

# 37MURA

## Outdoor Unit Single Zone Heat Pump System

### Sizes 1-1/2 to 5 Nominal Tons



## Product Data



Fig. 1 – Typical Unit

**NOTE:** Images are for illustration purposes only. Actual models may differ slightly.

## INDUSTRY LEADING FEATURES / BENEFITS

### Energy Efficiency

- 15.2 – 18.8 SEER2; 10 – 13 EER2 B2; 8.4 – 9.2 HSPF2 IV

### Sound

- Levels as low as 55 dB(A)

### Design Features

- Small Footprint
- Integrated 24V and RS-485 communications

### Reliability, Quality, and Toughness

- Inverter-driven, variable speed, rotary Compressor
- Line lengths up to 213' (65 m)
- Low ambient operation on high heat models down to -22°F (-30°C) without the use of wind baffles
- Conventional line set sizes

**NOTE:** Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory ([www.ahridirectory.org](http://www.ahridirectory.org)) for the most up-to-date ratings information.

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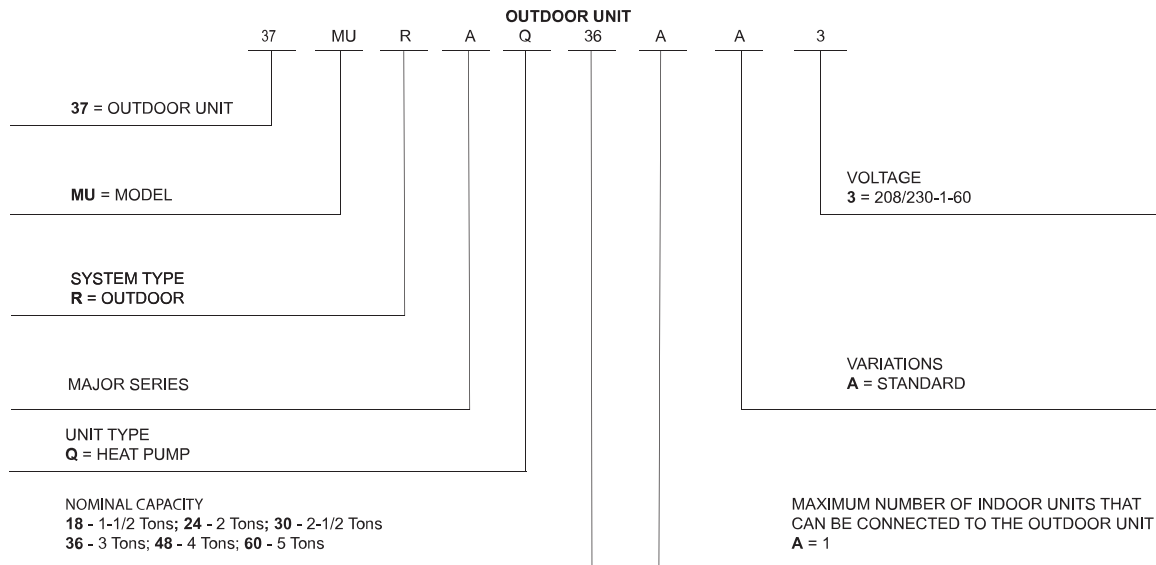
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## MODEL NUMBER NOMENCLATURE



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to [www.ahridirectory.org](http://www.ahridirectory.org).



## STANDARD FEATURES AND ACCESSORIES

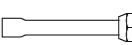
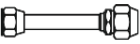
Table 1 – Features

**LEGEND**  
S - Standard  
A - Accessory

| Ease Of Installation                                  |   |
|-------------------------------------------------------|---|
| Low Voltage Controls                                  | S |
| Comfort Features                                      |   |
| Microprocessor Control                                | S |
| Auto Restart Function                                 | S |
| Auto Changeover                                       | S |
| Energy Saving Features                                |   |
| Inverter Driven Compressor                            | S |
| 46° F Heating Mode (Heating Setback)                  | S |
| Safety And Reliability                                |   |
| 3 Minute Time Delay For Compressor                    | S |
| High Compressor Discharge Temperature                 | S |
| Low Voltage Protection                                | S |
| Compressor Overload Protection                        | S |
| Compressor Over Current Protection                    | S |
| IPM Module Protection                                 | S |
| Condenser High Temperature Protection in Cooling Mode |   |
| Aluminum Hydrophilic pre-coated fins                  | S |
| Ease Of Service And Maintenance                       |   |
| Diagnostics                                           | S |
| Liquid Line Pressure Taps                             | S |
| Application Flexibility                               |   |
| Crankcase Heater                                      | S |
| Base pan Heater                                       | S |

## ACCESSORIES

Table 2 – Accessories

| Name                                                            | Image                                                                             | Qty |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------|-----|
| Drain Fitting                                                   |  | 1   |
| Gasket                                                          |  | 1   |
| Flare-to-Braze Adapter                                          |  | 1   |
| 5/8 Flare to 3/4 Flare Adapter<br>(for 18K Regular Heat Series) |  | 1   |
| 6 feet of Drain Tubing                                          |                                                                                   | 1   |

## DIMENSIONS

Table 3 – Dimensions and Weights

| System Size  |      | 18K         | 24K         | 30K         | 36K         | 48K         | 60K         |
|--------------|------|-------------|-------------|-------------|-------------|-------------|-------------|
|              |      | (208/230 V) | (208/230 V) | (208/230 V) | (208/230 V) | (208/230 V) | (208/230 V) |
| Height (H)   | in   | 21.81       | 26.5        | 31.89       | 31.89       | 38.39       | 38.39       |
|              | mm   | 554         | 673         | 810         | 810         | 975         | 975         |
| Width (W)    | in   | 31.69       | 35.04       | 37.24       | 37.24       | 38.58       | 38.58       |
|              | mm   | 805         | 890         | 946         | 946         | 980         | 980         |
| Depth (D)    | in   | 12.99       | 13.46       | 16.14       | 16.14       | 16.34       | 16.34       |
|              | mm   | 330         | 342         | 410         | 410         | 415         | 415         |
| Weight -Net  | lbs. | 77.16       | 102.29      | 141.76      | 153.22      | 192.9       | 192.9       |
|              | kg   | 35          | 46.4        | 64.3        | 69.5        | 87.5        | 87.5        |
| Packaging    |      |             |             |             |             |             |             |
| Height (H)   | in   | 24.21       | 29.13       | 34.84       | 34.84       | 42.52       | 42.52       |
|              | mm   | 615         | 740         | 885         | 885         | 1080        | 1080        |
| Width (W)    | in   | 36.02       | 39.17       | 42.91       | 42.91       | 45.08       | 45.08       |
|              | mm   | 915         | 995         | 1090        | 1090        | 1145        | 1145        |
| Depth (D)    | in   | 14.57       | 15.67       | 19.68       | 19.68       | 19.68       | 19.68       |
|              | mm   | 370         | 398         | 500         | 500         | 500         | 500         |
| Weight-Gross | lbs. | 83.77       | 109.13      | 152.34      | 163.58      | 224.21      | 224.21      |
|              | kg   | 38          | 49.5        | 69.1        | 74.2        | 101.7       | 101.7       |

## Outdoor Units

### Crankcase Heater

The crankcase heater is standard on all unit sizes. Heater clamps must be placed around the compressor oil sump.

### Base pan Heater

The base pan heater is standard on all unit sizes.

### Long Line Piping Length

Piping flexibility up to a total piping length of 213ft. (65m).

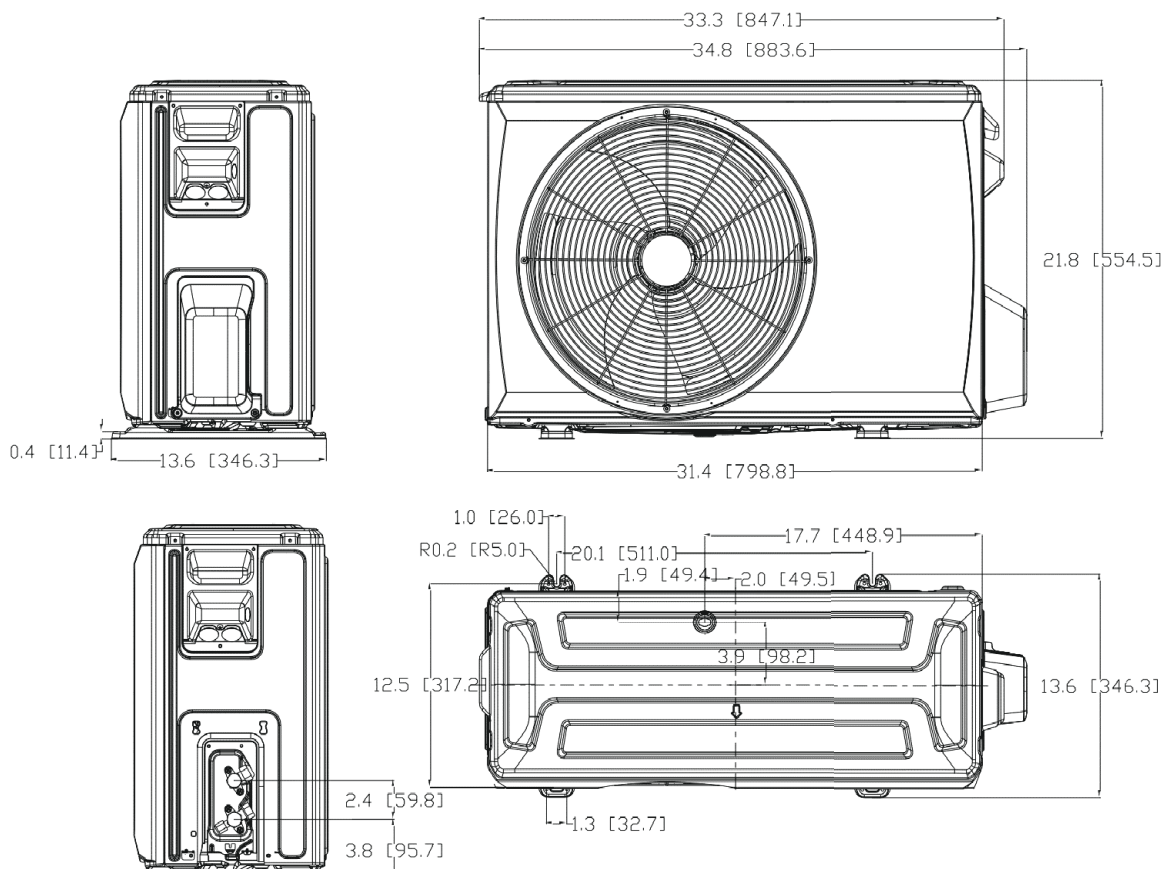


Fig. 2 – Size 18K

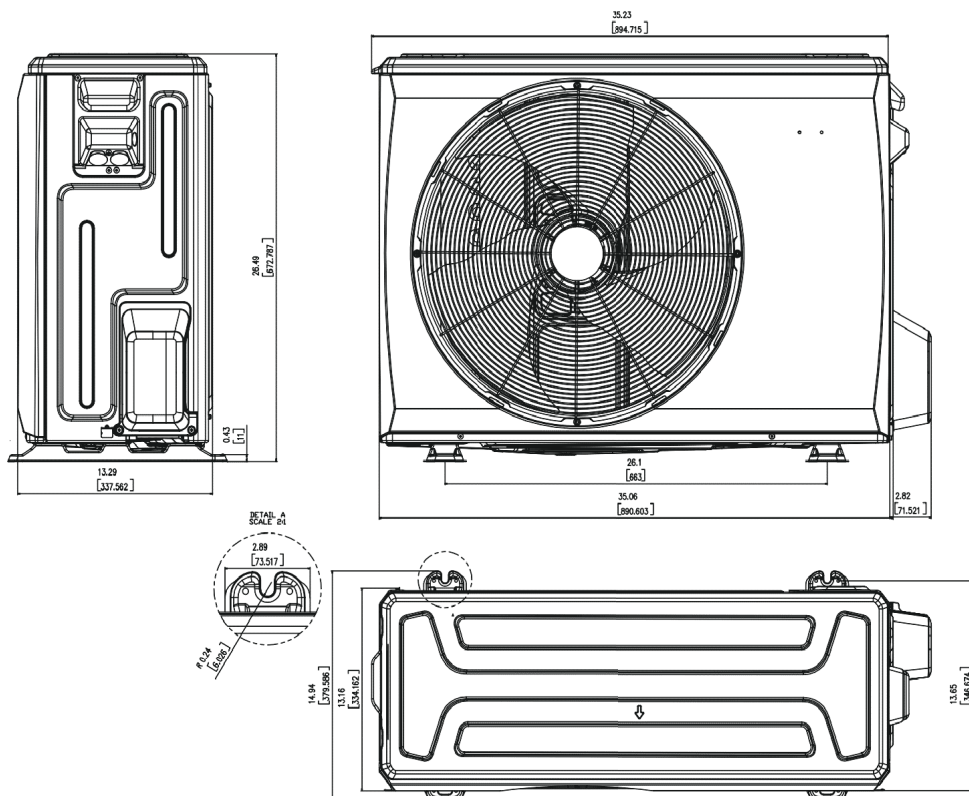


Fig. 3 – Size 24K

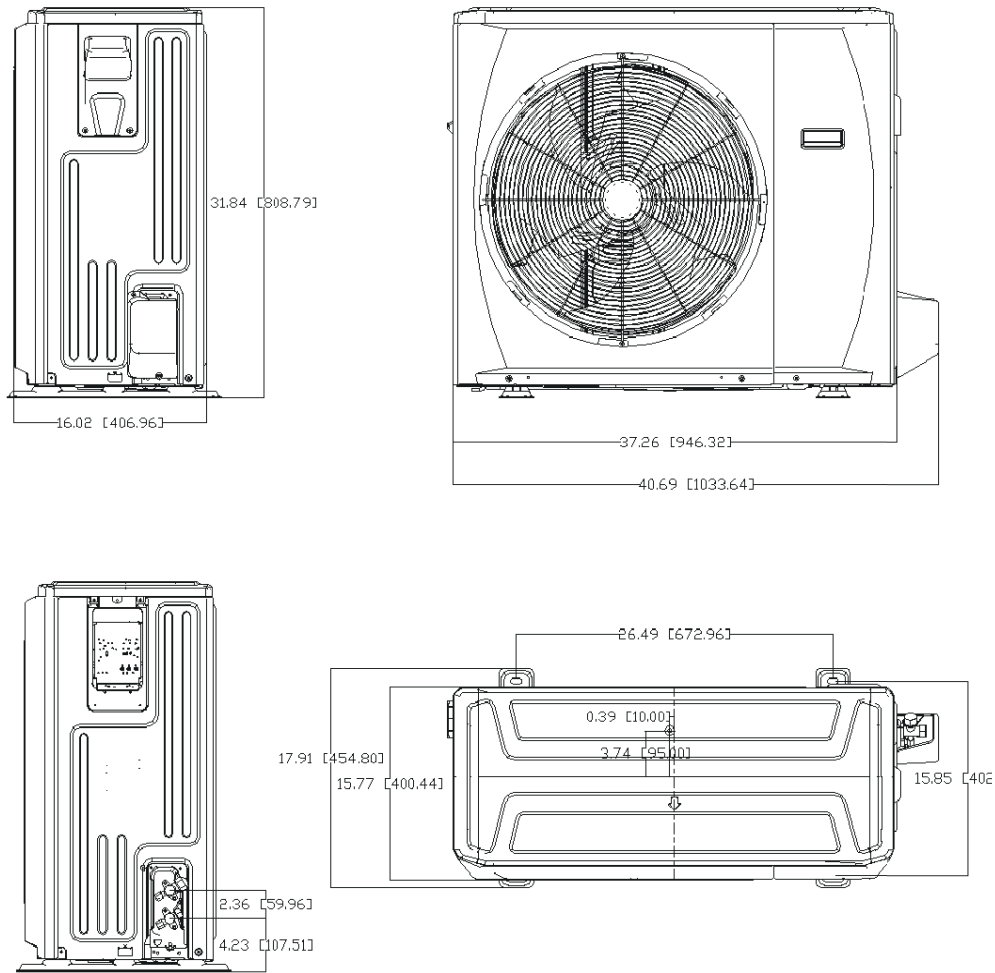


Fig. 4 – Sizes 30/36K

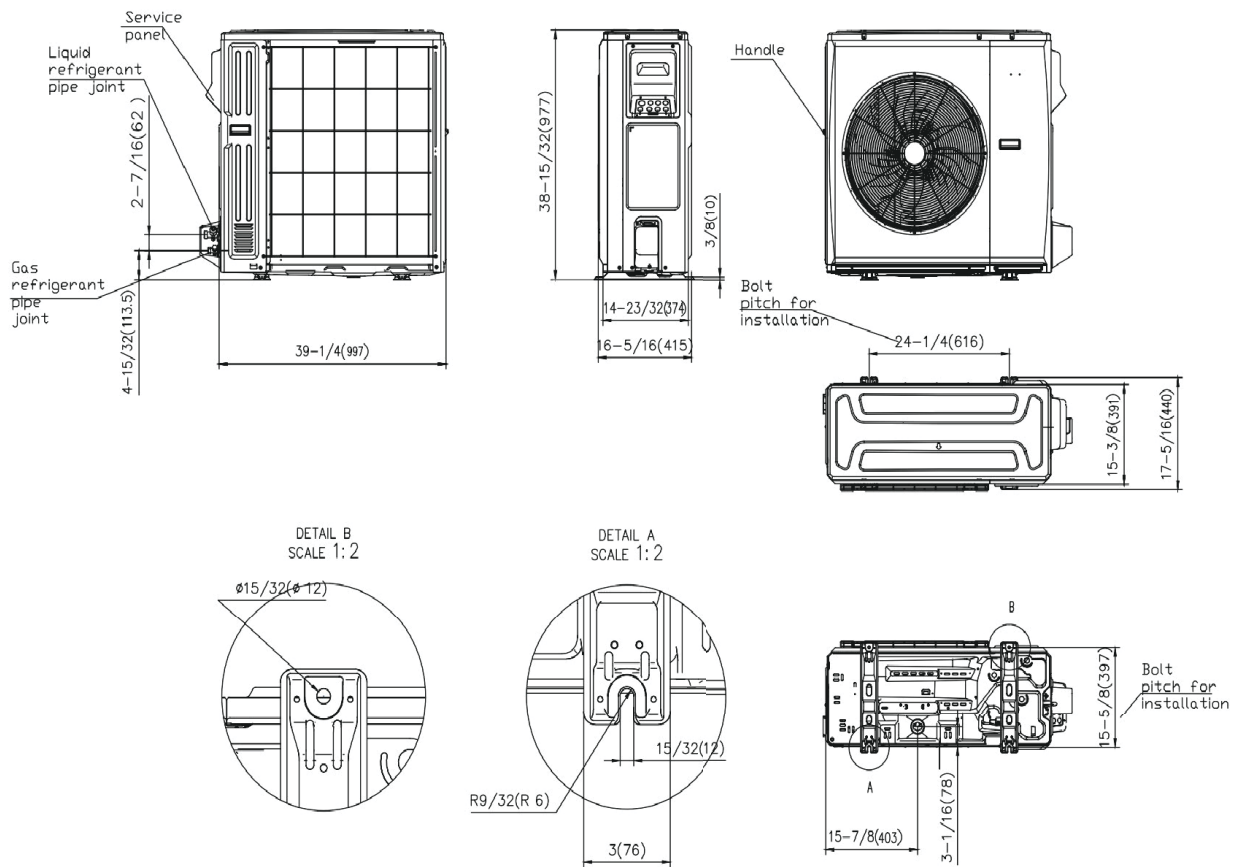


Fig. 5 – Sizes 48/60K

## CLEARANCES

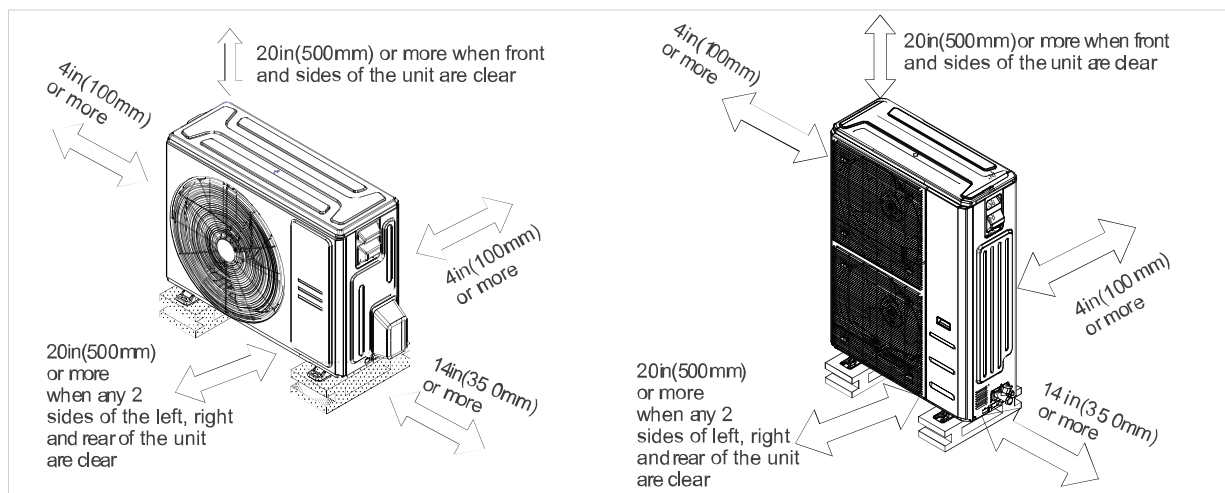


Fig. 6 – Clearances

**NOTE:** The outdoor unit must be mounted at least 2in (50mm) above the maximum anticipated snow depth.

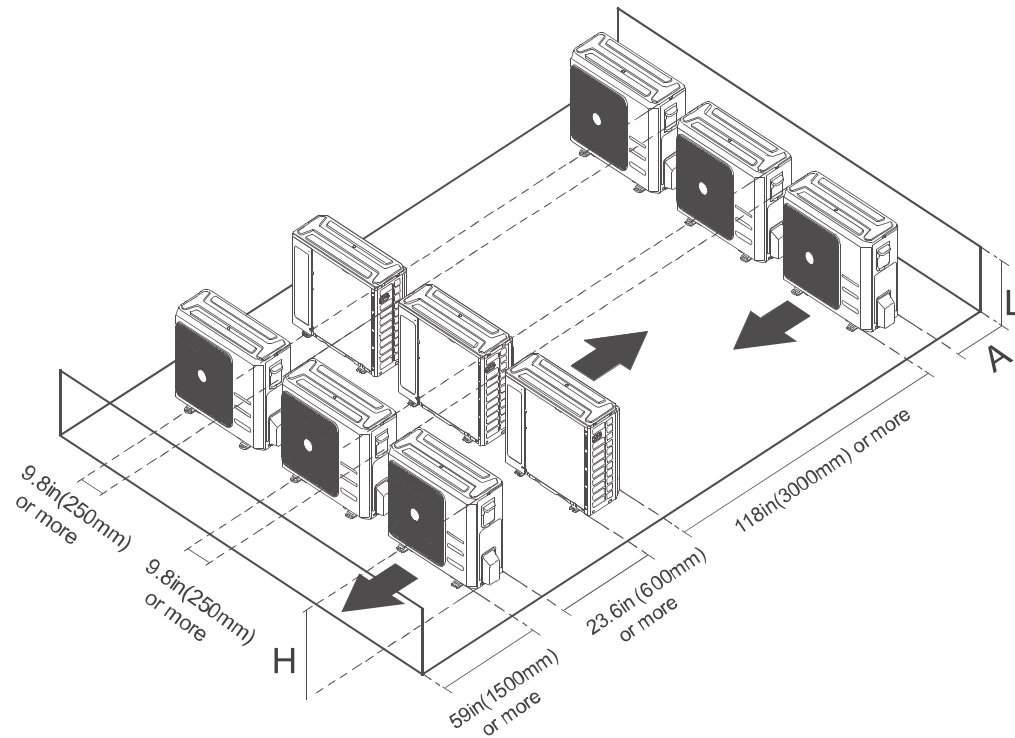


Fig. 7 – Clearances for multiple units

SPECIFICATIONS

Table 4 – Comprehensive Specifications

| Outdoor Model                |                  | 37MURAQ18AA3 | 37MURAQ24AA3                 | 37MURAQ30AA3       | 37MURAQ36AA3      | 37MURAQ48AA3      | 37MURAQ60AA3     |
|------------------------------|------------------|--------------|------------------------------|--------------------|-------------------|-------------------|------------------|
| Power supply                 |                  | V;Ph;Hz      | 208/230V;1Ph;60HZ            |                    |                   |                   |                  |
| COMPRESSOR SPECIFICATIONS    | Model            |              | KSN140D58UFZ                 | KTM240D46UKT2      | KTF250D22UMT      | KTF310D43UMT      | MTH550UKPC8FU    |
|                              | Type             |              | ROTARY                       |                    |                   |                   |                  |
|                              | Brand            |              | GMCC                         |                    |                   | HIGHLY            |                  |
|                              | Capacity         | W            | 4315                         | 4780/7600          | 8095              | 10010             | 16250            |
|                              |                  | Btu/h        | 14723                        | 16309/25931        | 27620             | 34154             | 55445            |
|                              | Input            | W            | 1090                         | 805/2045           | 2200              | 2765              | 4900             |
|                              | Rated current    | A            | 7.15                         | 9.30               | 10                | 5.38              | 21               |
|                              | Refrigerant Oil  |              | ESTER OIL                    |                    |                   | HAF68D1C          |                  |
|                              | Oil Type         |              | VG74                         |                    |                   | HAF68D1C          |                  |
|                              | Oil Charge       | fl. Oz       | 14.88                        | 20.97              | 22.66             | 33.82             | 60.87            |
| OUTDOOR FAN SPECIFICATIONS   | Material         |              | Acrylonitrile Styrene +20%GF |                    |                   |                   |                  |
|                              | Type             |              | ZL-434*144*8-3KN             | ZL-535*133*12-3KFN | ZL-560*139*12-3KN | ZL-560*139*12-3KN | ZL-570*196*15-3N |
|                              | Diameter         | inch         | 17.1                         | 21.1               | 22.0              | 22.0              | 22.4             |
|                              |                  | mm           | 434                          | 535                | 560               | 560               | 570              |
|                              | Height           | inch         | 5.7                          | 5.2                | 5.5               | 5.5               | 7.7              |
|                              |                  | mm           | 144                          | 133                | 139               | 139               | 196              |
| OUTDOOR MOTOR SPECIFICATIONS | Model            |              | ZKFN-34-10-1L-1              | ZKFN-80-8-3        | ZKFN-120-8-2      | ZKFN-120-10-1L    | ZKFN-250-10-1    |
|                              | Type             |              | DC                           | DC                 | DC                | DC                | DC               |
|                              | Input            | W            | 35.4                         | 94.7               | 91.0              | 81.8              | 228.0            |
|                              | Max. input       | W            | 81.0                         | 239.0              | 176.0             | 181.0             | 365.0            |
|                              | Output           | W            | 26.6                         | 71                 | 68.3              | 61.4              | 171.0            |
|                              | FLA              | A            | 0.8                          | 1                  | 1.1               | 1.5               | 1.2              |
|                              | Rated HP         | HP           | 0.04                         | 0.10               | 0.09              | 0.08              | 0.23             |
|                              | Range of current | Amps         | 0.57~0.85                    | 0.3~1.85           | 0.79~1.67         | 0.84~1.69         | 1.28~2.96        |
|                              | Rated current    | Amps         | 0.620                        | 0.82               | 1.09              | 1.05              | 2.00             |
|                              | Speed            | rev/min      | 840/700/650                  | 810/700/450        | 850/700/500       | 800/750/500       | 850/800/750/650  |
|                              | Rated RPM        | rev/min      | 840                          | 810                | 850               | 800               | 850              |
|                              | Insulation class |              | B                            | E                  | E                 | B                 | B                |
|                              | Safe class       |              | IP24                         | IPX4               | IPX4              | IP44              | IP44             |

Table 4 – Comprehensive Specifications (Continued)

| Outdoor Model                           |                                                                     |                 | 37MURAQ18AA3              | 37MURAQ24AA3                      | 37MURAQ30AA3                      | 37MURAQ36AA3                                       | 37MURAQ48AA3     | 37MURAQ60AA3     |
|-----------------------------------------|---------------------------------------------------------------------|-----------------|---------------------------|-----------------------------------|-----------------------------------|----------------------------------------------------|------------------|------------------|
| OUTDOOR REFRIGERANT COIL SPECIFICATIONS | Number of rows                                                      | Rows            | 2                         | 2                                 | 2.6                               | 3                                                  | 3                | 3                |
|                                         | Tube outside dia.                                                   | inch            | 0.276                     | 0.276                             | 0.276                             | 0.276                                              | 0.276            | 0.276            |
|                                         |                                                                     | mm              | Φ7                        | Φ7                                | Φ7                                | Φ7                                                 | Φ7               | Φ7               |
|                                         | Nominal Tube Wall                                                   | in (mm)         | 0.00945 (0.24)            | 0.00945 (0.24)                    | 0.00945 (0.24)                    | 0.00945 (0.24)                                     | 0.00945 (0.24)   | 0.00945 (0.24)   |
|                                         | Tube Enhancement                                                    | (Yes/No)        | Yes                       | Yes                               | Yes                               | Yes                                                | Yes              | Yes              |
|                                         | Tube Material                                                       |                 | Copper                    | Copper                            | Copper                            | Copper                                             | Copper           | Copper           |
|                                         | Tube pitch(a)x row pitch(b)                                         | inch            | 0.83× 0.87                | 0.83× 0.87                        | 0.83x0.53                         | 0.83x0.53                                          | 0.83x0.53        | 0.83x0.53        |
|                                         |                                                                     | mm              | 21x22                     | 21x22                             | 21x13.37                          | 21x13.37                                           | 21x13.37         | 21x13.37         |
|                                         | Fin Spacing                                                         | FPI             | 20                        | 20                                | 19                                | 19                                                 | 20               | 20               |
|                                         |                                                                     | mm              | 1.3                       | 1.3                               | 1.4                               | 1.4                                                | 1.3              | 1.3              |
|                                         | Fin type                                                            |                 | Flat fin                  | Flat fin                          | Louvered                          | Louvered                                           | Flat fin         | Flat fin         |
|                                         | Fin Material                                                        |                 | Gold hydrophilic aluminum |                                   |                                   |                                                    |                  |                  |
|                                         | Coil length x height x width                                        | inch            | 33.86x19.84x1.73          | 35.43x23.98x0.86+34.06x23.98x0.86 | 39.57x29.76x1.05+23.54x29.76x0.53 | 39.37x29.76x0.53+38.58x29.76x0.53+37.64x29.76x0.53 | 29.92x36.38x1.58 | 29.92x36.38x1.58 |
|                                         |                                                                     | mm              | 860*504*44                | 900*609*22+865*609*22             | 1005x756x26.74+598x756x13.37      | 1000x756x13.37+980x756x13.37+965x756x13.37         | 760*924*40.11    | 760*924*40.11    |
| Piping and Refrigerant Information      | Face area                                                           | ft <sup>2</sup> | 4.67                      | 5.90                              | 8.18                              | 8.14                                               | 7.56             | 7.56             |
|                                         | Number of circuits                                                  | #               | 4                         | 6                                 | 6                                 | 6                                                  | 10               | 10               |
|                                         | High Burst Pressure                                                 | Psi (MPa)       | 550(3.79)                 | 550(3.79)                         | 550(3.79)                         | 550(3.79)                                          | 550(3.79)        | 550(3.79)        |
|                                         | Low Burst Pressure                                                  | Psi (MPa)       | 340(2.34)                 | 340(2.34)                         | 340(2.34)                         | 340(2.34)                                          | 340(2.34)        | 340(2.34)        |
|                                         | Refrigerant Type                                                    | Type            | R454B                     | R454B                             | R454B                             | R454B                                              | R454B            | R454B            |
|                                         | Charge Amount                                                       | lb. (kg)        | 3.2(1.45)                 | 4.63(2.1)                         | 5.73(2.6)                         | 7.28(3.3)                                          | 8.38(3.8)        | 8.38(3.8)        |
|                                         | Additional refrigerant charge                                       | Oz/ft (g/m)     | 0.7(65)                   | 0.7(65)                           | 0.7(65)                           | 0.7(65)                                            | 0.7(65)          | 0.7(65)          |
|                                         | Liquid Pipe (size - connection type)                                | In (mm)         | 3/8in (9.52mm)            | 3/8in (9.52mm)                    | 3/8in (9.52mm)                    | 3/8in (9.52mm)                                     | 3/8in (9.52mm)   | 3/8in (9.52mm)   |
|                                         | Suction Pipe (size - connection type)                               | In (mm)         | 3/4in (19mm)              | 3/4in (19mm)                      | 3/4in (19mm)                      | 3/4in (19mm)                                       | 3/4in (19mm)     | 3/4in (19mm)     |
|                                         | Min. Piping Length                                                  | ft. (m)         | 9.8 (3)                   | 9.8 (3)                           | 9.8 (3)                           | 9.8 (3)                                            | 9.8 (3)          | 9.8 (3)          |
|                                         | Standard Piping Length                                              | ft. (m)         | 24.6 (7.5)                | 24.6 (7.5)                        | 24.6 (7.5)                        | 24.6 (7.5)                                         | 24.6 (7.5)       | 24.6 (7.5)       |
|                                         | Max. Piping Length with no additional refrigerant charge per System | ft. (m)         | 24.6 (7.5)                | 24.6 (7.5)                        | 24.6 (7.5)                        | 24.6 (7.5)                                         | 24.6 (7.5)       | 24.6 (7.5)       |
|                                         | Total Maximum Piping Length per system                              | ft. (m)         | 98.42(30)                 | 164.04(50)                        | 164.04(50)                        | 246(75)                                            | 246(75)          | 246(75)          |
|                                         | Max. outdoor-indoor height difference (OU higher than IU)           | ft. (m)         | 65.62(20)                 | 82.02(25)                         | 82.02(25)                         | 98.42(30)                                          | 98.42(30)        | 98.42(30)        |
|                                         | Max. outdoor-indoor height difference (IU higher than OU)           | ft. (m)         | 65.62(20)                 | 82.02(25)                         | 82.02(25)                         | 98.42(30)                                          | 98.42(30)        | 98.42(30)        |
| AIRFLOW SPECIFICATIONS                  | Outdoor (CFM)                                                       | CFM             | 1451.7                    | 1766.8                            | 3003.5                            | 2237.9                                             | 3037.1           | 3037.1           |
| SOUND DATA                              | Outdoor Sound Pressure Level                                        | dB(A)           | 55                        | 60                                | 60                                | 63                                                 | 65               | 65               |

Table 4 – Comprehensive Specifications (Continued)

| Outdoor Model                |                                                          |                      |      | 37MURAQ18AA3 | 37MURAQ24AA3 | 37MURAQ30AA3 | 37MURAQ36AA3 | 37MURAQ48AA3 | 37MURAQ60AA3 |          |
|------------------------------|----------------------------------------------------------|----------------------|------|--------------|--------------|--------------|--------------|--------------|--------------|----------|
| ENVIRONMENTAL SPECIFICATIONS | Cooling Operating Range                                  | Indoor Min - Max DB  | °F   | 60~90        | 60~90        | 60~90        | 60~90        | 60~90        | 60~90        |          |
|                              |                                                          |                      | (°C) | (16-32)      | (16-32)      | (16-32)      | (16-32)      | (16-32)      | (16-32)      |          |
|                              |                                                          | Indoor Min - Max WB  | °F   | 59-84        | 59-84        | 59-84        | 59-84        | 59-84        | 59-84        |          |
|                              |                                                          |                      | (°C) | (15-29)      | (15-29)      | (15-29)      | (15-29)      | (15-29)      | (15-29)      |          |
|                              |                                                          | Outdoor Min - Max DB | °F   | -13~122      | -13~122      | -13~122      | -13~122      | -13~122      | -13~122      |          |
|                              |                                                          |                      | (°C) | (-25~50)     | (-25~50)     | (-25~50)     | (-25~50)     | (-25~50)     | (-25~50)     |          |
|                              | Heating Operating Range                                  | Indoor Min - Max DB  | °F   | 32-86        | 32-866       | 32-86        | 32-86        | 32-86        | 32-86        |          |
|                              |                                                          |                      | (°C) | (0-30)       | (0-30)       | (0-30)       | (0-30)       | (0-30)       | (0-30)       |          |
|                              |                                                          | Outdoor Min - Max DB | °F   | -13~75       | -13~75       | -13~75       | -13~75       | -13~75       | -13~75       |          |
|                              |                                                          |                      | (°C) | (-25~24)     | (-25~24)     | (-25~24)     | (-25~24)     | (-25~24)     | (-25~24)     |          |
|                              | Cooling Cut-in                                           | Temperature          | °F   | NA           | NA           | NA           | NA           | NA           | NA           |          |
|                              |                                                          |                      | (°C) | NA           | NA           | NA           | NA           | NA           | NA           |          |
|                              | Cooling Cut-out                                          | Temperature          | °F   | NA           | NA           | NA           | NA           | NA           | NA           |          |
|                              |                                                          |                      | (°C) | NA           | NA           | NA           | NA           | NA           | NA           |          |
|                              | Heating Cut-in                                           | Temperature          | °F   | NA           | NA           | NA           | NA           | NA           | NA           |          |
|                              |                                                          |                      | (°C) | NA           | NA           | NA           | NA           | NA           | NA           |          |
|                              | Heating Cut-Out                                          | Temperature          | °F   | NA           | NA           | NA           | NA           | NA           | NA           |          |
|                              |                                                          |                      | (°C) | NA           | NA           | NA           | NA           | NA           | NA           |          |
|                              | Non-operating environment Storage Temperature range (DB) |                      |      | °F           | -49-140      | -49-140      | -49-140      | -49-140      | -49-140      | -49-140  |
|                              |                                                          |                      |      | (°C)         | (-45-60)     | (-45-60)     | (-45-60)     | (-45-60)     | (-45-60)     | (-45-60) |
| Operation Humidity           |                                                          |                      | %    | 0-80%        | 0-80%        | 0-80%        | 0-80%        | 0-80%        | 0-80%        |          |
| Ambient Humidity             |                                                          |                      | %    | 0-80%        | 0-80%        | 0-80%        | 0-80%        | 0-80%        | 0-80%        |          |

PERFORMANCE DATA

| Indoor unit type |                                         |         | AHU3              |                   |                   |                   |                   |                   |
|------------------|-----------------------------------------|---------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Indoor model     |                                         |         | 45MUA AQ18XX3     | 45MUA AQ24XX3     | 45MUA AQ30XX3     | 45MUA AQ36XX3     | 45MUA AQ48XX3     | 45MUA AQ60XX3     |
| Outdoor model    |                                         |         | 37MURA Q18AA3     | 37MURA Q24AA3     | 37MURA Q30AA3     | 37MURA Q36AA3     | 37MURA Q48AA3     | 37MURA Q60AA3     |
| Performance Data | Power supply                            | V;Ph;Hz | 208/230V;1Ph;60HZ | 208/230V;1Ph;60HZ | 208/230V;1Ph;60HZ | 208/230V;1Ph;60HZ | 208/230V;1Ph;60HZ | 208/230V;1Ph;60HZ |
|                  | Cooling Rated Capacity (DOE A2 - 95°F)  | Btu/h   | 18000             | 24000             | 30000             | 36000             | 48000             | 54000             |
|                  | Cooling Capacity Range                  | Btu/h   | 5350~20000        | 7200~27000        | 10400~34000       | 8300~38900        | 16600~49900       | 21000~55000       |
|                  | SEER2                                   | Btu/h.W | 18.8              | 18.2              | 17                | 16.2              | 16                | 15.2              |
|                  | EER2 (DOE A2 - 95°F)                    | Btu/h.W | 11                | 11                | 10.8              | 10                | 10                | 8.7               |
|                  | Heating Rated Capacity (DOE H12 - 47°F) | Btu/h   | 18000             | 26000             | 31000             | 36000             | 48000             | 54000             |
|                  | Heating Capacity Range                  | Btu/h   | 5600~19000        | 7100~30000        | 6400~32000        | 6700~41300        | 15300~49500       | 26000~55000       |
|                  | COP (DOE H12 - 47°F)                    | W/W     | 3.15              | 3.18              | 3.5               | 3.4               | 3.45              | 3.37              |
|                  | HSPF2 IV                                | Btu/h.W | 9.2               | 9.7               | 8.5               | 8.7               | 8.5               | 8.4               |
|                  | HSPF2 V                                 | Btu/h.W | 7                 | 7.7               | 6.6               | 7                 | 7.2               | 6.8               |
|                  | Cooling Rated Capacity (DOE B2 - 82°F)  | Btu/h   | 18800             | 25600             | 32400             | 36400             | 44000             | 55000             |
|                  | EER (DOE B2 - 82°F)                     | Btu/h.W | 13                | 13.8              | 13.5              | 12.1              | 10.9              | 10                |
|                  | Heating Rated Capacity (DOE H32 - 17°F) | Btu/h   | 12600             | 20000             | 18500             | 25600             | 32400             | 33000             |
|                  | COP (DOE H32 - 17°F)                    | W/W     | 2.6               | 2.42              | 2.4               | 2.6               | 2.47              | 2.34              |
|                  | Heating Maximum Capacity (17°F)         | Btu/h   | 12600             | 22000             | 20600             | 30000             | 39000             | 40000             |
|                  | Heating Rated Capacity (DOE H42 - 5°F)  | Btu/h   | 11200             | 21600             | 19100             | 27000             | 38000             | 38000             |
|                  | COP (DOE H42 - 5°F)                     | W/W     | 2                 | 1.87              | 2                 | 2                 | 1.85              | 1.8               |
|                  | Heating Maximum Capacity (5°F)          | Btu/h   | 11200             | 21600             | 19100             | 27000             | 38000             | 38000             |

COOLING PERFORMANCE - 37MURA + 45MUA A

For the following tables:  
TC = Total Cooling Capacity (BTU/hr)  
S/T = Sensible Cooling Capacity Ratio  
PI = Power Input (kW)

Extrapolated Data: The highlighted data is tested; other data is simulated and for reference.

Table 5 – 18K Cooling — **37MURA + 45MUAA**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 490            | -13°F<br>25°C         | TC          | 14173            | 14171            | 14169            | 14169            | 14166            | 14832            | 14829            | 14826            | 14826            | 14823            | 15300            | 15296            | 15293            | 15292            | 15289            | 16177            | 16173            | 16170            | 16169            | 16164            |
|                |                       | S/T         | 0.72             | 0.80             | 0.87             | 0.88             | 0.97             | 0.59             | 0.67             | 0.74             | 0.76             | 0.83             | 0.51             | 0.59             | 0.66             | 0.67             | 0.75             | 0.38             | 0.46             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             |
|                | -4°F<br>20°C          | TC          | 15263            | 15261            | 15259            | 15259            | 15256            | 15973            | 15969            | 15967            | 15966            | 15963            | 16477            | 16473            | 16469            | 16468            | 16465            | 17422            | 17417            | 17413            | 17413            | 17407            |
|                |                       | S/T         | 0.72             | 0.80             | 0.88             | 0.89             | 0.97             | 0.60             | 0.68             | 0.75             | 0.76             | 0.84             | 0.52             | 0.59             | 0.66             | 0.67             | 0.75             | 0.39             | 0.47             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             |
|                | 0°F<br>17.8°C         | TC          | 15760            | 15757            | 15754            | 15754            | 15749            | 16486            | 16483            | 16479            | 16478            | 16474            | 17000            | 16996            | 16992            | 16991            | 16986            | 17959            | 17955            | 17951            | 17951            | 17944            |
|                |                       | S/T         | 0.72             | 0.81             | 0.88             | 0.90             | 0.98             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             |
|                | 5°F<br>15°C           | TC          | 16254            | 16254            | 16254            | 16254            | 16497            | 17066            | 17063            | 17062            | 17062            | 17064            | 17649            | 17648            | 17645            | 17645            | 17647            | 18768            | 18763            | 18759            | 18758            | 18758            |
|                |                       | S/T         | 0.73             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.86             | 0.52             | 0.60             | 0.67             | 0.68             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 0.72             | 0.72             | 0.72             | 0.72             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             |
|                | 14°F<br>10°C          | TC          | 17302            | 17299            | 17297            | 17297            | 17381            | 18210            | 18205            | 18202            | 18202            | 18199            | 18859            | 18854            | 18850            | 18849            | 18845            | 20091            | 20086            | 20081            | 20080            | 20073            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 0.99             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.66             | 0.68             | 0.76             | 0.39             | 0.47             | 0.51             | 0.53             | 0.60             |
|                |                       | PI          | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             |
|                | 17°F<br>10°C          | TC          | 17663            | 17659            | 17657            | 17656            | 17911            | 18589            | 18585            | 18581            | 18580            | 18581            | 19254            | 19254            | 19251            | 19251            | 19253            | 20555            | 20549            | 20544            | 20543            | 20544            |
|                |                       | S/T         | 0.73             | 0.82             | 0.89             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             |
|                | 23°F<br>5°C           | TC          | 17678            | 17679            | 17679            | 17690            | 18013            | 18630            | 18626            | 18626            | 18626            | 18628            | 19314            | 19313            | 19310            | 19310            | 19312            | 20631            | 20625            | 20620            | 20619            | 20619            |
|                |                       | S/T         | 0.74             | 0.83             | 0.90             | 0.91             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             |
|                | 35°F<br>1.7°C         | TC          | 17854            | 17853            | 17852            | 17851            | 17876            | 18779            | 18777            | 18775            | 18775            | 18773            | 19433            | 19429            | 19428            | 19427            | 19425            | 20657            | 20652            | 20648            | 20647            | 20646            |
|                |                       | S/T         | 0.70             | 0.78             | 0.85             | 0.86             | 0.93             | 0.59             | 0.66             | 0.72             | 0.74             | 0.81             | 0.51             | 0.58             | 0.64             | 0.65             | 0.73             | 0.39             | 0.46             | 0.50             | 0.51             | 0.58             |
|                |                       | PI          | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.76             | 0.76             | 0.76             | 0.76             | 0.76             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             |
|                | 41°F<br>5°C           | TC          | 16123            | 16121            | 16120            | 16120            | 16158            | 16952            | 16950            | 16948            | 16948            | 16946            | 17537            | 17534            | 17533            | 17532            | 17529            | 18634            | 18630            | 18627            | 18626            | 18625            |
|                |                       | S/T         | 0.71             | 0.79             | 0.86             | 0.87             | 0.95             | 0.59             | 0.67             | 0.73             | 0.74             | 0.82             | 0.51             | 0.59             | 0.65             | 0.66             | 0.73             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 0.73             | 0.73             | 0.73             | 0.73             | 0.74             | 0.78             | 0.78             | 0.78             | 0.78             | 0.78             | 0.81             | 0.81             | 0.81             | 0.81             | 0.81             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             |
|                | 47°F<br>8.3°C         | TC          | 14387            | 14385            | 14385            | 14385            | 14435            | 15122            | 15120            | 15118            | 15118            | 15117            | 15642            | 15638            | 15637            | 15637            | 15634            | 16613            | 16609            | 16606            | 16605            | 16604            |
|                |                       | S/T         | 0.71             | 0.80             | 0.87             | 0.88             | 0.96             | 0.59             | 0.67             | 0.74             | 0.75             | 0.83             | 0.51             | 0.59             | 0.65             | 0.66             | 0.74             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             |
|                | 50°F<br>10°C          | TC          | 14060            | 14063            | 14192            | 14307            | 14838            | 14911            | 14914            | 14918            | 14919            | 14974            | 15528            | 15529            | 15536            | 15538            | 15544            | 16724            | 16718            | 16720            | 16719            | 16734            |
|                |                       | S/T         | 0.79             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             |
|                | 59°F<br>15°C          | TC          | 13720            | 13741            | 14012            | 14094            | 14645            | 14593            | 14596            | 14599            | 14599            | 14689            | 15232            | 15228            | 15234            | 15235            | 15239            | 16456            | 16449            | 16450            | 16450            | 16462            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 0.86             | 0.86             | 0.86             | 0.86             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             |
|                | 68°F<br>20°C          | TC          | 13391            | 13435            | 13814            | 13899            | 14467            | 14280            | 14283            | 14285            | 14285            | 14457            | 14929            | 14926            | 14932            | 14932            | 14935            | 16177            | 16171            | 16171            | 16171            | 16183            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.88             | 0.89             | 0.89             | 0.89             | 0.90             | 0.89             | 0.89             | 0.89             | 0.89             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             |
|                | 77°F<br>25°C          | TC          | 13043            | 13107            | 13557            | 13646            | 14233            | 13955            | 13960            | 13963            | 13977            | 14253            | 14623            | 14622            | 14629            | 14630            | 14648            | 15907            | 15899            | 15901            | 15902            | 15920            |
|                |                       | S/T         | 0.83             | 0.96             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.55             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 0.92             | 0.92             | 0.92             | 0.92             | 0.93             | 0.92             | 0.92             | 0.92             | 0.92             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             |
|                | 82°F<br>27.8°C        | TC          | 13350            | 13436            | 13952            | 14044            | 14665            | 14309            | 14316            | 14328            | 14340            | 14686            | 15010            | 15011            | 15020            | 15021            | 15046            | 16361            | 16353            | 16356            | 16357            | 16379            |
|                |                       | S/T         | 0.84             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.88             | 0.90             | 1.00             | 0.56             | 0.67             | 0.77             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.03             | 1.03             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 86°F<br>30°C          | TC          | 14226            | 14351            | 14949            | 15050            | 15726            | 15266            | 15273            | 15294            | 15309            | 15749            | 16025            | 16028            | 16036            | 16037            | 16073            | 17489            | 17480            | 17483            | 17487            | 17509            |
|                |                       | S/T         | 0.85             | 0.98             | 1.00             | 1.00             | 1.00             | 0.67             | 0.80             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.26             | 1.26             | 1.26             | 1.26             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             |
|                | 95°F<br>35°C          | TC          | 16435            | 16434            | 16436            | 16454            | 16875            | 17535            | 17531            | 17530            | 17530            | 17533            | 18329            | 18327            | 18323            | 18323            | 18323            | 19862            | 19855            | 19850            | 19849            | 19849            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.87             | 0.52             |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 5 – 18K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
| 530            | -13°F<br>25°C         | TC          | 14747            | 14744            | 14741            | 14741            | 15043            | 15411            | 15407            | 15403            | 15402            | 15397            | 15882            | 15877            | 15871            | 15870            | 15863            | 16765            | 16760            | 16754            | 16753            | 16742            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.93             | 1.00             | 0.61             | 0.70             | 0.78             | 0.79             | 0.88             | 0.52             | 0.61             | 0.69             | 0.70             | 0.79             | 0.38             | 0.46             | 0.53             | 0.54             | 0.62             |
|                |                       | PI          | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.67             | 0.67             | 0.67             | 0.67             | 0.68             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             | 0.67             |
|                | -4°F<br>20°C          | TC          | 15882            | 15878            | 15875            | 15875            | 16201            | 16597            | 16592            | 16588            | 16587            | 16581            | 17104            | 17098            | 17092            | 17091            | 17083            | 18054            | 18050            | 18042            | 18042            | 18030            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.94             | 1.00             | 0.61             | 0.71             | 0.78             | 0.79             | 0.88             | 0.53             | 0.61             | 0.69             | 0.70             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 0.70             | 0.71             | 0.71             | 0.71             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             |
|                | 0°F<br>17.8°C         | TC          | 16401            | 16396            | 16393            | 16392            | 16801            | 17132            | 17126            | 17120            | 17119            | 17111            | 17649            | 17642            | 17635            | 17633            | 17622            | 18610            | 18606            | 18604            | 18603            | 18606            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             |
|                | 5°F<br>15°C           | TC          | 16900            | 16901            | 16954            | 16978            | 17475            | 17723            | 17722            | 17724            | 17725            | 17746            | 18313            | 18312            | 18313            | 18314            | 18317            | 19438            | 19433            | 19433            | 19432            | 19434            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             |
|                | 14°F<br>10°C          | TC          | 17999            | 17995            | 17992            | 17991            | 18502            | 18919            | 18913            | 18908            | 18907            | 18901            | 19576            | 19570            | 19563            | 19561            | 19552            | 20825            | 20819            | 20811            | 20810            | 20797            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 0.65             | 0.65             | 0.66             | 0.66             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             |
|                | 17°F<br>10°C          | TC          | 18363            | 18357            | 18405            | 18431            | 18983            | 19300            | 19294            | 19298            | 19299            | 19319            | 19976            | 19976            | 19979            | 19981            | 19987            | 21287            | 21281            | 21283            | 21281            | 21286            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             |
|                | 23°F<br>5°C           | TC          | 18382            | 18383            | 18458            | 18491            | 19098            | 19346            | 19346            | 19349            | 19349            | 19381            | 20039            | 20038            | 20040            | 20041            | 20046            | 21367            | 21360            | 21361            | 21360            | 21363            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.62             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             |
|                | 35°F<br>1.7°C         | TC          | 18595            | 18593            | 18594            | 18594            | 18833            | 19519            | 19516            | 19514            | 19514            | 19515            | 20168            | 20166            | 20163            | 20163            | 20162            | 21380            | 21375            | 21371            | 21370            | 21369            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 1.00             | 0.60             | 0.68             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 0.73             | 0.73             | 0.73             | 0.73             | 0.74             | 0.77             | 0.77             | 0.77             | 0.77             | 0.77             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             |
|                | 41°F<br>5°C           | TC          | 16747            | 16787            | 16788            | 16793            | 17069            | 17618            | 17614            | 17613            | 17613            | 17614            | 18200            | 18199            | 18196            | 18195            | 18195            | 19287            | 19283            | 19279            | 19278            | 19277            |
|                |                       | S/T         | 0.74             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.45             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 0.74             | 0.74             | 0.74             | 0.74             | 0.75             | 0.78             | 0.78             | 0.78             | 0.78             | 0.78             | 0.82             | 0.82             | 0.82             | 0.82             | 0.82             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             |
|                | 47°F<br>8.3°C         | TC          | 14980            | 14979            | 14979            | 14994            | 15289            | 15715            | 15712            | 15711            | 15711            | 15711            | 16233            | 16231            | 16229            | 16228            | 16228            | 17197            | 17193            | 17190            | 17189            | 17188            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.70             | 0.77             | 0.78             | 0.87             | 0.52             | 0.61             | 0.68             | 0.69             | 0.78             | 0.39             | 0.45             | 0.52             | 0.53             | 0.62             |
|                |                       | PI          | 0.75             | 0.75             | 0.75             | 0.75             | 0.77             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             |
|                | 50°F<br>10°C          | TC          | 14610            | 14672            | 15086            | 15172            | 15745            | 15477            | 15487            | 15491            | 15507            | 15765            | 16105            | 16115            | 16124            | 16125            | 16149            | 17305            | 17299            | 17319            | 17323            | 17347            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             |
|                | 59°F<br>15°C          | TC          | 14257            | 14359            | 14867            | 14956            | 15550            | 15150            | 15157            | 15180            | 15194            | 15570            | 15795            | 15803            | 15810            | 15811            | 15850            | 17035            | 17027            | 17044            | 17048            | 17066            |
|                |                       | S/T         | 0.85             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 0.87             | 0.87             | 0.87             | 0.87             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             |
|                | 68°F<br>20°C          | TC          | 13915            | 14149            | 14663            | 14755            | 15367            | 14826            | 14832            | 14873            | 14891            | 15387            | 15483            | 15492            | 15497            | 15497            | 15557            | 16750            | 16743            | 16759            | 16762            | 16776            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.91             | 0.93             | 1.00             | 0.57             | 0.69             | 0.79             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 0.89             | 0.89             | 0.90             | 0.90             | 0.91             | 0.90             | 0.90             | 0.90             | 0.90             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             |
|                | 77°F<br>25°C          | TC          | 13553            | 13869            | 14400            | 14495            | 15129            | 14490            | 14497            | 14553            | 14576            | 15148            | 15162            | 15175            | 15183            | 15184            | 15262            | 16463            | 16455            | 16481            | 16485            | 16504            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.82             | 0.93             | 0.95             | 1.00             | 0.57             | 0.70             | 0.80             | 0.82             | 0.94             | 0.39             | 0.49             | 0.59             | 0.60             | 0.72             |
|                |                       | PI          | 0.92             | 0.93             | 0.93             | 0.93             | 0.94             | 0.93             | 0.93             | 0.93             | 0.93             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             |
|                | 82°F<br>27.8°C        | TC          | 13883            | 14261            | 14822            | 14922            | 15591            | 14857            | 14865            | 14936            | 14966            | 15612            | 15563            | 15580            | 15588            | 15589            | 15687            | 16930            | 16933            | 16954            | 16959            | 16981            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.96             | 1.00             | 0.58             | 0.70             | 0.81             | 0.83             | 0.96             | 0.39             | 0.49             | 0.59             | 0.61             | 0.72             |
|                |                       | PI          | 1.04             | 1.05             | 1.05             | 1.05             | 1.06             | 1.05             | 1.05             | 1.05             | 1.05             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             |
|                | 86°F<br>30°C          | TC          | 14805            | 15272            | 15884            | 15992            | 16722            | 15853            | 15860            | 15955            | 15997            | 16744            | 16617            | 16635            | 16643            | 16644            | 16773            | 18098            | 18099            | 18126            | 18131            | 18152            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.84             | 0.96             | 0.98             | 1.00             | 0.58             | 0.71             | 0.82             | 0.84             | 0.97             | 0.39             | 0.50             | 0.60             | 0.61             | 0.73             |
|                |                       | PI          | 1.27             | 1.27             | 1.28             | 1.28             | 1.29             | 1.28             | 1.28             | 1.28             | 1.28             | 1.29             | 1.29             | 1.29             | 1.29             | 1.28             | 1.29             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             |
|                | 95°F<br>35°C          | TC          | 17096            | 17099            | 17193            | 17238            | 17948            | 18213            | 18211            | 18216            | 18217            | 18249            | 19017            | 19017            | 19016            | 19017            | 19026            | 20567            | 20560            | 20554            | 20563            | 20558            |
|                |                       | S/T         | 0.77             | 0.87             | 0.96             | 0.98             | 1.00             | 0.63             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 1.71             | 1.71             | 1.71             | 1.71             | 1.75             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 5 – 18K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 580            | -13°F<br>25°C         | TC          | 15338            | 15333            | 15328            | 15417            | 15871            | 16013            | 16004            | 15997            | 15996            | 15985            | 16491            | 16483            | 16472            | 16470            | 16458            | 17396            | 17392            | 17379            | 17374            | 17348            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             |
|                | -4°F<br>20°C          | TC          | 16518            | 16512            | 16507            | 16603            | 17092            | 17245            | 17236            | 17228            | 17227            | 17215            | 17760            | 17750            | 17739            | 17737            | 17724            | 18734            | 18729            | 18715            | 18711            | 18683            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 0.72             | 0.72             | 0.72             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             |
|                | 0°F<br>17.8°C         | TC          | 17063            | 17055            | 17121            | 17252            | 17730            | 17807            | 17793            | 17783            | 17781            | 17778            | 18329            | 18319            | 18302            | 18299            | 18283            | 19317            | 19311            | 19312            | 19314            | 19329            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             |
|                | 5°F<br>15°C           | TC          | 17565            | 17581            | 17818            | 17899            | 18447            | 18400            | 18404            | 18406            | 18406            | 18497            | 19002            | 19001            | 19006            | 19006            | 19009            | 20138            | 20132            | 20132            | 20133            | 20145            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             |
|                | 14°F<br>10°C          | TC          | 18710            | 18703            | 18780            | 18945            | 19532            | 19649            | 19638            | 19628            | 19627            | 19616            | 20328            | 20318            | 20303            | 20300            | 20283            | 21606            | 21600            | 21584            | 21579            | 21546            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 0.67             | 0.67             | 0.67             | 0.67             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             |
|                | 17°F<br>10°C          | TC          | 19114            | 19119            | 19353            | 19465            | 20091            | 20074            | 20075            | 20080            | 20080            | 20175            | 20714            | 20722            | 20735            | 20736            | 20741            | 22091            | 22085            | 22087            | 22091            | 22112            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             | 0.64             |
|                | 23°F<br>5°C           | TC          | 19104            | 19131            | 19442            | 19537            | 20176            | 20085            | 20090            | 20092            | 20093            | 20212            | 20793            | 20792            | 20799            | 20799            | 20803            | 22133            | 22127            | 22127            | 22130            | 22146            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             |
|                | 35°F<br>1.7°C         | TC          | 19349            | 19350            | 19387            | 19409            | 19908            | 20278            | 20275            | 20276            | 20276            | 20277            | 20929            | 20928            | 20926            | 20926            | 20928            | 22142            | 22136            | 22132            | 22135            | 22131            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 0.74             | 0.74             | 0.74             | 0.74             | 0.76             | 0.78             | 0.78             | 0.78             | 0.78             | 0.78             | 0.82             | 0.82             | 0.82             | 0.82             | 0.82             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             |
|                | 41°F<br>5°C           | TC          | 17468            | 17469            | 17517            | 17541            | 18038            | 18302            | 18300            | 18301            | 18301            | 18317            | 18888            | 18886            | 18884            | 18884            | 18886            | 19975            | 19970            | 19966            | 19968            | 19965            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 0.75             | 0.75             | 0.76             | 0.76             | 0.78             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             |
|                | 47°F<br>8.3°C         | TC          | 15584            | 15584            | 15644            | 15671            | 16154            | 16326            | 16323            | 16324            | 16324            | 16349            | 16846            | 16844            | 16843            | 16843            | 16844            | 17812            | 17808            | 17807            | 17806            | 17803            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.77             | 0.77             | 0.77             | 0.77             | 0.80             | 0.82             | 0.82             | 0.82             | 0.82             | 0.82             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             |
|                | 50°F<br>10°C          | TC          | 15178            | 15426            | 15941            | 16033            | 16647            | 16070            | 16079            | 16132            | 16152            | 16666            | 16703            | 16724            | 16734            | 16735            | 16811            | 17906            | 17915            | 17958            | 17963            | 17987            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             |
|                | 59°F<br>15°C          | TC          | 14826            | 15183            | 15718            | 15812            | 16448            | 15731            | 15738            | 15816            | 15846            | 16467            | 16384            | 16402            | 16408            | 16409            | 16517            | 17635            | 17640            | 17675            | 17679            | 17696            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             |
|                | 68°F<br>20°C          | TC          | 14489            | 14957            | 15507            | 15605            | 16261            | 15395            | 15400            | 15520            | 15622            | 16279            | 16065            | 16078            | 16083            | 16083            | 16266            | 17347            | 17353            | 17380            | 17384            | 17396            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 0.91             | 0.91             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.94             | 0.94             | 0.94             | 0.94             | 0.93             |
|                | 77°F<br>25°C          | TC          | 14126            | 14668            | 15236            | 15338            | 16015            | 15045            | 15052            | 15225            | 15356            | 16034            | 15732            | 15750            | 15757            | 15775            | 16049            | 17038            | 17054            | 17092            | 17096            | 17115            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 0.94             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             |
|                | 82°F<br>27.8°C        | TC          | 14471            | 15085            | 15686            | 15793            | 16511            | 15426            | 15451            | 15705            | 15812            | 16529            | 16148            | 16169            | 16177            | 16203            | 16544            | 17515            | 17538            | 17581            | 17586            | 17607            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.06             | 1.07             | 1.07             | 1.07             | 1.08             | 1.07             | 1.07             | 1.07             | 1.07             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.09             | 1.09             | 1.09             | 1.09             | 1.09             |
|                | 86°F<br>30°C          | TC          | 15422            | 16136            | 16791            | 16907            | 17695            | 16441            | 16475            | 16811            | 16927            | 17709            | 17225            | 17245            | 17272            | 17288            | 17725            | 18705            | 18732            | 18776            | 18781            | 18801            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.29             | 1.30             | 1.30             | 1.30             | 1.31             | 1.30             | 1.30             | 1.30             | 1.30             | 1.31             | 1.31             | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             |
|                | 95°F<br>35°C          | TC          | 17771            | 17802            | 18184            | 18291            | 19009            | 18907            | 18912            | 18918            | 18919            | 19047            | 19724            | 19726            | 19736            | 19737            | 19746            | 21292            | 21284            | 21287            | 21286            | 21302            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             |                  |                  |

Table 5 – 18K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 620            | -13°F<br>25°C         | TC          | 15944            | 15937            | 16164            | 16231            | 16678            | 16635            | 16621            | 16611            | 16609            | 16596            | 17133            | 17111            | 17095            | 17092            | 17076            | 18072            | 18067            | 18030            | 18023            | 17985            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.71             | 0.71             | 0.71             | 0.71             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             |
|                | -4°F<br>20°C          | TC          | 17170            | 17163            | 17407            | 17480            | 17961            | 17915            | 17900            | 17889            | 17887            | 17872            | 18450            | 18427            | 18410            | 18407            | 18390            | 19462            | 19456            | 19416            | 19409            | 19368            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             |
|                | 0°F<br>17.8°C         | TC          | 17740            | 17730            | 18059            | 18134            | 18632            | 18501            | 18481            | 18466            | 18464            | 18650            | 19045            | 19018            | 18994            | 18991            | 18982            | 20069            | 20064            | 20063            | 20065            | 20078            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             |
|                | 5°F<br>15°C           | TC          | 18249            | 18312            | 18730            | 18817            | 19397            | 19105            | 19109            | 19111            | 19130            | 19416            | 19716            | 19721            | 19725            | 19725            | 19752            | 20872            | 20866            | 20877            | 20879            | 20888            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.77             | 0.77             | 0.77             | 0.77             | 0.77             |
|                | 14°F<br>10°C          | TC          | 19453            | 19444            | 19840            | 19933            | 20552            | 20419            | 20401            | 20387            | 20385            | 20576            | 21119            | 21092            | 21071            | 21067            | 21046            | 22456            | 22449            | 22406            | 22398            | 22350            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             |
|                | 17°F<br>10°C          | TC          | 19807            | 19872            | 20331            | 20430            | 21094            | 20793            | 20802            | 20806            | 20823            | 21117            | 21503            | 21511            | 21519            | 21520            | 21547            | 22869            | 22863            | 22859            | 22863            | 22882            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.65             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             |
|                | 23°F<br>5°C           | TC          | 19848            | 19934            | 20449            | 20550            | 21227            | 20853            | 20860            | 20862            | 20889            | 21250            | 21572            | 21580            | 21585            | 21586            | 21621            | 22938            | 22931            | 22947            | 22950            | 22964            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             |
|                | 35°F<br>1.7°C         | TC          | 20118            | 20119            | 20237            | 20294            | 20948            | 21059            | 21058            | 21060            | 21060            | 21116            | 21718            | 21716            | 21717            | 21718            | 21720            | 22941            | 22935            | 22934            | 22933            | 22935            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.76             | 0.76             | 0.76             | 0.77             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.81             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             |
|                | 41°F<br>5°C           | TC          | 18161            | 18161            | 18306            | 18433            | 18978            | 19006            | 19005            | 19006            | 19006            | 19073            | 19599            | 19597            | 19599            | 19599            | 19600            | 20698            | 20693            | 20692            | 20691            | 20693            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 0.77             | 0.77             | 0.78             | 0.79             | 0.82             | 0.82             | 0.82             | 0.82             | 0.82             | 0.82             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             |
|                | 47°F<br>8.3°C         | TC          | 16202            | 16213            | 16430            | 16504            | 16992            | 16954            | 16953            | 16953            | 16953            | 17032            | 17480            | 17478            | 17480            | 17479            | 17479            | 18459            | 18454            | 18452            | 18452            | 18454            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 0.79             | 0.79             | 0.80             | 0.81             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             |
|                | 50°F<br>10°C          | TC          | 15793            | 16228            | 16775            | 16872            | 17527            | 16685            | 16694            | 16809            | 16862            | 17543            | 17335            | 17358            | 17367            | 17368            | 17535            | 18530            | 18579            | 18627            | 18633            | 18656            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             |
|                | 59°F<br>15°C          | TC          | 15436            | 15978            | 16545            | 16646            | 17323            | 16332            | 16355            | 16540            | 16663            | 17340            | 17006            | 17023            | 17029            | 17054            | 17354            | 18261            | 18298            | 18334            | 18338            | 18354            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 0.91             | 0.91             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.93             | 0.92             | 0.92             | 0.92             | 0.92             |
|                | 68°F<br>20°C          | TC          | 15075            | 15718            | 16301            | 16405            | 17101            | 15959            | 15995            | 16319            | 16422            | 17118            | 16649            | 16661            | 16691            | 16706            | 17132            | 17939            | 17972            | 18001            | 18003            | 18013            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 0.93             | 0.94             | 0.95             | 0.95             | 0.95             | 0.94             | 0.94             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             |
|                | 77°F<br>25°C          | TC          | 14703            | 15411            | 16014            | 16121            | 16841            | 15587            | 15637            | 16032            | 16139            | 16858            | 16293            | 16312            | 16353            | 16372            | 16873            | 17598            | 17651            | 17692            | 17696            | 17713            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 0.97             | 0.97             | 0.98             | 0.98             | 0.98             | 0.97             | 0.97             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             |
|                | 82°F<br>27.8°C        | TC          | 15074            | 15843            | 16482            | 16594            | 17354            | 15973            | 16035            | 16496            | 16612            | 17372            | 16716            | 16737            | 16789            | 16810            | 17387            | 18074            | 18142            | 18189            | 18194            | 18214            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 1.09             | 1.10             | 1.10             | 1.10             | 1.11             | 1.10             | 1.10             | 1.10             | 1.10             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             |
|                | 86°F<br>30°C          | TC          | 16151            | 16957            | 17651            | 17774            | 18602            | 17033            | 17111            | 17670            | 17794            | 18621            | 17840            | 17860            | 17926            | 17952            | 18637            | 19314            | 19388            | 19434            | 19439            | 19457            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 1.33             | 1.34             | 1.34             | 1.34             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.34             | 1.34             | 1.35             | 1.35             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             |
|                | 95°F<br>35°C          | TC          | 18464            | 18564            | 19164            | 19277            | 20039            | 19623            | 19635            | 19641            | 19664            | 20064            | 20465            | 20470            | 20482            | 20484            | 20518            | 22052            | 22044            | 22048            | 22055            | 22084            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0                |                  |

Table 6 – 24K Cooling — **37MURA + 45MUAA**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 629            | -13°F<br>25°C         | TC          | 17307            | 17304            | 17302            | 17301            | 17298            | 18112            | 18107            | 18104            | 18104            | 18101            | 18683            | 18678            | 18674            | 18673            | 18669            | 19755            | 19749            | 19745            | 19744            | 19738            |
|                |                       | S/T         | 0.72             | 0.80             | 0.87             | 0.88             | 0.97             | 0.59             | 0.67             | 0.74             | 0.76             | 0.83             | 0.51             | 0.59             | 0.66             | 0.67             | 0.75             | 0.38             | 0.46             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 0.84             | 0.84             | 0.84             | 0.84             | 0.84             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             |
|                | -4°F<br>20°C          | TC          | 18638            | 18635            | 18633            | 18632            | 18629            | 19505            | 19500            | 19497            | 19497            | 19493            | 20120            | 20115            | 20111            | 20110            | 20105            | 21274            | 21269            | 21264            | 21263            | 21256            |
|                |                       | S/T         | 0.72             | 0.80             | 0.88             | 0.89             | 0.97             | 0.60             | 0.68             | 0.75             | 0.76             | 0.84             | 0.52             | 0.59             | 0.66             | 0.67             | 0.75             | 0.39             | 0.47             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             |
|                | 0°F<br>17.8°C         | TC          | 19244            | 19240            | 19237            | 19237            | 19231            | 20131            | 20127            | 20123            | 20122            | 20117            | 20759            | 20754            | 20749            | 20748            | 20742            | 21931            | 21925            | 21921            | 21920            | 21911            |
|                |                       | S/T         | 0.72             | 0.81             | 0.88             | 0.90             | 0.98             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.87             | 0.87             | 0.87             | 0.87             | 0.88             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             |
|                | 5°F<br>15°C           | TC          | 19848            | 19848            | 19848            | 19848            | 20145            | 20839            | 20835            | 20835            | 20835            | 20837            | 21552            | 21550            | 21547            | 21547            | 21548            | 22918            | 22912            | 22906            | 22905            | 22905            |
|                |                       | S/T         | 0.73             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.86             | 0.52             | 0.60             | 0.67             | 0.68             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             |
|                | 14°F<br>10°C          | TC          | 19685            | 19683            | 19680            | 19680            | 19776            | 20719            | 20713            | 20710            | 20710            | 20706            | 21457            | 21452            | 21446            | 21446            | 21441            | 22859            | 22852            | 22847            | 22846            | 22839            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 0.99             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.66             | 0.68             | 0.76             | 0.39             | 0.47             | 0.51             | 0.53             | 0.60             |
|                |                       | PI          | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             | 1.01             |
|                | 17°F<br>10°C          | TC          | 19646            | 19642            | 19639            | 19639            | 19922            | 20677            | 20672            | 20668            | 20667            | 20667            | 21417            | 21416            | 21413            | 21412            | 21416            | 22863            | 22856            | 22851            | 22850            | 22851            |
|                |                       | S/T         | 0.73             | 0.82             | 0.89             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             |
|                | 23°F<br>5°C           | TC          | 19333            | 19333            | 19333            | 19346            | 19699            | 20373            | 20369            | 20369            | 20370            | 20372            | 21122            | 21120            | 21117            | 21117            | 21119            | 22562            | 22555            | 22550            | 22549            | 22549            |
|                |                       | S/T         | 0.74             | 0.83             | 0.90             | 0.91             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.09             | 1.09             | 1.09             | 1.09             | 1.09             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             |
|                | 35°F<br>1.7°C         | TC          | 18864            | 18862            | 18861            | 18861            | 18887            | 19841            | 19839            | 19837            | 19836            | 19835            | 20532            | 20527            | 20527            | 20526            | 20523            | 21825            | 21820            | 21816            | 21815            | 21814            |
|                |                       | S/T         | 0.70             | 0.78             | 0.85             | 0.86             | 0.93             | 0.59             | 0.66             | 0.72             | 0.74             | 0.81             | 0.51             | 0.58             | 0.64             | 0.65             | 0.73             | 0.39             | 0.46             | 0.50             | 0.51             | 0.58             |
|                |                       | PI          | 1.09             | 1.09             | 1.09             | 1.09             | 1.09             | 1.15             | 1.15             | 1.15             | 1.15             | 1.15             | 1.20             | 1.20             | 1.20             | 1.20             | 1.20             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             |
|                | 41°F<br>5°C           | TC          | 18431            | 18429            | 18428            | 18428            | 18471            | 19378            | 19376            | 19374            | 19373            | 19372            | 20048            | 20044            | 20042            | 20042            | 20038            | 21302            | 21297            | 21293            | 21292            | 21291            |
|                |                       | S/T         | 0.71             | 0.79             | 0.86             | 0.87             | 0.95             | 0.59             | 0.67             | 0.73             | 0.74             | 0.82             | 0.51             | 0.59             | 0.65             | 0.66             | 0.73             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.17             | 1.17             | 1.17             | 1.17             | 1.17             |
|                | 47°F<br>8.3°C         | TC          | 17995            | 17992            | 17991            | 17991            | 18054            | 18913            | 18911            | 18908            | 18908            | 18907            | 19563            | 19559            | 19558            | 19557            | 19554            | 20778            | 20773            | 20769            | 20769            | 20767            |
|                |                       | S/T         | 0.71             | 0.80             | 0.87             | 0.88             | 0.96             | 0.59             | 0.67             | 0.74             | 0.75             | 0.83             | 0.51             | 0.59             | 0.65             | 0.66             | 0.74             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             |
|                | 50°F<br>10°C          | TC          | 17493            | 17495            | 17656            | 17800            | 18461            | 18551            | 18555            | 18560            | 18561            | 18629            | 19318            | 19320            | 19329            | 19330            | 19338            | 20806            | 20798            | 20801            | 20800            | 20818            |
|                |                       | S/T         | 0.79             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             |
|                | 59°F<br>15°C          | TC          | 16790            | 16816            | 17147            | 17247            | 17921            | 17858            | 17862            | 17865            | 17866            | 17975            | 18639            | 18635            | 18642            | 18643            | 18649            | 20138            | 20129            | 20131            | 20130            | 20145            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 68°F<br>20°C          | TC          | 16103            | 16156            | 16612            | 16714            | 17397            | 17173            | 17176            | 17178            | 17178            | 17385            | 17953            | 17949            | 17956            | 17957            | 17960            | 19454            | 19446            | 19446            | 19446            | 19461            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.02             | 1.02             | 1.02             | 1.02             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             |
|                | 77°F<br>25°C          | TC          | 15396            | 15473            | 16004            | 16108            | 16801            | 16474            | 16479            | 16483            | 16499            | 16826            | 17261            | 17260            | 17269            | 17270            | 17291            | 18777            | 18768            | 18771            | 18771            | 18793            |
|                |                       | S/T         | 0.83             | 0.96             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.55             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 1.06             | 1.06             | 1.06             | 1.06             | 1.07             | 1.06             | 1.06             | 1.06             | 1.06             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             |
|                | 82°F<br>27.8°C        | TC          | 15875            | 15977            | 16590            | 16700            | 17438            | 17014            | 17023            | 17037            | 17052            | 17463            | 17849            | 17850            | 17860            | 17861            | 17892            | 19455            | 19445            | 19449            | 19451            | 19477            |
|                |                       | S/T         | 0.84             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.88             | 0.90             | 1.00             | 0.56             | 0.67             | 0.77             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.26             | 1.26             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             |
|                | 86°F<br>30°C          | TC          | 17352            | 17503            | 18233            | 18356            | 19181            | 18620            | 18629            | 18654            | 18673            | 19209            | 19546            | 19549            | 19559            | 19560            | 19605            | 21331            | 21320            | 21324            | 21329            | 21355            |
|                |                       | S/T         | 0.85             | 0.98             | 1.00             | 1.00             | 1.00             | 0.67             | 0.80             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.65             | 1.65             | 1.66             | 1.66             | 1.67             | 1.66             | 1.66             | 1.66             | 1.66             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             |
|                | 95°F<br>35°C          | TC          | 20972            | 20972            | 20973            | 20997            | 21535            | 22377            | 22371            | 22370            | 22370            | 22374            | 23389            | 23387            | 23382            | 23382            | 23383            | 25346            | 25338            | 25331            | 25330            | 25329            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.87             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0                |                  |                  |                  |

Table 6 – 24K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 694            | -13°F<br>25°C         | TC          | 18283            | 18279            | 18275            | 18275            | 18650            | 19106            | 19100            | 19095            | 19094            | 19088            | 19689            | 19683            | 19676            | 19675            | 19666            | 20784            | 20778            | 20770            | 20770            | 20756            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.93             | 1.00             | 0.61             | 0.70             | 0.78             | 0.79             | 0.88             | 0.52             | 0.61             | 0.69             | 0.70             | 0.79             | 0.38             | 0.46             | 0.53             | 0.54             | 0.62             |
|                |                       | PI          | 0.86             | 0.86             | 0.86             | 0.86             | 0.86             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             |
|                | -4°F<br>20°C          | TC          | 19689            | 19685            | 19681            | 19681            | 20084            | 20576            | 20570            | 20564            | 20563            | 20557            | 21204            | 21197            | 21190            | 21188            | 21179            | 22383            | 22377            | 22368            | 22367            | 22353            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.94             | 1.00             | 0.61             | 0.71             | 0.78             | 0.79             | 0.88             | 0.53             | 0.61             | 0.69             | 0.70             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             |
|                | 0°F<br>17.8°C         | TC          | 20333            | 20327            | 20323            | 20322            | 20829            | 21240            | 21232            | 21224            | 21223            | 21214            | 21881            | 21872            | 21862            | 21860            | 21847            | 23072            | 23067            | 23065            | 23063            | 23066            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             |
|                | 5°F<br>15°C           | TC          | 20951            | 20953            | 21019            | 21048            | 21664            | 21971            | 21970            | 21974            | 21974            | 22000            | 22703            | 22702            | 22703            | 22704            | 22708            | 24098            | 24092            | 24092            | 24091            | 24092            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             |
|                | 14°F<br>10°C          | TC          | 20791            | 20787            | 20783            | 20782            | 21372            | 21853            | 21847            | 21841            | 21839            | 21832            | 22613            | 22605            | 22597            | 22596            | 22585            | 24056            | 24049            | 24039            | 24038            | 24023            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.03             | 1.03             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             | 1.04             |
|                | 17°F<br>10°C          | TC          | 20736            | 20730            | 20784            | 20813            | 21437            | 21795            | 21788            | 21793            | 21793            | 21816            | 22559            | 22558            | 22562            | 22563            | 22570            | 24038            | 24031            | 24034            | 24032            | 24038            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             |
|                | 23°F<br>5°C           | TC          | 20409            | 20411            | 20494            | 20530            | 21205            | 21480            | 21479            | 21483            | 21483            | 21518            | 22249            | 22248            | 22251            | 22251            | 22256            | 23723            | 23716            | 23717            | 23716            | 23719            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.62             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.11             | 1.11             | 1.11             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.14             | 1.14             | 1.14             | 1.14             | 1.14             |
|                | 35°F<br>1.7°C         | TC          | 19946            | 19944            | 19945            | 19945            | 20201            | 20937            | 20934            | 20932            | 20932            | 20933            | 21633            | 21632            | 21628            | 21628            | 21627            | 22934            | 22928            | 22924            | 22923            | 22922            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 1.00             | 0.60             | 0.68             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 1.11             | 1.11             | 1.11             | 1.11             | 1.13             | 1.17             | 1.17             | 1.17             | 1.17             | 1.17             | 1.22             | 1.22             | 1.22             | 1.22             | 1.22             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             |
|                | 41°F<br>5°C           | TC          | 19436            | 19483            | 19483            | 19489            | 19810            | 20447            | 20443            | 20441            | 20442            | 20442            | 21123            | 21121            | 21118            | 21117            | 21116            | 22384            | 22379            | 22375            | 22374            | 22372            |
|                |                       | S/T         | 0.74             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.45             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 0.99             | 0.99             | 0.99             | 0.99             | 1.01             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.20             | 1.20             | 1.20             | 1.20             | 1.20             |
|                | 47°F<br>8.3°C         | TC          | 19021            | 19020            | 19020            | 19039            | 19414            | 19955            | 19951            | 19950            | 19950            | 19950            | 20612            | 20610            | 20607            | 20607            | 20606            | 21837            | 21832            | 21827            | 21827            | 21825            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.70             | 0.77             | 0.78             | 0.87             | 0.52             | 0.61             | 0.68             | 0.69             | 0.78             | 0.39             | 0.45             | 0.52             | 0.53             | 0.62             |
|                |                       | PI          | 0.87             | 0.87             | 0.87             | 0.87             | 0.89             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 50°F<br>10°C          | TC          | 18454            | 18532            | 19055            | 19163            | 19888            | 19549            | 19561            | 19566            | 19586            | 19912            | 20343            | 20354            | 20366            | 20368            | 20397            | 21858            | 21849            | 21875            | 21881            | 21910            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             |
|                | 59°F<br>15°C          | TC          | 17713            | 17840            | 18471            | 18581            | 19319            | 18822            | 18831            | 18859            | 18877            | 19344            | 19623            | 19633            | 19643            | 19644            | 19692            | 21164            | 21155            | 21176            | 21180            | 21202            |
|                |                       | S/T         | 0.85             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.01             | 1.01             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             |
|                | 68°F<br>20°C          | TC          | 16989            | 17274            | 17902            | 18014            | 18761            | 18101            | 18108            | 18158            | 18180            | 18786            | 18903            | 18913            | 18919            | 18920            | 18994            | 20449            | 20441            | 20460            | 20464            | 20481            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.91             | 0.93             | 1.00             | 0.57             | 0.69             | 0.79             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.04             | 1.04             | 1.05             | 1.05             | 1.06             | 1.05             | 1.05             | 1.05             | 1.05             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             |
|                | 77°F<br>25°C          | TC          | 16242            | 16621            | 17258            | 17372            | 18131            | 17365            | 17374            | 17441            | 17469            | 18154            | 18171            | 18187            | 18196            | 18197            | 18291            | 19730            | 19721            | 19752            | 19757            | 19780            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.82             | 0.93             | 0.95             | 1.00             | 0.57             | 0.70             | 0.80             | 0.82             | 0.94             | 0.39             | 0.49             | 0.59             | 0.60             | 0.72             |
|                |                       | PI          | 1.08             | 1.08             | 1.09             | 1.09             | 1.10             | 1.09             | 1.09             | 1.09             | 1.09             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             |
|                | 82°F<br>27.8°C        | TC          | 16761            | 17216            | 17894            | 18014            | 18822            | 17936            | 17946            | 18032            | 18067            | 18847            | 18788            | 18808            | 18818            | 18820            | 18938            | 20438            | 20442            | 20468            | 20474            | 20500            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.96             | 1.00             | 0.58             | 0.70             | 0.81             | 0.83             | 0.96             | 0.39             | 0.49             | 0.59             | 0.61             | 0.72             |
|                |                       | PI          | 1.29             | 1.29             | 1.30             | 1.30             | 1.31             | 1.30             | 1.30             | 1.30             | 1.30             | 1.31             | 1.31             | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             |
|                | 86°F<br>30°C          | TC          | 18333            | 18911            | 19670            | 19803            | 20707            | 19630            | 19640            | 19757            | 19810            | 20734            | 20577            | 20599            | 20609            | 20610            | 20770            | 22411            | 22413            | 22445            | 22451            | 22477            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.84             | 0.96             | 0.98             | 1.00             | 0.58             | 0.71             | 0.82             | 0.84             | 0.97             | 0.39             | 0.50             | 0.60             | 0.61             | 0.73             |
|                |                       | PI          | 1.69             | 1.70             | 1.70             | 1.71             | 1.71             | 1.70             | 1.70             | 1.70             | 1.71             | 1.71             | 1.71             | 1.71             | 1.71             | 1.71             | 1.72             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             |
|                | 95°F<br>35°C          | TC          | 22149            | 22153            | 22275            | 22333            | 23253            | 23597            | 23594            | 23600            | 23601            | 23643            | 24638            | 24638            | 24637            | 24638            | 24649            | 26646            | 26637            | 26629            | 26641            | 26634            |
|                |                       | S/T         | 0.77             | 0.87             | 0.96             | 0.98             | 1.00             | 0.63             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             |                  |                  |                  |

Table 6 – 24K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 759            | -13°F<br>25°C         | TC          | 19305            | 19298            | 19293            | 19405            | 19976            | 20155            | 20144            | 20135            | 20133            | 20119            | 20757            | 20746            | 20732            | 20730            | 20715            | 21896            | 21890            | 21874            | 21868            | 21836            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.89             | 0.89             | 0.89             | 0.89             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             |
|                | -4°F<br>20°C          | TC          | 20790            | 20783            | 20777            | 20898            | 21513            | 21705            | 21693            | 21684            | 21682            | 21667            | 22353            | 22342            | 22327            | 22324            | 22309            | 23580            | 23574            | 23556            | 23550            | 23515            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 0.92             | 0.92             | 0.92             | 0.92             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             |
|                | 0°F<br>17.8°C         | TC          | 21476            | 21467            | 21550            | 21714            | 22316            | 22413            | 22396            | 22383            | 22381            | 22377            | 23070            | 23057            | 23036            | 23032            | 23012            | 24313            | 24306            | 24307            | 24310            | 24328            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.93             | 0.93             | 0.93             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             |
|                | 5°F<br>15°C           | TC          | 22108            | 22128            | 22426            | 22529            | 23218            | 23159            | 23164            | 23166            | 23167            | 23281            | 23917            | 23915            | 23922            | 23922            | 23925            | 25346            | 25339            | 25339            | 25341            | 25355            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.93             | 0.93             | 0.93             | 0.93             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.94             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             |
|                | 14°F<br>10°C          | TC          | 21942            | 21934            | 22024            | 22217            | 22906            | 23043            | 23030            | 23019            | 23017            | 23005            | 23839            | 23828            | 23810            | 23807            | 23786            | 25338            | 25331            | 25312            | 25307            | 25268            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.08             | 1.08             | 1.08             | 1.08             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             |
|                | 17°F<br>10°C          | TC          | 21914            | 21919            | 22188            | 22316            | 23034            | 23014            | 23016            | 23021            | 23022            | 23130            | 23748            | 23757            | 23772            | 23774            | 23780            | 25327            | 25320            | 25322            | 25327            | 25351            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             |
|                | 23°F<br>5°C           | TC          | 21534            | 21564            | 21915            | 22203            | 22743            | 22640            | 22646            | 22649            | 22649            | 22783            | 23438            | 23437            | 23445            | 23445            | 23449            | 24949            | 24941            | 24942            | 24946            | 24963            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.15             | 1.15             | 1.15             | 1.15             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.18             | 1.18             | 1.18             | 1.18             | 1.18             |
|                | 35°F<br>1.7°C         | TC          | 21072            | 21073            | 21113            | 21137            | 21680            | 22083            | 22080            | 22081            | 22081            | 22082            | 22793            | 22791            | 22789            | 22789            | 22791            | 24113            | 24107            | 24102            | 24105            | 24101            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.15             | 1.15             | 1.15             | 1.15             | 1.19             | 1.21             | 1.21             | 1.21             | 1.21             | 1.21             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             |
|                | 41°F<br>5°C           | TC          | 20582            | 20583            | 20640            | 20668            | 21254            | 21565            | 21562            | 21563            | 21563            | 21582            | 22255            | 22253            | 22251            | 22251            | 22254            | 23536            | 23531            | 23526            | 23528            | 23525            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.02             | 1.02             | 1.03             | 1.03             | 1.06             | 1.09             | 1.09             | 1.09             | 1.09             | 1.09             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.24             | 1.24             | 1.24             | 1.24             | 1.24             |
|                | 47°F<br>8.3°C         | TC          | 20091            | 20091            | 20168            | 20203            | 20825            | 21047            | 21044            | 21044            | 21044            | 21076            | 21717            | 21715            | 21713            | 21713            | 21714            | 22963            | 22957            | 22956            | 22955            | 22952            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.90             | 0.90             | 0.90             | 0.91             | 0.95             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.10             | 1.09             | 1.09             | 1.09             | 1.09             |
|                | 50°F<br>10°C          | TC          | 19464            | 19782            | 20443            | 20560            | 21347            | 20607            | 20620            | 20686            | 20713            | 21372            | 21419            | 21446            | 21459            | 21460            | 21557            | 22962            | 22973            | 23029            | 23035            | 23066            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             | 1.02             |
|                | 59°F<br>15°C          | TC          | 18701            | 19151            | 19825            | 19945            | 20747            | 19842            | 19851            | 19949            | 19988            | 20771            | 20666            | 20688            | 20697            | 20698            | 20834            | 22244            | 22250            | 22294            | 22299            | 22321            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.05             | 1.05             | 1.05             | 1.05             | 1.06             | 1.05             | 1.05             | 1.05             | 1.05             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 68°F<br>20°C          | TC          | 17960            | 18539            | 19221            | 19342            | 20156            | 19082            | 19088            | 19237            | 19363            | 20178            | 19912            | 19929            | 19935            | 19935            | 20162            | 21501            | 21508            | 21543            | 21547            | 21562            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.08             | 1.08             | 1.09             | 1.09             | 1.10             | 1.09             | 1.09             | 1.09             | 1.09             | 1.10             | 1.09             | 1.09             | 1.09             | 1.09             | 1.10             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             |
|                | 77°F<br>25°C          | TC          | 17188            | 17847            | 18539            | 18662            | 19487            | 18306            | 18314            | 18525            | 18684            | 19509            | 19141            | 19163            | 19172            | 19195            | 19527            | 20731            | 20750            | 20796            | 20802            | 20824            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.12             | 1.12             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.14             | 1.15             | 1.15             | 1.14             | 1.14             | 1.14             |
|                | 82°F<br>27.8°C        | TC          | 17737            | 18489            | 19225            | 19356            | 20237            | 18907            | 18938            | 19249            | 19380            | 20259            | 19792            | 19818            | 19828            | 19859            | 20278            | 21468            | 21495            | 21549            | 21555            | 21581            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.33             | 1.34             | 1.35             | 1.35             | 1.35             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.37             | 1.36             | 1.36             | 1.36             | 1.36             |
|                | 86°F<br>30°C          | TC          | 19389            | 20287            | 21110            | 21255            | 22246            | 20669            | 20712            | 21135            | 21281            | 22263            | 21655            | 21680            | 21715            | 21734            | 22284            | 23516            | 23550            | 23605            | 23611            | 23636            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.75             | 1.76             | 1.77             | 1.77             | 1.78             | 1.76             | 1.76             | 1.77             | 1.77             | 1.78             | 1.77             | 1.77             | 1.77             | 1.77             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             |
|                | 95°F<br>35°C          | TC          | 23374            | 23416            | 23919            | 24059            | 25003            | 24869            | 24875            | 24884            | 24885            | 25054            | 25943            | 25946            | 25959            | 25961            | 25973            | 28006            | 27996            | 27999            | 27998            | 28019            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             |                  |                  |                  |

Table 6 – 24K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
| 824            | -13°F<br>25°C         | TC          | 20374            | 20365            | 20655            | 20741            | 21312            | 21257            | 21240            | 21226            | 21224            | 21207            | 21893            | 21865            | 21845            | 21842            | 21821            | 23093            | 23086            | 23039            | 23030            | 22982            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             |
|                | -4°F<br>20°C          | TC          | 21941            | 21931            | 22244            | 22336            | 22951            | 22892            | 22874            | 22859            | 22857            | 22838            | 23577            | 23547            | 23525            | 23522            | 23499            | 24869            | 24862            | 24811            | 24802            | 24749            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.95             | 0.96             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.96             |
|                | 0°F<br>17.8°C         | TC          | 22669            | 22656            | 23076            | 23173            | 23809            | 23642            | 23615            | 23597            | 23594            | 23832            | 24336            | 24302            | 24272            | 24268            | 24257            | 25645            | 25639            | 25637            | 25641            | 25657            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             |
|                | 5°F<br>15°C           | TC          | 23319            | 23400            | 23934            | 24045            | 24786            | 24413            | 24419            | 24421            | 24446            | 24810            | 25194            | 25200            | 25205            | 25206            | 25239            | 26671            | 26663            | 26677            | 26680            | 26692            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 0.97             | 0.97             | 0.97             | 0.97             | 0.98             | 0.97             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 14°F<br>10°C          | TC          | 23162            | 23150            | 23622            | 23733            | 24469            | 24312            | 24290            | 24274            | 24271            | 24498            | 25144            | 25113            | 25087            | 25083            | 25058            | 26737            | 26728            | 26677            | 26668            | 26611            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             |
|                | 17°F<br>10°C          | TC          | 23055            | 23130            | 23665            | 23780            | 24553            | 24203            | 24213            | 24217            | 24237            | 24579            | 25029            | 25038            | 25048            | 25049            | 25080            | 26619            | 26611            | 26607            | 26612            | 26634            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             | 1.17             | 1.17             | 1.17             | 1.17             | 1.17             |
|                | 23°F<br>5°C           | TC          | 22714            | 22812            | 23402            | 23518            | 24293            | 23865            | 23872            | 23874            | 23906            | 24319            | 24688            | 24696            | 24703            | 24703            | 24743            | 26251            | 26242            | 26261            | 26265            | 26280            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.20             | 1.20             | 1.20             | 1.20             | 1.21             | 1.21             | 1.21             | 1.21             | 1.21             | 1.21             | 1.21             | 1.21             | 1.21             | 1.21             | 1.22             | 1.24             | 1.24             | 1.24             | 1.24             | 1.24             |
|                | 35°F<br>1.7°C         | TC          | 22243            | 22244            | 22375            | 22437            | 23161            | 23283            | 23282            | 23284            | 23284            | 23346            | 24012            | 24010            | 24012            | 24012            | 24015            | 25364            | 25358            | 25357            | 25356            | 25358            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.19             | 1.19             | 1.20             | 1.21             | 1.26             | 1.27             | 1.27             | 1.27             | 1.27             | 1.27             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             |
|                | 41°F<br>5°C           | TC          | 21725            | 21726            | 21899            | 22051            | 22703            | 22736            | 22735            | 22736            | 22736            | 22816            | 23445            | 23443            | 23445            | 23445            | 23447            | 24760            | 24754            | 24753            | 24752            | 24754            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.06             | 1.06             | 1.08             | 1.09             | 1.13             | 1.13             | 1.13             | 1.13             | 1.13             | 1.14             | 1.18             | 1.18             | 1.18             | 1.18             | 1.18             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             |
|                | 47°F<br>8.3°C         | TC          | 21206            | 21220            | 21505            | 21601            | 22240            | 22189            | 22189            | 22189            | 22189            | 22292            | 22878            | 22876            | 22878            | 22878            | 22878            | 24159            | 24153            | 24151            | 24150            | 24153            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 0.94             | 0.94             | 0.96             | 0.96             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.01             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.14             | 1.14             | 1.14             | 1.14             | 1.14             |
|                | 50°F<br>10°C          | TC          | 20561            | 21127            | 21840            | 21966            | 22818            | 21722            | 21734            | 21884            | 21953            | 22840            | 22569            | 22598            | 22610            | 22612            | 22829            | 24125            | 24188            | 24251            | 24258            | 24288            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 59°F<br>15°C          | TC          | 19767            | 20461            | 21187            | 21316            | 22183            | 20915            | 20943            | 21181            | 21339            | 22205            | 21778            | 21800            | 21807            | 21839            | 22224            | 23385            | 23432            | 23478            | 23484            | 23503            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.09             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.10             | 1.11             | 1.11             | 1.11             | 1.11             | 1.11             |
|                | 68°F<br>20°C          | TC          | 18970            | 19780            | 20513            | 20644            | 21519            | 20083            | 20128            | 20535            | 20666            | 21541            | 20951            | 20967            | 21004            | 21023            | 21559            | 22575            | 22616            | 22652            | 22656            | 22667            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 1.12             | 1.13             | 1.14             | 1.14             | 1.15             | 1.13             | 1.13             | 1.14             | 1.14             | 1.15             | 1.14             | 1.14             | 1.14             | 1.14             | 1.15             | 1.16             | 1.16             | 1.16             | 1.16             | 1.16             |
|                | 77°F<br>25°C          | TC          | 18163            | 19037            | 19783            | 19914            | 20804            | 19255            | 19316            | 19804            | 19937            | 20825            | 20127            | 20150            | 20201            | 20224            | 20843            | 21738            | 21804            | 21855            | 21860            | 21880            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 1.17             | 1.17             | 1.18             | 1.18             | 1.19             | 1.18             | 1.18             | 1.18             | 1.18             | 1.19             | 1.18             | 1.18             | 1.18             | 1.18             | 1.19             | 1.20             | 1.20             | 1.19             | 1.19             | 1.19             |
|                | 82°F<br>27.8°C        | TC          | 18757            | 19715            | 20510            | 20649            | 21594            | 19877            | 19953            | 20528            | 20672            | 21617            | 20801            | 20827            | 20892            | 20918            | 21636            | 22490            | 22575            | 22634            | 22640            | 22664            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 1.39             | 1.40             | 1.41             | 1.41             | 1.41             | 1.40             | 1.40             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.43             | 1.42             | 1.42             | 1.42             | 1.42             |
|                | 86°F<br>30°C          | TC          | 20615            | 21644            | 22529            | 22686            | 23743            | 21740            | 21840            | 22554            | 22712            | 23767            | 22770            | 22796            | 22880            | 22913            | 23788            | 24651            | 24746            | 24805            | 24811            | 24834            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 1.83             | 1.84             | 1.84             | 1.85             | 1.86             | 1.84             | 1.84             | 1.85             | 1.85             | 1.86             | 1.85             | 1.85             | 1.85             | 1.85             | 1.86             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             |
|                | 95°F<br>35°C          | TC          | 24657            | 24790            | 25591            | 25743            | 26760            | 26205            | 26220            | 26228            | 26259            | 26794            | 27329            | 27335            | 27352            | 27354            | 27400            | 29449            | 29437            | 29443            | 29452            | 29491            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.69             | 2.70             | 2.74             | 2.75             | 2.80             | 2.77             | 2.77             | 2.77             | 2.78             | 2.80             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 7 – 30K Cooling — **37MURA + 45MUAA**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
| 712            | -13°F<br>25°C         | TC          | 22272            | 22269            | 22266            | 22266            | 22262            | 23309            | 23303            | 23299            | 23299            | 23294            | 24044            | 24038            | 24032            | 24031            | 24026            | 25423            | 25416            | 25410            | 25409            | 25401            |
|                |                       | S/T         | 0.72             | 0.80             | 0.87             | 0.88             | 0.97             | 0.59             | 0.67             | 0.74             | 0.76             | 0.83             | 0.51             | 0.59             | 0.66             | 0.67             | 0.75             | 0.38             | 0.46             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             |
|                | -4°F<br>20°C          | TC          | 23986            | 23982            | 23979            | 23979            | 23974            | 25102            | 25095            | 25091            | 25091            | 25086            | 25894            | 25887            | 25881            | 25880            | 25874            | 27378            | 27371            | 27365            | 27364            | 27355            |
|                |                       | S/T         | 0.72             | 0.80             | 0.88             | 0.89             | 0.97             | 0.60             | 0.68             | 0.75             | 0.76             | 0.84             | 0.52             | 0.59             | 0.66             | 0.67             | 0.75             | 0.39             | 0.47             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             |
|                | 0°F<br>17.8°C         | TC          | 24766            | 24761            | 24757            | 24757            | 24749            | 25908            | 25902            | 25896            | 25896            | 25889            | 26716            | 26709            | 26703            | 26702            | 26693            | 28223            | 28216            | 28210            | 28209            | 28198            |
|                |                       | S/T         | 0.72             | 0.81             | 0.88             | 0.90             | 0.98             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             |
|                | 5°F<br>15°C           | TC          | 25543            | 25543            | 25543            | 25543            | 25925            | 26818            | 26814            | 26813            | 26813            | 26816            | 27735            | 27734            | 27730            | 27729            | 27731            | 29494            | 29486            | 29479            | 29478            | 29478            |
|                |                       | S/T         | 0.73             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.86             | 0.52             | 0.60             | 0.67             | 0.68             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 14°F<br>10°C          | TC          | 25384            | 25381            | 25377            | 25377            | 25501            | 26717            | 26710            | 26705            | 26705            | 26700            | 27669            | 27662            | 27655            | 27654            | 27648            | 29477            | 29468            | 29461            | 29460            | 29451            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 0.99             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.66             | 0.68             | 0.76             | 0.39             | 0.47             | 0.51             | 0.53             | 0.60             |
|                |                       | PI          | 1.35             | 1.36             | 1.36             | 1.36             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             |
|                | 17°F<br>10°C          | TC          | 25351            | 25346            | 25342            | 25341            | 25706            | 26681            | 26674            | 26669            | 26668            | 26668            | 27635            | 27634            | 27630            | 27630            | 27634            | 29501            | 29493            | 29486            | 29485            | 29486            |
|                |                       | S/T         | 0.73             | 0.82             | 0.89             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             |
|                | 23°F<br>5°C           | TC          | 25036            | 25037            | 25037            | 25053            | 25510            | 26383            | 26378            | 26378            | 26378            | 26381            | 27353            | 27351            | 27347            | 27346            | 27349            | 29217            | 29209            | 29202            | 29200            | 29201            |
|                |                       | S/T         | 0.74             | 0.83             | 0.90             | 0.91             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 35°F<br>1.7°C         | TC          | 24610            | 24608            | 24607            | 24606            | 24640            | 25885            | 25883            | 25880            | 25879            | 25877            | 26786            | 26781            | 26780            | 26779            | 26775            | 28473            | 28467            | 28461            | 28460            | 28459            |
|                |                       | S/T         | 0.70             | 0.78             | 0.85             | 0.86             | 0.93             | 0.59             | 0.66             | 0.72             | 0.74             | 0.81             | 0.51             | 0.58             | 0.64             | 0.65             | 0.73             | 0.39             | 0.46             | 0.50             | 0.51             | 0.58             |
|                |                       | PI          | 1.32             | 1.32             | 1.32             | 1.32             | 1.33             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.58             | 1.58             | 1.58             | 1.58             | 1.58             |
|                | 41°F<br>5°C           | TC          | 24430            | 24427            | 24426            | 24426            | 24483            | 25686            | 25683            | 25680            | 25679            | 25677            | 26573            | 26568            | 26566            | 26565            | 26561            | 28235            | 28229            | 28224            | 28223            | 28221            |
|                |                       | S/T         | 0.71             | 0.79             | 0.86             | 0.87             | 0.95             | 0.59             | 0.67             | 0.73             | 0.74             | 0.82             | 0.51             | 0.59             | 0.65             | 0.66             | 0.73             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 1.35             | 1.35             | 1.35             | 1.35             | 1.36             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.50             | 1.50             | 1.50             | 1.50             | 1.50             | 1.64             | 1.64             | 1.63             | 1.63             | 1.63             |
|                | 47°F<br>8.3°C         | TC          | 24246            | 24243            | 24241            | 24241            | 24325            | 25483            | 25480            | 25477            | 25477            | 25475            | 26359            | 26353            | 26352            | 26351            | 26347            | 27996            | 27990            | 27984            | 27984            | 27981            |
|                |                       | S/T         | 0.71             | 0.80             | 0.87             | 0.88             | 0.96             | 0.59             | 0.67             | 0.74             | 0.75             | 0.83             | 0.51             | 0.59             | 0.65             | 0.66             | 0.74             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             |
|                | 50°F<br>10°C          | TC          | 23857            | 23861            | 24081            | 24276            | 25177            | 25300            | 25306            | 25313            | 25314            | 25407            | 26347            | 26350            | 26361            | 26364            | 26374            | 28376            | 28366            | 28370            | 28368            | 28393            |
|                |                       | S/T         | 0.79             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.56             | 1.56             | 1.56             | 1.56             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 59°F<br>15°C          | TC          | 23768            | 23805            | 24273            | 24415            | 25370            | 25280            | 25285            | 25290            | 25291            | 25446            | 26386            | 26380            | 26390            | 26392            | 26399            | 28507            | 28496            | 28498            | 28497            | 28518            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.61             | 1.61             | 1.61             | 1.61             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             |
|                | 68°F<br>20°C          | TC          | 23693            | 23771            | 24442            | 24592            | 25597            | 25267            | 25271            | 25275            | 25275            | 25579            | 26415            | 26409            | 26419            | 26420            | 26425            | 28623            | 28611            | 28612            | 28611            | 28633            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.65             | 1.65             | 1.66             | 1.66             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             |
|                | 77°F<br>25°C          | TC          | 23580            | 23696            | 24510            | 24669            | 25731            | 25229            | 25238            | 25243            | 25268            | 25768            | 26436            | 26434            | 26448            | 26450            | 26482            | 28757            | 28744            | 28747            | 28748            | 28781            |
|                |                       | S/T         | 0.83             | 0.96             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.55             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 1.71             | 1.72             | 1.72             | 1.72             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             |
|                | 82°F<br>27.8°C        | TC          | 23637            | 23790            | 24702            | 24866            | 25965            | 25334            | 25346            | 25368            | 25390            | 26002            | 26576            | 26578            | 26593            | 26595            | 26640            | 28967            | 28953            | 28959            | 28961            | 29000            |
|                |                       | S/T         | 0.84             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.88             | 0.90             | 1.00             | 0.56             | 0.67             | 0.77             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.87             | 1.87             | 1.87             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             |
|                | 86°F<br>30°C          | TC          | 23839            | 24047            | 25049            | 25218            | 26352            | 25582            | 25593            | 25628            | 25653            | 26390            | 26853            | 26857            | 26871            | 26873            | 26934            | 29306            | 29291            | 29296            | 29303            | 29339            |
|                |                       | S/T         | 0.85             | 0.98             | 1.00             | 1.00             | 1.00             | 0.67             | 0.80             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.13             | 2.13             | 2.14             | 2.14             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.16             | 2.16             | 2.16             | 2.16             | 2.16             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             |
|                | 95°F<br>35°C          | TC          | 24664            | 24663            | 24665            | 24693            | 25325            | 26315            | 26309            | 26307            | 26307            | 26312            | 27506            | 27504            | 27498            | 27497            | 27498            | 29808            | 29797            | 29789            | 29788            | 29788            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.87             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 7 – 30K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 806            | -13°F<br>25°C         | TC          | 23962            | 23957            | 23952            | 23952            | 24443            | 25041            | 25034            | 25027            | 25026            | 25018            | 25806            | 25797            | 25788            | 25787            | 25775            | 27240            | 27233            | 27222            | 27221            | 27204            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.93             | 1.00             | 0.61             | 0.70             | 0.78             | 0.79             | 0.88             | 0.52             | 0.61             | 0.69             | 0.70             | 0.79             | 0.38             | 0.46             | 0.53             | 0.54             | 0.62             |
|                |                       | PI          | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             |
|                | -4°F<br>20°C          | TC          | 25805            | 25800            | 25795            | 25794            | 26324            | 26967            | 26960            | 26952            | 26951            | 26942            | 27791            | 27782            | 27772            | 27770            | 27758            | 29335            | 29328            | 29316            | 29315            | 29296            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.94             | 1.00             | 0.61             | 0.71             | 0.78             | 0.79             | 0.88             | 0.53             | 0.61             | 0.69             | 0.70             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.40             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             |
|                | 0°F<br>17.8°C         | TC          | 26649            | 26642            | 26636            | 26635            | 27299            | 27837            | 27828            | 27817            | 27815            | 27803            | 28678            | 28666            | 28654            | 28651            | 28633            | 30239            | 30233            | 30229            | 30227            | 30231            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.40             | 1.41             | 1.41             | 1.41             | 1.41             | 1.40             | 1.40             | 1.40             | 1.40             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             |
|                | 5°F<br>15°C           | TC          | 27459            | 27462            | 27548            | 27587            | 28394            | 28797            | 28795            | 28799            | 28800            | 28834            | 29755            | 29754            | 29756            | 29757            | 29763            | 31584            | 31576            | 31576            | 31575            | 31577            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.43             | 1.43             | 1.43             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.45             | 1.45             | 1.45             | 1.45             | 1.45             |
|                | 14°F<br>10°C          | TC          | 27304            | 27298            | 27293            | 27292            | 28067            | 28699            | 28690            | 28682            | 28681            | 28672            | 29696            | 29686            | 29676            | 29674            | 29660            | 31591            | 31582            | 31570            | 31568            | 31548            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.41             | 1.41             | 1.41             | 1.41             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             |
|                | 17°F<br>10°C          | TC          | 27250            | 27242            | 27313            | 27351            | 28171            | 28642            | 28632            | 28638            | 28640            | 28670            | 29645            | 29645            | 29649            | 29651            | 29660            | 31590            | 31580            | 31583            | 31582            | 31589            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 23°F<br>5°C           | TC          | 26916            | 26918            | 27028            | 27076            | 27965            | 28328            | 28328            | 28333            | 28333            | 28379            | 29343            | 29342            | 29345            | 29346            | 29353            | 31287            | 31277            | 31279            | 31277            | 31282            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.62             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.45             | 1.45             | 1.45             | 1.45             | 1.45             |
|                | 35°F<br>1.7°C         | TC          | 26501            | 26499            | 26500            | 26500            | 26841            | 27819            | 27814            | 27811            | 27811            | 27813            | 28744            | 28741            | 28737            | 28736            | 28735            | 30471            | 30464            | 30458            | 30457            | 30456            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 1.00             | 0.60             | 0.68             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 1.38             | 1.38             | 1.38             | 1.38             | 1.40             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.65             | 1.65             | 1.65             | 1.65             | 1.65             |
|                | 41°F<br>5°C           | TC          | 26237            | 26300            | 26301            | 26309            | 26742            | 27601            | 27596            | 27594            | 27594            | 27595            | 28514            | 28512            | 28507            | 28506            | 28505            | 30217            | 30210            | 30204            | 30202            | 30200            |
|                |                       | S/T         | 0.74             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.45             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.41             | 1.41             | 1.41             | 1.41             | 1.44             | 1.50             | 1.50             | 1.50             | 1.50             | 1.50             | 1.57             | 1.57             | 1.56             | 1.56             | 1.56             | 1.71             | 1.71             | 1.70             | 1.70             | 1.70             |
|                | 47°F<br>8.3°C         | TC          | 26101            | 26100            | 26100            | 26125            | 26640            | 27382            | 27377            | 27375            | 27375            | 27376            | 28285            | 28281            | 28277            | 28277            | 28276            | 29965            | 29958            | 29952            | 29951            | 29949            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.70             | 0.77             | 0.78             | 0.87             | 0.52             | 0.61             | 0.68             | 0.69             | 0.78             | 0.39             | 0.45             | 0.52             | 0.53             | 0.62             |
|                |                       | PI          | 1.45             | 1.45             | 1.45             | 1.45             | 1.48             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             |
|                | 50°F<br>10°C          | TC          | 25631            | 25740            | 26467            | 26617            | 27623            | 27153            | 27169            | 27177            | 27205            | 27658            | 28255            | 28271            | 28288            | 28290            | 28331            | 30359            | 30348            | 30383            | 30392            | 30433            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             |
|                | 59°F<br>15°C          | TC          | 25537            | 25720            | 26629            | 26788            | 27852            | 27135            | 27148            | 27189            | 27214            | 27888            | 28290            | 28305            | 28319            | 28320            | 28389            | 30512            | 30498            | 30529            | 30535            | 30567            |
|                |                       | S/T         | 0.85             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.68             | 1.68             | 1.68             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             |
|                | 68°F<br>20°C          | TC          | 25457            | 25884            | 26825            | 26992            | 28113            | 27123            | 27133            | 27208            | 27241            | 28149            | 28325            | 28340            | 28350            | 28351            | 28461            | 30642            | 30629            | 30659            | 30665            | 30690            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.91             | 0.93             | 1.00             | 0.57             | 0.69             | 0.79             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.73             | 1.73             | 1.74             | 1.74             | 1.75             | 1.74             | 1.74             | 1.74             | 1.74             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             | 1.78             | 1.78             | 1.78             | 1.78             | 1.77             |
|                | 77°F<br>25°C          | TC          | 25334            | 25925            | 26918            | 27095            | 28279            | 27085            | 27098            | 27202            | 27246            | 28316            | 28342            | 28366            | 28380            | 28382            | 28529            | 30773            | 30759            | 30807            | 30815            | 30850            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.82             | 0.93             | 0.95             | 1.00             | 0.57             | 0.70             | 0.80             | 0.82             | 0.94             | 0.39             | 0.49             | 0.59             | 0.60             | 0.72             |
|                |                       | PI          | 1.79             | 1.79             | 1.80             | 1.80             | 1.81             | 1.80             | 1.80             | 1.80             | 1.80             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             |
|                | 82°F<br>27.8°C        | TC          | 25416            | 26106            | 27134            | 27317            | 28542            | 27198            | 27213            | 27343            | 27397            | 28580            | 28490            | 28521            | 28536            | 28538            | 28718            | 30993            | 30998            | 31037            | 31046            | 31086            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.96             | 1.00             | 0.58             | 0.70             | 0.81             | 0.83             | 0.96             | 0.39             | 0.49             | 0.59             | 0.61             | 0.72             |
|                |                       | PI          | 1.95             | 1.95             | 1.96             | 1.96             | 1.97             | 1.96             | 1.96             | 1.96             | 1.96             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             |
|                | 86°F<br>30°C          | TC          | 25650            | 26460            | 27521            | 27708            | 28972            | 27466            | 27479            | 27643            | 27717            | 29010            | 28791            | 28821            | 28835            | 28837            | 29060            | 31357            | 31359            | 31405            | 31413            | 31450            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.84             | 0.96             | 0.98             | 1.00             | 0.58             | 0.71             | 0.82             | 0.84             | 0.97             | 0.39             | 0.50             | 0.60             | 0.61             | 0.73             |
|                |                       | PI          | 2.22             | 2.23             | 2.24             | 2.24             | 2.25             | 2.24             | 2.24             | 2.24             | 2.24             | 2.25             | 2.25             | 2.25             | 2.25             | 2.25             | 2.25             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             |
|                | 95°F<br>35°C          | TC          | 26527            | 26533            | 26678            | 26747            | 27850            | 28261            | 28258            | 28265            | 28267            | 28317            | 29509            | 29508            | 29507            | 29508            | 29522            | 31914            | 31902            | 31893            | 31908            | 31899            |
|                |                       | S/T         | 0.77             | 0.87             | 0.96             | 0.98             | 1.00             | 0.63             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.53             |                  |                  |

Table 7 – 30K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 894            | -13°F<br>25°C         | TC          | 25768            | 25759            | 25752            | 25901            | 26664            | 26903            | 26888            | 26876            | 26874            | 26855            | 27706            | 27691            | 27673            | 27670            | 27650            | 29226            | 29218            | 29197            | 29189            | 29146            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.42             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             |
|                | -4°F<br>20°C          | TC          | 27750            | 27740            | 27733            | 27894            | 28715            | 28972            | 28956            | 28943            | 28941            | 28921            | 29837            | 29821            | 29801            | 29798            | 29777            | 31474            | 31466            | 31442            | 31435            | 31388            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.47             | 1.47             | 1.47             | 1.47             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             |
|                | 0°F<br>17.8°C         | TC          | 28666            | 28654            | 28764            | 28984            | 29786            | 29916            | 29893            | 29876            | 29873            | 29868            | 30793            | 30776            | 30748            | 30743            | 30716            | 32453            | 32443            | 32445            | 32448            | 32472            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             |
|                | 5°F<br>15°C           | TC          | 29509            | 29536            | 29934            | 30071            | 30991            | 30912            | 30919            | 30922            | 30923            | 31075            | 31924            | 31921            | 31930            | 31931            | 31935            | 33832            | 33822            | 33822            | 33825            | 33843            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.49             | 1.49             | 1.49             | 1.49             | 1.50             | 1.50             | 1.50             | 1.50             | 1.50             | 1.50             | 1.51             | 1.51             | 1.51             | 1.51             | 1.51             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             |
|                | 14°F<br>10°C          | TC          | 29346            | 29335            | 29456            | 29714            | 30636            | 30819            | 30801            | 30786            | 30784            | 30768            | 31884            | 31869            | 31844            | 31840            | 31813            | 33889            | 33879            | 33854            | 33846            | 33794            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.47             | 1.47             | 1.47             | 1.47             | 1.48             | 1.47             | 1.47             | 1.47             | 1.47             | 1.47             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             |
|                | 17°F<br>10°C          | TC          | 29328            | 29336            | 29695            | 29866            | 30828            | 30801            | 30803            | 30810            | 30811            | 30956            | 31783            | 31795            | 31816            | 31817            | 31825            | 33897            | 33886            | 33890            | 33896            | 33928            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.47             | 1.47             | 1.47             | 1.47             | 1.47             |
|                | 23°F<br>5°C           | TC          | 28924            | 28964            | 29435            | 29580            | 30547            | 30408            | 30416            | 30420            | 30421            | 30601            | 31480            | 31479            | 31489            | 31490            | 31496            | 33510            | 33500            | 33501            | 33506            | 33529            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.49             | 1.49             | 1.49             | 1.49             | 1.50             | 1.50             | 1.50             | 1.50             | 1.50             | 1.50             | 1.51             | 1.51             | 1.51             | 1.51             | 1.51             | 1.53             | 1.53             | 1.53             | 1.53             | 1.53             |
|                | 35°F<br>1.7°C         | TC          | 28513            | 28514            | 28569            | 28601            | 29336            | 29881            | 29877            | 29879            | 29879            | 29880            | 30842            | 30840            | 30836            | 30836            | 30840            | 32628            | 32620            | 32613            | 32618            | 32612            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.45             | 1.45             | 1.45             | 1.45             | 1.50             | 1.53             | 1.53             | 1.53             | 1.53             | 1.53             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             |
|                | 41°F<br>5°C           | TC          | 28296            | 28297            | 28375            | 28413            | 29220            | 29647            | 29644            | 29645            | 29645            | 29671            | 30596            | 30592            | 30590            | 30590            | 30594            | 32357            | 32349            | 32343            | 32346            | 32342            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.48             | 1.48             | 1.49             | 1.49             | 1.55             | 1.58             | 1.58             | 1.58             | 1.58             | 1.58             | 1.65             | 1.65             | 1.65             | 1.65             | 1.65             | 1.80             | 1.79             | 1.79             | 1.79             | 1.79             |
|                | 47°F<br>8.3°C         | TC          | 28076            | 28077            | 28185            | 28234            | 29102            | 29412            | 29408            | 29409            | 29409            | 29454            | 30349            | 30346            | 30343            | 30344            | 30346            | 32091            | 32083            | 32080            | 32079            | 32075            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.52             | 1.52             | 1.53             | 1.53             | 1.60             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                | 50°F<br>10°C          | TC          | 27532            | 27982            | 28917            | 29083            | 30197            | 29150            | 29167            | 29262            | 29300            | 30232            | 30298            | 30337            | 30355            | 30356            | 30493            | 32481            | 32496            | 32575            | 32584            | 32628            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             |
|                | 59°F<br>15°C          | TC          | 27458            | 28119            | 29108            | 29284            | 30462            | 29133            | 29146            | 29291            | 29347            | 30497            | 30343            | 30375            | 30388            | 30389            | 30590            | 32660            | 32669            | 32733            | 32740            | 32772            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.77             | 1.77             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             |
|                | 68°F<br>20°C          | TC          | 27407            | 28291            | 29332            | 29517            | 30758            | 29120            | 29129            | 29357            | 29549            | 30793            | 30387            | 30412            | 30421            | 30422            | 30768            | 32812            | 32823            | 32875            | 32881            | 32905            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.82             | 1.83             | 1.84             | 1.84             | 1.85             | 1.83             | 1.83             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             |
|                | 77°F<br>25°C          | TC          | 27302            | 28348            | 29448            | 29643            | 30954            | 29078            | 29091            | 29426            | 29678            | 30990            | 30405            | 30440            | 30454            | 30489            | 31018            | 32931            | 32960            | 33034            | 33042            | 33078            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.88             | 1.89             | 1.90             | 1.90             | 1.91             | 1.90             | 1.90             | 1.90             | 1.90             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             |
|                | 82°F<br>27.8°C        | TC          | 27391            | 28552            | 29690            | 29893            | 31252            | 29199            | 29246            | 29726            | 29929            | 31287            | 30565            | 30606            | 30621            | 30669            | 31316            | 33153            | 33196            | 33279            | 33288            | 33327            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 2.05             | 2.06             | 2.07             | 2.07             | 2.08             | 2.06             | 2.06             | 2.07             | 2.07             | 2.08             | 2.08             | 2.07             | 2.07             | 2.07             | 2.08             | 2.10             | 2.10             | 2.09             | 2.09             | 2.09             |
|                | 86°F<br>30°C          | TC          | 27627            | 28907            | 30080            | 30287            | 31699            | 29452            | 29513            | 30116            | 30323            | 31724            | 30857            | 30893            | 30942            | 30970            | 31753            | 33509            | 33557            | 33636            | 33644            | 33679            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 2.34             | 2.35             | 2.36             | 2.36             | 2.38             | 2.36             | 2.36             | 2.36             | 2.36             | 2.38             | 2.37             | 2.37             | 2.37             | 2.37             | 2.38             | 2.40             | 2.40             | 2.40             | 2.40             | 2.40             |
|                | 95°F<br>35°C          | TC          | 28510            | 28561            | 29174            | 29346            | 30497            | 30334            | 30341            | 30352            | 30353            | 30559            | 31644            | 31647            | 31663            | 31666            | 31680            | 34160            | 34148            | 34152            | 34150            | 34175            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             |                  |                  |

Table 7 – 30K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.6°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 988            | -13°F<br>25°C         | TC          | 27696            | 27683            | 28078            | 28194            | 28970            | 28896            | 28873            | 28854            | 28852            | 28828            | 29760            | 29723            | 29695            | 29691            | 29662            | 31392            | 31383            | 31319            | 31307            | 31241            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.50             | 1.50             | 1.50             | 1.50             | 1.50             | 1.49             | 1.50             | 1.50             | 1.50             | 1.50             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             | 1.50             | 1.50             | 1.50             | 1.50             | 1.50             |
|                | -4°F<br>20°C          | TC          | 29826            | 29813            | 30238            | 30363            | 31199            | 31119            | 31094            | 31074            | 31071            | 31045            | 32050            | 32009            | 31979            | 31975            | 31944            | 33806            | 33797            | 33728            | 33715            | 33644            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.56             | 1.56             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 0°F<br>17.8°C         | TC          | 30816            | 30798            | 31369            | 31500            | 32365            | 32138            | 32102            | 32077            | 32074            | 32396            | 33082            | 33035            | 32994            | 32989            | 32974            | 34861            | 34853            | 34850            | 34855            | 34878            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             |
|                | 5°F<br>15°C           | TC          | 31700            | 31809            | 32536            | 32686            | 33693            | 33186            | 33195            | 33197            | 33231            | 33726            | 34247            | 34256            | 34263            | 34264            | 34310            | 36256            | 36245            | 36264            | 36268            | 36284            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.58             | 1.58             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             |
|                | 14°F<br>10°C          | TC          | 31548            | 31532            | 32176            | 32327            | 33329            | 33114            | 33085            | 33063            | 33059            | 33368            | 34249            | 34206            | 34171            | 34166            | 34131            | 36417            | 36406            | 36336            | 36324            | 36246            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.57             | 1.57             | 1.57             | 1.57             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             |
|                | 17°F<br>10°C          | TC          | 31424            | 31527            | 32255            | 32412            | 33465            | 32988            | 33002            | 33008            | 33036            | 33501            | 34114            | 34127            | 34140            | 34142            | 34184            | 36281            | 36271            | 36266            | 36272            | 36303            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 23°F<br>5°C           | TC          | 31071            | 31204            | 32011            | 32169            | 33230            | 32644            | 32654            | 32657            | 32700            | 33265            | 33770            | 33781            | 33790            | 33791            | 33846            | 35908            | 35896            | 35922            | 35927            | 35948            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.58             | 1.58             | 1.58             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             |
|                | 35°F<br>1.7°C         | TC          | 30653            | 30654            | 30834            | 30920            | 31917            | 32086            | 32084            | 32087            | 32087            | 32173            | 33090            | 33088            | 33090            | 33090            | 33094            | 34953            | 34945            | 34943            | 34942            | 34945            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.53             | 1.53             | 1.55             | 1.55             | 1.62             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                | 41°F<br>5°C           | TC          | 30418            | 30418            | 30660            | 30873            | 31786            | 31832            | 31832            | 31833            | 31833            | 31945            | 32826            | 32823            | 32825            | 32826            | 32828            | 34667            | 34659            | 34657            | 34655            | 34659            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.57             | 1.57             | 1.59             | 1.61             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.68             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             |
|                | 47°F<br>8.3°C         | TC          | 30181            | 30201            | 30606            | 30743            | 31653            | 31581            | 31580            | 31580            | 31580            | 31726            | 32561            | 32558            | 32561            | 32560            | 32560            | 34384            | 34376            | 34373            | 34371            | 34375            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 1.62             | 1.62             | 1.65             | 1.66             | 1.73             | 1.72             | 1.72             | 1.72             | 1.72             | 1.73             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.97             | 1.97             | 1.96             | 1.96             | 1.97             |
|                | 50°F<br>10°C          | TC          | 29620            | 30436            | 31463            | 31645            | 32872            | 31292            | 31310            | 31526            | 31625            | 32903            | 32513            | 32556            | 32573            | 32575            | 32888            | 34754            | 34846            | 34936            | 34946            | 34990            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             |
|                | 59°F<br>15°C          | TC          | 29558            | 30595            | 31681            | 31874            | 33171            | 31274            | 31317            | 31672            | 31908            | 33204            | 32564            | 32597            | 32608            | 32656            | 33231            | 34967            | 35037            | 35107            | 35115            | 35144            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.88             | 1.88             | 1.89             | 1.89             | 1.90             | 1.89             | 1.89             | 1.89             | 1.89             | 1.90             | 1.89             | 1.89             | 1.89             | 1.89             | 1.90             | 1.91             | 1.91             | 1.90             | 1.90             | 1.90             |
|                | 68°F<br>20°C          | TC          | 29482            | 30741            | 31881            | 32083            | 33445            | 31212            | 31282            | 31915            | 32118            | 33478            | 32561            | 32585            | 32644            | 32673            | 33505            | 35085            | 35150            | 35205            | 35210            | 35229            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 1.93             | 1.94             | 1.95             | 1.96             | 1.97             | 1.95             | 1.95             | 1.95             | 1.96             | 1.97             | 1.96             | 1.96             | 1.96             | 1.96             | 1.97             | 1.99             | 1.99             | 1.99             | 1.99             | 1.98             |
|                | 77°F<br>25°C          | TC          | 29382            | 30797            | 32003            | 32216            | 33655            | 31149            | 31248            | 32037            | 32251            | 33689            | 32560            | 32596            | 32680            | 32716            | 33717            | 35166            | 35273            | 35354            | 35363            | 35396            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 2.00             | 2.01             | 2.02             | 2.03             | 2.04             | 2.02             | 2.02             | 2.02             | 2.03             | 2.04             | 2.03             | 2.03             | 2.03             | 2.03             | 2.04             | 2.05             | 2.05             | 2.05             | 2.05             | 2.05             |
|                | 82°F<br>27.8°C        | TC          | 29500            | 31006            | 32257            | 32476            | 33963            | 31261            | 31382            | 32285            | 32512            | 33998            | 32715            | 32757            | 32859            | 32899            | 34028            | 35372            | 35505            | 35598            | 35607            | 35646            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 2.18             | 2.19             | 2.20             | 2.20             | 2.21             | 2.19             | 2.19             | 2.20             | 2.20             | 2.21             | 2.21             | 2.20             | 2.20             | 2.20             | 2.21             | 2.23             | 2.23             | 2.23             | 2.23             | 2.22             |
|                | 86°F<br>30°C          | TC          | 29915            | 31409            | 32694            | 32921            | 34455            | 31548            | 31693            | 32730            | 32959            | 34490            | 33043            | 33081            | 33203            | 33251            | 34520            | 35773            | 35911            | 35997            | 36005            | 36039            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 2.49             | 2.50             | 2.51             | 2.52             | 2.53             | 2.50             | 2.50             | 2.51             | 2.52             | 2.53             | 2.52             | 2.52             | 2.52             | 2.52             | 2.53             | 2.55             | 2.55             | 2.55             | 2.55             | 2.54             |
|                | 95°F<br>35°C          | TC          | 30629            | 30794            | 31789            | 31978            | 33241            | 32552            | 32571            | 32581            | 32620            | 33283            | 33949            | 33956            | 33977            | 33980            | 34036            | 36581            | 36567            | 36575            | 36585            | 36634            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             |                  |                  |

Table 8 – 36K Cooling — **37MURA + 45MUAA**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 865            | -13°F<br>25°C         | TC          | 27520            | 27516            | 27512            | 27512            | 27507            | 28801            | 28793            | 28788            | 28788            | 28782            | 29709            | 29701            | 29694            | 29693            | 29686            | 31412            | 31404            | 31397            | 31395            | 31385            |
|                |                       | S/T         | 0.72             | 0.80             | 0.87             | 0.88             | 0.97             | 0.59             | 0.67             | 0.74             | 0.76             | 0.83             | 0.51             | 0.59             | 0.66             | 0.67             | 0.75             | 0.38             | 0.46             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 2.29             | 2.29             | 2.29             | 2.29             | 2.29             | 2.26             | 2.26             | 2.26             | 2.26             | 2.27             | 2.25             | 2.25             | 2.25             | 2.25             | 2.25             | 2.24             | 2.24             | 2.24             | 2.24             | 2.24             |
|                | -4°F<br>20°C          | TC          | 29637            | 29632            | 29628            | 29628            | 29622            | 31016            | 31008            | 31003            | 31002            | 30996            | 31994            | 31986            | 31978            | 31977            | 31970            | 33829            | 33820            | 33812            | 33810            | 33800            |
|                |                       | S/T         | 0.72             | 0.80             | 0.88             | 0.89             | 0.97             | 0.60             | 0.68             | 0.75             | 0.76             | 0.84             | 0.52             | 0.59             | 0.66             | 0.67             | 0.75             | 0.39             | 0.47             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.34             | 2.34             | 2.35             | 2.35             | 2.35             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.32             | 2.32             | 2.32             | 2.32             | 2.32             |
|                | 0°F<br>17.8°C         | TC          | 30601            | 30595            | 30590            | 30589            | 30580            | 32011            | 32005            | 31998            | 31997            | 31988            | 33010            | 33001            | 32994            | 32992            | 32982            | 34872            | 34863            | 34857            | 34855            | 34842            |
|                |                       | S/T         | 0.72             | 0.81             | 0.88             | 0.90             | 0.98             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 2.39             | 2.39             | 2.39             | 2.39             | 2.39             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             |
|                | 5°F<br>15°C           | TC          | 31560            | 31560            | 31561            | 31561            | 32032            | 33137            | 33131            | 33130            | 33130            | 33133            | 34270            | 34268            | 34263            | 34262            | 34265            | 36442            | 36432            | 36424            | 36423            | 36422            |
|                |                       | S/T         | 0.73             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.86             | 0.52             | 0.60             | 0.67             | 0.68             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 2.42             | 2.42             | 2.42             | 2.42             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             |
|                | 14°F<br>10°C          | TC          | 32607            | 32603            | 32599            | 32598            | 32757            | 34319            | 34310            | 34304            | 34304            | 34298            | 35542            | 35533            | 35524            | 35523            | 35516            | 37864            | 37853            | 37844            | 37843            | 37831            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 0.99             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.66             | 0.68             | 0.76             | 0.39             | 0.47             | 0.51             | 0.53             | 0.60             |
|                |                       | PI          | 2.35             | 2.35             | 2.35             | 2.35             | 2.35             | 2.34             | 2.34             | 2.34             | 2.34             | 2.34             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.32             | 2.32             | 2.32             | 2.32             | 2.32             |
|                | 17°F<br>10°C          | TC          | 32980            | 32973            | 32968            | 32967            | 33442            | 34709            | 34701            | 34694            | 34693            | 34693            | 35951            | 35950            | 35945            | 35944            | 35949            | 38379            | 38368            | 38359            | 38357            | 38359            |
|                |                       | S/T         | 0.73             | 0.82             | 0.89             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 2.31             | 2.31             | 2.32             | 2.32             | 2.31             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             | 2.31             | 2.31             | 2.31             | 2.31             | 2.31             |
|                | 23°F<br>5°C           | TC          | 32851            | 32852            | 32852            | 32873            | 33473            | 34618            | 34612            | 34611            | 34612            | 34616            | 35891            | 35888            | 35883            | 35882            | 35886            | 38337            | 38326            | 38317            | 38315            | 38315            |
|                |                       | S/T         | 0.74             | 0.83             | 0.90             | 0.91             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 2.26             | 2.26             | 2.26             | 2.26             | 2.26             | 2.26             | 2.26             | 2.26             | 2.26             | 2.26             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             |
|                | 35°F<br>1.7°C         | TC          | 32862            | 32859            | 32857            | 32857            | 32902            | 34564            | 34561            | 34557            | 34556            | 34553            | 35767            | 35760            | 35758            | 35758            | 35752            | 38020            | 38011            | 38004            | 38003            | 38001            |
|                |                       | S/T         | 0.70             | 0.78             | 0.85             | 0.86             | 0.93             | 0.59             | 0.66             | 0.72             | 0.74             | 0.81             | 0.51             | 0.58             | 0.64             | 0.65             | 0.73             | 0.39             | 0.46             | 0.50             | 0.51             | 0.58             |
|                |                       | PI          | 2.01             | 2.01             | 2.01             | 2.01             | 2.02             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.21             | 2.21             | 2.21             | 2.21             | 2.21             | 2.40             | 2.40             | 2.40             | 2.40             | 2.40             |
|                | 41°F<br>5°C           | TC          | 28517            | 28514            | 28512            | 28512            | 28578            | 29982            | 29979            | 29975            | 29975            | 29973            | 31018            | 31012            | 31010            | 31009            | 31004            | 32958            | 32952            | 32945            | 32944            | 32942            |
|                |                       | S/T         | 0.71             | 0.79             | 0.86             | 0.87             | 0.95             | 0.59             | 0.67             | 0.73             | 0.74             | 0.82             | 0.51             | 0.59             | 0.65             | 0.66             | 0.73             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.71             | 1.71             | 1.71             | 1.71             | 1.71             | 1.86             | 1.86             | 1.86             | 1.86             | 1.86             |
|                | 47°F<br>8.3°C         | TC          | 24162            | 24159            | 24158            | 24157            | 24241            | 25395            | 25392            | 25389            | 25389            | 25387            | 26268            | 26262            | 26261            | 26260            | 26256            | 27900            | 27893            | 27888            | 27887            | 27884            |
|                |                       | S/T         | 0.71             | 0.80             | 0.87             | 0.88             | 0.96             | 0.59             | 0.67             | 0.74             | 0.75             | 0.83             | 0.51             | 0.59             | 0.65             | 0.66             | 0.74             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             | 1.15             | 1.15             | 1.15             | 1.15             | 1.15             | 1.20             | 1.20             | 1.20             | 1.20             | 1.20             | 1.31             | 1.31             | 1.31             | 1.31             | 1.31             |
|                | 50°F<br>10°C          | TC          | 23792            | 23795            | 24015            | 24210            | 25108            | 25231            | 25237            | 25244            | 25245            | 25338            | 26275            | 26278            | 26289            | 26291            | 26302            | 28299            | 28288            | 28292            | 28290            | 28315            |
|                |                       | S/T         | 0.79             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             | 1.26             |
|                | 59°F<br>15°C          | TC          | 23754            | 23790            | 24259            | 24401            | 25354            | 25265            | 25270            | 25275            | 25275            | 25430            | 26370            | 26364            | 26374            | 26376            | 26383            | 28490            | 28478            | 28481            | 28479            | 28501            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             |
|                | 68°F<br>20°C          | TC          | 23730            | 23807            | 24479            | 24630            | 25637            | 25306            | 25310            | 25313            | 25314            | 25618            | 26455            | 26450            | 26460            | 26461            | 26466            | 28667            | 28655            | 28656            | 28655            | 28677            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.58             | 1.58             | 1.59             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             |
|                | 77°F<br>25°C          | TC          | 23666            | 23783            | 24599            | 24760            | 25825            | 25322            | 25331            | 25336            | 25360            | 25863            | 26532            | 26531            | 26545            | 26547            | 26578            | 28862            | 28849            | 28853            | 28853            | 28887            |
|                |                       | S/T         | 0.83             | 0.96             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.55             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 1.76             | 1.76             | 1.77             | 1.77             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             |
|                | 82°F<br>27.8°C        | TC          | 24268            | 24424            | 25361            | 25529            | 26657            | 26009            | 26022            | 26044            | 26067            | 26695            | 27284            | 27286            | 27302            | 27304            | 27350            | 29740            | 29725            | 29731            | 29733            | 29773            |
|                |                       | S/T         | 0.84             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.88             | 0.90             | 1.00             | 0.56             | 0.67             | 0.77             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.05             | 2.06             | 2.07             | 2.07             | 2.08             | 2.07             | 2.07             | 2.07             | 2.07             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.10             | 2.10             | 2.10             | 2.10             | 2.10             |
|                | 86°F<br>30°C          | TC          | 25552            | 25775            | 26850            | 27031            | 28246            | 27420            | 27432            | 27470            | 27497            | 28287            | 28783            | 28788            | 28803            | 28804            | 28870            | 31412            | 31396            | 31402            | 31409            | 31448            |
|                |                       | S/T         | 0.85             | 0.98             | 1.00             | 1.00             | 1.00             | 0.67             | 0.80             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.53             | 2.54             | 2.55             | 2.55             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.57             | 2.57             | 2.57             | 2.57             | 2.57             | 2.60             | 2.60             | 2.60             | 2.60             | 2.60             |
|                | 95°F<br>35°C          | TC          | 28863            | 28862            | 28865            | 28897            | 29637            | 30796            | 30788            | 30786            | 30786            | 30793            | 32189            | 32186            | 32180            | 32179            | 32180            | 34883            | 34871            | 34861            | 34860            | 34859            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.87             | 0.52             |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 8 – 36K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 970            | -13°F<br>25°C         | TC          | 29392            | 29386            | 29380            | 29379            | 29982            | 30715            | 30707            | 30698            | 30697            | 30687            | 31653            | 31643            | 31632            | 31630            | 31616            | 33413            | 33404            | 33391            | 33390            | 33368            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.93             | 1.00             | 0.61             | 0.70             | 0.78             | 0.79             | 0.88             | 0.52             | 0.61             | 0.69             | 0.70             | 0.79             | 0.38             | 0.46             | 0.53             | 0.54             | 0.62             |
|                |                       | PI          | 2.36             | 2.36             | 2.36             | 2.36             | 2.35             | 2.34             | 2.34             | 2.34             | 2.34             | 2.34             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             |
|                | -4°F<br>20°C          | TC          | 31653            | 31646            | 31640            | 31639            | 32289            | 33078            | 33069            | 33060            | 33058            | 33047            | 34088            | 34077            | 34065            | 34063            | 34048            | 35983            | 35974            | 35959            | 35958            | 35935            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.94             | 1.00             | 0.61             | 0.71             | 0.78             | 0.79             | 0.88             | 0.53             | 0.61             | 0.69             | 0.70             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 2.44             | 2.44             | 2.45             | 2.45             | 2.43             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.41             | 2.41             | 2.41             | 2.41             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             |
|                | 0°F<br>17.8°C         | TC          | 32688            | 32679            | 32672            | 32670            | 33485            | 34146            | 34134            | 34121            | 34118            | 34104            | 35176            | 35162            | 35147            | 35144            | 35122            | 37091            | 37083            | 37079            | 37077            | 37082            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 2.46             | 2.46             | 2.47             | 2.47             | 2.46             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             |
|                | 5°F<br>15°C           | TC          | 33682            | 33685            | 33790            | 33838            | 34828            | 35322            | 35321            | 35326            | 35326            | 35368            | 36498            | 36496            | 36499            | 36500            | 36507            | 38741            | 38731            | 38731            | 38730            | 38732            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.54             | 2.54             | 2.54             | 2.54             | 2.54             |
|                | 14°F<br>10°C          | TC          | 34819            | 34811            | 34804            | 34803            | 35791            | 36597            | 36586            | 36576            | 36574            | 36562            | 37869            | 37856            | 37843            | 37840            | 37823            | 40285            | 40274            | 40258            | 40256            | 40230            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 2.43             | 2.43             | 2.43             | 2.43             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             |
|                | 17°F<br>10°C          | TC          | 35192            | 35181            | 35273            | 35323            | 36381            | 36990            | 36977            | 36985            | 36987            | 37026            | 38285            | 38285            | 38291            | 38293            | 38305            | 40797            | 40785            | 40789            | 40786            | 40796            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 2.39             | 2.39             | 2.39             | 2.39             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.39             | 2.39             | 2.39             | 2.39             | 2.39             |
|                | 23°F<br>5°C           | TC          | 35060            | 35064            | 35206            | 35269            | 36428            | 36900            | 36899            | 36906            | 36907            | 36966            | 38222            | 38221            | 38225            | 38226            | 38235            | 40754            | 40742            | 40744            | 40742            | 40748            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.62             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 2.33             | 2.33             | 2.33             | 2.33             | 2.34             | 2.34             | 2.34             | 2.34             | 2.34             | 2.34             | 2.35             | 2.35             | 2.35             | 2.35             | 2.35             | 2.39             | 2.39             | 2.39             | 2.39             | 2.39             |
|                | 35°F<br>1.7°C         | TC          | 35129            | 35127            | 35127            | 35127            | 35579            | 36876            | 36869            | 36866            | 36866            | 36868            | 38102            | 38098            | 38092            | 38092            | 38090            | 40392            | 40382            | 40375            | 40373            | 40371            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 1.00             | 0.60             | 0.68             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 2.08             | 2.08             | 2.08             | 2.08             | 2.11             | 2.20             | 2.19             | 2.19             | 2.19             | 2.20             | 2.29             | 2.29             | 2.29             | 2.29             | 2.29             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             |
|                | 41°F<br>5°C           | TC          | 30404            | 30477            | 30477            | 30486            | 30988            | 31984            | 31978            | 31975            | 31976            | 31977            | 33042            | 33039            | 33033            | 33033            | 33032            | 35015            | 35007            | 35000            | 34998            | 34996            |
|                |                       | S/T         | 0.74             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.45             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.59             | 1.59             | 1.59             | 1.59             | 1.62             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             | 1.93             | 1.92             | 1.92             | 1.92             | 1.92             |
|                | 47°F<br>8.3°C         | TC          | 25822            | 25821            | 25820            | 25846            | 26355            | 27089            | 27084            | 27082            | 27082            | 27083            | 27982            | 27979            | 27975            | 27974            | 27974            | 29644            | 29637            | 29631            | 29630            | 29628            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.70             | 0.77             | 0.78             | 0.87             | 0.52             | 0.61             | 0.68             | 0.69             | 0.78             | 0.39             | 0.45             | 0.52             | 0.53             | 0.62             |
|                |                       | PI          | 1.11             | 1.11             | 1.11             | 1.12             | 1.14             | 1.19             | 1.19             | 1.19             | 1.19             | 1.19             | 1.24             | 1.24             | 1.24             | 1.24             | 1.24             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             |
|                | 50°F<br>10°C          | TC          | 25375            | 25483            | 26202            | 26351            | 27347            | 26881            | 26898            | 26905            | 26933            | 27381            | 27973            | 27988            | 28005            | 28007            | 28048            | 30056            | 30045            | 30080            | 30088            | 30129            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             |
|                | 59°F<br>15°C          | TC          | 25336            | 25517            | 26419            | 26577            | 27633            | 26922            | 26935            | 26975            | 27000            | 27669            | 28068            | 28082            | 28096            | 28097            | 28166            | 30271            | 30258            | 30288            | 30295            | 30327            |
|                |                       | S/T         | 0.85             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.47             | 1.47             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.49             | 1.49             | 1.48             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             |
|                | 68°F<br>20°C          | TC          | 25310            | 25735            | 26671            | 26837            | 27951            | 26967            | 26977            | 27052            | 27085            | 27987            | 28162            | 28177            | 28186            | 28188            | 28297            | 30466            | 30453            | 30482            | 30488            | 30513            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.91             | 0.93             | 1.00             | 0.57             | 0.69             | 0.79             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.64             | 1.64             | 1.65             | 1.65             | 1.66             | 1.66             | 1.66             | 1.66             | 1.66             | 1.66             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             |
|                | 77°F<br>25°C          | TC          | 25241            | 25830            | 26820            | 26996            | 28177            | 26987            | 26999            | 27103            | 27147            | 28212            | 28239            | 28263            | 28277            | 28279            | 28425            | 30661            | 30647            | 30695            | 30703            | 30738            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.82             | 0.93             | 0.95             | 1.00             | 0.57             | 0.70             | 0.80             | 0.82             | 0.94             | 0.39             | 0.49             | 0.59             | 0.60             | 0.72             |
|                |                       | PI          | 1.82             | 1.83             | 1.84             | 1.84             | 1.85             | 1.84             | 1.84             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             |
|                | 82°F<br>27.8°C        | TC          | 25903            | 26607            | 27655            | 27841            | 29089            | 27719            | 27735            | 27868            | 27923            | 29128            | 29037            | 29068            | 29083            | 29086            | 29269            | 31587            | 31593            | 31633            | 31642            | 31682            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.96             | 1.00             | 0.58             | 0.70             | 0.81             | 0.83             | 0.96             | 0.39             | 0.49             | 0.59             | 0.61             | 0.72             |
|                |                       | PI          | 2.13             | 2.13             | 2.14             | 2.15             | 2.16             | 2.14             | 2.14             | 2.15             | 2.15             | 2.16             | 2.16             | 2.16             | 2.16             | 2.16             | 2.16             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             |
|                | 86°F<br>30°C          | TC          | 27294            | 28155            | 29284            | 29483            | 30828            | 29226            | 29240            | 29415            | 29493            | 30869            | 30635            | 30668            | 30682            | 30684            | 30922            | 33366            | 33368            | 33417            | 33426            | 33465            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.84             | 0.96             | 0.98             | 1.00             | 0.58             | 0.71             | 0.82             | 0.84             | 0.97             | 0.39             | 0.50             | 0.60             | 0.61             | 0.73             |
|                |                       | PI          | 2.62             | 2.63             | 2.65             | 2.65             | 2.66             | 2.65             | 2.65             | 2.65             | 2.65             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.69             | 2.69             | 2.69             | 2.69             | 2.69             |
|                | 95°F<br>35°C          | TC          | 30818            | 30824            | 30994            | 31073            | 32354            | 32833            | 32829            | 32837            | 32839            | 32897            | 34282            | 34281            | 34280            | 34281            | 34297            | 37076            | 37063            | 37052            | 37069            | 37059            |
|                |                       | S/T         | 0.77             | 0.87             | 0.96             | 0.98             | 1.00             | 0.63             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.6              |                  |                  |                  |                  |                  |                  |                  |                  |

Table 8 – 36K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
| 1080           | -13°F<br>25°C         | TC          | 31377            | 31366            | 31358            | 31540            | 32468            | 32759            | 32741            | 32726            | 32724            | 32701            | 33737            | 33719            | 33697            | 33693            | 33669            | 35588            | 35578            | 35552            | 35543            | 35490            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.46             | 2.46             | 2.46             | 2.46             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.43             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.45             |
|                | -4°F<br>20°C          | TC          | 33791            | 33779            | 33770            | 33966            | 34966            | 35279            | 35259            | 35243            | 35241            | 35216            | 36332            | 36313            | 36289            | 36285            | 36259            | 38325            | 38315            | 38287            | 38277            | 38220            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.55             | 2.55             | 2.55             | 2.54             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             | 2.52             | 2.52             | 2.52             | 2.52             | 2.52             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             |
|                | 0°F<br>17.8°C         | TC          | 34906            | 34891            | 35026            | 35293            | 36270            | 36428            | 36400            | 36380            | 36376            | 36370            | 37496            | 37475            | 37441            | 37436            | 37402            | 39517            | 39506            | 39508            | 39512            | 39541            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.57             | 2.57             | 2.57             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             |
|                | 5°F<br>15°C           | TC          | 35933            | 35965            | 36450            | 36617            | 37737            | 37642            | 37649            | 37653            | 37654            | 37840            | 38873            | 38870            | 38881            | 38882            | 38886            | 41196            | 41184            | 41184            | 41188            | 41210            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.59             | 2.59             | 2.59             | 2.59             | 2.60             | 2.59             | 2.60             | 2.60             | 2.60             | 2.60             | 2.61             | 2.61             | 2.61             | 2.61             | 2.61             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             |
|                | 14°F<br>10°C          | TC          | 37150            | 37136            | 37290            | 37616            | 38783            | 39015            | 38992            | 38973            | 38970            | 38950            | 40363            | 40344            | 40312            | 40307            | 40273            | 42901            | 42888            | 42856            | 42847            | 42781            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.54             | 2.54             | 2.54             | 2.53             | 2.53             | 2.52             | 2.52             | 2.53             | 2.53             | 2.53             | 2.52             | 2.52             | 2.52             | 2.52             | 2.52             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             |
|                | 17°F<br>10°C          | TC          | 37601            | 37610            | 38071            | 38290            | 39523            | 39489            | 39492            | 39500            | 39501            | 39688            | 40748            | 40763            | 40790            | 40792            | 40802            | 43458            | 43444            | 43449            | 43457            | 43497            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.51             | 2.51             | 2.51             | 2.51             | 2.51             |
|                | 23°F<br>5°C           | TC          | 37402            | 37454            | 38063            | 38250            | 39500            | 39322            | 39331            | 39337            | 39338            | 39570            | 40708            | 40707            | 40719            | 40721            | 40728            | 43332            | 43319            | 43321            | 43327            | 43356            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 2.43             | 2.43             | 2.43             | 2.43             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             |
|                | 35°F<br>1.7°C         | TC          | 37522            | 37523            | 37595            | 37637            | 38605            | 39322            | 39316            | 39318            | 39319            | 39320            | 40585            | 40583            | 40578            | 40578            | 40583            | 42936            | 42926            | 42917            | 42923            | 42915            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 2.16             | 2.17             | 2.17             | 2.17             | 2.24             | 2.29             | 2.29             | 2.29             | 2.29             | 2.29             | 2.39             | 2.39             | 2.39             | 2.39             | 2.39             | 2.60             | 2.60             | 2.60             | 2.60             | 2.60             |
|                | 41°F<br>5°C           | TC          | 32551            | 32551            | 32642            | 32686            | 33613            | 34105            | 34101            | 34102            | 34102            | 34132            | 35196            | 35192            | 35189            | 35190            | 35194            | 37222            | 37213            | 37206            | 37210            | 37204            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.66             | 1.66             | 1.67             | 1.67             | 1.73             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 2.01             | 2.01             | 2.01             | 2.01             | 2.01             |
|                | 47°F<br>8.3°C         | TC          | 27574            | 27574            | 27680            | 27728            | 28581            | 28886            | 28882            | 28883            | 28883            | 28926            | 29806            | 29803            | 29800            | 29801            | 29802            | 31516            | 31508            | 31506            | 31505            | 31500            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.16             | 1.16             | 1.17             | 1.17             | 1.22             | 1.24             | 1.24             | 1.24             | 1.24             | 1.24             | 1.30             | 1.30             | 1.30             | 1.30             | 1.30             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             |
|                | 50°F<br>10°C          | TC          | 27059            | 27501            | 28420            | 28582            | 29677            | 28649            | 28666            | 28759            | 28796            | 29712            | 29777            | 29815            | 29833            | 29834            | 29969            | 31922            | 31938            | 32015            | 32024            | 32066            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             |
|                | 59°F<br>15°C          | TC          | 27043            | 27695            | 28669            | 28842            | 30002            | 28694            | 28706            | 28849            | 28904            | 30037            | 29885            | 29917            | 29929            | 29931            | 30128            | 32167            | 32176            | 32239            | 32246            | 32278            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.54             | 1.54             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 68°F<br>20°C          | TC          | 27051            | 27924            | 28951            | 29134            | 30359            | 28742            | 28751            | 28976            | 29165            | 30393            | 29993            | 30018            | 30026            | 30027            | 30369            | 32386            | 32397            | 32448            | 32454            | 32478            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.72             | 1.72             | 1.73             | 1.73             | 1.74             | 1.73             | 1.73             | 1.73             | 1.73             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.77             | 1.77             | 1.76             | 1.76             | 1.76             |
|                | 77°F<br>25°C          | TC          | 27005            | 28040            | 29127            | 29321            | 30616            | 28761            | 28775            | 29105            | 29355            | 30652            | 30074            | 30109            | 30123            | 30157            | 30680            | 32572            | 32601            | 32674            | 32682            | 32718            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.91             | 1.92             | 1.92             | 1.93             | 1.93             | 1.92             | 1.92             | 1.92             | 1.93             | 1.94             | 1.93             | 1.93             | 1.93             | 1.93             | 1.94             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             |
|                | 82°F<br>27.8°C        | TC          | 27713            | 28889            | 30040            | 30245            | 31620            | 29543            | 29591            | 30076            | 30281            | 31656            | 30925            | 30966            | 30982            | 31030            | 31684            | 33544            | 33586            | 33670            | 33680            | 33720            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 2.23             | 2.24             | 2.24             | 2.25             | 2.26             | 2.24             | 2.24             | 2.24             | 2.25             | 2.26             | 2.25             | 2.25             | 2.25             | 2.25             | 2.26             | 2.28             | 2.28             | 2.27             | 2.27             | 2.27             |
|                | 86°F<br>30°C          | TC          | 29184            | 30535            | 31774            | 31993            | 33484            | 31111            | 31176            | 31812            | 32032            | 33511            | 32595            | 32633            | 32685            | 32714            | 33542            | 35397            | 35448            | 35531            | 35540            | 35577            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 2.74             | 2.76             | 2.77             | 2.77             | 2.79             | 2.77             | 2.76             | 2.77             | 2.77             | 2.79             | 2.78             | 2.78             | 2.78             | 2.78             | 2.79             | 2.82             | 2.81             | 2.81             | 2.81             | 2.81             |
|                | 95°F<br>35°C          | TC          | 32881            | 32940            | 33647            | 33845            | 35172            | 34984            | 34993            | 35005            | 35006            | 35244            | 36495            | 36498            | 36517            | 36520            | 36536            | 39397            | 39383            | 39387            | 39385            | 39414            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 3.77             | 3.77             | 3.81             | 3.82             | 3.89             | 3.               |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 8 – 36K Cooling — 37MURA + 45MUAA (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1185           | -13°F<br>25°C         | TC          | 33479            | 33464            | 33941            | 34082            | 35020            | 34931            | 34902            | 34880            | 34877            | 34848            | 35975            | 35930            | 35896            | 35891            | 35856            | 37947            | 37937            | 37859            | 37844            | 37764            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.59             | 2.59             | 2.58             | 2.58             | 2.57             | 2.57             | 2.57             | 2.57             | 2.57             | 2.57             | 2.57             | 2.57             | 2.57             | 2.57             | 2.57             | 2.58             | 2.58             | 2.59             | 2.59             | 2.59             |
|                | -4°F<br>20°C          | TC          | 36055            | 36038            | 36552            | 36704            | 37714            | 37618            | 37587            | 37563            | 37559            | 37528            | 38742            | 38694            | 38657            | 38652            | 38615            | 40866            | 40855            | 40771            | 40756            | 40669            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.68             | 2.68             | 2.67             | 2.67             | 2.67             | 2.66             | 2.66             | 2.67             | 2.67             | 2.67             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             |
|                | 0°F<br>17.8°C         | TC          | 37251            | 37229            | 37920            | 38078            | 39124            | 38849            | 38806            | 38776            | 38771            | 39161            | 39991            | 39934            | 39884            | 39878            | 39859            | 42141            | 42131            | 42128            | 42134            | 42161            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             |
|                | 5°F<br>15°C           | TC          | 38319            | 38451            | 39330            | 39511            | 40729            | 40116            | 40126            | 40129            | 40170            | 40769            | 41399            | 41410            | 41418            | 41419            | 41474            | 43827            | 43814            | 43837            | 43842            | 43861            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.72             | 2.72             | 2.73             | 2.73             | 2.74             | 2.73             | 2.73             | 2.74             | 2.74             | 2.74             | 2.75             | 2.75             | 2.75             | 2.75             | 2.76             | 2.81             | 2.81             | 2.81             | 2.81             | 2.82             |
|                | 14°F<br>10°C          | TC          | 39647            | 39627            | 40436            | 40625            | 41885            | 41615            | 41579            | 41550            | 41546            | 41935            | 43041            | 42987            | 42943            | 42937            | 42893            | 45766            | 45752            | 45664            | 45649            | 45551            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.67             | 2.67             | 2.67             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.67             | 2.67             | 2.67             | 2.67             | 2.67             |
|                | 17°F<br>10°C          | TC          | 39995            | 40125            | 41052            | 41252            | 42592            | 41985            | 42003            | 42010            | 42046            | 42638            | 43418            | 43435            | 43452            | 43454            | 43507            | 46176            | 46164            | 46157            | 46165            | 46204            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.63             | 2.63             | 2.63             | 2.63             | 2.65             | 2.65             | 2.65             | 2.65             | 2.65             |
|                | 23°F<br>5°C           | TC          | 39886            | 40057            | 41093            | 41296            | 42657            | 41905            | 41918            | 41923            | 41977            | 42703            | 43351            | 43366            | 43377            | 43378            | 43448            | 46095            | 46080            | 46113            | 46120            | 46146            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.56             | 2.56             | 2.57             | 2.57             | 2.58             | 2.57             | 2.57             | 2.57             | 2.57             | 2.58             | 2.59             | 2.59             | 2.59             | 2.59             | 2.59             | 2.64             | 2.64             | 2.64             | 2.64             | 2.64             |
|                | 35°F<br>1.7°C         | TC          | 40043            | 40045            | 40280            | 40393            | 41695            | 41915            | 41914            | 41917            | 41917            | 42029            | 43227            | 43224            | 43227            | 43228            | 43232            | 45661            | 45650            | 45648            | 45646            | 45650            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.28             | 2.28             | 2.30             | 2.31             | 2.40             | 2.42             | 2.42             | 2.42             | 2.42             | 2.43             | 2.52             | 2.52             | 2.52             | 2.52             | 2.52             | 2.74             | 2.74             | 2.74             | 2.74             | 2.74             |
|                | 41°F<br>5°C           | TC          | 34737            | 34737            | 35014            | 35257            | 36299            | 36352            | 36351            | 36353            | 36353            | 36481            | 37486            | 37484            | 37486            | 37487            | 37489            | 39590            | 39580            | 39577            | 39576            | 39580            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.75             | 1.75             | 1.77             | 1.79             | 1.86             | 1.86             | 1.86             | 1.86             | 1.86             | 1.87             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             |
|                | 47°F<br>8.3°C         | TC          | 29425            | 29445            | 29840            | 29973            | 30860            | 30790            | 30789            | 30789            | 30789            | 30932            | 31746            | 31743            | 31745            | 31745            | 31745            | 33523            | 33515            | 33512            | 33511            | 33514            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 1.23             | 1.23             | 1.25             | 1.26             | 1.31             | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             |
|                | 50°F<br>10°C          | TC          | 28899            | 29695            | 30697            | 30875            | 32072            | 30531            | 30547            | 30759            | 30855            | 32102            | 31722            | 31763            | 31780            | 31781            | 32087            | 33908            | 33998            | 34085            | 34095            | 34138            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.43             | 1.43             | 1.43             |
|                | 59°F<br>15°C          | TC          | 28900            | 29914            | 30976            | 31165            | 32433            | 30578            | 30620            | 30967            | 31198            | 32465            | 31839            | 31872            | 31883            | 31929            | 32491            | 34189            | 34258            | 34326            | 34334            | 34362            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.63             | 1.63             | 1.63             | 1.63             | 1.64             | 1.63             | 1.63             | 1.63             | 1.63             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.65             | 1.65             | 1.65             | 1.65             | 1.65             |
|                | 68°F<br>20°C          | TC          | 28888            | 30121            | 31238            | 31436            | 32770            | 30582            | 30651            | 31272            | 31470            | 32803            | 31904            | 31928            | 31986            | 32014            | 32830            | 34377            | 34441            | 34495            | 34500            | 34518            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 1.81             | 1.82             | 1.83             | 1.83             | 1.84             | 1.83             | 1.83             | 1.83             | 1.83             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.86             | 1.86             | 1.86             | 1.86             | 1.86             |
|                | 77°F<br>25°C          | TC          | 28851            | 30240            | 31424            | 31633            | 33046            | 30586            | 30683            | 31458            | 31668            | 33080            | 31971            | 32007            | 32089            | 32125            | 33107            | 34530            | 34635            | 34715            | 34723            | 34756            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 2.01             | 2.02             | 2.03             | 2.03             | 2.04             | 2.03             | 2.03             | 2.03             | 2.03             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.06             | 2.06             | 2.06             | 2.06             | 2.06             |
|                | 82°F<br>27.8°C        | TC          | 29631            | 31143            | 32399            | 32619            | 34113            | 31399            | 31520            | 32428            | 32656            | 34149            | 32860            | 32901            | 33004            | 33044            | 34179            | 35528            | 35662            | 35755            | 35764            | 35803            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 2.35             | 2.36             | 2.37             | 2.37             | 2.38             | 2.36             | 2.36             | 2.37             | 2.37             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.40             | 2.40             | 2.40             | 2.40             | 2.40             |
|                | 86°F<br>30°C          | TC          | 31371            | 32937            | 34284            | 34523            | 36131            | 33083            | 33235            | 34322            | 34562            | 36168            | 34651            | 34691            | 34818            | 34868            | 36199            | 37514            | 37658            | 37748            | 37757            | 37792            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 2.90             | 2.91             | 2.93             | 2.93             | 2.95             | 2.92             | 2.92             | 2.93             | 2.93             | 2.95             | 2.93             | 2.93             | 2.93             | 2.93             | 2.95             | 2.97             | 2.97             | 2.97             | 2.97             | 2.96             |
|                | 95°F<br>35°C          | TC          | 35067            | 35256            | 36396            | 36611            | 38058            | 37269            | 37291            | 37302            | 37346            | 38106            | 38868            | 38876            | 38900            | 38904            | 38968            | 41882            | 41866            | 41875            | 41887            | 41943            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 9 – 48K Cooling — **37MURA + 45MUAA**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1094           | -13°F<br>25°C         | TC          | 36259            | 36254            | 36249            | 36248            | 36242            | 37947            | 37937            | 37930            | 37930            | 37922            | 39143            | 39133            | 39124            | 39123            | 39114            | 41388            | 41377            | 41367            | 41365            | 41352            |
|                |                       | S/T         | 0.72             | 0.80             | 0.87             | 0.88             | 0.97             | 0.59             | 0.67             | 0.74             | 0.76             | 0.83             | 0.51             | 0.59             | 0.66             | 0.67             | 0.75             | 0.38             | 0.46             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 1.70             | 1.70             | 1.71             | 1.70             | 1.71             | 1.68             | 1.68             | 1.69             | 1.69             | 1.69             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             |
|                | -4°F<br>20°C          | TC          | 39048            | 39042            | 39037            | 39037            | 39029            | 40866            | 40855            | 40848            | 40847            | 40839            | 42154            | 42143            | 42134            | 42132            | 42123            | 44571            | 44560            | 44549            | 44547            | 44533            |
|                |                       | S/T         | 0.72             | 0.80             | 0.88             | 0.89             | 0.97             | 0.60             | 0.68             | 0.75             | 0.76             | 0.84             | 0.52             | 0.59             | 0.66             | 0.67             | 0.75             | 0.39             | 0.47             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             | 1.74             | 1.74             | 1.75             | 1.75             | 1.75             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             |
|                | 0°F<br>17.8°C         | TC          | 40319            | 40311            | 40304            | 40303            | 40291            | 42177            | 42168            | 42159            | 42158            | 42146            | 43493            | 43481            | 43471            | 43470            | 43456            | 45946            | 45935            | 45926            | 45924            | 45906            |
|                |                       | S/T         | 0.72             | 0.81             | 0.88             | 0.90             | 0.98             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             |
|                | 5°F<br>15°C           | TC          | 41583            | 41583            | 41583            | 41583            | 42205            | 43660            | 43652            | 43650            | 43651            | 43655            | 45152            | 45150            | 45143            | 45142            | 45146            | 48015            | 48002            | 47991            | 47989            | 47989            |
|                |                       | S/T         | 0.73             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.86             | 0.52             | 0.60             | 0.67             | 0.68             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             |
|                | 14°F<br>10°C          | TC          | 42098            | 42092            | 42087            | 42086            | 42291            | 44308            | 44296            | 44289            | 44288            | 44280            | 45887            | 45876            | 45864            | 45863            | 45853            | 48885            | 48871            | 48860            | 48857            | 48842            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 0.99             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.66             | 0.68             | 0.76             | 0.39             | 0.47             | 0.51             | 0.53             | 0.60             |
|                |                       | PI          | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.75             | 1.76             | 1.76             | 1.76             | 1.76             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             |
|                | 17°F<br>10°C          | TC          | 42301            | 42292            | 42286            | 42285            | 42894            | 44520            | 44509            | 44500            | 44498            | 44499            | 46112            | 46111            | 46104            | 46103            | 46110            | 49227            | 49213            | 49201            | 49199            | 49201            |
|                |                       | S/T         | 0.73             | 0.82             | 0.89             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             |
|                | 23°F<br>5°C           | TC          | 41205            | 41206            | 41206            | 41233            | 41986            | 43422            | 43414            | 43413            | 43414            | 43419            | 45018            | 45015            | 45008            | 45007            | 45012            | 48086            | 48072            | 48061            | 48059            | 48059            |
|                |                       | S/T         | 0.74             | 0.83             | 0.90             | 0.91             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             |
|                | 35°F<br>1.7°C         | TC          | 39347            | 39344            | 39341            | 39341            | 39395            | 41385            | 41381            | 41377            | 41375            | 41372            | 42826            | 42817            | 42816            | 42814            | 42808            | 45523            | 45513            | 45504            | 45503            | 45500            |
|                |                       | S/T         | 0.70             | 0.78             | 0.85             | 0.86             | 0.93             | 0.59             | 0.66             | 0.72             | 0.74             | 0.81             | 0.51             | 0.58             | 0.64             | 0.65             | 0.73             | 0.39             | 0.46             | 0.50             | 0.51             | 0.58             |
|                |                       | PI          | 2.11             | 2.11             | 2.11             | 2.11             | 2.11             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.32             | 2.32             | 2.32             | 2.32             | 2.32             | 2.52             | 2.52             | 2.52             | 2.52             | 2.52             |
|                | 41°F<br>5°C           | TC          | 38212            | 38207            | 38206            | 38205            | 38294            | 40176            | 40171            | 40166            | 40166            | 40162            | 41563            | 41555            | 41552            | 41552            | 41544            | 44163            | 44154            | 44145            | 44144            | 44141            |
|                |                       | S/T         | 0.71             | 0.79             | 0.86             | 0.87             | 0.95             | 0.59             | 0.67             | 0.73             | 0.74             | 0.82             | 0.51             | 0.59             | 0.65             | 0.66             | 0.73             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 2.02             | 2.02             | 2.02             | 2.02             | 2.03             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.24             | 2.24             | 2.24             | 2.24             | 2.24             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             |
|                | 47°F<br>8.3°C         | TC          | 37069            | 37064            | 37062            | 37061            | 37190            | 38960            | 38956            | 38951            | 38951            | 38948            | 40300            | 40291            | 40288            | 40287            | 40281            | 42803            | 42793            | 42785            | 42783            | 42779            |
|                |                       | S/T         | 0.71             | 0.80             | 0.87             | 0.88             | 0.96             | 0.59             | 0.67             | 0.74             | 0.75             | 0.83             | 0.51             | 0.59             | 0.65             | 0.66             | 0.74             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 1.94             | 1.94             | 1.94             | 1.94             | 1.95             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.17             | 2.17             | 2.17             | 2.17             | 2.16             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             |
|                | 50°F<br>10°C          | TC          | 36419            | 36424            | 36760            | 37058            | 38434            | 38622            | 38630            | 38641            | 38643            | 38785            | 40220            | 40224            | 40241            | 40245            | 40261            | 43318            | 43301            | 43307            | 43304            | 43343            |
|                |                       | S/T         | 0.79             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             |
|                | 59°F<br>15°C          | TC          | 36116            | 36172            | 36884            | 37100            | 38550            | 38414            | 38421            | 38429            | 38430            | 38666            | 40094            | 40085            | 40101            | 40103            | 40115            | 43318            | 43300            | 43303            | 43301            | 43334            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 2.37             | 2.37             | 2.37             | 2.37             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.39             | 2.39             | 2.39             | 2.39             | 2.39             | 2.40             | 2.40             | 2.40             | 2.40             | 2.40             |
|                | 68°F<br>20°C          | TC          | 35837            | 35954            | 36970            | 37196            | 38717            | 38217            | 38224            | 38229            | 38230            | 38689            | 39953            | 39946            | 39960            | 39962            | 39970            | 43294            | 43276            | 43277            | 43276            | 43309            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.51             | 2.51             | 2.53             | 2.53             | 2.54             | 2.54             | 2.54             | 2.54             | 2.54             | 2.54             | 2.56             | 2.56             | 2.56             | 2.56             | 2.55             | 2.59             | 2.59             | 2.59             | 2.59             | 2.59             |
|                | 77°F<br>25°C          | TC          | 35501            | 35677            | 36901            | 37142            | 38740            | 37985            | 37998            | 38006            | 38043            | 38796            | 39801            | 39798            | 39819            | 39822            | 39870            | 43296            | 43276            | 43282            | 43282            | 43332            |
|                |                       | S/T         | 0.83             | 0.96             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.55             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 2.68             | 2.69             | 2.70             | 2.70             | 2.71             | 2.71             | 2.71             | 2.71             | 2.71             | 2.71             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             |
|                | 82°F<br>27.8°C        | TC          | 35647            | 35877            | 37253            | 37500            | 39157            | 38206            | 38224            | 38257            | 38290            | 39214            | 40079            | 40081            | 40104            | 40107            | 40176            | 43685            | 43664            | 43672            | 43676            | 43735            |
|                |                       | S/T         | 0.84             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.88             | 0.90             | 1.00             | 0.56             | 0.67             | 0.77             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 3.00             | 3.00             | 3.02             | 3.02             | 3.03             | 3.03             | 3.03             | 3.03             | 3.03             | 3.03             | 3.04             | 3.04             | 3.04             | 3.04             | 3.04             | 3.07             | 3.07             | 3.07             | 3.07             | 3.07             |
|                | 86°F<br>30°C          | TC          | 36187            | 36502            | 38024            | 38280            | 40002            | 38832            | 38849            | 38903            | 38941            | 40060            | 40763            | 40768            | 40790            | 40792            | 40885            | 44485            | 44463            | 44471            | 44481            | 44536            |
|                |                       | S/T         | 0.85             | 0.98             | 1.00             | 1.00             | 1.00             | 0.67             | 0.80             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 3.53             | 3.54             | 3.56             | 3.56             | 3.58             | 3.57             | 3.57             | 3.57             | 3.57             | 3.58             | 3.59             | 3.59             | 3.59             | 3.59             | 3.59             | 3.63             | 3.63             | 3.63             | 3.63             | 3.63             |
|                | 95°F<br>35°C          | TC          | 37969            | 37968            | 37971            | 38014            | 38988            | 40512            | 40502            | 40499            | 40500            | 40508            | 42345            | 42341            | 42332            | 42332            | 42333            | 45888            | 45872            | 45860            | 45858            | 45857            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.87             | 0.52.            |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 9 – 48K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1282           | -13°F<br>25°C         | TC          | 38401            | 38392            | 38385            | 38384            | 39172            | 40129            | 40118            | 40107            | 40105            | 40092            | 41355            | 41341            | 41327            | 41324            | 41306            | 43654            | 43642            | 43625            | 43624            | 43595            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.93             | 1.00             | 0.61             | 0.70             | 0.78             | 0.79             | 0.88             | 0.52             | 0.61             | 0.69             | 0.70             | 0.79             | 0.38             | 0.46             | 0.53             | 0.54             | 0.62             |
|                |                       | PI          | 1.74             | 1.74             | 1.74             | 1.74             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             |
|                | -4°F<br>20°C          | TC          | 41355            | 41346            | 41337            | 41336            | 42185            | 43216            | 43204            | 43192            | 43190            | 43176            | 44536            | 44521            | 44506            | 44503            | 44483            | 47012            | 46999            | 46981            | 46979            | 46949            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.94             | 1.00             | 0.61             | 0.71             | 0.78             | 0.79             | 0.88             | 0.53             | 0.61             | 0.69             | 0.70             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             |
|                | 0°F<br>17.8°C         | TC          | 42707            | 42694            | 42685            | 42683            | 43747            | 44611            | 44595            | 44578            | 44575            | 44556            | 45957            | 45939            | 45919            | 45915            | 45886            | 48459            | 48449            | 48444            | 48441            | 48447            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 1.82             | 1.82             | 1.82             | 1.82             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             |
|                | 5°F<br>15°C           | TC          | 44005            | 44009            | 44147            | 44209            | 45502            | 46148            | 46146            | 46152            | 46153            | 46208            | 47684            | 47682            | 47685            | 47687            | 47696            | 50615            | 50601            | 50602            | 50600            | 50603            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.84             | 1.84             | 1.84             | 1.84             | 1.83             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             |
|                | 14°F<br>10°C          | TC          | 44575            | 44565            | 44557            | 44555            | 45820            | 46852            | 46838            | 46825            | 46822            | 46807            | 48480            | 48464            | 48447            | 48443            | 48421            | 51574            | 51559            | 51538            | 51536            | 51503            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.82             | 1.82             | 1.82             | 1.82             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             |
|                | 17°F<br>10°C          | TC          | 44760            | 44746            | 44863            | 44925            | 46272            | 47046            | 47029            | 47040            | 47042            | 47092            | 48693            | 48693            | 48700            | 48704            | 48719            | 51888            | 51873            | 51878            | 51875            | 51886            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             |
|                | 23°F<br>5°C           | TC          | 43607            | 43611            | 43789            | 43866            | 45307            | 45895            | 45894            | 45902            | 45903            | 45977            | 47539            | 47538            | 47542            | 47545            | 47555            | 50689            | 50673            | 50676            | 50673            | 50681            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.62             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.98             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             | 2.02             | 2.02             | 2.02             | 2.02             | 2.02             |
|                | 35°F<br>1.7°C         | TC          | 41709            | 41706            | 41706            | 41706            | 42243            | 43782            | 43774            | 43771            | 43771            | 43773            | 45238            | 45234            | 45227            | 45226            | 45224            | 47957            | 47946            | 47936            | 47934            | 47932            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 1.00             | 0.60             | 0.68             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 2.16             | 2.16             | 2.16             | 2.16             | 2.19             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.38             | 2.38             | 2.38             | 2.38             | 2.38             | 2.59             | 2.59             | 2.59             | 2.59             | 2.59             |
|                | 41°F<br>5°C           | TC          | 40398            | 40494            | 40495            | 40507            | 41174            | 42498            | 42490            | 42486            | 42487            | 42488            | 43903            | 43899            | 43892            | 43891            | 43890            | 46525            | 46514            | 46505            | 46502            | 46499            |
|                |                       | S/T         | 0.74             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.45             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 2.07             | 2.07             | 2.07             | 2.07             | 2.12             | 2.20             | 2.20             | 2.20             | 2.20             | 2.20             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             | 2.51             | 2.51             | 2.51             | 2.51             | 2.51             |
|                | 47°F<br>8.3°C         | TC          | 39282            | 39280            | 39280            | 39318            | 40092            | 41210            | 41202            | 41199            | 41199            | 41200            | 42568            | 42563            | 42557            | 42556            | 42555            | 45097            | 45086            | 45077            | 45076            | 45072            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.70             | 0.77             | 0.78             | 0.87             | 0.52             | 0.61             | 0.68             | 0.69             | 0.78             | 0.39             | 0.45             | 0.52             | 0.53             | 0.62             |
|                |                       | PI          | 1.99             | 1.99             | 1.99             | 2.00             | 2.05             | 2.13             | 2.13             | 2.13             | 2.13             | 2.13             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.43             | 2.43             | 2.42             | 2.42             | 2.42             |
|                | 50°F<br>10°C          | TC          | 38516            | 38679            | 39772            | 39997            | 41509            | 40802            | 40827            | 40838            | 40881            | 41561            | 42459            | 42483            | 42507            | 42511            | 42573            | 45621            | 45604            | 45657            | 45669            | 45731            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             |
|                | 59°F<br>15°C          | TC          | 38199            | 38472            | 39831            | 40069            | 41662            | 40589            | 40608            | 40669            | 40707            | 41715            | 42317            | 42338            | 42359            | 42361            | 42465            | 45639            | 45620            | 45665            | 45674            | 45723            |
|                |                       | S/T         | 0.85             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.43             | 2.43             | 2.44             | 2.44             | 2.45             | 2.44             | 2.44             | 2.44             | 2.44             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             |
|                | 68°F<br>20°C          | TC          | 37903            | 38540            | 39941            | 40190            | 41858            | 40384            | 40399            | 40511            | 40560            | 41912            | 42174            | 42197            | 42210            | 42212            | 42376            | 45624            | 45605            | 45649            | 45657            | 45695            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.91             | 0.93             | 1.00             | 0.57             | 0.69             | 0.79             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 2.58             | 2.59             | 2.60             | 2.60             | 2.62             | 2.61             | 2.61             | 2.61             | 2.61             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.66             | 2.66             | 2.66             | 2.66             | 2.65             |
|                | 77°F<br>25°C          | TC          | 37546            | 38422            | 39894            | 40156            | 41912            | 40142            | 40161            | 40316            | 40381            | 41965            | 42005            | 42041            | 42062            | 42064            | 42281            | 45608            | 45586            | 45659            | 45670            | 45722            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.82             | 0.93             | 0.95             | 1.00             | 0.57             | 0.70             | 0.80             | 0.82             | 0.94             | 0.39             | 0.49             | 0.59             | 0.60             | 0.72             |
|                |                       | PI          | 2.76             | 2.76             | 2.78             | 2.78             | 2.79             | 2.78             | 2.78             | 2.78             | 2.78             | 2.79             | 2.80             | 2.79             | 2.79             | 2.79             | 2.80             | 2.82             | 2.82             | 2.82             | 2.82             | 2.82             |
|                | 82°F<br>27.8°C        | TC          | 37730            | 38756            | 40282            | 40552            | 42371            | 40375            | 40398            | 40592            | 40672            | 42428            | 42295            | 42340            | 42362            | 42365            | 42632            | 46009            | 46018            | 46076            | 46089            | 46148            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.96             | 1.00             | 0.58             | 0.70             | 0.81             | 0.83             | 0.96             | 0.39             | 0.49             | 0.59             | 0.61             | 0.72             |
|                |                       | PI          | 3.08             | 3.09             | 3.11             | 3.11             | 3.12             | 3.11             | 3.11             | 3.11             | 3.11             | 3.12             | 3.12             | 3.12             | 3.12             | 3.12             | 3.12             | 3.16             | 3.16             | 3.15             | 3.15             | 3.15             |
|                | 86°F<br>30°C          | TC          | 38328            | 39537            | 41123            | 41403            | 43291            | 41041            | 41061            | 41306            | 41416            | 43349            | 43021            | 43066            | 43087            | 43090            | 43423            | 46855            | 46858            | 46927            | 46939            | 46994            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.84             | 0.96             | 0.98             | 1.00             | 0.58             | 0.71             | 0.82             | 0.84             | 0.97             | 0.39             | 0.50             | 0.60             | 0.61             | 0.73             |
|                |                       | PI          | 3.63             | 3.64             | 3.66             | 3.66             | 3.68             | 3.66             | 3.66             | 3.66             | 3.66             | 3.68             | 3.68             | 3.68             | 3.68             | 3.68             | 3.68             | 3.73             | 3.73             | 3.72             | 3.72             | 3.72             |
|                | 95°F<br>35°C          | TC          | 40200            | 40209            | 40430            | 40533            | 42204            | 42828            | 42823            | 42834            | 42836            | 42912            | 44718            | 44717            | 44716            | 44718            | 44738            | 48363            | 48346            | 48332            | 48354            | 48341            |
|                |                       | S/T         | 0.77             | 0.87             | 0.96             | 0.98             | 1.00             | 0.63             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0                |                  |                  |                  |                  |                  |                  |                  |                  |

Table 9 – 48K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       | TC          | 40650            | 40635            | 40624            | 40860            | 42063            | 42439            | 42416            | 42397            | 42394            | 42364            | 43706            | 43683            | 43654            | 43649            | 43619            | 46104            | 46092            | 46058            | 46047            | 45978            |
| 1471           | -13°F<br>25°C         | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.80             | 1.80             | 1.80             | 1.80             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             |
|                |                       | TC          | 43776            | 43761            | 43749            | 44003            | 45298            | 45704            | 45679            | 45658            | 45655            | 45623            | 47068            | 47043            | 47012            | 47007            | 46974            | 49651            | 49638            | 49601            | 49589            | 49515            |
|                | -4°F<br>20°C          | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.86             | 1.86             | 1.86             | 1.86             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                |                       | TC          | 45221            | 45202            | 45376            | 45722            | 46988            | 47193            | 47157            | 47130            | 47125            | 47117            | 48577            | 48549            | 48505            | 48498            | 48455            | 51195            | 51180            | 51182            | 51188            | 51226            |
|                | 0°F<br>17.8°C         | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.88             | 1.88             | 1.88             | 1.88             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                |                       | TC          | 46551            | 46593            | 47221            | 47438            | 48888            | 48765            | 48775            | 48780            | 48781            | 49021            | 50361            | 50357            | 50370            | 50371            | 50378            | 53370            | 53354            | 53355            | 53359            | 53388            |
|                | 5°F<br>15°C           | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.89             | 1.89             | 1.89             | 1.89             | 1.90             | 1.90             | 1.90             | 1.90             | 1.90             | 1.90             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             |
|                |                       | TC          | 47159            | 47142            | 47337            | 47751            | 49233            | 49527            | 49499            | 49475            | 49471            | 49445            | 51238            | 51214            | 51175            | 51168            | 51125            | 54460            | 54444            | 54404            | 54392            | 54309            |
|                | 14°F<br>10°C          | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.88             | 1.88             | 1.88             | 1.88             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             |
|                |                       | TC          | 47421            | 47433            | 48014            | 48291            | 49845            | 49802            | 49806            | 49816            | 49818            | 50054            | 51390            | 51410            | 51443            | 51445            | 51458            | 54808            | 54791            | 54797            | 54807            | 54858            |
|                | 17°F<br>10°C          | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.86             | 1.86             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             |
|                |                       | TC          | 46128            | 46192            | 46944            | 47174            | 48716            | 48496            | 48508            | 48514            | 48516            | 48803            | 50206            | 50204            | 50220            | 50222            | 50230            | 53442            | 53426            | 53428            | 53435            | 53472            |
|                | 23°F<br>5°C           | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 2.03             | 2.03             | 2.04             | 2.04             | 2.05             | 2.04             | 2.04             | 2.04             | 2.04             | 2.05             | 2.06             | 2.06             | 2.06             | 2.06             | 2.06             | 2.09             | 2.09             | 2.09             | 2.09             | 2.09             |
|                |                       | TC          | 44175            | 44176            | 44261            | 44311            | 45450            | 46294            | 46288            | 46289            | 46291            | 46292            | 47782            | 47778            | 47773            | 47773            | 47779            | 50549            | 50537            | 50526            | 50534            | 50525            |
|                | 35°F<br>1.7°C         | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 2.23             | 2.23             | 2.24             | 2.24             | 2.31             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             |
|                |                       | TC          | 42887            | 42888            | 43007            | 43065            | 44287            | 44935            | 44929            | 44931            | 44931            | 44971            | 46372            | 46367            | 46363            | 46364            | 46369            | 49042            | 49030            | 49020            | 49025            | 49018            |
|                | 41°F<br>5°C           | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 2.15             | 2.15             | 2.16             | 2.16             | 2.24             | 2.28             | 2.28             | 2.28             | 2.28             | 2.28             | 2.39             | 2.39             | 2.38             | 2.38             | 2.39             | 2.60             | 2.60             | 2.60             | 2.60             | 2.60             |
|                |                       | TC          | 41595            | 41595            | 41755            | 41828            | 43115            | 43574            | 43568            | 43569            | 43569            | 43635            | 44962            | 44957            | 44953            | 44954            | 44957            | 47542            | 47530            | 47526            | 47525            | 47518            |
|                | 47°F<br>8.3°C         | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 2.06             | 2.06             | 2.08             | 2.08             | 2.17             | 2.20             | 2.20             | 2.20             | 2.20             | 2.20             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             | 2.51             | 2.51             | 2.51             | 2.51             | 2.51             |
|                |                       | TC          | 40726            | 41392            | 42775            | 43020            | 44668            | 43119            | 43145            | 43285            | 43340            | 44720            | 44817            | 44875            | 44901            | 44904            | 45107            | 48046            | 48069            | 48186            | 48199            | 48263            |
|                | 50°F<br>10°C          | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             |
|                |                       | TC          | 40430            | 41403            | 42860            | 43118            | 44853            | 42897            | 42916            | 43129            | 43212            | 44905            | 44678            | 44726            | 44744            | 44746            | 45042            | 48090            | 48103            | 48197            | 48208            | 48255            |
|                | 59°F<br>15°C          | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 2.52             | 2.52             | 2.53             | 2.53             | 2.54             | 2.53             | 2.53             | 2.53             | 2.53             | 2.54             | 2.54             | 2.54             | 2.54             | 2.54             | 2.54             | 2.56             | 2.56             | 2.56             | 2.55             | 2.55             |
|                |                       | TC          | 40170            | 41466            | 42991            | 43262            | 45082            | 42681            | 42694            | 43028            | 43309            | 45132            | 44538            | 44575            | 44587            | 44588            | 45096            | 48092            | 48107            | 48185            | 48193            | 48228            |
|                | 68°F<br>20°C          | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 2.68             | 2.69             | 2.70             | 2.70             | 2.72             | 2.70             | 2.70             | 2.70             | 2.71             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             |
|                |                       | TC          | 39832            | 41358            | 42962            | 43247            | 45159            | 42422            | 42442            | 42930            | 43298            | 45212            | 44359            | 44410            | 44430            | 44482            | 45252            | 48043            | 48086            | 48194            | 48206            | 48258            |
|                | 77°F<br>25°C          | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 2.86             | 2.87             | 2.88             | 2.89             | 2.90             | 2.88             | 2.88             | 2.88             | 2.89             | 2.90             | 2.90             | 2.90             | 2.90             | 2.90             | 2.90             | 2.93             | 2.93             | 2.93             | 2.93             | 2.92             |
|                |                       | TC          | 40027            | 41725            | 43388            | 43683            | 45670            | 42670            | 42739            | 43440            | 43736            | 45721            | 44666            | 44725            | 44748            | 44818            | 45763            | 48448            | 48510            | 48631            | 48645            | 48703            |
|                | 82°F<br>27.8°C        | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 3.20             | 3.21             | 3.23             | 3.23             | 3.24             | 3.22             | 3.22             | 3.23             | 3.23             | 3.24             | 3.24             | 3.24             | 3.24             | 3.24             | 3.24             | 3.27             | 3.27             | 3.27             | 3.27             | 3.27             |
|                |                       | TC          | 40638            | 42520            | 44245            | 44550            | 46626            | 43321            | 43411            | 44298            | 44603            | 46663            | 45388            | 45441            | 45513            | 45554            | 46706            | 49289            | 49360            | 49476            | 49488            | 49540            |
|                | 86°F<br>30°C          | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 3.76             | 3.78             | 3.80             | 3.80             | 3.83             | 3.79             | 3.79             | 3.80             | 3.81             | 3.83             | 3.82             | 3.82             | 3.81             | 3.82             | 3.83             | 3.86             | 3.86             | 3.86             | 3.86             | 3.85             |
|                |                       | TC          | 42531            | 42607            | 43521            | 43778            | 45494            | 45251            | 45262            | 45278            | 45280            | 45587            | 47205            | 47210            | 47234            | 47238            | 47259            | 50959            | 50941            | 50946            | 50944            | 50982            |
|                | 95°F<br>35°C          | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 4.86             | 4.86             | 4.91             | 4.92             | 5.02             | 5.01</           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 9 – 48K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1600           | -13°F<br>25°C         | TC          | 43008            | 42988            | 43602            | 43782            | 44987            | 44873            | 44836            | 44807            | 44803            | 44766            | 46214            | 46156            | 46112            | 46106            | 46062            | 48747            | 48734            | 48634            | 48616            | 48513            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.88             | 1.88             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.86             | 1.86             | 1.86             | 1.86             | 1.87             | 1.88             | 1.87             | 1.88             | 1.88             | 1.88             |
|                | -4°F<br>20°C          | TC          | 46316            | 46295            | 46956            | 47150            | 48448            | 48324            | 48285            | 48254            | 48250            | 48210            | 49769            | 49707            | 49660            | 49653            | 49605            | 52497            | 52483            | 52375            | 52355            | 52245            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.94             | 1.94             | 1.94             | 1.94             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             |
|                | 0°F<br>17.8°C         | TC          | 47854            | 47825            | 48713            | 48916            | 50259            | 49906            | 49851            | 49812            | 49806            | 50307            | 51373            | 51300            | 51236            | 51229            | 51204            | 54136            | 54123            | 54118            | 54126            | 54161            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 1.98             | 1.98             | 1.98             | 1.98             | 1.98             |
|                | 5°F<br>15°C           | TC          | 49226            | 49395            | 50524            | 50757            | 52321            | 51534            | 51547            | 51551            | 51604            | 52373            | 53182            | 53196            | 53207            | 53208            | 53279            | 56302            | 56284            | 56314            | 56320            | 56345            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.97             | 1.97             | 1.98             | 1.98             | 1.99             | 1.98             | 1.98             | 1.98             | 1.98             | 1.99             | 2.00             | 2.00             | 2.00             | 2.00             | 2.00             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             |
|                | 14°F<br>10°C          | TC          | 49907            | 49882            | 50900            | 51139            | 52724            | 52385            | 52338            | 52303            | 52297            | 52786            | 54179            | 54111            | 54056            | 54048            | 53993            | 57610            | 57592            | 57481            | 57462            | 57339            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.96             | 1.96             | 1.96             | 1.96             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             |
|                | 17°F<br>10°C          | TC          | 50016            | 50179            | 51339            | 51589            | 53265            | 52506            | 52527            | 52537            | 52581            | 53322            | 54297            | 54318            | 54340            | 54342            | 54409            | 57747            | 57731            | 57722            | 57733            | 57781            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             | 1.93             | 1.93             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             |
|                | 23°F<br>5°C           | TC          | 48778            | 48988            | 50255            | 50503            | 52167            | 51248            | 51263            | 51269            | 51336            | 52224            | 53016            | 53034            | 53048            | 53049            | 53135            | 56372            | 56354            | 56394            | 56402            | 56434            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.12             | 2.12             | 2.13             | 2.13             | 2.14             | 2.14             | 2.14             | 2.14             | 2.14             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.19             | 2.19             | 2.19             | 2.19             | 2.19             |
|                | 35°F<br>1.7°C         | TC          | 46747            | 46749            | 47024            | 47155            | 48676            | 48932            | 48931            | 48935            | 48935            | 49065            | 50464            | 50461            | 50463            | 50465            | 50470            | 53306            | 53293            | 53291            | 53288            | 53293            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.33             | 2.33             | 2.35             | 2.36             | 2.46             | 2.47             | 2.47             | 2.47             | 2.47             | 2.48             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.81             | 2.81             | 2.81             | 2.80             | 2.81             |
|                | 41°F<br>5°C           | TC          | 45382            | 45383            | 45744            | 46062            | 47424            | 47493            | 47492            | 47494            | 47494            | 47661            | 48975            | 48971            | 48974            | 48975            | 48978            | 51723            | 51710            | 51707            | 51704            | 51710            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 2.24             | 2.24             | 2.27             | 2.29             | 2.38             | 2.39             | 2.39             | 2.39             | 2.39             | 2.40             | 2.49             | 2.49             | 2.49             | 2.49             | 2.50             | 2.50             | 2.72             | 2.72             | 2.72             | 2.72             |
|                | 47°F<br>8.3°C         | TC          | 44015            | 44044            | 44634            | 44834            | 46160            | 46055            | 46054            | 46055            | 46054            | 46268            | 47486            | 47481            | 47485            | 47484            | 47484            | 50144            | 50132            | 50127            | 50125            | 50130            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 2.16             | 2.16             | 2.20             | 2.22             | 2.31             | 2.30             | 2.30             | 2.30             | 2.30             | 2.32             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             |
|                | 50°F<br>10°C          | TC          | 43131            | 44318            | 45814            | 46079            | 47865            | 45566            | 45591            | 45906            | 46050            | 47911            | 47343            | 47405            | 47430            | 47432            | 47888            | 50606            | 50740            | 50870            | 50886            | 50949            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             |
|                | 59°F<br>15°C          | TC          | 42843            | 44346            | 45920            | 46199            | 48079            | 45330            | 45392            | 45907            | 46249            | 48127            | 47200            | 47248            | 47264            | 47333            | 48166            | 50683            | 50784            | 50886            | 50897            | 50940            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 2.64             | 2.64             | 2.65             | 2.65             | 2.66             | 2.65             | 2.65             | 2.65             | 2.65             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.68             | 2.67             | 2.67             | 2.67             | 2.67             |
|                | 68°F<br>20°C          | TC          | 42536            | 44352            | 45997            | 46289            | 48253            | 45031            | 45133            | 46047            | 46339            | 48301            | 46978            | 47014            | 47098            | 47139            | 48341            | 50619            | 50713            | 50793            | 50801            | 50827            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 2.80             | 2.82             | 2.83             | 2.84             | 2.85             | 2.82             | 2.83             | 2.83             | 2.84             | 2.85             | 2.84             | 2.84             | 2.84             | 2.84             | 2.85             | 2.88             | 2.88             | 2.88             | 2.88             | 2.88             |
|                | 77°F<br>25°C          | TC          | 42197            | 44229            | 45960            | 46266            | 48333            | 44734            | 44876            | 46010            | 46317            | 48382            | 46760            | 46813            | 46932            | 46985            | 48422            | 50503            | 50656            | 50773            | 50786            | 50833            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 2.99             | 3.01             | 3.02             | 3.02             | 3.04             | 3.01             | 3.01             | 3.02             | 3.02             | 3.04             | 3.03             | 3.03             | 3.03             | 3.03             | 3.04             | 3.07             | 3.06             | 3.06             | 3.06             | 3.06             |
|                | 82°F<br>27.8°C        | TC          | 42437            | 44603            | 46402            | 46717            | 48856            | 44970            | 45144            | 46443            | 46769            | 48907            | 47062            | 47121            | 47268            | 47326            | 48950            | 50884            | 51075            | 51208            | 51222            | 51277            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 3.35             | 3.36             | 3.38             | 3.38             | 3.40             | 3.37             | 3.37             | 3.38             | 3.38             | 3.40             | 3.39             | 3.39             | 3.39             | 3.39             | 3.40             | 3.43             | 3.42             | 3.42             | 3.42             | 3.42             |
|                | 86°F<br>30°C          | TC          | 43316            | 45478            | 47338            | 47668            | 49888            | 45681            | 45890            | 47391            | 47723            | 49940            | 47845            | 47900            | 48076            | 48145            | 49983            | 51798            | 51998            | 52121            | 52134            | 52182            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 3.94             | 3.96             | 3.98             | 3.99             | 4.01             | 3.97             | 3.97             | 3.98             | 3.99             | 4.01             | 3.99             | 3.99             | 3.99             | 3.99             | 4.01             | 4.05             | 4.04             | 4.03             | 4.03             | 4.03             |
|                | 95°F<br>35°C          | TC          | 44977            | 45220            | 46681            | 46958            | 48814            | 47801            | 47829            | 47844            | 47901            | 48875            | 49852            | 49863            | 49894            | 49898            | 49981            | 53718            | 53698            | 53709            | 53724            | 53796            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0                |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 10 – 54K Cooling — **37MURA + 45MUAA**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1135           | -13°F<br>25°C         | TC          | 34216            | 34211            | 34206            | 34206            | 34199            | 35808            | 35799            | 35793            | 35792            | 35785            | 36937            | 36928            | 36919            | 36918            | 36910            | 39055            | 39045            | 39036            | 39035            | 39022            |
|                |                       | S/T         | 0.72             | 0.80             | 0.87             | 0.88             | 0.97             | 0.59             | 0.67             | 0.74             | 0.76             | 0.83             | 0.51             | 0.59             | 0.66             | 0.67             | 0.75             | 0.38             | 0.46             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             |
|                | -4°F<br>20°C          | TC          | 36848            | 36842            | 36838            | 36837            | 36830            | 38563            | 38553            | 38546            | 38545            | 38538            | 39779            | 39768            | 39759            | 39758            | 39749            | 42060            | 42049            | 42039            | 42037            | 42024            |
|                |                       | S/T         | 0.72             | 0.80             | 0.88             | 0.89             | 0.97             | 0.60             | 0.68             | 0.75             | 0.76             | 0.84             | 0.52             | 0.59             | 0.66             | 0.67             | 0.75             | 0.39             | 0.47             | 0.51             | 0.52             | 0.60             |
|                |                       | PI          | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.54             | 2.54             | 2.54             | 2.54             | 2.54             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             |
|                | 0°F<br>17.8°C         | TC          | 38047            | 38039            | 38033            | 38032            | 38021            | 39800            | 39792            | 39783            | 39782            | 39771            | 41042            | 41031            | 41022            | 41020            | 41007            | 43357            | 43346            | 43338            | 43336            | 43319            |
|                |                       | S/T         | 0.72             | 0.81             | 0.88             | 0.90             | 0.98             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 2.60             | 2.60             | 2.60             | 2.60             | 2.60             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             |
|                | 5°F<br>15°C           | TC          | 39240            | 39240            | 39240            | 39240            | 39826            | 41200            | 41192            | 41191            | 41191            | 41195            | 42608            | 42606            | 42599            | 42598            | 42602            | 45309            | 45297            | 45287            | 45285            | 45285            |
|                |                       | S/T         | 0.73             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.86             | 0.52             | 0.60             | 0.67             | 0.68             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.63             | 2.62             | 2.63             | 2.63             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             |
|                | 14°F<br>10°C          | TC          | 40127            | 40122            | 40116            | 40116            | 40311            | 42234            | 42223            | 42216            | 42215            | 42207            | 43738            | 43728            | 43717            | 43716            | 43706            | 46597            | 46583            | 46572            | 46570            | 46555            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 0.99             | 0.60             | 0.68             | 0.75             | 0.76             | 0.85             | 0.52             | 0.60             | 0.66             | 0.68             | 0.76             | 0.39             | 0.47             | 0.51             | 0.53             | 0.60             |
|                |                       | PI          | 2.52             | 2.52             | 2.52             | 2.52             | 2.51             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             | 2.48             | 2.48             | 2.48             | 2.48             | 2.48             |
|                | 17°F<br>10°C          | TC          | 40452            | 40444            | 40438            | 40437            | 41020            | 42574            | 42564            | 42555            | 42553            | 42554            | 44097            | 44096            | 44089            | 44088            | 44095            | 47075            | 47062            | 47051            | 47048            | 47051            |
|                |                       | S/T         | 0.73             | 0.82             | 0.89             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 2.46             | 2.46             | 2.46             | 2.46             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.44             | 2.44             | 2.44             | 2.44             | 2.44             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             |
|                | 23°F<br>5°C           | TC          | 39332            | 39333            | 39333            | 39359            | 40077            | 41448            | 41440            | 41440            | 41441            | 41445            | 42972            | 42969            | 42962            | 42962            | 42966            | 45901            | 45887            | 45876            | 45874            | 45875            |
|                |                       | S/T         | 0.74             | 0.83             | 0.90             | 0.91             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.47             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 2.65             | 2.65             | 2.65             | 2.65             | 2.65             | 2.66             | 2.66             | 2.66             | 2.66             | 2.66             | 2.67             | 2.67             | 2.67             | 2.67             | 2.67             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             |
|                | 35°F<br>1.7°C         | TC          | 37410            | 37407            | 37405            | 37404            | 37456            | 39348            | 39344            | 39340            | 39339            | 39336            | 40718            | 40710            | 40708            | 40707            | 40701            | 43283            | 43273            | 43265            | 43263            | 43261            |
|                |                       | S/T         | 0.70             | 0.78             | 0.85             | 0.86             | 0.93             | 0.59             | 0.66             | 0.72             | 0.74             | 0.81             | 0.51             | 0.58             | 0.64             | 0.65             | 0.73             | 0.39             | 0.46             | 0.50             | 0.51             | 0.58             |
|                |                       | PI          | 2.83             | 2.83             | 2.83             | 2.83             | 2.84             | 2.99             | 2.99             | 2.99             | 2.99             | 2.99             | 3.11             | 3.11             | 3.11             | 3.11             | 3.11             | 3.38             | 3.38             | 3.38             | 3.38             | 3.38             |
|                | 41°F<br>5°C           | TC          | 37413            | 37408            | 37407            | 37406            | 37493            | 39335            | 39331            | 39326            | 39326            | 39323            | 40694            | 40686            | 40683            | 40683            | 40676            | 43240            | 43231            | 43222            | 43221            | 43218            |
|                |                       | S/T         | 0.71             | 0.79             | 0.86             | 0.87             | 0.95             | 0.59             | 0.67             | 0.73             | 0.74             | 0.82             | 0.51             | 0.59             | 0.65             | 0.66             | 0.73             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 3.21             | 3.21             | 3.21             | 3.21             | 3.22             | 3.41             | 3.41             | 3.41             | 3.41             | 3.41             | 3.56             | 3.56             | 3.56             | 3.56             | 3.56             | 3.88             | 3.88             | 3.88             | 3.88             | 3.88             |
|                | 47°F<br>8.3°C         | TC          | 37409            | 37404            | 37402            | 37401            | 37531            | 39318            | 39314            | 39308            | 39308            | 39305            | 40670            | 40661            | 40658            | 40657            | 40651            | 43195            | 43185            | 43177            | 43176            | 43172            |
|                |                       | S/T         | 0.71             | 0.80             | 0.87             | 0.88             | 0.96             | 0.59             | 0.67             | 0.74             | 0.75             | 0.83             | 0.51             | 0.59             | 0.65             | 0.66             | 0.74             | 0.39             | 0.46             | 0.51             | 0.52             | 0.59             |
|                |                       | PI          | 3.60             | 3.60             | 3.59             | 3.59             | 3.61             | 3.83             | 3.83             | 3.83             | 3.83             | 3.83             | 4.01             | 4.01             | 4.01             | 4.01             | 4.01             | 4.38             | 4.37             | 4.37             | 4.37             | 4.37             |
|                | 50°F<br>10°C          | TC          | 36734            | 36739            | 37078            | 37379            | 38766            | 38956            | 38964            | 38975            | 38977            | 39120            | 40568            | 40572            | 40590            | 40593            | 40609            | 43692            | 43676            | 43682            | 43679            | 43718            |
|                |                       | S/T         | 0.79             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 3.93             | 3.93             | 3.93             | 3.93             | 3.94             | 3.94             | 3.94             | 3.94             | 3.94             | 3.94             | 3.93             | 3.93             | 3.93             | 3.93             | 3.93             | 3.93             | 3.93             | 3.93             | 3.93             | 3.93             |
|                | 59°F<br>15°C          | TC          | 36372            | 36428            | 37144            | 37362            | 38823            | 38685            | 38693            | 38701            | 38702            | 38939            | 40378            | 40368            | 40384            | 40386            | 40398            | 43624            | 43606            | 43609            | 43607            | 43640            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 3.69             | 3.69             | 3.69             | 3.70             | 3.71             | 3.71             | 3.71             | 3.71             | 3.71             | 3.71             | 3.72             | 3.72             | 3.72             | 3.72             | 3.72             | 3.74             | 3.74             | 3.74             | 3.74             | 3.74             |
|                | 68°F<br>20°C          | TC          | 36033            | 36151            | 37172            | 37400            | 38929            | 38426            | 38433            | 38438            | 38439            | 38901            | 40172            | 40164            | 40179            | 40181            | 40188            | 43531            | 43513            | 43514            | 43512            | 43546            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 3.45             | 3.45             | 3.46             | 3.47             | 3.49             | 3.48             | 3.48             | 3.48             | 3.48             | 3.49             | 3.51             | 3.51             | 3.50             | 3.50             | 3.50             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             |
|                | 77°F<br>25°C          | TC          | 35638            | 35815            | 37044            | 37286            | 38890            | 38132            | 38145            | 38153            | 38190            | 38947            | 39955            | 39952            | 39974            | 39976            | 40024            | 43464            | 43444            | 43449            | 43450            | 43500            |
|                |                       | S/T         | 0.83             | 0.96             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.55             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 3.24             | 3.25             | 3.26             | 3.26             | 3.28             | 3.27             | 3.27             | 3.27             | 3.27             | 3.28             | 3.29             | 3.29             | 3.29             | 3.29             | 3.29             | 3.32             | 3.32             | 3.32             | 3.32             | 3.32             |
|                | 82°F<br>27.8°C        | TC          | 35546            | 35775            | 37147            | 37394            | 39046            | 38097            | 38116            | 38148            | 38181            | 39102            | 39965            | 39967            | 39990            | 39993            | 40062            | 43561            | 43540            | 43548            | 43552            | 43610            |
|                |                       | S/T         | 0.84             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.88             | 0.90             | 1.00             | 0.56             | 0.67             | 0.77             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 3.40             | 3.40             | 3.42             | 3.42             | 3.44             | 3.43             | 3.43             | 3.43             | 3.43             | 3.44             | 3.45             | 3.45             | 3.45             | 3.45             | 3.45             | 3.48             | 3.48             | 3.48             | 3.48             | 3.48             |
|                | 86°F<br>30°C          | TC          | 35636            | 35947            | 37445            | 37698            | 39393            | 38241            | 38258            | 38310            | 38348            | 39450            | 40142            | 40148            | 40169            | 40171            | 40262            | 43808            | 43786            | 43794            | 43803            | 43858            |
|                |                       | S/T         | 0.85             | 0.98             | 1.00             | 1.00             | 1.00             | 0.67             | 0.80             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 3.86             | 3.87             | 3.89             | 3.89             | 3.91             | 3.90             | 3.90             | 3.90             | 3.90             | 3.91             | 3.92             | 3.92             | 3.92             | 3.92             | 3.92             | 3.97             | 3.97             | 3.97             | 3.97             | 3.96             |
|                | 95°F<br>35°C          | TC          | 36389            | 36388            | 36391            | 36432            | 37365            | 38826            | 38816            | 38814            | 38814            | 38822            | 40583            | 40579            | 40570            | 40570            | 40571            | 43978            | 43963            | 43951            | 43949            | 43949            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.69             | 0.77             | 0.78             | 0.87             | 0.52             |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 10 – 54K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
| 1359           | -13°F<br>25°C         | TC          | 38011            | 38003            | 37995            | 37994            | 38774            | 39722            | 39711            | 39700            | 39698            | 39685            | 40935            | 40922            | 40908            | 40905            | 40886            | 43210            | 43199            | 43182            | 43181            | 43152            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.93             | 1.00             | 0.61             | 0.70             | 0.78             | 0.79             | 0.88             | 0.52             | 0.61             | 0.69             | 0.70             | 0.79             | 0.38             | 0.46             | 0.53             | 0.54             | 0.62             |
|                |                       | PI          | 2.67             | 2.67             | 2.67             | 2.67             | 2.66             | 2.65             | 2.65             | 2.65             | 2.65             | 2.65             | 2.64             | 2.64             | 2.64             | 2.64             | 2.64             | 2.64             | 2.64             | 2.64             | 2.64             | 2.64             |
|                | -4°F<br>20°C          | TC          | 40935            | 40926            | 40918            | 40917            | 41756            | 42778            | 42765            | 42754            | 42752            | 42738            | 44084            | 44069            | 44054            | 44051            | 44031            | 46534            | 46522            | 46504            | 46502            | 46472            |
|                |                       | S/T         | 0.75             | 0.84             | 0.92             | 0.94             | 1.00             | 0.61             | 0.71             | 0.78             | 0.79             | 0.88             | 0.53             | 0.61             | 0.69             | 0.70             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 2.76             | 2.77             | 2.77             | 2.77             | 2.75             | 2.74             | 2.74             | 2.74             | 2.74             | 2.74             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             |
|                | 0°F<br>17.8°C         | TC          | 42273            | 42261            | 42252            | 42250            | 43303            | 44158            | 44142            | 44126            | 44122            | 44104            | 45491            | 45473            | 45453            | 45449            | 45421            | 47967            | 47957            | 47952            | 47949            | 47955            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 2.79             | 2.79             | 2.79             | 2.79             | 2.78             | 2.77             | 2.77             | 2.78             | 2.78             | 2.78             | 2.77             | 2.77             | 2.77             | 2.77             | 2.77             | 2.79             | 2.79             | 2.79             | 2.79             | 2.79             |
|                | 5°F<br>15°C           | TC          | 43558            | 43562            | 43698            | 43760            | 45040            | 45679            | 45677            | 45684            | 45685            | 45739            | 47200            | 47198            | 47201            | 47203            | 47212            | 50101            | 50087            | 50088            | 50086            | 50089            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 2.81             | 2.81             | 2.81             | 2.81             | 2.81             | 2.81             | 2.81             | 2.81             | 2.81             | 2.82             | 2.83             | 2.83             | 2.83             | 2.83             | 2.83             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             |
|                | 14°F<br>10°C          | TC          | 44568            | 44558            | 44550            | 44548            | 45813            | 46845            | 46831            | 46818            | 46815            | 46800            | 48472            | 48456            | 48439            | 48436            | 48413            | 51566            | 51551            | 51530            | 51528            | 51495            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.95             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.79             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 2.70             | 2.70             | 2.70             | 2.70             | 2.69             | 2.69             | 2.69             | 2.69             | 2.69             | 2.69             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             |
|                | 17°F<br>10°C          | TC          | 44899            | 44885            | 45002            | 45065            | 46415            | 47192            | 47176            | 47187            | 47188            | 47238            | 48845            | 48844            | 48852            | 48855            | 48870            | 52049            | 52034            | 52039            | 52036            | 52048            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.55             | 0.63             |
|                |                       | PI          | 2.64             | 2.64             | 2.64             | 2.64             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             | 2.64             | 2.64             | 2.64             | 2.64             | 2.64             |
|                | 23°F<br>5°C           | TC          | 43663            | 43667            | 43844            | 43922            | 45365            | 45954            | 45953            | 45961            | 45962            | 46035            | 47600            | 47598            | 47603            | 47605            | 47616            | 50753            | 50738            | 50740            | 50738            | 50745            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.62             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.81             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 2.84             | 2.84             | 2.84             | 2.84             | 2.85             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             |
|                | 35°F<br>1.7°C         | TC          | 41597            | 41594            | 41595            | 41595            | 42130            | 43665            | 43657            | 43654            | 43653            | 43656            | 45117            | 45113            | 45106            | 45105            | 45103            | 47829            | 47817            | 47808            | 47806            | 47804            |
|                |                       | S/T         | 0.73             | 0.81             | 0.89             | 0.90             | 1.00             | 0.60             | 0.68             | 0.76             | 0.77             | 0.85             | 0.52             | 0.60             | 0.67             | 0.68             | 0.76             | 0.39             | 0.47             | 0.52             | 0.53             | 0.60             |
|                |                       | PI          | 3.04             | 3.04             | 3.04             | 3.04             | 3.08             | 3.21             | 3.21             | 3.21             | 3.21             | 3.21             | 3.35             | 3.35             | 3.35             | 3.35             | 3.35             | 3.64             | 3.64             | 3.64             | 3.64             | 3.64             |
|                | 41°F<br>5°C           | TC          | 41489            | 41589            | 41589            | 41602            | 42287            | 43646            | 43638            | 43634            | 43635            | 43636            | 45089            | 45085            | 45078            | 45077            | 45075            | 47782            | 47771            | 47761            | 47759            | 47756            |
|                |                       | S/T         | 0.74             | 0.82             | 0.90             | 0.91             | 1.00             | 0.60             | 0.69             | 0.76             | 0.78             | 0.86             | 0.52             | 0.60             | 0.67             | 0.69             | 0.77             | 0.39             | 0.45             | 0.52             | 0.53             | 0.61             |
|                |                       | PI          | 3.44             | 3.45             | 3.45             | 3.45             | 3.52             | 3.67             | 3.67             | 3.67             | 3.67             | 3.67             | 3.83             | 3.83             | 3.83             | 3.83             | 3.83             | 4.18             | 4.18             | 4.18             | 4.18             | 4.18             |
|                | 47°F<br>8.3°C         | TC          | 41583            | 41581            | 41581            | 41622            | 42441            | 43624            | 43616            | 43613            | 43613            | 43614            | 45062            | 45057            | 45050            | 45049            | 45048            | 47738            | 47727            | 47718            | 47716            | 47713            |
|                |                       | S/T         | 0.74             | 0.83             | 0.91             | 0.92             | 1.00             | 0.61             | 0.70             | 0.77             | 0.78             | 0.87             | 0.52             | 0.61             | 0.68             | 0.69             | 0.78             | 0.39             | 0.45             | 0.52             | 0.53             | 0.62             |
|                |                       | PI          | 3.87             | 3.87             | 3.87             | 3.87             | 3.97             | 4.13             | 4.13             | 4.13             | 4.13             | 4.13             | 4.31             | 4.31             | 4.31             | 4.31             | 4.31             | 4.71             | 4.71             | 4.71             | 4.71             | 4.71             |
|                | 50°F<br>10°C          | TC          | 40751            | 40924            | 42079            | 42318            | 43918            | 43170            | 43196            | 43208            | 43253            | 43973            | 44922            | 44948            | 44974            | 44978            | 45043            | 48268            | 48250            | 48306            | 48319            | 48385            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.88             | 0.39             | 0.48             | 0.56             | 0.58             | 0.68             |
|                |                       | PI          | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.24             | 4.23             | 4.23             | 4.23             | 4.23             | 4.23             |
|                | 59°F<br>15°C          | TC          | 40352            | 40640            | 42077            | 42328            | 44010            | 42877            | 42897            | 42962            | 43002            | 44066            | 44702            | 44725            | 44747            | 44749            | 44858            | 48212            | 48191            | 48239            | 48249            | 48300            |
|                |                       | S/T         | 0.85             | 0.97             | 1.00             | 1.00             | 1.00             | 0.67             | 0.79             | 0.89             | 0.91             | 1.00             | 0.56             | 0.68             | 0.77             | 0.79             | 0.90             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 3.97             | 3.97             | 3.99             | 3.99             | 4.00             | 3.99             | 3.99             | 3.99             | 3.99             | 4.00             | 4.01             | 4.01             | 4.00             | 4.01             | 4.01             | 4.03             | 4.03             | 4.03             | 4.03             | 4.03             |
|                | 68°F<br>20°C          | TC          | 39977            | 40648            | 42125            | 42388            | 44148            | 42593            | 42609            | 42727            | 42779            | 44205            | 44481            | 44505            | 44519            | 44521            | 44694            | 48120            | 48099            | 48146            | 48155            | 48194            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.91             | 0.93             | 1.00             | 0.57             | 0.69             | 0.79             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 3.71             | 3.72             | 3.74             | 3.75             | 3.77             | 3.75             | 3.75             | 3.75             | 3.75             | 3.77             | 3.77             | 3.77             | 3.77             | 3.77             | 3.77             | 3.82             | 3.82             | 3.82             | 3.82             | 3.82             |
|                | 77°F<br>25°C          | TC          | 39537            | 40459            | 42009            | 42285            | 44134            | 42270            | 42290            | 42453            | 42522            | 44190            | 44231            | 44270            | 44292            | 44294            | 44523            | 48026            | 48003            | 48079            | 48091            | 48146            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.82             | 0.93             | 0.95             | 1.00             | 0.57             | 0.70             | 0.80             | 0.82             | 0.94             | 0.39             | 0.49             | 0.59             | 0.60             | 0.72             |
|                |                       | PI          | 3.49             | 3.50             | 3.52             | 3.52             | 3.54             | 3.52             | 3.52             | 3.52             | 3.52             | 3.54             | 3.54             | 3.54             | 3.54             | 3.54             | 3.54             | 3.58             | 3.58             | 3.58             | 3.58             | 3.58             |
|                | 82°F<br>27.8°C        | TC          | 39465            | 40538            | 42134            | 42417            | 44319            | 42232            | 42255            | 42458            | 42542            | 44379            | 44239            | 44287            | 44310            | 44313            | 44592            | 48125            | 48133            | 48194            | 48208            | 48270            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.96             | 1.00             | 0.58             | 0.70             | 0.81             | 0.83             | 0.96             | 0.39             | 0.49             | 0.59             | 0.61             | 0.72             |
|                |                       | PI          | 3.66             | 3.68             | 3.69             | 3.69             | 3.71             | 3.69             | 3.69             | 3.69             | 3.69             | 3.71             | 3.71             | 3.71             | 3.71             | 3.71             | 3.71             | 3.75             | 3.75             | 3.75             | 3.75             | 3.75             |
|                | 86°F<br>30°C          | TC          | 39592            | 40842            | 42480            | 42769            | 44719            | 42395            | 42416            | 42669            | 42782            | 44779            | 44440            | 44487            | 44508            | 44511            | 44855            | 48401            | 48404            | 48475            | 48488            | 48544            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.84             | 0.96             | 0.98             | 1.00             | 0.58             | 0.71             | 0.82             | 0.84             | 0.97             | 0.39             | 0.50             | 0.60             | 0.61             | 0.73             |
|                |                       | PI          | 4.16             | 4.18             | 4.20             | 4.20             | 4.22             | 4.20             | 4.20             | 4.20             | 4.20             | 4.22             | 4.23             | 4.22             | 4.22             | 4.22             | 4.23             | 4.27             | 4.27             | 4.27             | 4.27             | 4.27             |
|                | 95°F<br>35°C          | TC          | 40413            | 40421            | 40644            | 40748            | 42428            | 43055            | 43050            | 43061            | 43063            | 43140            | 44955            | 44954            | 44953            | 44955            | 44975            | 48619            | 48602            | 48588            | 48610            | 48597            |
|                |                       | S/T         | 0.77             | 0.87             | 0.96             | 0.98             | 1.00             | 0.63             | 0.72             | 0.80             | 0.82             | 0.91             | 0.53             | 0.62             | 0.70             | 0.72             | 0.81             | 0.39             | 0.46             | 0.53             |                  |                  |

Table 10 – 54K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1582           | -13°F<br>25°C         | TC          | 42207            | 42192            | 42180            | 42425            | 43674            | 44065            | 44041            | 44021            | 44018            | 43987            | 45380            | 45357            | 45327            | 45321            | 45290            | 47871            | 47858            | 47822            | 47811            | 47739            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.89             | 2.89             | 2.89             | 2.89             | 2.88             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             | 2.88             | 2.88             | 2.88             | 2.88             | 2.88             |
|                | -4°F<br>20°C          | TC          | 45453            | 45437            | 45425            | 45689            | 47034            | 47455            | 47429            | 47407            | 47404            | 47371            | 48871            | 48846            | 48813            | 48808            | 48774            | 51553            | 51539            | 51501            | 51488            | 51411            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 3.00             | 3.00             | 3.00             | 2.99             | 2.98             | 2.97             | 2.98             | 2.98             | 2.98             | 2.98             | 2.97             | 2.97             | 2.97             | 2.97             | 2.97             | 2.98             | 2.98             | 2.98             | 2.98             | 2.98             |
|                | 0°F<br>17.8°C         | TC          | 46953            | 46933            | 47114            | 47474            | 48788            | 49001            | 48964            | 48935            | 48931            | 48922            | 50438            | 50409            | 50363            | 50356            | 50311            | 53156            | 53140            | 53143            | 53149            | 53188            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 3.02             | 3.02             | 3.02             | 3.02             | 3.01             | 3.01             | 3.01             | 3.01             | 3.01             | 3.01             | 3.01             | 3.01             | 3.02             | 3.02             | 3.02             | 3.04             | 3.04             | 3.04             | 3.04             | 3.04             |
|                | 5°F<br>15°C           | TC          | 48334            | 48378            | 49030            | 49255            | 50761            | 50633            | 50643            | 50649            | 50650            | 50899            | 52290            | 52286            | 52300            | 52301            | 52307            | 55414            | 55398            | 55399            | 55403            | 55433            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 3.05             | 3.05             | 3.05             | 3.05             | 3.06             | 3.05             | 3.05             | 3.05             | 3.05             | 3.06             | 3.07             | 3.07             | 3.07             | 3.07             | 3.07             | 3.13             | 3.13             | 3.13             | 3.13             | 3.13             |
|                | 14°F<br>10°C          | TC          | 49461            | 49442            | 49647            | 50081            | 51635            | 51944            | 51914            | 51889            | 51885            | 51857            | 53738            | 53713            | 53672            | 53665            | 53619            | 57118            | 57100            | 57059            | 57046            | 56958            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.93             | 2.93             | 2.93             | 2.93             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             | 2.91             | 2.91             | 2.91             | 2.91             | 2.91             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             |
|                | 17°F<br>10°C          | TC          | 49897            | 49910            | 50521            | 50812            | 52448            | 52402            | 52407            | 52418            | 52419            | 52667            | 54073            | 54094            | 54129            | 54132            | 54145            | 57670            | 57652            | 57658            | 57669            | 57722            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.86             | 2.88             | 2.88             | 2.88             | 2.88             | 2.88             |
|                | 23°F<br>5°C           | TC          | 48448            | 48515            | 49305            | 49547            | 51166            | 50935            | 50948            | 50954            | 50956            | 51257            | 52731            | 52729            | 52745            | 52747            | 52756            | 56130            | 56113            | 56115            | 56123            | 56161            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 3.08             | 3.08             | 3.09             | 3.09             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             | 3.12             | 3.12             | 3.12             | 3.12             | 3.12             | 3.17             | 3.17             | 3.17             | 3.17             | 3.18             |
|                | 35°F<br>1.7°C         | TC          | 46213            | 46214            | 46304            | 46356            | 47547            | 48430            | 48424            | 48426            | 48427            | 48428            | 49987            | 49983            | 49978            | 49978            | 49984            | 52882            | 52869            | 52858            | 52866            | 52856            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 3.30             | 3.30             | 3.31             | 3.31             | 3.41             | 3.49             | 3.49             | 3.49             | 3.49             | 3.49             | 3.64             | 3.64             | 3.64             | 3.64             | 3.64             | 3.96             | 3.96             | 3.96             | 3.96             | 3.96             |
|                | 41°F<br>5°C           | TC          | 46202            | 46203            | 46331            | 46393            | 47710            | 48408            | 48402            | 48404            | 48404            | 48447            | 49957            | 49951            | 49947            | 49948            | 49953            | 52833            | 52820            | 52809            | 52815            | 52807            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 3.75             | 3.75             | 3.77             | 3.78             | 3.91             | 3.99             | 3.99             | 3.99             | 3.99             | 3.99             | 4.17             | 4.17             | 4.17             | 4.17             | 4.17             | 4.54             | 4.54             | 4.54             | 4.54             | 4.54             |
|                | 47°F<br>8.3°C         | TC          | 46187            | 46187            | 46365            | 46446            | 47875            | 48385            | 48378            | 48379            | 48379            | 48453            | 49926            | 49920            | 49916            | 49917            | 49920            | 52791            | 52777            | 52773            | 52772            | 52764            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 4.20             | 4.20             | 4.23             | 4.24             | 4.41             | 4.48             | 4.48             | 4.48             | 4.48             | 4.49             | 4.69             | 4.69             | 4.69             | 4.69             | 4.69             | 5.12             | 5.11             | 5.11             | 5.11             | 5.11             |
|                | 50°F<br>10°C          | TC          | 45199            | 45938            | 47472            | 47744            | 49573            | 47855            | 47883            | 48039            | 48100            | 49631            | 49739            | 49803            | 49832            | 49835            | 50060            | 53323            | 53349            | 53478            | 53493            | 53564            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 4.61             | 4.61             | 4.61             | 4.61             | 4.60             | 4.61             | 4.61             | 4.61             | 4.61             | 4.60             | 4.60             | 4.60             | 4.60             | 4.60             | 4.60             | 4.60             | 4.60             | 4.60             | 4.60             | 4.60             |
|                | 59°F<br>15°C          | TC          | 44799            | 45878            | 47493            | 47779            | 49701            | 47533            | 47554            | 47790            | 47882            | 49758            | 49507            | 49560            | 49580            | 49582            | 49910            | 53288            | 53302            | 53407            | 53419            | 53471            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 4.32             | 4.33             | 4.34             | 4.34             | 4.35             | 4.34             | 4.34             | 4.34             | 4.34             | 4.35             | 4.35             | 4.35             | 4.35             | 4.35             | 4.35             | 4.38             | 4.38             | 4.38             | 4.38             | 4.38             |
|                | 68°F<br>20°C          | TC          | 44441            | 45875            | 47563            | 47863            | 49875            | 47219            | 47234            | 47603            | 47914            | 49931            | 49274            | 49314            | 49328            | 49330            | 49891            | 53205            | 53223            | 53308            | 53318            | 53356            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 4.04             | 4.06             | 4.08             | 4.08             | 4.11             | 4.08             | 4.08             | 4.08             | 4.08             | 4.11             | 4.10             | 4.10             | 4.10             | 4.10             | 4.11             | 4.16             | 4.16             | 4.15             | 4.15             | 4.15             |
|                | 77°F<br>25°C          | TC          | 43997            | 45683            | 47454            | 47769            | 49881            | 46858            | 46880            | 47419            | 47826            | 49939            | 48997            | 49053            | 49076            | 49133            | 49984            | 53067            | 53115            | 53233            | 53246            | 53304            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 3.80             | 3.82             | 3.83             | 3.84             | 3.86             | 3.83             | 3.83             | 3.83             | 3.84             | 3.86             | 3.85             | 3.85             | 3.85             | 3.85             | 3.86             | 3.89             | 3.89             | 3.89             | 3.89             | 3.89             |
|                | 82°F<br>27.8°C        | TC          | 43918            | 45780            | 47604            | 47929            | 50108            | 46817            | 46893            | 47662            | 47987            | 50165            | 49007            | 49072            | 49097            | 49174            | 50210            | 53157            | 53225            | 53357            | 53372            | 53436            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 3.99             | 4.00             | 4.02             | 4.02             | 4.04             | 4.01             | 4.01             | 4.02             | 4.02             | 4.04             | 4.04             | 4.03             | 4.03             | 4.03             | 4.04             | 4.08             | 4.08             | 4.07             | 4.07             | 4.07             |
|                | 86°F<br>30°C          | TC          | 44033            | 46073            | 47942            | 48272            | 50522            | 46941            | 47039            | 47999            | 48330            | 50562            | 49180            | 49238            | 49316            | 49361            | 50609            | 53408            | 53485            | 53610            | 53624            | 53679            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 4.53             | 4.55             | 4.57             | 4.58             | 4.61             | 4.56             | 4.56             | 4.57             | 4.58             | 4.60             | 4.59             | 4.59             | 4.59             | 4.59             | 4.60             | 4.65             | 4.65             | 4.64             | 4.64             | 4.64             |
|                | 95°F<br>35°C          | TC          | 44849            | 44929            | 45894            | 46164            | 47974            | 47718            | 47729            | 47746            | 47748            | 48072            | 49778            | 49783            | 49809            | 49813            | 49835            | 53737            | 53718            | 53723            | 53721            | 53761            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             |                  |                  |                  |                  |                  |                  |                  |                  |

Table 10 – 54K Cooling — **37MURA + 45MUAA** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1806           | -13°F<br>25°C         | TC          | 46842            | 46820            | 47488            | 47685            | 48997            | 48872            | 48832            | 48801            | 48797            | 48756            | 50334            | 50270            | 50223            | 50216            | 50168            | 53092            | 53078            | 52969            | 52949            | 52837            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 3.16             | 3.17             | 3.16             | 3.16             | 3.15             | 3.15             | 3.15             | 3.15             | 3.15             | 3.15             | 3.14             | 3.14             | 3.15             | 3.15             | 3.15             | 3.16             | 3.16             | 3.16             | 3.16             | 3.17             |
|                | -4°F<br>20°C          | TC          | 50445            | 50422            | 51141            | 51353            | 52766            | 52632            | 52589            | 52555            | 52550            | 52507            | 54206            | 54137            | 54086            | 54079            | 54027            | 57176            | 57161            | 57043            | 57022            | 56901            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 3.28             | 3.28             | 3.27             | 3.27             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             | 3.28             | 3.28             | 3.28             | 3.28             | 3.28             |
|                | 0°F<br>17.8°C         | TC          | 52119            | 52088            | 53055            | 53276            | 54739            | 54354            | 54294            | 54252            | 54246            | 54791            | 55952            | 55873            | 55803            | 55795            | 55768            | 58961            | 58947            | 58942            | 58950            | 58989            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 3.31             | 3.31             | 3.30             | 3.30             | 3.31             | 3.30             | 3.30             | 3.30             | 3.30             | 3.31             | 3.31             | 3.31             | 3.31             | 3.31             | 3.31             | 3.34             | 3.34             | 3.34             | 3.34             | 3.35             |
|                | 5°F<br>15°C           | TC          | 53613            | 53798            | 55028            | 55282            | 56985            | 56128            | 56142            | 56146            | 56203            | 57041            | 57923            | 57937            | 57949            | 57951            | 58028            | 61320            | 61301            | 61334            | 61340            | 61367            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 3.33             | 3.33             | 3.34             | 3.34             | 3.36             | 3.35             | 3.35             | 3.35             | 3.35             | 3.36             | 3.37             | 3.37             | 3.37             | 3.37             | 3.37             | 3.44             | 3.44             | 3.44             | 3.44             | 3.45             |
|                | 14°F<br>10°C          | TC          | 54904            | 54877            | 55997            | 56260            | 58004            | 57630            | 57579            | 57540            | 57534            | 58072            | 59605            | 59530            | 59469            | 59460            | 59400            | 63379            | 63359            | 63238            | 63216            | 63081            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 3.21             | 3.21             | 3.21             | 3.20             | 3.20             | 3.20             | 3.20             | 3.20             | 3.20             | 3.20             | 3.19             | 3.19             | 3.20             | 3.20             | 3.20             | 3.21             | 3.21             | 3.21             | 3.21             | 3.21             |
|                | 17°F<br>10°C          | TC          | 55204            | 55384            | 56664            | 56940            | 58790            | 57952            | 57976            | 57987            | 58035            | 58853            | 59930            | 59952            | 59976            | 59979            | 60053            | 63737            | 63719            | 63709            | 63721            | 63775            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 3.14             | 3.14             | 3.13             | 3.13             | 3.13             | 3.13             | 3.13             | 3.13             | 3.13             | 3.13             | 3.14             | 3.14             | 3.14             | 3.14             | 3.14             | 3.16             | 3.16             | 3.16             | 3.16             | 3.17             |
|                | 23°F<br>5°C           | TC          | 53739            | 53970            | 55367            | 55640            | 57473            | 56460            | 56477            | 56484            | 56558            | 57535            | 58408            | 58428            | 58443            | 58445            | 58539            | 62105            | 62086            | 62130            | 62139            | 62174            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 3.38             | 3.38             | 3.39             | 3.39             | 3.41             | 3.40             | 3.40             | 3.40             | 3.40             | 3.41             | 3.42             | 3.42             | 3.42             | 3.42             | 3.43             | 3.43             | 3.49             | 3.49             | 3.49             | 3.49             |
|                | 35°F<br>1.7°C         | TC          | 51299            | 51301            | 51602            | 51746            | 53415            | 53697            | 53695            | 53699            | 53700            | 53842            | 55378            | 55374            | 55377            | 55378            | 55384            | 58496            | 58482            | 58479            | 58477            | 58482            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 3.61             | 3.61             | 3.64             | 3.65             | 3.81             | 3.83             | 3.83             | 3.83             | 3.83             | 3.85             | 4.00             | 4.00             | 4.00             | 4.00             | 4.00             | 4.35             | 4.35             | 4.35             | 4.35             | 4.35             |
|                | 41°F<br>5°C           | TC          | 51284            | 51284            | 51693            | 52052            | 53591            | 53669            | 53668            | 53670            | 53671            | 53859            | 55343            | 55339            | 55343            | 55344            | 55347            | 58448            | 58434            | 58430            | 58428            | 58434            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 4.11             | 4.11             | 4.15             | 4.19             | 4.36             | 4.37             | 4.37             | 4.37             | 4.37             | 4.39             | 4.57             | 4.57             | 4.57             | 4.57             | 4.57             | 4.98             | 4.98             | 4.98             | 4.98             | 4.98             |
|                | 47°F<br>8.3°C         | TC          | 51267            | 51301            | 51989            | 52221            | 53766            | 53644            | 53642            | 53643            | 53642            | 53891            | 55310            | 55305            | 55309            | 55308            | 55308            | 58406            | 58391            | 58387            | 58384            | 58390            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 4.61             | 4.62             | 4.70             | 4.73             | 4.93             | 4.92             | 4.92             | 4.92             | 4.92             | 4.95             | 5.15             | 5.14             | 5.14             | 5.15             | 5.15             | 5.61             | 5.61             | 5.61             | 5.61             | 5.61             |
|                | 50°F<br>10°C          | TC          | 50211            | 51593            | 53334            | 53643            | 55723            | 53045            | 53075            | 53442            | 53610            | 55776            | 55115            | 55187            | 55215            | 55219            | 55750            | 58914            | 59069            | 59221            | 59239            | 59313            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 5.06             | 5.06             | 5.06             | 5.06             | 5.05             | 5.06             | 5.06             | 5.06             | 5.06             | 5.05             | 5.05             | 5.05             | 5.05             | 5.05             | 5.05             | 5.05             | 5.05             | 5.05             | 5.05             | 5.05             |
|                | 59°F<br>15°C          | TC          | 49798            | 51545            | 53374            | 53699            | 55884            | 52688            | 52760            | 53359            | 53756            | 55939            | 54862            | 54917            | 54936            | 55016            | 55985            | 58911            | 59028            | 59146            | 59159            | 59209            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 4.74             | 4.75             | 4.77             | 4.77             | 4.78             | 4.76             | 4.76             | 4.77             | 4.77             | 4.78             | 4.78             | 4.78             | 4.78             | 4.78             | 4.78             | 4.81             | 4.81             | 4.81             | 4.81             | 4.80             |
|                | 68°F<br>20°C          | TC          | 49363            | 51470            | 53379            | 53718            | 55997            | 52259            | 52376            | 53437            | 53776            | 56053            | 54518            | 54559            | 54657            | 54705            | 56099            | 58743            | 58852            | 58945            | 58954            | 58985            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 4.43             | 4.46             | 4.48             | 4.49             | 4.52             | 4.47             | 4.47             | 4.49             | 4.49             | 4.52             | 4.50             | 4.50             | 4.50             | 4.50             | 4.52             | 4.57             | 4.56             | 4.56             | 4.56             | 4.55             |
|                | 77°F<br>25°C          | TC          | 48891            | 51245            | 53251            | 53606            | 56001            | 51831            | 51995            | 53309            | 53665            | 56057            | 54178            | 54239            | 54377            | 54438            | 56104            | 58515            | 58692            | 58828            | 58843            | 58897            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 4.17             | 4.20             | 4.21             | 4.22             | 4.24             | 4.20             | 4.20             | 4.21             | 4.22             | 4.24             | 4.23             | 4.23             | 4.22             | 4.23             | 4.24             | 4.28             | 4.27             | 4.27             | 4.27             | 4.26             |
|                | 82°F<br>27.8°C        | TC          | 48841            | 51334            | 53404            | 53766            | 56229            | 51756            | 51956            | 53451            | 53827            | 56287            | 54163            | 54232            | 54400            | 54467            | 56337            | 58562            | 58782            | 58935            | 58951            | 59015            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 4.38             | 4.40             | 4.42             | 4.42             | 4.44             | 4.40             | 4.41             | 4.42             | 4.42             | 4.44             | 4.43             | 4.43             | 4.43             | 4.43             | 4.44             | 4.48             | 4.47             | 4.47             | 4.47             | 4.47             |
|                | 86°F<br>30°C          | TC          | 49233            | 51691            | 53805            | 54180            | 56703            | 51921            | 52159            | 53865            | 54242            | 56762            | 54381            | 54443            | 54643            | 54722            | 56811            | 58873            | 59101            | 59241            | 59256            | 59311            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 4.97             | 5.00             | 5.03             | 5.03             | 5.06             | 5.01             | 5.01             | 5.03             | 5.03             | 5.06             | 5.04             | 5.04             | 5.04             | 5.04             | 5.06             | 5.11             | 5.10             | 5.09             | 5.09             | 5.09             |
|                | 95°F<br>35°C          | TC          | 49751            | 50019            | 51636            | 51942            | 53995            | 52875            | 52905            | 52922            | 52985            | 54063            | 55144            | 55155            | 55189            | 55194            | 55286            | 59420            | 59397            | 59409            | 59426            | 59506            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.5              |                  |                  |                  |                  |                  |                  |                  |                  |                  |

**HEATING PERFORMANCE - 37MURA + 45MUAA**

Extrapolated Data: The highlighted data is tested; other data is simulated and for reference.

**Table 11 – 18K Heating — 37MURA + 45MUAA**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>490</b>       | -13°F (-25.0°C)                                    | 6758                                | 6623             | 6590             | 6263               | 6206               | 1.44                      | 1.45             | 1.46             | 1.46               | 1.47               |
|                  | -4°F (-20.0°C)                                     | 8417                                | 8249             | 8208             | 7800               | 7730               | 1.50                      | 1.52             | 1.52             | 1.52               | 1.53               |
|                  | 0°F (-17.8°C)                                      | 9316                                | 9130             | 9084             | 8633               | 8555               | 1.52                      | 1.53             | 1.53             | 1.54               | 1.54               |
|                  | 5°F (-15.0°C)                                      | 10439                               | 10231            | 10179            | 9674               | 9587               | 1.54                      | 1.55             | 1.55             | 1.56               | 1.56               |
|                  | 14°F (-10.0°C)                                     | 11301                               | 11075            | 11020            | 10472              | 10378              | 1.56                      | 1.58             | 1.58             | 1.58               | 1.59               |
|                  | 17°F (-8.3°C)                                      | 11588                               | 11356            | 11300            | 10739              | 10642              | 1.57                      | 1.58             | 1.59             | 1.59               | 1.60               |
|                  | 22°F (-5.6°C)                                      | 12365                               | 12117            | 12057            | 11458              | 11355              | 1.59                      | 1.60             | 1.60             | 1.61               | 1.61               |
|                  | 27°F (-2.8°C)                                      | 13141                               | 12878            | 12814            | 12178              | 12068              | 1.60                      | 1.61             | 1.62             | 1.62               | 1.63               |
|                  | 32°F (0.0°C)                                       | 13918                               | 13639            | 13571            | 12897              | 12781              | 1.62                      | 1.63             | 1.63             | 1.64               | 1.64               |
|                  | 35°F (1.7°C)                                       | 14384                               | 14096            | 14025            | 13329              | 13209              | 1.63                      | 1.64             | 1.64             | 1.65               | 1.65               |
|                  | 37°F (2.8°C)                                       | 14917                               | 14618            | 14545            | 13823              | 13699              | 1.62                      | 1.63             | 1.63             | 1.64               | 1.64               |
|                  | 42°F (5.6°C)                                       | 16250                               | 15925            | 15845            | 15058              | 14923              | 1.59                      | 1.60             | 1.61             | 1.61               | 1.62               |
|                  | 44.6°F (7.0°C)                                     | 16783                               | 16447            | 16365            | 15552              | 15412              | 1.58                      | 1.59             | 1.59             | 1.60               | 1.60               |
|                  | 47°F (8.3°C)                                       | 17583                               | 17231            | 17145            | 16294              | 16147              | 1.56                      | 1.58             | 1.58             | 1.58               | 1.59               |
|                  | 52°F (11.1°C)                                      | 16585                               | 16253            | 16172            | 15369              | 15231              | 1.48                      | 1.49             | 1.49             | 1.49               | 1.50               |
|                  | 57°F (13.9°C)                                      | 15588                               | 15276            | 15199            | 14445              | 14315              | 1.39                      | 1.40             | 1.40             | 1.41               | 1.41               |
|                  | 59°F (15.0°C)                                      | 15189                               | 14885            | 14810            | 14075              | 13948              | 1.36                      | 1.37             | 1.37             | 1.37               | 1.38               |
|                  | 62°F (16.7°C)                                      | 14590                               | 14298            | 14227            | 13520              | 13399              | 1.30                      | 1.31             | 1.32             | 1.32               | 1.32               |
|                  | 64.4°F (18.0°C)                                    | 14111                               | 13829            | 13760            | 13077              | 12959              | 1.26                      | 1.27             | 1.27             | 1.28               | 1.28               |
|                  | 69.8°F (21.0°C)                                    | 13034                               | 12773            | 12709            | 12078              | 11970              | 1.17                      | 1.18             | 1.18             | 1.18               | 1.19               |
|                  | 75.2°F (24.0°C)                                    | 11957                               | 11717            | 11659            | 11080              | 10980              | 1.08                      | 1.08             | 1.09             | 1.09               | 1.09               |
| <b>530</b>       | -13°F (-25.0°C)                                    | 7014                                | 6874             | 6839             | 6654               | 6594               | 1.46                      | 1.47             | 1.47             | 1.47               | 1.48               |
|                  | -4°F (-20.0°C)                                     | 8736                                | 8561             | 8518             | 8287               | 8213               | 1.52                      | 1.53             | 1.53             | 1.54               | 1.54               |
|                  | 0°F (-17.8°C)                                      | 9668                                | 9475             | 9428             | 9172               | 9090               | 1.53                      | 1.55             | 1.55             | 1.55               | 1.56               |
|                  | 5°F (-15.0°C)                                      | 10834                               | 10618            | 10565            | 10278              | 10186              | 1.55                      | 1.57             | 1.57             | 1.57               | 1.58               |
|                  | 14°F (-10.0°C)                                     | 11729                               | 11494            | 11437            | 11127              | 11027              | 1.58                      | 1.59             | 1.59             | 1.60               | 1.60               |
|                  | 17°F (-8.3°C)                                      | 12027                               | 11786            | 11727            | 11409              | 11307              | 1.59                      | 1.60             | 1.60             | 1.61               | 1.61               |
|                  | 22°F (-5.6°C)                                      | 12832                               | 12576            | 12513            | 12174              | 12064              | 1.60                      | 1.62             | 1.62             | 1.62               | 1.63               |
|                  | 27°F (-2.8°C)                                      | 13638                               | 13366            | 13299            | 12938              | 12822              | 1.62                      | 1.63             | 1.63             | 1.64               | 1.64               |
|                  | 32°F (0.0°C)                                       | 14444                               | 14155            | 14085            | 13703              | 13580              | 1.63                      | 1.65             | 1.65             | 1.65               | 1.66               |
|                  | 35°F (1.7°C)                                       | 14928                               | 14629            | 14556            | 14162              | 14034              | 1.64                      | 1.66             | 1.66             | 1.66               | 1.67               |
|                  | 37°F (2.8°C)                                       | 15481                               | 15171            | 15096            | 14687              | 14554              | 1.63                      | 1.65             | 1.65             | 1.65               | 1.66               |
|                  | 42°F (5.6°C)                                       | 16864                               | 16527            | 16445            | 15999              | 15855              | 1.61                      | 1.62             | 1.62             | 1.62               | 1.63               |
|                  | 44.6°F (7.0°C)                                     | 17418                               | 17069            | 16984            | 16524              | 16375              | 1.59                      | 1.61             | 1.61             | 1.61               | 1.62               |
|                  | 47°F (8.3°C)                                       | 18248                               | 17883            | 17793            | 17311              | 17156              | 1.58                      | 1.59             | 1.59             | 1.60               | 1.60               |
|                  | 52°F (11.1°C)                                      | 17213                               | 16868            | 16784            | 16329              | 16182              | 1.49                      | 1.50             | 1.51             | 1.51               | 1.52               |
|                  | 57°F (13.9°C)                                      | 16177                               | 15854            | 15774            | 15347              | 15209              | 1.40                      | 1.42             | 1.42             | 1.42               | 1.43               |
|                  | 59°F (15.0°C)                                      | 15763                               | 15448            | 15371            | 14954              | 14820              | 1.37                      | 1.38             | 1.38             | 1.39               | 1.39               |
|                  | 62°F (16.7°C)                                      | 15142                               | 14839            | 14765            | 14365              | 14236              | 1.32                      | 1.33             | 1.33             | 1.33               | 1.34               |
|                  | 64.4°F (18.0°C)                                    | 14645                               | 14352            | 14280            | 13893              | 13768              | 1.27                      | 1.29             | 1.29             | 1.29               | 1.30               |
|                  | 69.8°F (21.0°C)                                    | 13527                               | 13256            | 13190            | 12833              | 12717              | 1.18                      | 1.19             | 1.19             | 1.20               | 1.20               |
|                  | 75.2°F (24.0°C)                                    | 12409                               | 12161            | 12100            | 11772              | 11666              | 1.09                      | 1.10             | 1.10             | 1.10               | 1.10               |

Table 11 – 18K Heating — **37MURA + 45MUAA** (Continued)

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>580</b>       | -13°F (-25.0°C)                                    | 7279                                | 7134             | 7098             | 7070               | 7006               | 1.47                      | 1.48             | 1.49             | 1.49               | 1.49               |
|                  | -4°F (-20.0°C)                                     | 9066                                | 8885             | 8840             | 8805               | 8726               | 1.53                      | 1.55             | 1.55             | 1.55               | 1.56               |
|                  | 0°F (-17.8°C)                                      | 10034                               | 9834             | 9784             | 9745               | 9657               | 1.55                      | 1.56             | 1.57             | 1.57               | 1.58               |
|                  | 5°F (-15.0°C)                                      | 11244                               | 11019            | 10964            | 10920              | 10822              | 1.57                      | 1.58             | 1.58             | 1.59               | 1.59               |
|                  | 14°F (-10.0°C)                                     | 12172                               | 11929            | 11869            | 11822              | 11715              | 1.59                      | 1.61             | 1.61             | 1.61               | 1.62               |
|                  | 17°F (-8.3°C)                                      | 12482                               | 12232            | 12171            | 12122              | 12013              | 1.60                      | 1.62             | 1.62             | 1.62               | 1.63               |
|                  | 22°F (-5.6°C)                                      | 13318                               | 13052            | 12986            | 12934              | 12818              | 1.62                      | 1.63             | 1.64             | 1.64               | 1.65               |
|                  | 27°F (-2.8°C)                                      | 14154                               | 13871            | 13802            | 13747              | 13623              | 1.63                      | 1.65             | 1.65             | 1.65               | 1.66               |
|                  | 32°F (0.0°C)                                       | 14991                               | 14691            | 14617            | 14559              | 14428              | 1.65                      | 1.66             | 1.67             | 1.67               | 1.68               |
|                  | 35°F (1.7°C)                                       | 15492                               | 15183            | 15107            | 15046              | 14911              | 1.66                      | 1.67             | 1.68             | 1.68               | 1.69               |
|                  | 37°F (2.8°C)                                       | 16067                               | 15745            | 15667            | 15604              | 15464              | 1.65                      | 1.66             | 1.67             | 1.67               | 1.68               |
|                  | 42°F (5.6°C)                                       | 17502                               | 17152            | 17067            | 16998              | 16845              | 1.62                      | 1.63             | 1.64             | 1.64               | 1.65               |
|                  | 44.6°F (7.0°C)                                     | 18077                               | 17715            | 17627            | 17556              | 17398              | 1.61                      | 1.62             | 1.63             | 1.63               | 1.64               |
|                  | 47°F (8.3°C)                                       | 18938                               | 18559            | 18467            | 18393              | 18227              | 1.59                      | 1.61             | 1.61             | 1.61               | 1.62               |
|                  | 52°F (11.1°C)                                      | 17864                               | 17506            | 17419            | 17349              | 17193              | 1.51                      | 1.52             | 1.52             | 1.52               | 1.53               |
|                  | 57°F (13.9°C)                                      | 16789                               | 16453            | 16371            | 16306              | 16159              | 1.42                      | 1.43             | 1.43             | 1.44               | 1.44               |
|                  | 59°F (15.0°C)                                      | 16359                               | 16032            | 15952            | 15888              | 15745              | 1.38                      | 1.39             | 1.40             | 1.40               | 1.41               |
|                  | 62°F (16.7°C)                                      | 15715                               | 15401            | 15324            | 15262              | 15125              | 1.33                      | 1.34             | 1.34             | 1.35               | 1.35               |
|                  | 64.4°F (18.0°C)                                    | 15199                               | 14895            | 14821            | 14761              | 14628              | 1.29                      | 1.30             | 1.30             | 1.30               | 1.31               |
|                  | 69.8°F (21.0°C)                                    | 14039                               | 13758            | 13689            | 13634              | 13512              | 1.19                      | 1.20             | 1.20             | 1.21               | 1.21               |
|                  | 75.2°F (24.0°C)                                    | 12878                               | 12621            | 12558            | 12507              | 12395              | 1.10                      | 1.11             | 1.11             | 1.11               | 1.12               |
| <b>620</b>       | -13°F (-25.0°C)                                    | 7555                                | 7404             | 7367             | 7337               | 7271               | 1.49                      | 1.50             | 1.50             | 1.50               | 1.51               |
|                  | -4°F (-20.0°C)                                     | 9409                                | 9221             | 9175             | 9138               | 9056               | 1.55                      | 1.56             | 1.57             | 1.57               | 1.58               |
|                  | 0°F (-17.8°C)                                      | 10414                               | 10206            | 10154            | 10114              | 10023              | 1.57                      | 1.58             | 1.58             | 1.58               | 1.59               |
|                  | 5°F (-15.0°C)                                      | 11670                               | 11436            | 11379            | 11334              | 11232              | 1.58                      | 1.60             | 1.60             | 1.60               | 1.61               |
|                  | 14°F (-10.0°C)                                     | 12633                               | 12380            | 12318            | 12269              | 12158              | 1.61                      | 1.62             | 1.63             | 1.63               | 1.64               |
|                  | 17°F (-8.3°C)                                      | 12954                               | 12695            | 12631            | 12581              | 12467              | 1.62                      | 1.63             | 1.64             | 1.64               | 1.65               |
|                  | 22°F (-5.6°C)                                      | 13822                               | 13545            | 13478            | 13424              | 13303              | 1.64                      | 1.65             | 1.65             | 1.66               | 1.66               |
|                  | 27°F (-2.8°C)                                      | 14690                               | 14396            | 14324            | 14267              | 14138              | 1.65                      | 1.66             | 1.67             | 1.67               | 1.68               |
|                  | 32°F (0.0°C)                                       | 15558                               | 15247            | 15170            | 15110              | 14974              | 1.67                      | 1.68             | 1.68             | 1.69               | 1.69               |
|                  | 35°F (1.7°C)                                       | 16078                               | 15757            | 15678            | 15615              | 15475              | 1.68                      | 1.69             | 1.69             | 1.70               | 1.70               |
|                  | 37°F (2.8°C)                                       | 16675                               | 16341            | 16259            | 16194              | 16049              | 1.67                      | 1.68             | 1.68             | 1.69               | 1.69               |
|                  | 42°F (5.6°C)                                       | 18165                               | 17801            | 17712            | 17641              | 17483              | 1.64                      | 1.65             | 1.65             | 1.66               | 1.66               |
|                  | 44.6°F (7.0°C)                                     | 18761                               | 18385            | 18293            | 18220              | 18056              | 1.63                      | 1.64             | 1.64             | 1.65               | 1.65               |
|                  | 47°F (8.3°C)                                       | 19655                               | 19262            | 19165            | 19089              | 18917              | 1.61                      | 1.62             | 1.63             | 1.63               | 1.64               |
|                  | 52°F (11.1°C)                                      | 18540                               | 18169            | 18078            | 18006              | 17844              | 1.52                      | 1.53             | 1.54             | 1.54               | 1.55               |
|                  | 57°F (13.9°C)                                      | 17424                               | 17076            | 16991            | 16923              | 16770              | 1.43                      | 1.44             | 1.45             | 1.45               | 1.46               |
|                  | 59°F (15.0°C)                                      | 16978                               | 16639            | 16556            | 16489              | 16341              | 1.40                      | 1.41             | 1.41             | 1.41               | 1.42               |
|                  | 62°F (16.7°C)                                      | 16309                               | 15983            | 15903            | 15840              | 15697              | 1.34                      | 1.35             | 1.36             | 1.36               | 1.37               |
|                  | 64.4°F (18.0°C)                                    | 15774                               | 15459            | 15381            | 15320              | 15182              | 1.30                      | 1.31             | 1.31             | 1.32               | 1.32               |
|                  | 69.8°F (21.0°C)                                    | 14570                               | 14278            | 14207            | 14150              | 14023              | 1.20                      | 1.21             | 1.22             | 1.22               | 1.22               |
|                  | 75.2°F (24.0°C)                                    | 13365                               | 13098            | 13033            | 12981              | 12864              | 1.11                      | 1.12             | 1.12             | 1.12               | 1.13               |

Table 12 – 24K Heating — **37MURA + 45MUAA**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>629</b>       | -13°F (-25.0°C)                                    | 12426                               | 12178            | 12117            | 11894              | 11787              | 2.52                      | 2.54             | 2.55             | 2.55               | 2.56               |
|                  | -4°F (-20.0°C)                                     | 14871                               | 14574            | 14501            | 14234              | 14106              | 2.54                      | 2.57             | 2.57             | 2.58               | 2.59               |
|                  | 0°F (-17.8°C)                                      | 17003                               | 16663            | 16579            | 16274              | 16127              | 2.81                      | 2.83             | 2.84             | 2.85               | 2.86               |
|                  | 5°F (-15.0°C)                                      | 19667                               | 19274            | 19177            | 18824              | 18655              | 3.14                      | 3.17             | 3.18             | 3.18               | 3.19               |
|                  | 14°F (-10.0°C)                                     | 21030                               | 20610            | 20507            | 20129              | 19947              | 3.15                      | 3.17             | 3.18             | 3.19               | 3.20               |
|                  | 17°F (-8.3°C)                                      | 21485                               | 21055            | 20950            | 20564              | 20378              | 3.15                      | 3.17             | 3.18             | 3.19               | 3.20               |
|                  | 22°F (-5.6°C)                                      | 21426                               | 20997            | 20892            | 20507              | 20323              | 2.96                      | 2.99             | 2.99             | 3.00               | 3.01               |
|                  | 27°F (-2.8°C)                                      | 21367                               | 20940            | 20835            | 20451              | 20267              | 2.77                      | 2.80             | 2.80             | 2.81               | 2.82               |
|                  | 32°F (0.0°C)                                       | 21309                               | 20883            | 20778            | 20395              | 20212              | 2.59                      | 2.61             | 2.61             | 2.62               | 2.63               |
|                  | 35°F (1.7°C)                                       | 21274                               | 20848            | 20744            | 20361              | 20178              | 2.47                      | 2.49             | 2.50             | 2.50               | 2.51               |
|                  | 37°F (2.8°C)                                       | 22101                               | 21659            | 21551            | 21154              | 20963              | 2.49                      | 2.51             | 2.52             | 2.52               | 2.53               |
|                  | 42°F (5.6°C)                                       | 24170                               | 23687            | 23568            | 23134              | 22926              | 2.54                      | 2.56             | 2.57             | 2.57               | 2.58               |
|                  | 44.6°F (7.0°C)                                     | 24998                               | 24498            | 24375            | 23926              | 23711              | 2.56                      | 2.58             | 2.59             | 2.59               | 2.60               |
|                  | 47°F (8.3°C)                                       | 26239                               | 25715            | 25586            | 25114              | 24888              | 2.59                      | 2.61             | 2.62             | 2.62               | 2.64               |
|                  | 52°F (11.1°C)                                      | 24405                               | 23917            | 23797            | 23359              | 23149              | 2.49                      | 2.51             | 2.52             | 2.52               | 2.53               |
|                  | 57°F (13.9°C)                                      | 22571                               | 22119            | 22009            | 21603              | 21409              | 2.39                      | 2.41             | 2.42             | 2.42               | 2.43               |
|                  | 59°F (15.0°C)                                      | 21837                               | 21400            | 21293            | 20901              | 20713              | 2.35                      | 2.37             | 2.38             | 2.38               | 2.39               |
|                  | 62°F (16.7°C)                                      | 20737                               | 20322            | 20220            | 19848              | 19669              | 2.29                      | 2.31             | 2.32             | 2.32               | 2.33               |
|                  | 64.4°F (18.0°C)                                    | 19856                               | 19459            | 19362            | 19005              | 18834              | 2.24                      | 2.26             | 2.27             | 2.27               | 2.28               |
|                  | 69.8°F (21.0°C)                                    | 17875                               | 17518            | 17430            | 17109              | 16955              | 2.14                      | 2.15             | 2.16             | 2.16               | 2.17               |
|                  | 75.2°F (24.0°C)                                    | 15894                               | 15576            | 15498            | 15213              | 15076              | 2.03                      | 2.04             | 2.05             | 2.05               | 2.06               |
| <b>694</b>       | -13°F (-25.0°C)                                    | 13093                               | 12831            | 12767            | 12624              | 12510              | 2.55                      | 2.57             | 2.57             | 2.58               | 2.59               |
|                  | -4°F (-20.0°C)                                     | 15669                               | 15356            | 15279            | 15107              | 14971              | 2.57                      | 2.59             | 2.60             | 2.60               | 2.61               |
|                  | 0°F (-17.8°C)                                      | 17915                               | 17557            | 17469            | 17273              | 17117              | 2.84                      | 2.86             | 2.87             | 2.87               | 2.89               |
|                  | 5°F (-15.0°C)                                      | 20722                               | 20308            | 20206            | 19979              | 19800              | 3.18                      | 3.20             | 3.21             | 3.21               | 3.23               |
|                  | 14°F (-10.0°C)                                     | 22159                               | 21716            | 21607            | 21364              | 21172              | 3.18                      | 3.21             | 3.21             | 3.22               | 3.23               |
|                  | 17°F (-8.3°C)                                      | 22637                               | 22185            | 22074            | 21826              | 21629              | 3.18                      | 3.21             | 3.21             | 3.22               | 3.23               |
|                  | 22°F (-5.6°C)                                      | 22576                               | 22124            | 22014            | 21766              | 21570              | 2.99                      | 3.02             | 3.02             | 3.03               | 3.04               |
|                  | 27°F (-2.8°C)                                      | 22514                               | 22064            | 21953            | 21707              | 21511              | 2.80                      | 2.82             | 2.83             | 2.84               | 2.85               |
|                  | 32°F (0.0°C)                                       | 22452                               | 22003            | 21893            | 21647              | 21452              | 2.61                      | 2.63             | 2.64             | 2.64               | 2.65               |
|                  | 35°F (1.7°C)                                       | 22415                               | 21967            | 21857            | 21611              | 21417              | 2.50                      | 2.52             | 2.52             | 2.53               | 2.54               |
|                  | 37°F (2.8°C)                                       | 23287                               | 22821            | 22707            | 22452              | 22250              | 2.52                      | 2.54             | 2.54             | 2.55               | 2.56               |
|                  | 42°F (5.6°C)                                       | 25467                               | 24958            | 24833            | 24554              | 24333              | 2.57                      | 2.59             | 2.60             | 2.60               | 2.61               |
|                  | 44.6°F (7.0°C)                                     | 26339                               | 25813            | 25684            | 25395              | 25166              | 2.59                      | 2.61             | 2.62             | 2.62               | 2.63               |
|                  | 47°F (8.3°C)                                       | 27647                               | 27095            | 26959            | 26656              | 26416              | 2.62                      | 2.64             | 2.65             | 2.65               | 2.66               |
|                  | 52°F (11.1°C)                                      | 25715                               | 25200            | 25074            | 24793              | 24569              | 2.52                      | 2.54             | 2.54             | 2.55               | 2.56               |
|                  | 57°F (13.9°C)                                      | 23782                               | 23306            | 23190            | 22929              | 22723              | 2.42                      | 2.44             | 2.44             | 2.45               | 2.46               |
|                  | 59°F (15.0°C)                                      | 23009                               | 22549            | 22436            | 22184              | 21984              | 2.38                      | 2.40             | 2.40             | 2.40               | 2.41               |
|                  | 62°F (16.7°C)                                      | 21849                               | 21412            | 21305            | 21066              | 20876              | 2.32                      | 2.33             | 2.34             | 2.34               | 2.35               |
|                  | 64.4°F (18.0°C)                                    | 20922                               | 20503            | 20401            | 20171              | 19990              | 2.27                      | 2.28             | 2.29             | 2.29               | 2.30               |
|                  | 69.8°F (21.0°C)                                    | 18834                               | 18458            | 18365            | 18159              | 17995              | 2.16                      | 2.17             | 2.18             | 2.18               | 2.19               |
|                  | 75.2°F (24.0°C)                                    | 16747                               | 16412            | 16330            | 16146              | 16001              | 2.05                      | 2.06             | 2.07             | 2.07               | 2.08               |

Table 12 – 24K Heating — **37MURA + 45MUAA** (Continued)

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>759</b>       | -13°F (-25.0°C)                                    | 13796                               | 13520            | 13452            | 13399              | 13278              | 2.57                      | 2.59             | 2.60             | 2.60               | 2.61               |
|                  | -4°F (-20.0°C)                                     | 16510                               | 16180            | 16099            | 16035              | 15890              | 2.60                      | 2.62             | 2.62             | 2.63               | 2.64               |
|                  | 0°F (-17.8°C)                                      | 18876                               | 18499            | 18406            | 18333              | 18168              | 2.87                      | 2.89             | 2.90             | 2.90               | 2.91               |
|                  | 5°F (-15.0°C)                                      | 21834                               | 21398            | 21291            | 21206              | 21015              | 3.21                      | 3.23             | 3.24             | 3.25               | 3.26               |
|                  | 14°F (-10.0°C)                                     | 23348                               | 22881            | 22766            | 22675              | 22471              | 3.21                      | 3.24             | 3.24             | 3.25               | 3.26               |
|                  | 17°F (-8.3°C)                                      | 23852                               | 23375            | 23258            | 23165              | 22957              | 3.21                      | 3.24             | 3.25             | 3.25               | 3.26               |
|                  | 22°F (-5.6°C)                                      | 23787                               | 23311            | 23195            | 23102              | 22894              | 3.02                      | 3.05             | 3.05             | 3.06               | 3.07               |
|                  | 27°F (-2.8°C)                                      | 23722                               | 23248            | 23131            | 23039              | 22832              | 2.83                      | 2.85             | 2.86             | 2.86               | 2.88               |
|                  | 32°F (0.0°C)                                       | 23657                               | 23184            | 23068            | 22976              | 22769              | 2.64                      | 2.66             | 2.67             | 2.67               | 2.68               |
|                  | 35°F (1.7°C)                                       | 23618                               | 23146            | 23030            | 22938              | 22731              | 2.52                      | 2.54             | 2.55             | 2.55               | 2.56               |
|                  | 37°F (2.8°C)                                       | 24537                               | 24046            | 23926            | 23830              | 23616              | 2.54                      | 2.56             | 2.57             | 2.57               | 2.59               |
|                  | 42°F (5.6°C)                                       | 26834                               | 26297            | 26166            | 26061              | 25827              | 2.60                      | 2.62             | 2.62             | 2.63               | 2.64               |
|                  | 44.6°F (7.0°C)                                     | 27753                               | 27198            | 27062            | 26953              | 26711              | 2.62                      | 2.64             | 2.64             | 2.65               | 2.66               |
|                  | 47°F (8.3°C)                                       | 29131                               | 28548            | 28406            | 28292              | 28037              | 2.65                      | 2.67             | 2.67             | 2.68               | 2.69               |
|                  | 52°F (11.1°C)                                      | 27095                               | 26553            | 26420            | 26314              | 26077              | 2.54                      | 2.56             | 2.57             | 2.57               | 2.58               |
|                  | 57°F (13.9°C)                                      | 25058                               | 24557            | 24434            | 24337              | 24117              | 2.44                      | 2.46             | 2.47             | 2.47               | 2.48               |
|                  | 59°F (15.0°C)                                      | 24244                               | 23759            | 23640            | 23545              | 23333              | 2.40                      | 2.42             | 2.42             | 2.43               | 2.44               |
|                  | 62°F (16.7°C)                                      | 23022                               | 22561            | 22449            | 22359              | 22158              | 2.34                      | 2.36             | 2.36             | 2.37               | 2.38               |
|                  | 64.4°F (18.0°C)                                    | 22044                               | 21603            | 21495            | 21409              | 21217              | 2.29                      | 2.31             | 2.31             | 2.32               | 2.33               |
|                  | 69.8°F (21.0°C)                                    | 19845                               | 19448            | 19351            | 19273              | 19100              | 2.18                      | 2.20             | 2.20             | 2.21               | 2.21               |
|                  | 75.2°F (24.0°C)                                    | 17646                               | 17293            | 17206            | 17137              | 16983              | 2.07                      | 2.08             | 2.09             | 2.09               | 2.10               |
| <b>824</b>       | -13°F (-25.0°C)                                    | 14536                               | 14245            | 14174            | 14118              | 13990              | 2.60                      | 2.62             | 2.62             | 2.63               | 2.64               |
|                  | -4°F (-20.0°C)                                     | 17396                               | 17048            | 16963            | 16895              | 16743              | 2.62                      | 2.64             | 2.65             | 2.65               | 2.67               |
|                  | 0°F (-17.8°C)                                      | 19889                               | 19492            | 19394            | 19317              | 19143              | 2.90                      | 2.92             | 2.93             | 2.93               | 2.94               |
|                  | 5°F (-15.0°C)                                      | 23006                               | 22546            | 22433            | 22344              | 22142              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 14°F (-10.0°C)                                     | 24601                               | 24109            | 23988            | 23892              | 23677              | 3.24                      | 3.27             | 3.28             | 3.28               | 3.30               |
|                  | 17°F (-8.3°C)                                      | 25132                               | 24630            | 24506            | 24408              | 24189              | 3.25                      | 3.27             | 3.28             | 3.28               | 3.30               |
|                  | 22°F (-5.6°C)                                      | 25064                               | 24562            | 24440            | 24342              | 24123              | 3.05                      | 3.08             | 3.08             | 3.09               | 3.10               |
|                  | 27°F (-2.8°C)                                      | 24995                               | 24495            | 24373            | 24275              | 24057              | 2.86                      | 2.88             | 2.89             | 2.89               | 2.90               |
|                  | 32°F (0.0°C)                                       | 24926                               | 24428            | 24306            | 24209              | 23991              | 2.67                      | 2.69             | 2.69             | 2.70               | 2.71               |
|                  | 35°F (1.7°C)                                       | 24885                               | 24388            | 24266            | 24169              | 23951              | 2.55                      | 2.57             | 2.57             | 2.58               | 2.59               |
|                  | 37°F (2.8°C)                                       | 25853                               | 25336            | 25210            | 25109              | 24883              | 2.57                      | 2.59             | 2.60             | 2.60               | 2.61               |
|                  | 42°F (5.6°C)                                       | 28274                               | 27708            | 27570            | 27460              | 27212              | 2.62                      | 2.64             | 2.65             | 2.65               | 2.66               |
|                  | 44.6°F (7.0°C)                                     | 29242                               | 28657            | 28514            | 28400              | 28144              | 2.64                      | 2.66             | 2.67             | 2.67               | 2.68               |
|                  | 47°F (8.3°C)                                       | 30694                               | 30080            | 29930            | 29810              | 29542              | 2.67                      | 2.69             | 2.70             | 2.71               | 2.72               |
|                  | 52°F (11.1°C)                                      | 28549                               | 27978            | 27838            | 27726              | 27477              | 2.57                      | 2.59             | 2.60             | 2.60               | 2.61               |
|                  | 57°F (13.9°C)                                      | 26403                               | 25875            | 25745            | 25642              | 25412              | 2.47                      | 2.49             | 2.49             | 2.50               | 2.51               |
|                  | 59°F (15.0°C)                                      | 25545                               | 25034            | 24909            | 24809              | 24586              | 2.42                      | 2.44             | 2.45             | 2.45               | 2.46               |
|                  | 62°F (16.7°C)                                      | 24257                               | 23772            | 23653            | 23559              | 23347              | 2.36                      | 2.38             | 2.39             | 2.39               | 2.40               |
|                  | 64.4°F (18.0°C)                                    | 23227                               | 22763            | 22649            | 22558              | 22355              | 2.31                      | 2.33             | 2.34             | 2.34               | 2.35               |
|                  | 69.8°F (21.0°C)                                    | 20910                               | 20492            | 20389            | 20308              | 20125              | 2.20                      | 2.22             | 2.22             | 2.23               | 2.24               |
|                  | 75.2°F (24.0°C)                                    | 18592                               | 18221            | 18130            | 18057              | 17894              | 2.09                      | 2.11             | 2.11             | 2.11               | 2.12               |

Table 13 – 30K Heating — **37MURA + 45MUAA**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 712              | -13°F (-25.0°C)                                    | 10130                               | 9927             | 9877             | 9763               | 9675               | 2.39                      | 2.41             | 2.41             | 2.42               | 2.43               |
|                  | -4°F (-20.0°C)                                     | 12882                               | 12625            | 12561            | 12416              | 12304              | 2.33                      | 2.35             | 2.35             | 2.36               | 2.37               |
|                  | 0°F (-17.8°C)                                      | 14297                               | 14011            | 13941            | 13780              | 13656              | 2.34                      | 2.36             | 2.36             | 2.37               | 2.38               |
|                  | 5°F (-15.0°C)                                      | 16065                               | 15744            | 15665            | 15484              | 15345              | 2.35                      | 2.37             | 2.38             | 2.38               | 2.39               |
|                  | 14°F (-10.0°C)                                     | 17144                               | 16801            | 16717            | 16524              | 16375              | 2.30                      | 2.32             | 2.33             | 2.33               | 2.34               |
|                  | 17°F (-8.3°C)                                      | 17504                               | 17154            | 17068            | 16870              | 16719              | 2.29                      | 2.30             | 2.31             | 2.31               | 2.32               |
|                  | 22°F (-5.6°C)                                      | 17793                               | 17437            | 17349            | 17149              | 16994              | 2.24                      | 2.25             | 2.26             | 2.26               | 2.27               |
|                  | 27°F (-2.8°C)                                      | 18081                               | 17720            | 17631            | 17427              | 17270              | 2.19                      | 2.20             | 2.21             | 2.21               | 2.22               |
|                  | 32°F (0.0°C)                                       | 18370                               | 18003            | 17913            | 17705              | 17546              | 2.14                      | 2.15             | 2.16             | 2.16               | 2.17               |
|                  | 35°F (1.7°C)                                       | 18543                               | 18172            | 18081            | 17872              | 17711              | 2.11                      | 2.12             | 2.13             | 2.13               | 2.14               |
|                  | 37°F (2.8°C)                                       | 19901                               | 19503            | 19405            | 19181              | 19008              | 2.12                      | 2.13             | 2.14             | 2.14               | 2.15               |
|                  | 42°F (5.6°C)                                       | 23296                               | 22830            | 22716            | 22453              | 22251              | 2.14                      | 2.16             | 2.16             | 2.17               | 2.18               |
|                  | 44.6°F (7.0°C)                                     | 24654                               | 24161            | 24040            | 23762              | 23548              | 2.15                      | 2.17             | 2.17             | 2.18               | 2.18               |
|                  | 47°F (8.3°C)                                       | 26690                               | 26157            | 26026            | 25725              | 25493              | 2.16                      | 2.18             | 2.19             | 2.19               | 2.20               |
|                  | 52°F (11.1°C)                                      | 24390                               | 23902            | 23782            | 23507              | 23295              | 1.99                      | 2.01             | 2.01             | 2.02               | 2.02               |
|                  | 57°F (13.9°C)                                      | 22089                               | 21647            | 21539            | 21289              | 21098              | 1.82                      | 1.83             | 1.84             | 1.84               | 1.85               |
|                  | 59°F (15.0°C)                                      | 21168                               | 20745            | 20641            | 20402              | 20219              | 1.75                      | 1.76             | 1.77             | 1.77               | 1.78               |
|                  | 62°F (16.7°C)                                      | 19788                               | 19392            | 19295            | 19072              | 18900              | 1.65                      | 1.66             | 1.66             | 1.67               | 1.67               |
|                  | 64.4°F (18.0°C)                                    | 18683                               | 18310            | 18218            | 18007              | 17845              | 1.56                      | 1.58             | 1.58             | 1.58               | 1.59               |
|                  | 69.8°F (21.0°C)                                    | 16198                               | 15874            | 15795            | 15612              | 15472              | 1.38                      | 1.39             | 1.39             | 1.39               | 1.40               |
| 75.2°F (24.0°C)  | 13713                                              | 13439                               | 13372            | 13217            | 13098              | 1.19               | 1.20                      | 1.20             | 1.20             | 1.21               |                    |
| 806              | -13°F (-25.0°C)                                    | 10870                               | 10652            | 10599            | 10517              | 10422              | 2.51                      | 2.53             | 2.54             | 2.54               | 2.55               |
|                  | -4°F (-20.0°C)                                     | 13824                               | 13547            | 13479            | 13374              | 13254              | 2.45                      | 2.47             | 2.47             | 2.48               | 2.49               |
|                  | 0°F (-17.8°C)                                      | 15342                               | 15035            | 14960            | 14843              | 14709              | 2.46                      | 2.48             | 2.49             | 2.49               | 2.50               |
|                  | 5°F (-15.0°C)                                      | 17239                               | 16894            | 16810            | 16679              | 16529              | 2.48                      | 2.50             | 2.50             | 2.51               | 2.52               |
|                  | 14°F (-10.0°C)                                     | 18397                               | 18029            | 17939            | 17799              | 17639              | 2.42                      | 2.44             | 2.45             | 2.45               | 2.46               |
|                  | 17°F (-8.3°C)                                      | 18783                               | 18407            | 18315            | 18172              | 18009              | 2.41                      | 2.43             | 2.43             | 2.44               | 2.45               |
|                  | 22°F (-5.6°C)                                      | 19093                               | 18711            | 18617            | 18472              | 18306              | 2.35                      | 2.37             | 2.38             | 2.38               | 2.39               |
|                  | 27°F (-2.8°C)                                      | 19402                               | 19014            | 18919            | 18772              | 18603              | 2.30                      | 2.32             | 2.32             | 2.33               | 2.34               |
|                  | 32°F (0.0°C)                                       | 19712                               | 19318            | 19221            | 19072              | 18900              | 2.25                      | 2.27             | 2.27             | 2.28               | 2.29               |
|                  | 35°F (1.7°C)                                       | 19898                               | 19500            | 19403            | 19251              | 19078              | 2.22                      | 2.24             | 2.24             | 2.24               | 2.25               |
|                  | 37°F (2.8°C)                                       | 21355                               | 20928            | 20823            | 20661              | 20475              | 2.23                      | 2.25             | 2.25             | 2.25               | 2.26               |
|                  | 42°F (5.6°C)                                       | 24998                               | 24498            | 24376            | 24186              | 23968              | 2.25                      | 2.27             | 2.28             | 2.28               | 2.29               |
|                  | 44.6°F (7.0°C)                                     | 26455                               | 25926            | 25796            | 25595              | 25365              | 2.26                      | 2.28             | 2.29             | 2.29               | 2.30               |
|                  | 47°F (8.3°C)                                       | 28641                               | 28068            | 27928            | 27710              | 27461              | 2.28                      | 2.30             | 2.30             | 2.31               | 2.32               |
|                  | 52°F (11.1°C)                                      | 26172                               | 25648            | 25520            | 25321              | 25093              | 2.10                      | 2.11             | 2.12             | 2.12               | 2.13               |
|                  | 57°F (13.9°C)                                      | 23703                               | 23229            | 23112            | 22932              | 22726              | 1.91                      | 1.93             | 1.93             | 1.94               | 1.95               |
|                  | 59°F (15.0°C)                                      | 22715                               | 22261            | 22149            | 21977              | 21779              | 1.84                      | 1.86             | 1.86             | 1.86               | 1.87               |
|                  | 62°F (16.7°C)                                      | 21234                               | 20809            | 20705            | 20544              | 20359              | 1.73                      | 1.75             | 1.75             | 1.75               | 1.76               |
|                  | 64.4°F (18.0°C)                                    | 20049                               | 19648            | 19549            | 19397              | 19222              | 1.65                      | 1.66             | 1.66             | 1.67               | 1.67               |
|                  | 69.8°F (21.0°C)                                    | 17382                               | 17034            | 16949            | 16817              | 16666              | 1.45                      | 1.46             | 1.46             | 1.47               | 1.47               |
| 75.2°F (24.0°C)  | 14715                                              | 14421                               | 14349            | 14237            | 14109              | 1.25               | 1.26                      | 1.27             | 1.27             | 1.27               |                    |

Table 13 – 30K Heating — **37MURA + 45MUAA** (Continued)

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>894</b>       | -13°F (-25.0°C)                                    | 11664                               | 11431            | 11374            | 11328              | 11226              | 2.64                      | 2.67             | 2.67             | 2.68               | 2.69               |
|                  | -4°F (-20.0°C)                                     | 14834                               | 14537            | 14464            | 14406              | 14277              | 2.58                      | 2.60             | 2.60             | 2.61               | 2.62               |
|                  | 0°F (-17.8°C)                                      | 16463                               | 16133            | 16053            | 15988              | 15845              | 2.59                      | 2.61             | 2.62             | 2.62               | 2.63               |
|                  | 5°F (-15.0°C)                                      | 18499                               | 18129            | 18038            | 17966              | 17804              | 2.61                      | 2.63             | 2.64             | 2.64               | 2.65               |
|                  | 14°F (-10.0°C)                                     | 19741                               | 19346            | 19250            | 19173              | 19000              | 2.55                      | 2.57             | 2.58             | 2.58               | 2.59               |
|                  | 17°F (-8.3°C)                                      | 20155                               | 19752            | 19653            | 19575              | 19399              | 2.53                      | 2.55             | 2.56             | 2.56               | 2.57               |
|                  | 22°F (-5.6°C)                                      | 20488                               | 20078            | 19978            | 19898              | 19719              | 2.48                      | 2.50             | 2.50             | 2.51               | 2.52               |
|                  | 27°F (-2.8°C)                                      | 20820                               | 20404            | 20302            | 20221              | 20039              | 2.42                      | 2.44             | 2.45             | 2.45               | 2.46               |
|                  | 32°F (0.0°C)                                       | 21153                               | 20730            | 20626            | 20543              | 20359              | 2.37                      | 2.39             | 2.39             | 2.40               | 2.41               |
|                  | 35°F (1.7°C)                                       | 21352                               | 20925            | 20820            | 20737              | 20550              | 2.33                      | 2.35             | 2.36             | 2.36               | 2.37               |
|                  | 37°F (2.8°C)                                       | 22916                               | 22457            | 22345            | 22256              | 22055              | 2.34                      | 2.36             | 2.37             | 2.37               | 2.38               |
|                  | 42°F (5.6°C)                                       | 26825                               | 26288            | 26157            | 26052              | 25818              | 2.37                      | 2.39             | 2.40             | 2.40               | 2.41               |
|                  | 44.6°F (7.0°C)                                     | 28388                               | 27820            | 27681            | 27571              | 27322              | 2.38                      | 2.40             | 2.41             | 2.41               | 2.42               |
|                  | 47°F (8.3°C)                                       | 30734                               | 30119            | 29968            | 29848              | 29580              | 2.40                      | 2.42             | 2.42             | 2.43               | 2.44               |
|                  | 52°F (11.1°C)                                      | 28084                               | 27522            | 27385            | 27275              | 27030              | 2.21                      | 2.22             | 2.23             | 2.23               | 2.24               |
|                  | 57°F (13.9°C)                                      | 25435                               | 24926            | 24801            | 24702              | 24480              | 2.02                      | 2.03             | 2.04             | 2.04               | 2.05               |
|                  | 59°F (15.0°C)                                      | 24375                               | 23887            | 23768            | 23673              | 23460              | 1.94                      | 1.95             | 1.96             | 1.96               | 1.97               |
|                  | 62°F (16.7°C)                                      | 22785                               | 22330            | 22218            | 22129              | 21930              | 1.82                      | 1.84             | 1.84             | 1.85               | 1.85               |
|                  | 64.4°F (18.0°C)                                    | 21513                               | 21083            | 20978            | 20894              | 20706              | 1.73                      | 1.75             | 1.75             | 1.75               | 1.76               |
|                  | 69.8°F (21.0°C)                                    | 18652                               | 18279            | 18188            | 18115              | 17952              | 1.53                      | 1.54             | 1.54             | 1.54               | 1.55               |
|                  | 75.2°F (24.0°C)                                    | 15791                               | 15475            | 15397            | 15336              | 15198              | 1.32                      | 1.33             | 1.33             | 1.33               | 1.34               |
| <b>988</b>       | -13°F (-25.0°C)                                    | 12516                               | 12266            | 12205            | 12156              | 12047              | 2.78                      | 2.81             | 2.81             | 2.82               | 2.83               |
|                  | -4°F (-20.0°C)                                     | 15918                               | 15599            | 15521            | 15459              | 15320              | 2.71                      | 2.74             | 2.74             | 2.75               | 2.76               |
|                  | 0°F (-17.8°C)                                      | 17666                               | 17312            | 17226            | 17157              | 17002              | 2.73                      | 2.75             | 2.76             | 2.76               | 2.77               |
|                  | 5°F (-15.0°C)                                      | 19851                               | 19454            | 19356            | 19279              | 19105              | 2.75                      | 2.77             | 2.77             | 2.78               | 2.79               |
|                  | 14°F (-10.0°C)                                     | 21184                               | 20760            | 20656            | 20574              | 20388              | 2.69                      | 2.71             | 2.71             | 2.72               | 2.73               |
|                  | 17°F (-8.3°C)                                      | 21628                               | 21196            | 21090            | 21005              | 20816              | 2.67                      | 2.69             | 2.69             | 2.70               | 2.71               |
|                  | 22°F (-5.6°C)                                      | 21985                               | 21545            | 21437            | 21352              | 21159              | 2.61                      | 2.63             | 2.63             | 2.64               | 2.65               |
|                  | 27°F (-2.8°C)                                      | 22342                               | 21895            | 21785            | 21698              | 21503              | 2.55                      | 2.57             | 2.58             | 2.58               | 2.59               |
|                  | 32°F (0.0°C)                                       | 22698                               | 22244            | 22133            | 22045              | 21846              | 2.49                      | 2.51             | 2.52             | 2.52               | 2.53               |
|                  | 35°F (1.7°C)                                       | 22912                               | 22454            | 22342            | 22252              | 22052              | 2.46                      | 2.48             | 2.48             | 2.49               | 2.50               |
|                  | 37°F (2.8°C)                                       | 24590                               | 24098            | 23978            | 23882              | 23667              | 2.47                      | 2.49             | 2.49             | 2.50               | 2.51               |
|                  | 42°F (5.6°C)                                       | 28785                               | 28209            | 28068            | 27956              | 27704              | 2.50                      | 2.52             | 2.52             | 2.53               | 2.54               |
|                  | 44.6°F (7.0°C)                                     | 30463                               | 29853            | 29704            | 29585              | 29319              | 2.51                      | 2.53             | 2.53             | 2.54               | 2.55               |
|                  | 47°F (8.3°C)                                       | 32979                               | 32320            | 32158            | 32029              | 31741              | 2.52                      | 2.54             | 2.55             | 2.56               | 2.57               |
|                  | 52°F (11.1°C)                                      | 30136                               | 29534            | 29386            | 29268              | 29005              | 2.32                      | 2.34             | 2.35             | 2.35               | 2.36               |
|                  | 57°F (13.9°C)                                      | 27293                               | 26747            | 26614            | 26507              | 26269              | 2.12                      | 2.14             | 2.14             | 2.15               | 2.16               |
|                  | 59°F (15.0°C)                                      | 26156                               | 25633            | 25505            | 25403              | 25174              | 2.04                      | 2.06             | 2.06             | 2.07               | 2.07               |
|                  | 62°F (16.7°C)                                      | 24450                               | 23961            | 23841            | 23746              | 23532              | 1.92                      | 1.94             | 1.94             | 1.94               | 1.95               |
|                  | 64.4°F (18.0°C)                                    | 23085                               | 22624            | 22511            | 22421              | 22219              | 1.82                      | 1.84             | 1.84             | 1.85               | 1.85               |
|                  | 69.8°F (21.0°C)                                    | 20015                               | 19615            | 19517            | 19439              | 19264              | 1.61                      | 1.62             | 1.62             | 1.63               | 1.63               |
|                  | 75.2°F (24.0°C)                                    | 16945                               | 16606            | 16523            | 16457              | 16308              | 1.39                      | 1.40             | 1.40             | 1.40               | 1.41               |

Table 14 – 36K Heating — **37MURA + 45MUAA**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>865</b>       | -13°F (-25.0°C)                                    | 15315                               | 15009            | 14934            | 14445              | 14315              | 3.19                      | 3.22             | 3.22             | 3.23               | 3.24               |
|                  | -4°F (-20.0°C)                                     | 19313                               | 18926            | 18832            | 18215              | 18051              | 3.49                      | 3.52             | 3.52             | 3.53               | 3.55               |
|                  | 0°F (-17.8°C)                                      | 20727                               | 20312            | 20210            | 19549              | 19373              | 3.59                      | 3.62             | 3.63             | 3.64               | 3.65               |
|                  | 5°F (-15.0°C)                                      | 22494                               | 22044            | 21934            | 21216              | 21025              | 3.72                      | 3.75             | 3.76             | 3.77               | 3.78               |
|                  | 14°F (-10.0°C)                                     | 22244                               | 21799            | 21690            | 20980              | 20791              | 3.45                      | 3.48             | 3.49             | 3.50               | 3.51               |
|                  | 17°F (-8.3°C)                                      | 22161                               | 21718            | 21609            | 20902              | 20714              | 3.36                      | 3.39             | 3.40             | 3.41               | 3.42               |
|                  | 22°F (-5.6°C)                                      | 22701                               | 22247            | 22135            | 21411              | 21218              | 3.30                      | 3.33             | 3.34             | 3.34               | 3.36               |
|                  | 27°F (-2.8°C)                                      | 23240                               | 22775            | 22661            | 21920              | 21722              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 32°F (0.0°C)                                       | 23780                               | 23304            | 23187            | 22428              | 22227              | 3.18                      | 3.20             | 3.21             | 3.22               | 3.23               |
|                  | 35°F (1.7°C)                                       | 24103                               | 23621            | 23503            | 22734              | 22529              | 3.14                      | 3.16             | 3.17             | 3.18               | 3.19               |
|                  | 37°F (2.8°C)                                       | 25924                               | 25405            | 25278            | 24450              | 24230              | 3.18                      | 3.21             | 3.22             | 3.22               | 3.24               |
|                  | 42°F (5.6°C)                                       | 30474                               | 29865            | 29715            | 28742              | 28484              | 3.30                      | 3.32             | 3.33             | 3.33               | 3.35               |
|                  | 44.6°F (7.0°C)                                     | 32294                               | 31648            | 31490            | 30459              | 30185              | 3.34                      | 3.37             | 3.37             | 3.38               | 3.39               |
|                  | 47°F (8.3°C)                                       | 35025                               | 34324            | 34152            | 33034              | 32737              | 3.41                      | 3.43             | 3.44             | 3.45               | 3.46               |
|                  | 52°F (11.1°C)                                      | 34026                               | 33346            | 33179            | 32093              | 31804              | 3.17                      | 3.20             | 3.20             | 3.21               | 3.22               |
|                  | 57°F (13.9°C)                                      | 33028                               | 32368            | 32206            | 31152              | 30871              | 2.94                      | 2.96             | 2.97             | 2.97               | 2.99               |
|                  | 59°F (15.0°C)                                      | 32629                               | 31976            | 31817            | 30775              | 30498              | 2.85                      | 2.87             | 2.87             | 2.88               | 2.89               |
|                  | 62°F (16.7°C)                                      | 32030                               | 31390            | 31233            | 30210              | 29938              | 2.71                      | 2.73             | 2.73             | 2.74               | 2.75               |
|                  | 64.4°F (18.0°C)                                    | 31551                               | 30920            | 30765            | 29758              | 29490              | 2.59                      | 2.61             | 2.62             | 2.63               | 2.64               |
|                  | 69.8°F (21.0°C)                                    | 30473                               | 29864            | 29714            | 28742              | 28483              | 2.34                      | 2.36             | 2.37             | 2.37               | 2.38               |
|                  | 75.2°F (24.0°C)                                    | 29395                               | 28807            | 28663            | 27725              | 27475              | 2.09                      | 2.11             | 2.11             | 2.11               | 2.12               |
| <b>970</b>       | -13°F (-25.0°C)                                    | 16315                               | 15989            | 15909            | 15615              | 15474              | 3.22                      | 3.25             | 3.25             | 3.26               | 3.27               |
|                  | -4°F (-20.0°C)                                     | 20573                               | 20162            | 20061            | 19690              | 19513              | 3.52                      | 3.55             | 3.56             | 3.57               | 3.58               |
|                  | 0°F (-17.8°C)                                      | 22079                               | 21638            | 21530            | 21132              | 20942              | 3.63                      | 3.66             | 3.67             | 3.67               | 3.69               |
|                  | 5°F (-15.0°C)                                      | 23962                               | 23483            | 23365            | 22934              | 22727              | 3.76                      | 3.79             | 3.80             | 3.81               | 3.82               |
|                  | 14°F (-10.0°C)                                     | 23696                               | 23222            | 23106            | 22679              | 22475              | 3.49                      | 3.52             | 3.52             | 3.53               | 3.55               |
|                  | 17°F (-8.3°C)                                      | 23607                               | 23135            | 23020            | 22594              | 22391              | 3.40                      | 3.43             | 3.43             | 3.44               | 3.45               |
|                  | 22°F (-5.6°C)                                      | 24182                               | 23698            | 23580            | 23144              | 22936              | 3.34                      | 3.36             | 3.37             | 3.38               | 3.39               |
|                  | 27°F (-2.8°C)                                      | 24757                               | 24262            | 24140            | 23694              | 23481              | 3.27                      | 3.30             | 3.31             | 3.31               | 3.33               |
|                  | 32°F (0.0°C)                                       | 25332                               | 24825            | 24701            | 24244              | 24026              | 3.21                      | 3.23             | 3.24             | 3.25               | 3.26               |
|                  | 35°F (1.7°C)                                       | 25676                               | 25163            | 25037            | 24575              | 24353              | 3.17                      | 3.20             | 3.20             | 3.21               | 3.22               |
|                  | 37°F (2.8°C)                                       | 27615                               | 27063            | 26928            | 26430              | 26192              | 3.22                      | 3.24             | 3.25             | 3.25               | 3.27               |
|                  | 42°F (5.6°C)                                       | 32463                               | 31814            | 31655            | 31070              | 30790              | 3.33                      | 3.36             | 3.36             | 3.37               | 3.38               |
|                  | 44.6°F (7.0°C)                                     | 34402                               | 33714            | 33545            | 32926              | 32629              | 3.37                      | 3.40             | 3.41             | 3.41               | 3.43               |
|                  | 47°F (8.3°C)                                       | 37310                               | 36564            | 36381            | 35709              | 35388              | 3.44                      | 3.47             | 3.48             | 3.48               | 3.50               |
|                  | 52°F (11.1°C)                                      | 36247                               | 35522            | 35345            | 34692              | 34379              | 3.20                      | 3.23             | 3.24             | 3.24               | 3.26               |
|                  | 57°F (13.9°C)                                      | 35184                               | 34480            | 34308            | 33674              | 33371              | 2.97                      | 2.99             | 3.00             | 3.00               | 3.02               |
|                  | 59°F (15.0°C)                                      | 34759                               | 34063            | 33893            | 33267              | 32968              | 2.87                      | 2.90             | 2.90             | 2.91               | 2.92               |
|                  | 62°F (16.7°C)                                      | 34121                               | 33438            | 33271            | 32656              | 32362              | 2.73                      | 2.76             | 2.76             | 2.77               | 2.78               |
|                  | 64.4°F (18.0°C)                                    | 33610                               | 32938            | 32773            | 32168              | 31878              | 2.62                      | 2.64             | 2.65             | 2.65               | 2.66               |
|                  | 69.8°F (21.0°C)                                    | 32462                               | 31813            | 31654            | 31069              | 30789              | 2.37                      | 2.38             | 2.39             | 2.39               | 2.40               |
|                  | 75.2°F (24.0°C)                                    | 31314                               | 30687            | 30534            | 29970              | 29700              | 2.11                      | 2.13             | 2.13             | 2.14               | 2.14               |

Table 14 – 36K Heating — **37MURA + 45MUAA** (Continued)

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>1080</b>      | -13°F (-25.0°C)                                    | 17380                               | 17032            | 16947            | 16879              | 16727              | 3.25                      | 3.28             | 3.29             | 3.29               | 3.31               |
|                  | -4°F (-20.0°C)                                     | 21916                               | 21478            | 21370            | 21285              | 21093              | 3.56                      | 3.59             | 3.60             | 3.60               | 3.62               |
|                  | 0°F (-17.8°C)                                      | 23520                               | 23050            | 22935            | 22843              | 22637              | 3.67                      | 3.70             | 3.70             | 3.71               | 3.73               |
|                  | 5°F (-15.0°C)                                      | 25526                               | 25015            | 24890            | 24791              | 24568              | 3.80                      | 3.83             | 3.84             | 3.85               | 3.86               |
|                  | 14°F (-10.0°C)                                     | 25242                               | 24738            | 24614            | 24515              | 24295              | 3.52                      | 3.55             | 3.56             | 3.57               | 3.58               |
|                  | 17°F (-8.3°C)                                      | 25148                               | 24645            | 24522            | 24424              | 24204              | 3.43                      | 3.46             | 3.47             | 3.47               | 3.49               |
|                  | 22°F (-5.6°C)                                      | 25760                               | 25245            | 25119            | 25018              | 24793              | 3.37                      | 3.40             | 3.40             | 3.41               | 3.42               |
|                  | 27°F (-2.8°C)                                      | 26373                               | 25845            | 25716            | 25613              | 25382              | 3.31                      | 3.33             | 3.34             | 3.35               | 3.36               |
|                  | 32°F (0.0°C)                                       | 26985                               | 26445            | 26313            | 26208              | 25972              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 35°F (1.7°C)                                       | 27352                               | 26805            | 26671            | 26564              | 26325              | 3.20                      | 3.23             | 3.24             | 3.24               | 3.25               |
|                  | 37°F (2.8°C)                                       | 29418                               | 28829            | 28685            | 28570              | 28313              | 3.25                      | 3.27             | 3.28             | 3.29               | 3.30               |
|                  | 42°F (5.6°C)                                       | 34582                               | 33890            | 33721            | 33586              | 33283              | 3.36                      | 3.39             | 3.40             | 3.40               | 3.42               |
|                  | 44.6°F (7.0°C)                                     | 36647                               | 35914            | 35735            | 35592              | 35271              | 3.41                      | 3.43             | 3.44             | 3.45               | 3.46               |
|                  | 47°F (8.3°C)                                       | 39745                               | 38951            | 38756            | 38601              | 38253              | 3.48                      | 3.50             | 3.51             | 3.52               | 3.53               |
|                  | 52°F (11.1°C)                                      | 38613                               | 37841            | 37651            | 37501              | 37163              | 3.24                      | 3.26             | 3.27             | 3.28               | 3.29               |
|                  | 57°F (13.9°C)                                      | 37480                               | 36731            | 36547            | 36401              | 36073              | 3.00                      | 3.02             | 3.03             | 3.04               | 3.05               |
|                  | 59°F (15.0°C)                                      | 37027                               | 36287            | 36105            | 35961              | 35637              | 2.90                      | 2.93             | 2.93             | 2.94               | 2.95               |
|                  | 62°F (16.7°C)                                      | 36347                               | 35621            | 35442            | 35301              | 34983              | 2.76                      | 2.78             | 2.79             | 2.79               | 2.81               |
|                  | 64.4°F (18.0°C)                                    | 35804                               | 35088            | 34912            | 34773              | 34460              | 2.65                      | 2.67             | 2.67             | 2.68               | 2.69               |
|                  | 69.8°F (21.0°C)                                    | 34581                               | 33889            | 33719            | 33585              | 33282              | 2.39                      | 2.41             | 2.41             | 2.42               | 2.43               |
|                  | 75.2°F (24.0°C)                                    | 33357                               | 32690            | 32527            | 32397              | 32105              | 2.13                      | 2.15             | 2.15             | 2.16               | 2.17               |
| <b>1185</b>      | -13°F (-25.0°C)                                    | 18514                               | 18144            | 18053            | 17981              | 17819              | 3.29                      | 3.31             | 3.32             | 3.33               | 3.34               |
|                  | -4°F (-20.0°C)                                     | 23346                               | 22879            | 22765            | 22674              | 22470              | 3.60                      | 3.62             | 3.63             | 3.64               | 3.65               |
|                  | 0°F (-17.8°C)                                      | 25055                               | 24554            | 24431            | 24334              | 24115              | 3.70                      | 3.73             | 3.74             | 3.75               | 3.76               |
|                  | 5°F (-15.0°C)                                      | 27192                               | 26648            | 26515            | 26409              | 26171              | 3.84                      | 3.87             | 3.88             | 3.88               | 3.90               |
|                  | 14°F (-10.0°C)                                     | 26890                               | 26352            | 26220            | 26115              | 25880              | 3.56                      | 3.59             | 3.60             | 3.60               | 3.62               |
|                  | 17°F (-8.3°C)                                      | 26789                               | 26254            | 26122            | 26018              | 25784              | 3.47                      | 3.50             | 3.50             | 3.51               | 3.52               |
|                  | 22°F (-5.6°C)                                      | 27442                               | 26893            | 26758            | 26651              | 26411              | 3.40                      | 3.43             | 3.44             | 3.44               | 3.46               |
|                  | 27°F (-2.8°C)                                      | 28094                               | 27532            | 27394            | 27285              | 27039              | 3.34                      | 3.37             | 3.37             | 3.38               | 3.39               |
|                  | 32°F (0.0°C)                                       | 28746                               | 28171            | 28030            | 27918              | 27667              | 3.27                      | 3.30             | 3.31             | 3.31               | 3.33               |
|                  | 35°F (1.7°C)                                       | 29137                               | 28554            | 28412            | 28298              | 28043              | 3.24                      | 3.26             | 3.27             | 3.27               | 3.29               |
|                  | 37°F (2.8°C)                                       | 31338                               | 30711            | 30557            | 30435              | 30161              | 3.28                      | 3.31             | 3.31             | 3.32               | 3.33               |
|                  | 42°F (5.6°C)                                       | 36839                               | 36102            | 35921            | 35778              | 35456              | 3.40                      | 3.42             | 3.43             | 3.44               | 3.45               |
|                  | 44.6°F (7.0°C)                                     | 39039                               | 38258            | 38067            | 37915              | 37573              | 3.44                      | 3.47             | 3.48             | 3.48               | 3.50               |
|                  | 47°F (8.3°C)                                       | 42339                               | 41493            | 41285            | 41120              | 40750              | 3.51                      | 3.54             | 3.55             | 3.55               | 3.57               |
|                  | 52°F (11.1°C)                                      | 41133                               | 40310            | 40109            | 39948              | 39589              | 3.27                      | 3.30             | 3.30             | 3.31               | 3.32               |
|                  | 57°F (13.9°C)                                      | 39926                               | 39128            | 38932            | 38776              | 38427              | 3.03                      | 3.05             | 3.06             | 3.07               | 3.08               |
|                  | 59°F (15.0°C)                                      | 39444                               | 38655            | 38461            | 38308              | 37963              | 2.93                      | 2.96             | 2.96             | 2.97               | 2.98               |
|                  | 62°F (16.7°C)                                      | 38720                               | 37945            | 37756            | 37605              | 37266              | 2.79                      | 2.81             | 2.82             | 2.82               | 2.83               |
|                  | 64.4°F (18.0°C)                                    | 38140                               | 37378            | 37191            | 37042              | 36709              | 2.67                      | 2.69             | 2.70             | 2.71               | 2.72               |
|                  | 69.8°F (21.0°C)                                    | 36837                               | 36101            | 35920            | 35776              | 35454              | 2.41                      | 2.43             | 2.44             | 2.44               | 2.45               |
|                  | 75.2°F (24.0°C)                                    | 35534                               | 34824            | 34649            | 34511              | 34200              | 2.15                      | 2.17             | 2.17             | 2.18               | 2.19               |

Table 15 – 48K Heating — **37MURA + 45MUAA**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>1094</b>      | -13°F (-25.0°C)                                    | 28305                               | 27739            | 27600            | 24743              | 24521              | 5.62                      | 5.66             | 5.67             | 5.69               | 5.71               |
|                  | -4°F (-20.0°C)                                     | 31244                               | 30619            | 30466            | 27313              | 27067              | 5.67                      | 5.71             | 5.72             | 5.74               | 5.76               |
|                  | 0°F (-17.8°C)                                      | 34045                               | 33364            | 33197            | 29762              | 29494              | 5.79                      | 5.84             | 5.85             | 5.86               | 5.89               |
|                  | 5°F (-15.0°C)                                      | 37547                               | 36796            | 36612            | 32822              | 32527              | 5.95                      | 6.00             | 6.01             | 6.02               | 6.05               |
|                  | 14°F (-10.0°C)                                     | 35910                               | 35192            | 35016            | 31392              | 31109              | 5.58                      | 5.62             | 5.64             | 5.65               | 5.67               |
|                  | 17°F (-8.3°C)                                      | 35365                               | 34657            | 34484            | 30915              | 30637              | 5.46                      | 5.50             | 5.51             | 5.52               | 5.54               |
|                  | 22°F (-5.6°C)                                      | 33018                               | 32358            | 32196            | 28864              | 28604              | 5.06                      | 5.10             | 5.11             | 5.12               | 5.14               |
|                  | 27°F (-2.8°C)                                      | 30672                               | 30059            | 29909            | 26813              | 26572              | 4.66                      | 4.69             | 4.70             | 4.71               | 4.73               |
|                  | 32°F (0.0°C)                                       | 28326                               | 27760            | 27621            | 24762              | 24539              | 4.26                      | 4.29             | 4.30             | 4.31               | 4.33               |
|                  | 35°F (1.7°C)                                       | 26918                               | 26380            | 26248            | 23531              | 23320              | 4.02                      | 4.05             | 4.06             | 4.06               | 4.08               |
|                  | 37°F (2.8°C)                                       | 29611                               | 29018            | 28873            | 25885              | 25652              | 4.09                      | 4.12             | 4.13             | 4.14               | 4.16               |
|                  | 42°F (5.6°C)                                       | 36341                               | 35614            | 35436            | 31769              | 31483              | 4.28                      | 4.31             | 4.32             | 4.33               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 39033                               | 38253            | 38061            | 34122              | 33815              | 4.35                      | 4.39             | 4.40             | 4.41               | 4.42               |
|                  | 47°F (8.3°C)                                       | 43072                               | 42210            | 41999            | 37652              | 37313              | 4.47                      | 4.50             | 4.51             | 4.52               | 4.54               |
|                  | 52°F (11.1°C)                                      | 42076                               | 41235            | 41028            | 36782              | 36451              | 4.03                      | 4.06             | 4.07             | 4.08               | 4.09               |
|                  | 57°F (13.9°C)                                      | 41081                               | 40259            | 40058            | 35912              | 35588              | 3.59                      | 3.62             | 3.63             | 3.63               | 3.65               |
|                  | 59°F (15.0°C)                                      | 40682                               | 39869            | 39669            | 35564              | 35243              | 3.41                      | 3.44             | 3.45             | 3.46               | 3.47               |
|                  | 62°F (16.7°C)                                      | 40085                               | 39283            | 39087            | 35041              | 34726              | 3.15                      | 3.18             | 3.18             | 3.19               | 3.20               |
|                  | 64.4°F (18.0°C)                                    | 39607                               | 38815            | 38621            | 34624              | 34312              | 2.94                      | 2.97             | 2.97             | 2.98               | 2.99               |
|                  | 69.8°F (21.0°C)                                    | 38532                               | 37761            | 37572            | 33684              | 33381              | 2.47                      | 2.49             | 2.49             | 2.50               | 2.51               |
|                  | 75.2°F (24.0°C)                                    | 37457                               | 36708            | 36524            | 32744              | 32449              | 2.00                      | 2.01             | 2.02             | 2.02               | 2.03               |
| <b>1282</b>      | -13°F (-25.0°C)                                    | 29899                               | 29301            | 29154            | 27549              | 27301              | 5.67                      | 5.72             | 5.73             | 5.74               | 5.77               |
|                  | -4°F (-20.0°C)                                     | 33003                               | 32343            | 32182            | 30410              | 30136              | 5.72                      | 5.77             | 5.78             | 5.79               | 5.82               |
|                  | 0°F (-17.8°C)                                      | 35962                               | 35243            | 35067            | 33136              | 32838              | 5.85                      | 5.90             | 5.91             | 5.92               | 5.95               |
|                  | 5°F (-15.0°C)                                      | 39661                               | 38868            | 38673            | 36544              | 36215              | 6.01                      | 6.06             | 6.07             | 6.08               | 6.11               |
|                  | 14°F (-10.0°C)                                     | 37932                               | 37174            | 36988            | 34951              | 34637              | 5.64                      | 5.68             | 5.69             | 5.70               | 5.73               |
|                  | 17°F (-8.3°C)                                      | 37356                               | 36609            | 36426            | 34420              | 34111              | 5.51                      | 5.56             | 5.57             | 5.58               | 5.60               |
|                  | 22°F (-5.6°C)                                      | 34878                               | 34180            | 34009            | 32137              | 31848              | 5.11                      | 5.15             | 5.16             | 5.17               | 5.19               |
|                  | 27°F (-2.8°C)                                      | 32399                               | 31751            | 31593            | 29853              | 29585              | 4.70                      | 4.74             | 4.75             | 4.76               | 4.78               |
|                  | 32°F (0.0°C)                                       | 29921                               | 29323            | 29176            | 27570              | 27322              | 4.30                      | 4.33             | 4.34             | 4.35               | 4.37               |
|                  | 35°F (1.7°C)                                       | 28434                               | 27865            | 27726            | 26200              | 25964              | 4.06                      | 4.09             | 4.10             | 4.11               | 4.12               |
|                  | 37°F (2.8°C)                                       | 31278                               | 30652            | 30499            | 28820              | 28561              | 4.13                      | 4.17             | 4.17             | 4.18               | 4.20               |
|                  | 42°F (5.6°C)                                       | 38388                               | 37620            | 37432            | 35371              | 35052              | 4.32                      | 4.36             | 4.37             | 4.37               | 4.39               |
|                  | 44.6°F (7.0°C)                                     | 41231                               | 40407            | 40205            | 37991              | 37649              | 4.40                      | 4.43             | 4.44             | 4.45               | 4.47               |
|                  | 47°F (8.3°C)                                       | 45497                               | 44587            | 44364            | 41922              | 41544              | 4.51                      | 4.55             | 4.56             | 4.57               | 4.58               |
|                  | 52°F (11.1°C)                                      | 44445                               | 43557            | 43339            | 40953              | 40584              | 4.07                      | 4.10             | 4.11             | 4.12               | 4.13               |
|                  | 57°F (13.9°C)                                      | 43394                               | 42526            | 42313            | 39984              | 39624              | 3.63                      | 3.66             | 3.66             | 3.67               | 3.68               |
|                  | 59°F (15.0°C)                                      | 42973                               | 42114            | 41903            | 39596              | 39240              | 3.45                      | 3.48             | 3.48             | 3.49               | 3.50               |
|                  | 62°F (16.7°C)                                      | 42342                               | 41495            | 41288            | 39015              | 38663              | 3.18                      | 3.21             | 3.22             | 3.22               | 3.23               |
|                  | 64.4°F (18.0°C)                                    | 41837                               | 41001            | 40796            | 38550              | 38203              | 2.97                      | 3.00             | 3.00             | 3.01               | 3.02               |
|                  | 69.8°F (21.0°C)                                    | 40702                               | 39888            | 39688            | 37503              | 37165              | 2.49                      | 2.51             | 2.52             | 2.52               | 2.53               |
|                  | 75.2°F (24.0°C)                                    | 39566                               | 38775            | 38581            | 36456              | 36128              | 2.02                      | 2.03             | 2.04             | 2.04               | 2.05               |

Table 15 – 48K Heating — **37MURA + 45MUAA** (Continued)

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>1471</b>      | -13°F (-25.0°C)                                    | 31582                               | 30951            | 30796            | 30673              | 30397              | 5.73                      | 5.78             | 5.79             | 5.80               | 5.82               |
|                  | -4°F (-20.0°C)                                     | 34862                               | 34165            | 33994            | 33858              | 33553              | 5.78                      | 5.83             | 5.84             | 5.85               | 5.88               |
|                  | 0°F (-17.8°C)                                      | 37987                               | 37228            | 37041            | 36893              | 36561              | 5.91                      | 5.96             | 5.97             | 5.98               | 6.01               |
|                  | 5°F (-15.0°C)                                      | 41894                               | 41056            | 40851            | 40688              | 40322              | 6.07                      | 6.12             | 6.13             | 6.14               | 6.17               |
|                  | 14°F (-10.0°C)                                     | 40068                               | 39267            | 39071            | 38914              | 38564              | 5.69                      | 5.74             | 5.75             | 5.76               | 5.79               |
|                  | 17°F (-8.3°C)                                      | 39460                               | 38670            | 38477            | 38323              | 37978              | 5.57                      | 5.61             | 5.62             | 5.63               | 5.66               |
|                  | 22°F (-5.6°C)                                      | 36842                               | 36105            | 35924            | 35781              | 35459              | 5.16                      | 5.20             | 5.21             | 5.22               | 5.24               |
|                  | 27°F (-2.8°C)                                      | 34224                               | 33539            | 33372            | 33238              | 32939              | 4.75                      | 4.79             | 4.80             | 4.81               | 4.83               |
|                  | 32°F (0.0°C)                                       | 31606                               | 30974            | 30819            | 30696              | 30419              | 4.34                      | 4.38             | 4.39             | 4.40               | 4.41               |
|                  | 35°F (1.7°C)                                       | 30035                               | 29435            | 29287            | 29170              | 28908              | 4.10                      | 4.13             | 4.14             | 4.15               | 4.16               |
|                  | 37°F (2.8°C)                                       | 33039                               | 32378            | 32217            | 32088              | 31799              | 4.17                      | 4.21             | 4.22             | 4.22               | 4.24               |
|                  | 42°F (5.6°C)                                       | 40549                               | 39738            | 39540            | 39381              | 39027              | 4.37                      | 4.40             | 4.41             | 4.42               | 4.44               |
|                  | 44.6°F (7.0°C)                                     | 43553                               | 42682            | 42469            | 42299              | 41918              | 4.44                      | 4.48             | 4.49             | 4.50               | 4.51               |
|                  | 47°F (8.3°C)                                       | 48059                               | 47098            | 46862            | 46675              | 46255              | 4.56                      | 4.59             | 4.60             | 4.61               | 4.63               |
|                  | 52°F (11.1°C)                                      | 46948                               | 46009            | 45779            | 45596              | 45186              | 4.11                      | 4.14             | 4.15             | 4.16               | 4.18               |
|                  | 57°F (13.9°C)                                      | 45837                               | 44921            | 44696            | 44517              | 44117              | 3.66                      | 3.69             | 3.70             | 3.71               | 3.72               |
|                  | 59°F (15.0°C)                                      | 45393                               | 44485            | 44263            | 44086              | 43689              | 3.48                      | 3.51             | 3.52             | 3.53               | 3.54               |
|                  | 62°F (16.7°C)                                      | 44727                               | 43832            | 43613            | 43438              | 43047              | 3.22                      | 3.24             | 3.25             | 3.25               | 3.27               |
|                  | 64.4°F (18.0°C)                                    | 44193                               | 43309            | 43093            | 42921              | 42534              | 3.00                      | 3.03             | 3.03             | 3.04               | 3.05               |
|                  | 69.8°F (21.0°C)                                    | 42994                               | 42134            | 41923            | 41755              | 41380              | 2.52                      | 2.54             | 2.54             | 2.55               | 2.56               |
|                  | 75.2°F (24.0°C)                                    | 41794                               | 40958            | 40753            | 40590              | 40225              | 2.04                      | 2.05             | 2.06             | 2.06               | 2.07               |
| <b>1600</b>      | -13°F (-25.0°C)                                    | 33361                               | 32693            | 32530            | 32400              | 32108              | 5.79                      | 5.84             | 5.85             | 5.86               | 5.88               |
|                  | -4°F (-20.0°C)                                     | 36825                               | 36088            | 35908            | 35764              | 35442              | 5.84                      | 5.89             | 5.90             | 5.91               | 5.94               |
|                  | 0°F (-17.8°C)                                      | 40126                               | 39324            | 39127            | 38971              | 38620              | 5.97                      | 6.02             | 6.03             | 6.04               | 6.07               |
|                  | 5°F (-15.0°C)                                      | 44253                               | 43368            | 43152            | 42979              | 42592              | 6.13                      | 6.18             | 6.19             | 6.21               | 6.23               |
|                  | 14°F (-10.0°C)                                     | 42325                               | 41478            | 41271            | 41106              | 40736              | 5.75                      | 5.80             | 5.81             | 5.82               | 5.84               |
|                  | 17°F (-8.3°C)                                      | 41682                               | 40848            | 40644            | 40481              | 40117              | 5.62                      | 5.67             | 5.68             | 5.69               | 5.71               |
|                  | 22°F (-5.6°C)                                      | 38916                               | 38138            | 37947            | 37796              | 37455              | 5.21                      | 5.25             | 5.26             | 5.27               | 5.30               |
|                  | 27°F (-2.8°C)                                      | 36151                               | 35428            | 35251            | 35110              | 34794              | 4.80                      | 4.84             | 4.85             | 4.86               | 4.88               |
|                  | 32°F (0.0°C)                                       | 33386                               | 32718            | 32554            | 32424              | 32132              | 4.39                      | 4.42             | 4.43             | 4.44               | 4.46               |
|                  | 35°F (1.7°C)                                       | 31727                               | 31092            | 30937            | 30813              | 30536              | 4.14                      | 4.17             | 4.18             | 4.19               | 4.21               |
|                  | 37°F (2.8°C)                                       | 34900                               | 34202            | 34031            | 33895              | 33590              | 4.22                      | 4.25             | 4.26             | 4.27               | 4.28               |
|                  | 42°F (5.6°C)                                       | 42833                               | 41976            | 41766            | 41599              | 41225              | 4.41                      | 4.45             | 4.45             | 4.46               | 4.48               |
|                  | 44.6°F (7.0°C)                                     | 46006                               | 45086            | 44860            | 44681              | 44279              | 4.49                      | 4.52             | 4.53             | 4.54               | 4.56               |
|                  | 47°F (8.3°C)                                       | 50765                               | 49750            | 49501            | 49303              | 48860              | 4.60                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 49592                               | 48600            | 48357            | 48164              | 47730              | 4.15                      | 4.18             | 4.19             | 4.20               | 4.22               |
|                  | 57°F (13.9°C)                                      | 48419                               | 47450            | 47213            | 47024              | 46601              | 3.70                      | 3.73             | 3.74             | 3.74               | 3.76               |
|                  | 59°F (15.0°C)                                      | 47949                               | 46990            | 46755            | 46568              | 46149              | 3.52                      | 3.55             | 3.55             | 3.56               | 3.58               |
|                  | 62°F (16.7°C)                                      | 47245                               | 46300            | 46069            | 45884              | 45471              | 3.25                      | 3.27             | 3.28             | 3.29               | 3.30               |
|                  | 64.4°F (18.0°C)                                    | 46682                               | 45748            | 45519            | 45337              | 44929              | 3.03                      | 3.06             | 3.06             | 3.07               | 3.08               |
|                  | 69.8°F (21.0°C)                                    | 45415                               | 44506            | 44284            | 44107              | 43710              | 2.54                      | 2.56             | 2.57             | 2.57               | 2.58               |
|                  | 75.2°F (24.0°C)                                    | 44147                               | 43264            | 43048            | 42876              | 42490              | 2.06                      | 2.07             | 2.08             | 2.08               | 2.09               |

Table 16 – 54K Heating — **37MURA + 45MUAA**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>1135</b>      | -13°F (-25.0°C)                                    | 23207                               | 22743            | 22629            | 21648              | 21453              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.56               |
|                  | -4°F (-20.0°C)                                     | 26836                               | 26300            | 26168            | 25034              | 24808              | 4.80                      | 4.84             | 4.85             | 4.86               | 4.88               |
|                  | 0°F (-17.8°C)                                      | 28801                               | 28225            | 28084            | 26867              | 26625              | 4.93                      | 4.97             | 4.98             | 4.99               | 5.01               |
|                  | 5°F (-15.0°C)                                      | 31258                               | 30633            | 30480            | 29158              | 28896              | 5.09                      | 5.14             | 5.15             | 5.16               | 5.18               |
|                  | 14°F (-10.0°C)                                     | 33073                               | 32412            | 32250            | 30852              | 30574              | 5.10                      | 5.15             | 5.16             | 5.17               | 5.19               |
|                  | 17°F (-8.3°C)                                      | 33678                               | 33005            | 32840            | 31416              | 31133              | 5.11                      | 5.15             | 5.16             | 5.17               | 5.19               |
|                  | 22°F (-5.6°C)                                      | 33083                               | 32422            | 32260            | 30861              | 30583              | 4.93                      | 4.97             | 4.98             | 4.99               | 5.01               |
|                  | 27°F (-2.8°C)                                      | 32488                               | 31838            | 31679            | 30306              | 30033              | 4.75                      | 4.79             | 4.80             | 4.81               | 4.83               |
|                  | 32°F (0.0°C)                                       | 31893                               | 31255            | 31099            | 29750              | 29483              | 4.58                      | 4.61             | 4.62             | 4.63               | 4.65               |
|                  | 35°F (1.7°C)                                       | 31536                               | 30905            | 30751            | 29417              | 29153              | 4.47                      | 4.51             | 4.52             | 4.52               | 4.54               |
|                  | 37°F (2.8°C)                                       | 33364                               | 32697            | 32533            | 31123              | 30843              | 4.38                      | 4.42             | 4.43             | 4.44               | 4.46               |
|                  | 42°F (5.6°C)                                       | 37935                               | 37177            | 36991            | 35387              | 35069              | 4.17                      | 4.20             | 4.21             | 4.22               | 4.24               |
|                  | 44.6°F (7.0°C)                                     | 39764                               | 38969            | 38774            | 37093              | 36759              | 4.09                      | 4.12             | 4.13             | 4.14               | 4.15               |
|                  | 47°F (8.3°C)                                       | 42506                               | 41656            | 41448            | 39651              | 39294              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.02               |
|                  | 52°F (11.1°C)                                      | 42637                               | 41785            | 41576            | 39773              | 39415              | 3.69                      | 3.72             | 3.73             | 3.74               | 3.75               |
|                  | 57°F (13.9°C)                                      | 42768                               | 41913            | 41703            | 39895              | 39536              | 3.42                      | 3.45             | 3.46             | 3.46               | 3.48               |
|                  | 59°F (15.0°C)                                      | 42820                               | 41964            | 41754            | 39944              | 39584              | 3.32                      | 3.34             | 3.35             | 3.36               | 3.37               |
|                  | 62°F (16.7°C)                                      | 42899                               | 42041            | 41831            | 40017              | 39657              | 3.16                      | 3.18             | 3.19             | 3.19               | 3.21               |
|                  | 64.4°F (18.0°C)                                    | 42962                               | 42102            | 41892            | 40076              | 39715              | 3.03                      | 3.05             | 3.06             | 3.06               | 3.08               |
|                  | 69.8°F (21.0°C)                                    | 43103                               | 42241            | 42030            | 40208              | 39846              | 2.74                      | 2.76             | 2.77             | 2.77               | 2.78               |
|                  | 75.2°F (24.0°C)                                    | 43244                               | 42379            | 42168            | 40339              | 39976              | 2.45                      | 2.47             | 2.48             | 2.48               | 2.49               |
| <b>1359</b>      | -13°F (-25.0°C)                                    | 25714                               | 25199            | 25073            | 24475              | 24255              | 4.78                      | 4.82             | 4.83             | 4.84               | 4.86               |
|                  | -4°F (-20.0°C)                                     | 29735                               | 29141            | 28995            | 28303              | 28048              | 5.11                      | 5.15             | 5.16             | 5.17               | 5.19               |
|                  | 0°F (-17.8°C)                                      | 31913                               | 31274            | 31118            | 30375              | 30102              | 5.25                      | 5.29             | 5.30             | 5.31               | 5.33               |
|                  | 5°F (-15.0°C)                                      | 34635                               | 33942            | 33772            | 32966              | 32669              | 5.42                      | 5.46             | 5.47             | 5.48               | 5.51               |
|                  | 14°F (-10.0°C)                                     | 36646                               | 35913            | 35734            | 34880              | 34566              | 5.43                      | 5.47             | 5.48             | 5.50               | 5.52               |
|                  | 17°F (-8.3°C)                                      | 37317                               | 36570            | 36387            | 35519              | 35199              | 5.43                      | 5.48             | 5.49             | 5.50               | 5.52               |
|                  | 22°F (-5.6°C)                                      | 36657                               | 35924            | 35744            | 34891              | 34577              | 5.24                      | 5.29             | 5.30             | 5.31               | 5.33               |
|                  | 27°F (-2.8°C)                                      | 35998                               | 35278            | 35101            | 34263              | 33955              | 5.06                      | 5.10             | 5.11             | 5.12               | 5.14               |
|                  | 32°F (0.0°C)                                       | 35338                               | 34631            | 34458            | 33635              | 33333              | 4.87                      | 4.91             | 4.92             | 4.93               | 4.95               |
|                  | 35°F (1.7°C)                                       | 34942                               | 34244            | 34072            | 33259              | 32959              | 4.76                      | 4.79             | 4.80             | 4.81               | 4.83               |
|                  | 37°F (2.8°C)                                       | 36968                               | 36229            | 36048            | 35187              | 34870              | 4.66                      | 4.70             | 4.71             | 4.72               | 4.74               |
|                  | 42°F (5.6°C)                                       | 42033                               | 41193            | 40987            | 40008              | 39648              | 4.44                      | 4.47             | 4.48             | 4.49               | 4.51               |
|                  | 44.6°F (7.0°C)                                     | 44059                               | 43178            | 42962            | 41936              | 41559              | 4.35                      | 4.38             | 4.39             | 4.40               | 4.42               |
|                  | 47°F (8.3°C)                                       | 47098                               | 46156            | 45925            | 44829              | 44425              | 4.21                      | 4.24             | 4.25             | 4.26               | 4.28               |
|                  | 52°F (11.1°C)                                      | 47243                               | 46298            | 46067            | 44967              | 44562              | 3.93                      | 3.96             | 3.97             | 3.97               | 3.99               |
|                  | 57°F (13.9°C)                                      | 47388                               | 46440            | 46208            | 45105              | 44699              | 3.64                      | 3.67             | 3.68             | 3.69               | 3.70               |
|                  | 59°F (15.0°C)                                      | 47446                               | 46497            | 46265            | 45160              | 44754              | 3.53                      | 3.56             | 3.56             | 3.57               | 3.59               |
|                  | 62°F (16.7°C)                                      | 47533                               | 46582            | 46349            | 45243              | 44836              | 3.36                      | 3.38             | 3.39             | 3.40               | 3.41               |
|                  | 64.4°F (18.0°C)                                    | 47603                               | 46651            | 46417            | 45309              | 44901              | 3.22                      | 3.25             | 3.25             | 3.26               | 3.27               |
|                  | 69.8°F (21.0°C)                                    | 47759                               | 46804            | 46570            | 45458              | 45049              | 2.91                      | 2.94             | 2.94             | 2.95               | 2.96               |
|                  | 75.2°F (24.0°C)                                    | 47916                               | 46957            | 46723            | 45607              | 45197              | 2.61                      | 2.63             | 2.63             | 2.64               | 2.65               |

Table 16 – 54K Heating — **37MURA + 45MUAA** (Continued)

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>1582</b>      | -13°F (-25.0°C)                                    | 28491                               | 27922            | 27782            | 27671              | 27422              | 5.08                      | 5.12             | 5.14             | 5.15               | 5.17               |
|                  | -4°F (-20.0°C)                                     | 32947                               | 32288            | 32127            | 31998              | 31710              | 5.43                      | 5.48             | 5.49             | 5.50               | 5.52               |
|                  | 0°F (-17.8°C)                                      | 35360                               | 34653            | 34480            | 34342              | 34033              | 5.58                      | 5.63             | 5.64             | 5.65               | 5.67               |
|                  | 5°F (-15.0°C)                                      | 38376                               | 37608            | 37420            | 37271              | 36935              | 5.77                      | 5.81             | 5.82             | 5.83               | 5.86               |
|                  | 14°F (-10.0°C)                                     | 40605                               | 39793            | 39594            | 39435              | 39080              | 5.78                      | 5.82             | 5.83             | 5.85               | 5.87               |
|                  | 17°F (-8.3°C)                                      | 41348                               | 40521            | 40318            | 40157              | 39795              | 5.78                      | 5.83             | 5.84             | 5.85               | 5.87               |
|                  | 22°F (-5.6°C)                                      | 40617                               | 39805            | 39606            | 39447              | 39092              | 5.58                      | 5.62             | 5.64             | 5.65               | 5.67               |
|                  | 27°F (-2.8°C)                                      | 39886                               | 39088            | 38893            | 38737              | 38389              | 5.38                      | 5.42             | 5.43             | 5.44               | 5.47               |
|                  | 32°F (0.0°C)                                       | 39155                               | 38372            | 38180            | 38028              | 37685              | 5.18                      | 5.22             | 5.23             | 5.24               | 5.26               |
|                  | 35°F (1.7°C)                                       | 38717                               | 37943            | 37753            | 37602              | 37263              | 5.06                      | 5.10             | 5.11             | 5.12               | 5.14               |
|                  | 37°F (2.8°C)                                       | 40962                               | 40143            | 39942            | 39782              | 39424              | 4.96                      | 5.00             | 5.01             | 5.02               | 5.04               |
|                  | 42°F (5.6°C)                                       | 46574                               | 45642            | 45414            | 45232              | 44825              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 44.6°F (7.0°C)                                     | 48819                               | 47842            | 47603            | 47413              | 46986              | 4.62                      | 4.66             | 4.67             | 4.68               | 4.70               |
|                  | 47°F (8.3°C)                                       | 52186                               | 51142            | 50886            | 50683              | 50227              | 4.48                      | 4.52             | 4.52             | 4.53               | 4.55               |
|                  | 52°F (11.1°C)                                      | 52346                               | 51300            | 51043            | 50839              | 50381              | 4.18                      | 4.21             | 4.22             | 4.23               | 4.24               |
|                  | 57°F (13.9°C)                                      | 52507                               | 51457            | 51200            | 50995              | 50536              | 3.87                      | 3.91             | 3.91             | 3.92               | 3.94               |
|                  | 59°F (15.0°C)                                      | 52571                               | 51520            | 51262            | 51057              | 50598              | 3.75                      | 3.78             | 3.79             | 3.80               | 3.81               |
|                  | 62°F (16.7°C)                                      | 52668                               | 51614            | 51356            | 51151              | 50690              | 3.57                      | 3.60             | 3.61             | 3.61               | 3.63               |
|                  | 64.4°F (18.0°C)                                    | 52745                               | 51690            | 51431            | 51226              | 50765              | 3.43                      | 3.45             | 3.46             | 3.47               | 3.48               |
|                  | 69.8°F (21.0°C)                                    | 52918                               | 51860            | 51601            | 51394              | 50932              | 3.10                      | 3.12             | 3.13             | 3.14               | 3.15               |
|                  | 75.2°F (24.0°C)                                    | 53092                               | 52030            | 51770            | 51563              | 51099              | 2.77                      | 2.80             | 2.80             | 2.81               | 2.82               |
| <b>1806</b>      | -13°F (-25.0°C)                                    | 31569                               | 30938            | 30783            | 30660              | 30384              | 5.41                      | 5.45             | 5.46             | 5.47               | 5.50               |
|                  | -4°F (-20.0°C)                                     | 36506                               | 35776            | 35597            | 35455              | 35136              | 5.78                      | 5.83             | 5.84             | 5.85               | 5.87               |
|                  | 0°F (-17.8°C)                                      | 39180                               | 38396            | 38204            | 38051              | 37709              | 5.94                      | 5.98             | 6.00             | 6.01               | 6.03               |
|                  | 5°F (-15.0°C)                                      | 42521                               | 41671            | 41463            | 41297              | 40925              | 6.13                      | 6.18             | 6.20             | 6.21               | 6.23               |
|                  | 14°F (-10.0°C)                                     | 44991                               | 44091            | 43871            | 43695              | 43302              | 6.14                      | 6.19             | 6.21             | 6.22               | 6.24               |
|                  | 17°F (-8.3°C)                                      | 45814                               | 44898            | 44673            | 44495              | 44094              | 6.15                      | 6.20             | 6.21             | 6.22               | 6.25               |
|                  | 22°F (-5.6°C)                                      | 45004                               | 44104            | 43884            | 43708              | 43315              | 5.94                      | 5.98             | 6.00             | 6.01               | 6.03               |
|                  | 27°F (-2.8°C)                                      | 44195                               | 43311            | 43094            | 42922              | 42536              | 5.72                      | 5.77             | 5.78             | 5.79               | 5.82               |
|                  | 32°F (0.0°C)                                       | 43385                               | 42517            | 42305            | 42136              | 41756              | 5.51                      | 5.55             | 5.57             | 5.58               | 5.60               |
|                  | 35°F (1.7°C)                                       | 42899                               | 42041            | 41831            | 41664              | 41289              | 5.38                      | 5.43             | 5.44             | 5.45               | 5.47               |
|                  | 37°F (2.8°C)                                       | 45387                               | 44479            | 44256            | 44079              | 43683              | 5.28                      | 5.32             | 5.33             | 5.34               | 5.36               |
|                  | 42°F (5.6°C)                                       | 51605                               | 50573            | 50320            | 50119              | 49668              | 5.02                      | 5.06             | 5.07             | 5.08               | 5.10               |
|                  | 44.6°F (7.0°C)                                     | 54092                               | 53010            | 52745            | 52534              | 52061              | 4.92                      | 4.96             | 4.97             | 4.98               | 5.00               |
|                  | 47°F (8.3°C)                                       | 57823                               | 56667            | 56383            | 56158              | 55652              | 4.76                      | 4.80             | 4.81             | 4.82               | 4.84               |
|                  | 52°F (11.1°C)                                      | 58001                               | 56841            | 56557            | 56331              | 55824              | 4.44                      | 4.48             | 4.49             | 4.50               | 4.52               |
|                  | 57°F (13.9°C)                                      | 58179                               | 57015            | 56730            | 56503              | 55995              | 4.12                      | 4.15             | 4.16             | 4.17               | 4.19               |
|                  | 59°F (15.0°C)                                      | 58250                               | 57085            | 56800            | 56573              | 56063              | 3.99                      | 4.02             | 4.03             | 4.04               | 4.06               |
|                  | 62°F (16.7°C)                                      | 58357                               | 57190            | 56904            | 56676              | 56166              | 3.80                      | 3.83             | 3.84             | 3.85               | 3.86               |
|                  | 64.4°F (18.0°C)                                    | 58442                               | 57274            | 56987            | 56759              | 56248              | 3.65                      | 3.67             | 3.68             | 3.69               | 3.70               |
|                  | 69.8°F (21.0°C)                                    | 58635                               | 57462            | 57175            | 56946              | 56433              | 3.30                      | 3.32             | 3.33             | 3.34               | 3.35               |
|                  | 75.2°F (24.0°C)                                    | 58827                               | 57650            | 57362            | 57133              | 56618              | 2.95                      | 2.97             | 2.98             | 2.99               | 3.00               |

**COOLING PERFORMANCE - 37MURA + 45MULA**

For the following tables:

TC = Total Cooling Capacity (BTU/hr)

S/T = Sensible Cooling Capacity Ratio

PI = Power Input (kW)

Extrapolated Data: The highlighted data is tested; other data is simulated and for reference.

Table 17 – 18K Cooling — **37MURA + 45MULA (24A)**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       | TC          | S/T              | PI               | TC               | S/T              | PI               | TC               | S/T              | PI               | TC               | S/T              | PI               | TC               | S/T              | PI               | TC               | S/T              | PI               | TC               | S/T              | PI               |
| 441            | -13°F<br>25°C         | TC          | 12511            | 12507            | 12504            | 12576            | 12946            | 13062            | 13055            | 13049            | 13048            | 13039            | 13452            | 13445            | 13436            | 13435            | 13425            | 14190            | 14187            | 14176            | 14173            | 14151            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             |
|                | -4°F<br>20°C          | TC          | 13474            | 13469            | 13465            | 13544            | 13942            | 14067            | 14059            | 14053            | 14052            | 14042            | 14487            | 14479            | 14470            | 14468            | 14458            | 15282            | 15278            | 15267            | 15263            | 15240            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             |
|                | 0°F<br>17.8°C         | TC          | 13918            | 13912            | 13966            | 14073            | 14462            | 14525            | 14514            | 14506            | 14505            | 14502            | 14951            | 14943            | 14929            | 14927            | 14914            | 15757            | 15753            | 15753            | 15755            | 15767            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             |
|                | 5°F<br>15°C           | TC          | 14328            | 14341            | 14534            | 14601            | 15047            | 15009            | 15012            | 15014            | 15014            | 15088            | 15500            | 15499            | 15503            | 15504            | 15506            | 16427            | 16422            | 16422            | 16423            | 16432            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             |
|                | 14°F<br>10°C          | TC          | 14579            | 14573            | 14634            | 14762            | 15220            | 15310            | 15302            | 15294            | 15293            | 15285            | 15840            | 15832            | 15820            | 15818            | 15804            | 16836            | 16830            | 16818            | 16814            | 16789            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             |
|                | 17°F<br>10°C          | TC          | 14680            | 14684            | 14864            | 14950            | 15431            | 15417            | 15419            | 15422            | 15422            | 15495            | 15909            | 15915            | 15925            | 15926            | 15930            | 16967            | 16962            | 16964            | 16967            | 16983            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             |
|                | 23°F<br>5°C           | TC          | 14974            | 14995            | 15239            | 15314            | 15814            | 15743            | 15747            | 15749            | 15749            | 15842            | 16298            | 16297            | 16302            | 16303            | 16305            | 17348            | 17343            | 17344            | 17346            | 17358            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 0.61             | 0.61             | 0.61             | 0.61             | 0.62             | 0.61             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             |
|                | 35°F<br>1.7°C         | TC          | 15771            | 15771            | 15802            | 15820            | 16226            | 16528            | 16525            | 16526            | 16526            | 16527            | 17059            | 17057            | 17056            | 17056            | 17058            | 18047            | 18042            | 18039            | 18041            | 18038            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 0.60             | 0.60             | 0.60             | 0.60             | 0.62             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             |
|                | 41°F<br>5°C           | TC          | 15107            | 15107            | 15149            | 15169            | 15600            | 15828            | 15826            | 15826            | 15827            | 15840            | 16334            | 16332            | 16331            | 16331            | 16333            | 17275            | 17270            | 17267            | 17269            | 17266            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 0.65             | 0.65             | 0.65             | 0.65             | 0.68             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             |
|                | 47°F<br>8.3°C         | TC          | 14440            | 14440            | 14496            | 14521            | 14968            | 15127            | 15125            | 15126            | 15126            | 15149            | 15609            | 15608            | 15606            | 15606            | 15607            | 16505            | 16501            | 16500            | 16499            | 16497            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.70             | 0.70             | 0.70             | 0.71             | 0.73             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.78             | 0.78             | 0.78             | 0.78             | 0.78             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             |
|                | 50°F<br>10°C          | TC          | 14070            | 14300            | 14777            | 14862            | 15431            | 14896            | 14905            | 14954            | 14973            | 15449            | 15483            | 15503            | 15512            | 15513            | 15583            | 16598            | 16606            | 16647            | 16651            | 16673            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             |
|                | 59°F<br>15°C          | TC          | 13760            | 14092            | 14587            | 14675            | 15266            | 14600            | 14606            | 14679            | 14707            | 15283            | 15206            | 15222            | 15229            | 15229            | 15330            | 16367            | 16372            | 16404            | 16408            | 16424            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 0.82             | 0.82             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             |
|                | 68°F<br>20°C          | TC          | 13465            | 13899            | 14410            | 14501            | 15111            | 14306            | 14311            | 14423            | 14517            | 15128            | 14929            | 14941            | 14945            | 14946            | 15116            | 16120            | 16125            | 16151            | 16154            | 16166            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 0.85             | 0.86             | 0.86             | 0.86             | 0.87             | 0.86             | 0.86             | 0.86             | 0.86             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             |
|                | 77°F<br>25°C          | TC          | 13145            | 13648            | 14177            | 14272            | 14902            | 13999            | 14006            | 14167            | 14288            | 14920            | 14638            | 14655            | 14662            | 14679            | 14933            | 15854            | 15869            | 15904            | 15908            | 15925            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 0.89             | 0.89             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             |
|                | 82°F<br>27.8°C        | TC          | 13196            | 13756            | 14304            | 14401            | 15056            | 14067            | 14090            | 14321            | 14419            | 15073            | 14725            | 14745            | 14752            | 14775            | 15087            | 15972            | 15993            | 16033            | 16037            | 16056            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 0.97             | 0.98             | 0.98             | 0.98             | 0.99             | 0.98             | 0.98             | 0.98             | 0.98             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 86°F<br>30°C          | TC          | 13516            | 14142            | 14715            | 14817            | 15507            | 14408            | 14438            | 14733            | 14835            | 15520            | 15096            | 15113            | 15137            | 15151            | 15534            | 16393            | 16417            | 16455            | 16459            | 16477            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.12             | 1.13             | 1.13             | 1.13             | 1.14             | 1.13             | 1.13             | 1.13             | 1.13             | 1.14             | 1.14             | 1.14             | 1.14             | 1.14             | 1.14             | 1.15             | 1.15             | 1.15             | 1.15             | 1.15             |
|                | 95°F<br>35°C          | TC          | 14410            | 14435            | 14745            | 14832            | 15414            | 15331            | 15335            | 15340            | 15341            | 15445            | 15993            | 15995            | 16003            | 16005            | 16012            | 17265            | 17259            | 17261            | 17260            | 17273            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0                |                  |                  |                  |                  |                  |                  |                  |

Table 17 – 18K Cooling — **37MURA + 45MULA (24A)** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 617            | -13°F<br>25°C         | TC          | 17022            | 17015            | 17257            | 17329            | 17806            | 17760            | 17746            | 17734            | 17733            | 17718            | 18291            | 18268            | 18251            | 18248            | 18231            | 19294            | 19289            | 19249            | 19242            | 19201            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.92             | 0.92             | 0.92             | 0.92             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             |
|                | -4°F<br>20°C          | TC          | 18332            | 18323            | 18585            | 18662            | 19175            | 19126            | 19111            | 19099            | 19097            | 19081            | 19698            | 19674            | 19655            | 19652            | 19633            | 20778            | 20772            | 20730            | 20722            | 20678            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.94             | 0.94             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             |
|                | 0°F<br>17.8°C         | TC          | 18940            | 18929            | 19280            | 19361            | 19892            | 19752            | 19731            | 19715            | 19713            | 19911            | 20333            | 20304            | 20279            | 20276            | 20266            | 21427            | 21421            | 21420            | 21423            | 21436            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             |
|                | 5°F<br>15°C           | TC          | 19483            | 19550            | 19997            | 20089            | 20708            | 20397            | 20402            | 20403            | 20424            | 20729            | 21049            | 21055            | 21059            | 21059            | 21087            | 22284            | 22277            | 22289            | 22291            | 22301            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 14°F<br>10°C          | TC          | 19839            | 19829            | 20234            | 20329            | 20959            | 20824            | 20806            | 20792            | 20789            | 20984            | 21538            | 21511            | 21489            | 21485            | 21464            | 22901            | 22894            | 22850            | 22842            | 22794            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             |
|                | 17°F<br>10°C          | TC          | 19911            | 19976            | 20437            | 20537            | 21204            | 20902            | 20911            | 20914            | 20932            | 21227            | 21615            | 21623            | 21632            | 21633            | 21660            | 22988            | 22982            | 22979            | 22983            | 23002            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.81             | 0.81             | 0.81             | 0.81             | 0.81             |
|                | 23°F<br>5°C           | TC          | 20362            | 20449            | 20978            | 21082            | 21777            | 21393            | 21399            | 21401            | 21430            | 21800            | 22131            | 22138            | 22144            | 22144            | 22180            | 23531            | 23524            | 23541            | 23544            | 23558            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 0.82             | 0.82             | 0.82             | 0.82             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             |
|                | 35°F<br>1.7°C         | TC          | 21461            | 21462            | 21588            | 21649            | 22347            | 22465            | 22464            | 22466            | 22466            | 22526            | 23168            | 23166            | 23167            | 23168            | 23170            | 24472            | 24467            | 24465            | 24464            | 24466            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.80             | 0.80             | 0.81             | 0.81             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.86             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             |
|                | 41°F<br>5°C           | TC          | 20556            | 20556            | 20720            | 20864            | 21481            | 21512            | 21512            | 21513            | 21513            | 21589            | 22183            | 22182            | 22183            | 22183            | 22185            | 23428            | 23422            | 23421            | 23420            | 23422            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 0.87             | 0.87             | 0.88             | 0.89             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 47°F<br>8.3°C         | TC          | 19650            | 19663            | 19926            | 20015            | 20608            | 20561            | 20560            | 20561            | 20560            | 20655            | 21199            | 21197            | 21199            | 21198            | 21198            | 22386            | 22380            | 22378            | 22378            | 22380            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 0.94             | 0.94             | 0.96             | 0.97             | 1.01             | 1.00             | 1.00             | 1.00             | 1.00             | 1.01             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.14             | 1.14             | 1.14             | 1.14             | 1.14             |
|                | 50°F<br>10°C          | TC          | 19161            | 19688            | 20353            | 20470            | 21264            | 20242            | 20254            | 20394            | 20458            | 21284            | 21032            | 21059            | 21070            | 21072            | 21274            | 22482            | 22541            | 22599            | 22606            | 22634            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.06             | 1.06             | 1.06             |
|                | 59°F<br>15°C          | TC          | 18751            | 19409            | 20097            | 20220            | 21043            | 19839            | 19866            | 20092            | 20241            | 21063            | 20658            | 20679            | 20686            | 20716            | 21081            | 22182            | 22227            | 22271            | 22276            | 22294            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.11             | 1.11             | 1.11             | 1.11             | 1.12             | 1.11             | 1.11             | 1.11             | 1.11             | 1.12             | 1.12             | 1.12             | 1.11             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             |
|                | 68°F<br>20°C          | TC          | 18335            | 19117            | 19826            | 19952            | 20799            | 19410            | 19454            | 19848            | 19974            | 20819            | 20249            | 20264            | 20301            | 20319            | 20837            | 21819            | 21859            | 21893            | 21897            | 21908            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 1.15             | 1.15             | 1.16             | 1.16             | 1.17             | 1.16             | 1.16             | 1.16             | 1.16             | 1.17             | 1.16             | 1.16             | 1.16             | 1.16             | 1.17             | 1.18             | 1.18             | 1.18             | 1.18             | 1.18             |
|                | 77°F<br>25°C          | TC          | 17907            | 18769            | 19503            | 19633            | 20510            | 18983            | 19043            | 19525            | 19655            | 20531            | 19843            | 19865            | 19916            | 19938            | 20548            | 21431            | 21496            | 21546            | 21551            | 21571            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 1.20             | 1.20             | 1.21             | 1.21             | 1.22             | 1.21             | 1.21             | 1.21             | 1.21             | 1.22             | 1.21             | 1.21             | 1.21             | 1.21             | 1.22             | 1.23             | 1.23             | 1.22             | 1.22             | 1.22             |
|                | 82°F<br>27.8°C        | TC          | 17991            | 18909            | 19672            | 19805            | 20712            | 19065            | 19138            | 19689            | 19827            | 20734            | 19951            | 19977            | 20039            | 20063            | 20752            | 21572            | 21653            | 21709            | 21715            | 21739            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 1.31             | 1.32             | 1.33             | 1.33             | 1.33             | 1.32             | 1.32             | 1.32             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             |
|                | 86°F<br>30°C          | TC          | 18526            | 19451            | 20246            | 20387            | 21337            | 19537            | 19627            | 20269            | 20411            | 21359            | 20463            | 20486            | 20562            | 20591            | 21377            | 22153            | 22239            | 22292            | 22297            | 22318            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 1.51             | 1.52             | 1.53             | 1.53             | 1.54             | 1.52             | 1.52             | 1.53             | 1.53             | 1.54             | 1.53             | 1.53             | 1.53             | 1.53             | 1.54             | 1.55             | 1.55             | 1.55             | 1.55             | 1.54             |
|                | 95°F<br>35°C          | TC          | 19596            | 19702            | 20338            | 20459            | 21267            | 20826            | 20838            | 20845            | 20870            | 21294            | 21720            | 21724            | 21738            | 21740            | 21776            | 23404            | 23395            | 23400            | 23407            | 23438            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0                |                  |                  |

Table 18 – 18K Cooling — **37MURA + 45MULA (24B)**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 441            | -13°F<br>25°C         | TC          | 12511            | 12507            | 12504            | 12576            | 12946            | 13062            | 13055            | 13049            | 13048            | 13039            | 13452            | 13445            | 13436            | 13435            | 13425            | 14190            | 14187            | 14176            | 14173            | 14151            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             | 0.68             |
|                | -4°F<br>20°C          | TC          | 13474            | 13469            | 13465            | 13544            | 13942            | 14067            | 14059            | 14053            | 14052            | 14042            | 14487            | 14479            | 14470            | 14468            | 14458            | 15282            | 15278            | 15267            | 15263            | 15240            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.70             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             |
|                | 0°F<br>17.8°C         | TC          | 13918            | 13912            | 13966            | 14073            | 14462            | 14525            | 14514            | 14506            | 14505            | 14502            | 14951            | 14943            | 14929            | 14927            | 14914            | 15757            | 15753            | 15753            | 15755            | 15767            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.71             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             |
|                | 5°F<br>15°C           | TC          | 14328            | 14341            | 14534            | 14601            | 15047            | 15009            | 15012            | 15014            | 15014            | 15088            | 15500            | 15499            | 15503            | 15504            | 15506            | 16427            | 16422            | 16422            | 16423            | 16432            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.73             | 0.73             | 0.73             | 0.73             | 0.73             | 0.74             | 0.74             | 0.74             | 0.74             | 0.74             |
|                | 14°F<br>10°C          | TC          | 14579            | 14573            | 14634            | 14762            | 15220            | 15310            | 15302            | 15294            | 15293            | 15285            | 15840            | 15832            | 15820            | 15818            | 15804            | 16836            | 16830            | 16818            | 16814            | 16789            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             |
|                | 17°F<br>10°C          | TC          | 14680            | 14684            | 14864            | 14950            | 15431            | 15417            | 15419            | 15422            | 15422            | 15495            | 15909            | 15915            | 15925            | 15926            | 15930            | 16967            | 16962            | 16964            | 16967            | 16983            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             | 0.60             |
|                | 23°F<br>5°C           | TC          | 14974            | 14995            | 15239            | 15314            | 15814            | 15743            | 15747            | 15749            | 15749            | 15842            | 16298            | 16297            | 16302            | 16303            | 16305            | 17348            | 17343            | 17344            | 17346            | 17358            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 0.61             | 0.61             | 0.61             | 0.61             | 0.62             | 0.61             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.62             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             |
|                | 35°F<br>1.7°C         | TC          | 15771            | 15771            | 15802            | 15820            | 16226            | 16528            | 16525            | 16526            | 16526            | 16527            | 17059            | 17057            | 17056            | 17056            | 17058            | 18047            | 18042            | 18039            | 18041            | 18038            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 0.60             | 0.60             | 0.60             | 0.60             | 0.62             | 0.63             | 0.63             | 0.63             | 0.63             | 0.63             | 0.66             | 0.66             | 0.66             | 0.66             | 0.66             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             |
|                | 41°F<br>5°C           | TC          | 15107            | 15107            | 15149            | 15169            | 15600            | 15828            | 15826            | 15826            | 15827            | 15840            | 16334            | 16332            | 16331            | 16331            | 16333            | 17275            | 17270            | 17267            | 17269            | 17266            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 0.65             | 0.65             | 0.65             | 0.65             | 0.68             | 0.69             | 0.69             | 0.69             | 0.69             | 0.69             | 0.72             | 0.72             | 0.72             | 0.72             | 0.72             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             |
|                | 47°F<br>8.3°C         | TC          | 14440            | 14440            | 14496            | 14521            | 14968            | 15127            | 15125            | 15126            | 15126            | 15149            | 15609            | 15608            | 15606            | 15606            | 15607            | 16505            | 16501            | 16500            | 16499            | 16497            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.70             | 0.70             | 0.70             | 0.71             | 0.73             | 0.75             | 0.75             | 0.75             | 0.75             | 0.75             | 0.78             | 0.78             | 0.78             | 0.78             | 0.78             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             |
|                | 50°F<br>10°C          | TC          | 14070            | 14300            | 14777            | 14862            | 15431            | 14896            | 14905            | 14954            | 14973            | 15449            | 15483            | 15503            | 15512            | 15513            | 15583            | 16598            | 16606            | 16647            | 16651            | 16673            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             | 0.79             |
|                | 59°F<br>15°C          | TC          | 13760            | 14092            | 14587            | 14675            | 15266            | 14600            | 14606            | 14679            | 14707            | 15283            | 15206            | 15222            | 15229            | 15229            | 15330            | 16367            | 16372            | 16404            | 16408            | 16424            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 0.82             | 0.82             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             |
|                | 68°F<br>20°C          | TC          | 13465            | 13899            | 14410            | 14501            | 15111            | 14306            | 14311            | 14423            | 14517            | 15128            | 14929            | 14941            | 14945            | 14946            | 15116            | 16120            | 16125            | 16151            | 16154            | 16166            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 0.85             | 0.86             | 0.86             | 0.86             | 0.87             | 0.86             | 0.86             | 0.86             | 0.86             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.87             | 0.88             | 0.88             | 0.88             | 0.88             | 0.88             |
|                | 77°F<br>25°C          | TC          | 13145            | 13648            | 14177            | 14272            | 14902            | 13999            | 14006            | 14167            | 14288            | 14920            | 14638            | 14655            | 14662            | 14679            | 14933            | 15854            | 15869            | 15904            | 15908            | 15925            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 0.89             | 0.89             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.90             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             |
|                | 82°F<br>27.8°C        | TC          | 13196            | 13756            | 14304            | 14401            | 15056            | 14067            | 14090            | 14321            | 14419            | 15073            | 14725            | 14745            | 14752            | 14775            | 15087            | 15972            | 15993            | 16033            | 16037            | 16056            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 0.97             | 0.98             | 0.98             | 0.98             | 0.99             | 0.98             | 0.98             | 0.98             | 0.98             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 86°F<br>30°C          | TC          | 13516            | 14142            | 14715            | 14817            | 15507            | 14408            | 14438            | 14733            | 14835            | 15520            | 15096            | 15113            | 15137            | 15151            | 15534            | 16393            | 16417            | 16455            | 16459            | 16477            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.12             | 1.13             | 1.13             | 1.13             | 1.14             | 1.13             | 1.13             | 1.13             | 1.13             | 1.14             | 1.14             | 1.14             | 1.14             | 1.14             | 1.14             | 1.15             | 1.15             | 1.15             | 1.15             | 1.15             |
|                | 95°F<br>35°C          | TC          | 14410            | 14435            | 14745            | 14832            | 15414            | 15331            | 15335            | 15340            | 15341            | 15445            | 15993            | 15995            | 16003            | 16005            | 16012            | 17265            | 17259            | 17261            | 17260            | 17273            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             |                  |                  |                  |

Table 18 – 18K Cooling — **37MURA + 45MULA (24B)** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 617            | -13°F<br>25°C         | TC          | 17022            | 17015            | 17257            | 17329            | 17806            | 17760            | 17746            | 17734            | 17733            | 17718            | 18291            | 18268            | 18251            | 18248            | 18231            | 19294            | 19289            | 19249            | 19242            | 19201            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.92             | 0.92             | 0.92             | 0.92             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.91             | 0.92             | 0.92             | 0.92             | 0.92             | 0.92             |
|                | -4°F<br>20°C          | TC          | 18332            | 18323            | 18585            | 18662            | 19175            | 19126            | 19111            | 19099            | 19097            | 19081            | 19698            | 19674            | 19655            | 19652            | 19633            | 20778            | 20772            | 20730            | 20722            | 20678            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.94             | 0.94             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             |
|                | 0°F<br>17.8°C         | TC          | 18940            | 18929            | 19280            | 19361            | 19892            | 19752            | 19731            | 19715            | 19713            | 19911            | 20333            | 20304            | 20279            | 20276            | 20266            | 21427            | 21421            | 21420            | 21423            | 21436            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.96             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             |
|                | 5°F<br>15°C           | TC          | 19483            | 19550            | 19997            | 20089            | 20708            | 20397            | 20402            | 20403            | 20424            | 20729            | 21049            | 21055            | 21059            | 21059            | 21087            | 22284            | 22277            | 22289            | 22291            | 22301            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 0.98             | 0.98             | 0.98             | 0.98             | 0.98             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 14°F<br>10°C          | TC          | 19839            | 19829            | 20234            | 20329            | 20959            | 20824            | 20806            | 20792            | 20789            | 20984            | 21538            | 21511            | 21489            | 21485            | 21464            | 22901            | 22894            | 22850            | 22842            | 22794            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             |
|                | 17°F<br>10°C          | TC          | 19911            | 19976            | 20437            | 20537            | 21204            | 20902            | 20911            | 20914            | 20932            | 21227            | 21615            | 21623            | 21632            | 21633            | 21660            | 22988            | 22982            | 22979            | 22983            | 23002            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.80             | 0.81             | 0.81             | 0.81             | 0.81             | 0.81             |
|                | 23°F<br>5°C           | TC          | 20362            | 20449            | 20978            | 21082            | 21777            | 21393            | 21399            | 21401            | 21430            | 21800            | 22131            | 22138            | 22144            | 22144            | 22180            | 23531            | 23524            | 23541            | 23544            | 23558            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 0.82             | 0.82             | 0.82             | 0.82             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.83             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             |
|                | 35°F<br>1.7°C         | TC          | 21461            | 21462            | 21588            | 21649            | 22347            | 22465            | 22464            | 22466            | 22466            | 22526            | 23168            | 23166            | 23167            | 23168            | 23170            | 24472            | 24467            | 24465            | 24464            | 24466            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 0.80             | 0.80             | 0.81             | 0.81             | 0.85             | 0.85             | 0.85             | 0.85             | 0.85             | 0.86             | 0.89             | 0.89             | 0.89             | 0.89             | 0.89             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             |
|                | 41°F<br>5°C           | TC          | 20556            | 20556            | 20720            | 20864            | 21481            | 21512            | 21512            | 21513            | 21513            | 21589            | 22183            | 22182            | 22183            | 22183            | 22185            | 23428            | 23422            | 23421            | 23420            | 23422            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 0.87             | 0.87             | 0.88             | 0.89             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             | 0.93             | 0.97             | 0.97             | 0.97             | 0.97             | 0.97             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 47°F<br>8.3°C         | TC          | 19650            | 19663            | 19926            | 20015            | 20608            | 20561            | 20560            | 20561            | 20560            | 20655            | 21199            | 21197            | 21199            | 21198            | 21198            | 22386            | 22380            | 22378            | 22378            | 22380            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 0.94             | 0.94             | 0.96             | 0.97             | 1.01             | 1.00             | 1.00             | 1.00             | 1.00             | 1.01             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.14             | 1.14             | 1.14             | 1.14             | 1.14             |
|                | 50°F<br>10°C          | TC          | 19161            | 19688            | 20353            | 20470            | 21264            | 20242            | 20254            | 20394            | 20458            | 21284            | 21032            | 21059            | 21070            | 21072            | 21274            | 22482            | 22541            | 22599            | 22606            | 22634            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.07             | 1.06             | 1.06             | 1.06             |
|                | 59°F<br>15°C          | TC          | 18751            | 19409            | 20097            | 20220            | 21043            | 19839            | 19866            | 20092            | 20241            | 21063            | 20658            | 20679            | 20686            | 20716            | 21081            | 22182            | 22227            | 22271            | 22276            | 22294            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.11             | 1.11             | 1.11             | 1.11             | 1.12             | 1.11             | 1.11             | 1.11             | 1.11             | 1.12             | 1.12             | 1.12             | 1.11             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             | 1.12             |
|                | 68°F<br>20°C          | TC          | 18335            | 19117            | 19826            | 19952            | 20799            | 19410            | 19454            | 19848            | 19974            | 20819            | 20249            | 20264            | 20301            | 20319            | 20837            | 21819            | 21859            | 21893            | 21897            | 21908            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 1.15             | 1.15             | 1.16             | 1.16             | 1.17             | 1.16             | 1.16             | 1.16             | 1.16             | 1.17             | 1.16             | 1.16             | 1.16             | 1.16             | 1.17             | 1.18             | 1.18             | 1.18             | 1.18             | 1.18             |
|                | 77°F<br>25°C          | TC          | 17907            | 18769            | 19503            | 19633            | 20510            | 18983            | 19043            | 19525            | 19655            | 20531            | 19843            | 19865            | 19916            | 19938            | 20548            | 21431            | 21496            | 21546            | 21551            | 21571            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 1.20             | 1.20             | 1.21             | 1.21             | 1.22             | 1.21             | 1.21             | 1.21             | 1.21             | 1.22             | 1.21             | 1.21             | 1.21             | 1.21             | 1.22             | 1.23             | 1.23             | 1.22             | 1.22             | 1.22             |
|                | 82°F<br>27.8°C        | TC          | 17991            | 18909            | 19672            | 19805            | 20712            | 19065            | 19138            | 19689            | 19827            | 20734            | 19951            | 19977            | 20039            | 20063            | 20752            | 21572            | 21653            | 21709            | 21715            | 21739            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 1.31             | 1.32             | 1.33             | 1.33             | 1.33             | 1.32             | 1.32             | 1.32             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             |
|                | 86°F<br>30°C          | TC          | 18526            | 19451            | 20246            | 20387            | 21337            | 19537            | 19627            | 20269            | 20411            | 21359            | 20463            | 20486            | 20562            | 20591            | 21377            | 22153            | 22239            | 22292            | 22297            | 22318            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 1.51             | 1.52             | 1.53             | 1.53             | 1.54             | 1.52             | 1.52             | 1.53             | 1.53             | 1.54             | 1.53             | 1.53             | 1.53             | 1.53             | 1.54             | 1.55             | 1.55             | 1.55             | 1.55             | 1.54             |
|                | 95°F<br>35°C          | TC          | 19596            | 19702            | 20338            | 20459            | 21267            | 20826            | 20838            | 20845            | 20870            | 21294            | 21720            | 21724            | 21738            | 21740            | 21776            | 23404            | 23395            | 23400            | 23407            | 23438            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0                |                  |                  |

Table 19 – 24K Cooling — **37MURA + 45MULA (24A)**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
| 529            | -13°F<br>25°C         | TC          | 16758            | 16753            | 16748            | 16845            | 17341            | 17496            | 17487            | 17479            | 17478            | 17465            | 18019            | 18009            | 17997            | 17995            | 17983            | 19007            | 19002            | 18988            | 18984            | 18955            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.36             | 1.36             | 1.36             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             |
|                | -4°F<br>20°C          | TC          | 18048            | 18041            | 18036            | 18141            | 18675            | 18842            | 18832            | 18823            | 18822            | 18809            | 19405            | 19395            | 19382            | 19379            | 19366            | 20469            | 20464            | 20449            | 20444            | 20413            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             |
|                | 0°F<br>17.8°C         | TC          | 18643            | 18635            | 18707            | 18850            | 19372            | 19456            | 19441            | 19430            | 19428            | 19425            | 20027            | 20015            | 19997            | 19994            | 19976            | 21106            | 21100            | 21101            | 21103            | 21119            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             |
|                | 5°F<br>15°C           | TC          | 19192            | 19209            | 19468            | 19557            | 20155            | 20104            | 20108            | 20111            | 20111            | 20210            | 20762            | 20760            | 20766            | 20767            | 20769            | 22003            | 21996            | 21996            | 21998            | 22010            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.47             | 1.47             | 1.47             | 1.47             | 1.47             |
|                | 14°F<br>10°C          | TC          | 19321            | 19313            | 19393            | 19563            | 20170            | 20290            | 20279            | 20269            | 20267            | 20257            | 20992            | 20982            | 20966            | 20963            | 20945            | 22312            | 22305            | 22289            | 22284            | 22249            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             |
|                | 17°F<br>10°C          | TC          | 19388            | 19393            | 19630            | 19743            | 20379            | 20361            | 20363            | 20367            | 20368            | 20464            | 21010            | 21018            | 21032            | 21033            | 21038            | 22408            | 22401            | 22403            | 22408            | 22428            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             |
|                | 23°F<br>5°C           | TC          | 19273            | 19299            | 19613            | 19710            | 20354            | 20262            | 20267            | 20270            | 20270            | 20390            | 20976            | 20975            | 20982            | 20983            | 20986            | 22328            | 22322            | 22323            | 22325            | 22341            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.46             | 1.46             | 1.46             | 1.46             | 1.47             |
|                | 35°F<br>1.7°C         | TC          | 19309            | 19309            | 19347            | 19368            | 19866            | 20235            | 20233            | 20233            | 20234            | 20234            | 20886            | 20884            | 20882            | 20882            | 20884            | 22095            | 22090            | 22085            | 22088            | 22084            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.46             | 1.46             | 1.47             | 1.47             | 1.51             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             |
|                | 41°F<br>5°C           | TC          | 17810            | 17810            | 17859            | 17883            | 18391            | 18660            | 18658            | 18658            | 18659            | 18675            | 19257            | 19255            | 19253            | 19254            | 19256            | 20366            | 20361            | 20356            | 20359            | 20356            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.18             | 1.18             | 1.18             | 1.18             | 1.22             | 1.25             | 1.25             | 1.25             | 1.25             | 1.25             | 1.31             | 1.31             | 1.30             | 1.30             | 1.31             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             |
|                | 47°F<br>8.3°C         | TC          | 16308            | 16308            | 16371            | 16399            | 16904            | 17084            | 17081            | 17082            | 17082            | 17108            | 17628            | 17626            | 17625            | 17625            | 17626            | 18639            | 18635            | 18633            | 18633            | 18630            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.89             | 0.89             | 0.90             | 0.90             | 0.94             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             |
|                | 50°F<br>10°C          | TC          | 15944            | 16205            | 16746            | 16842            | 17487            | 16881            | 16891            | 16946            | 16968            | 17508            | 17546            | 17569            | 17579            | 17580            | 17659            | 18810            | 18819            | 18865            | 18870            | 18895            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 59°F<br>15°C          | TC          | 15760            | 16139            | 16707            | 16808            | 17484            | 16722            | 16729            | 16812            | 16844            | 17504            | 17416            | 17434            | 17442            | 17442            | 17558            | 18746            | 18751            | 18788            | 18792            | 18810            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.02             | 1.02             | 1.02             | 1.02             | 1.03             | 1.02             | 1.02             | 1.02             | 1.02             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             |
|                | 68°F<br>20°C          | TC          | 15590            | 16093            | 16685            | 16790            | 17496            | 16564            | 16570            | 16699            | 16808            | 17516            | 17285            | 17300            | 17304            | 17305            | 17502            | 18664            | 18671            | 18701            | 18704            | 18717            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.03             | 1.04             | 1.04             | 1.04             | 1.05             | 1.04             | 1.04             | 1.04             | 1.04             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 77°F<br>25°C          | TC          | 15391            | 15980            | 16600            | 16710            | 17449            | 16391            | 16399            | 16587            | 16730            | 17469            | 17140            | 17159            | 17167            | 17187            | 17485            | 18563            | 18580            | 18621            | 18626            | 18646            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.06             | 1.06             | 1.07             | 1.07             | 1.08             | 1.07             | 1.07             | 1.07             | 1.07             | 1.08             | 1.07             | 1.07             | 1.07             | 1.07             | 1.08             | 1.09             | 1.09             | 1.08             | 1.08             | 1.08             |
|                | 82°F<br>27.8°C        | TC          | 15803            | 16473            | 17129            | 17246            | 18030            | 16846            | 16873            | 17150            | 17267            | 18050            | 17634            | 17657            | 17666            | 17694            | 18067            | 19127            | 19151            | 19199            | 19205            | 19227            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.22             | 1.22             | 1.23             | 1.23             | 1.24             | 1.23             | 1.23             | 1.23             | 1.23             | 1.24             | 1.23             | 1.23             | 1.23             | 1.23             | 1.24             | 1.25             | 1.25             | 1.25             | 1.25             | 1.24             |
|                | 86°F<br>30°C          | TC          | 16778            | 17555            | 18267            | 18393            | 19251            | 17886            | 17923            | 18289            | 18415            | 19266            | 18739            | 18761            | 18791            | 18808            | 19284            | 20350            | 20379            | 20427            | 20432            | 20453            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.52             | 1.53             | 1.54             | 1.54             | 1.55             | 1.54             | 1.54             | 1.54             | 1.54             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.57             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 95°F<br>35°C          | TC          | 19199            | 19233            | 19646            | 19761            | 20536            | 20427            | 20432            | 20439            | 20440            | 20578            | 21309            | 21311            | 21322            | 21323            | 21333            | 23003            | 22995            | 22997            | 22996            | 23013            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 19 – 24K Cooling — **37MURA + 45MULA (24A)** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 706            | -13°F<br>25°C         | TC          | 21750            | 21740            | 22050            | 22141            | 22750            | 22692            | 22674            | 22659            | 22657            | 22639            | 23371            | 23342            | 23319            | 23316            | 23294            | 24652            | 24645            | 24594            | 24585            | 24533            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.74             | 1.74             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.72             | 1.72             | 1.72             | 1.72             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.74             |
|                | -4°F<br>20°C          | TC          | 23423            | 23412            | 23746            | 23844            | 24500            | 24438            | 24418            | 24402            | 24400            | 24380            | 25169            | 25137            | 25113            | 25110            | 25086            | 26548            | 26541            | 26486            | 26476            | 26420            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.80             | 1.80             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             |
|                | 0°F<br>17.8°C         | TC          | 24200            | 24186            | 24634            | 24737            | 25417            | 25238            | 25210            | 25190            | 25187            | 25441            | 25980            | 25943            | 25910            | 25907            | 25894            | 27377            | 27370            | 27368            | 27372            | 27390            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             |
|                | 5°F<br>15°C           | TC          | 24894            | 24979            | 25550            | 25668            | 26459            | 26061            | 26068            | 26070            | 26096            | 26485            | 26895            | 26901            | 26907            | 26908            | 26944            | 28472            | 28463            | 28478            | 28481            | 28494            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.83             | 1.83             | 1.83             | 1.83             | 1.84             | 1.83             | 1.84             | 1.84             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 14°F<br>10°C          | TC          | 25080            | 25068            | 25579            | 25699            | 26496            | 26325            | 26302            | 26284            | 26281            | 26527            | 27227            | 27193            | 27165            | 27161            | 27134            | 28951            | 28942            | 28887            | 28877            | 28815            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.77             | 1.77             | 1.77             | 1.77             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             |
|                | 17°F<br>10°C          | TC          | 25083            | 25165            | 25747            | 25872            | 26713            | 26332            | 26343            | 26348            | 26370            | 26741            | 27231            | 27241            | 27252            | 27253            | 27287            | 28960            | 28952            | 28948            | 28953            | 28978            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             |
|                | 23°F<br>5°C           | TC          | 24999            | 25106            | 25756            | 25883            | 26736            | 26265            | 26272            | 26275            | 26310            | 26765            | 27170            | 27180            | 27187            | 27188            | 27231            | 28890            | 28881            | 28902            | 28906            | 28923            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.82             | 1.82             | 1.83             | 1.83             | 1.84             | 1.83             | 1.83             | 1.83             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             |
|                | 35°F<br>1.7°C         | TC          | 25065            | 25066            | 25213            | 25283            | 26099            | 26236            | 26235            | 26238            | 26238            | 26308            | 27058            | 27056            | 27057            | 27058            | 27061            | 28581            | 28574            | 28573            | 28572            | 28574            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.87             | 1.87             | 1.89             | 1.89             | 1.97             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.25             | 2.25             | 2.25             | 2.25             | 2.25             |
|                | 41°F<br>5°C           | TC          | 23117            | 23118            | 23302            | 23464            | 24157            | 24192            | 24192            | 24193            | 24193            | 24278            | 24947            | 24945            | 24947            | 24947            | 24949            | 26347            | 26340            | 26339            | 26337            | 26340            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.51             | 1.51             | 1.52             | 1.54             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.61             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             |
|                | 47°F<br>8.3°C         | TC          | 21168            | 21182            | 21466            | 21562            | 22200            | 22149            | 22148            | 22149            | 22149            | 22251            | 22837            | 22835            | 22837            | 22836            | 22836            | 24115            | 24109            | 24107            | 24106            | 24109            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 1.14             | 1.14             | 1.17             | 1.17             | 1.22             | 1.22             | 1.22             | 1.22             | 1.22             | 1.23             | 1.28             | 1.27             | 1.27             | 1.28             | 1.28             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 50°F<br>10°C          | TC          | 20713            | 21283            | 22001            | 22129            | 22987            | 21882            | 21894            | 22045            | 22115            | 23008            | 22736            | 22765            | 22777            | 22779            | 22998            | 24303            | 24367            | 24430            | 24437            | 24468            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             |
|                | 59°F<br>15°C          | TC          | 20486            | 21204            | 21957            | 22090            | 22989            | 21675            | 21704            | 21951            | 22114            | 23012            | 22569            | 22592            | 22599            | 22632            | 23031            | 24234            | 24283            | 24331            | 24337            | 24357            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.33             | 1.32             | 1.32             | 1.32             | 1.32             |
|                | 68°F<br>20°C          | TC          | 20250            | 21114            | 21897            | 22037            | 22972            | 21438            | 21486            | 21921            | 22060            | 22995            | 22365            | 22382            | 22422            | 22441            | 23013            | 24098            | 24143            | 24181            | 24184            | 24197            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 1.33             | 1.33             | 1.34             | 1.34             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.37             | 1.37             | 1.36             | 1.36             | 1.36             |
|                | 77°F<br>25°C          | TC          | 20000            | 20963            | 21783            | 21928            | 22908            | 21202            | 21269            | 21807            | 21952            | 22931            | 22162            | 22187            | 22244            | 22269            | 22950            | 23936            | 24009            | 24064            | 24070            | 24093            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 1.36             | 1.37             | 1.37             | 1.38             | 1.38             | 1.37             | 1.37             | 1.37             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 82°F<br>27.8°C        | TC          | 20551            | 21600            | 22471            | 22624            | 23660            | 21778            | 21862            | 22491            | 22649            | 23684            | 22791            | 22819            | 22890            | 22919            | 23705            | 24641            | 24734            | 24799            | 24805            | 24832            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 1.56             | 1.57             | 1.58             | 1.58             | 1.59             | 1.57             | 1.57             | 1.58             | 1.58             | 1.59             | 1.58             | 1.58             | 1.58             | 1.58             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             |
|                | 86°F<br>30°C          | TC          | 21937            | 23032            | 23974            | 24142            | 25266            | 23135            | 23241            | 24001            | 24169            | 25292            | 24231            | 24259            | 24348            | 24383            | 25314            | 26233            | 26334            | 26397            | 26403            | 26428            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 1.96             | 1.97             | 1.98             | 1.98             | 1.99             | 1.97             | 1.97             | 1.98             | 1.98             | 1.99             | 1.98             | 1.98             | 1.98             | 1.98             | 1.99             | 2.01             | 2.01             | 2.01             | 2.00             | 2.00             |
|                | 95°F<br>35°C          | TC          | 24905            | 25039            | 25848            | 26001            | 27029            | 26468            | 26484            | 26492            | 26523            | 27063            | 27604            | 27610            | 27627            | 27629            | 27675            | 29745            | 29733            | 29740            | 297              |                  |

Table 20 – 24K Cooling — **37MURA + 45MULA (24B)**

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 529            | -13°F<br>25°C         | TC          | 16758            | 16753            | 16748            | 16845            | 17341            | 17496            | 17487            | 17479            | 17478            | 17465            | 18019            | 18009            | 17997            | 17995            | 17983            | 19007            | 19002            | 18988            | 18984            | 18955            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.36             | 1.36             | 1.36             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             |
|                | -4°F<br>20°C          | TC          | 18048            | 18041            | 18036            | 18141            | 18675            | 18842            | 18832            | 18823            | 18822            | 18809            | 19405            | 19395            | 19382            | 19379            | 19366            | 20469            | 20464            | 20449            | 20444            | 20413            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             |
|                | 0°F<br>17.8°C         | TC          | 18643            | 18635            | 18707            | 18850            | 19372            | 19456            | 19441            | 19430            | 19428            | 19425            | 20027            | 20015            | 19997            | 19994            | 19976            | 21106            | 21100            | 21101            | 21103            | 21119            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             |
|                | 5°F<br>15°C           | TC          | 19192            | 19209            | 19468            | 19557            | 20155            | 20104            | 20108            | 20111            | 20111            | 20210            | 20762            | 20760            | 20766            | 20767            | 20769            | 22003            | 21996            | 21996            | 21998            | 22010            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.47             | 1.47             | 1.47             | 1.47             | 1.47             |
|                | 14°F<br>10°C          | TC          | 19321            | 19313            | 19393            | 19563            | 20170            | 20290            | 20279            | 20269            | 20267            | 20257            | 20992            | 20982            | 20966            | 20963            | 20945            | 22312            | 22305            | 22289            | 22284            | 22249            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             |
|                | 17°F<br>10°C          | TC          | 19388            | 19393            | 19630            | 19743            | 20379            | 20361            | 20363            | 20367            | 20368            | 20464            | 21010            | 21018            | 21032            | 21033            | 21038            | 22408            | 22401            | 22403            | 22408            | 22428            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             |
|                | 23°F<br>5°C           | TC          | 19273            | 19299            | 19613            | 19710            | 20354            | 20262            | 20267            | 20270            | 20270            | 20390            | 20976            | 20975            | 20982            | 20983            | 20986            | 22328            | 22322            | 22323            | 22325            | 22341            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.46             | 1.46             | 1.46             | 1.46             | 1.47             |
|                | 35°F<br>1.7°C         | TC          | 19309            | 19309            | 19347            | 19368            | 19866            | 20235            | 20233            | 20233            | 20234            | 20234            | 20886            | 20884            | 20882            | 20882            | 20884            | 22095            | 22090            | 22085            | 22088            | 22084            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.46             | 1.46             | 1.47             | 1.47             | 1.51             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             |
|                | 41°F<br>5°C           | TC          | 17810            | 17810            | 17859            | 17883            | 18391            | 18660            | 18658            | 18658            | 18659            | 18675            | 19257            | 19255            | 19253            | 19254            | 19256            | 20366            | 20361            | 20356            | 20359            | 20356            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.18             | 1.18             | 1.18             | 1.18             | 1.22             | 1.25             | 1.25             | 1.25             | 1.25             | 1.25             | 1.31             | 1.31             | 1.30             | 1.30             | 1.31             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             |
|                | 47°F<br>8.3°C         | TC          | 16308            | 16308            | 16371            | 16399            | 16904            | 17084            | 17081            | 17082            | 17082            | 17108            | 17628            | 17626            | 17625            | 17625            | 17626            | 18639            | 18635            | 18633            | 18633            | 18630            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.89             | 0.89             | 0.90             | 0.90             | 0.94             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             |
|                | 50°F<br>10°C          | TC          | 15944            | 16205            | 16746            | 16842            | 17487            | 16881            | 16891            | 16946            | 16968            | 17508            | 17546            | 17569            | 17579            | 17580            | 17659            | 18810            | 18819            | 18865            | 18870            | 18895            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 59°F<br>15°C          | TC          | 15760            | 16139            | 16707            | 16808            | 17484            | 16722            | 16729            | 16812            | 16844            | 17504            | 17416            | 17434            | 17442            | 17442            | 17558            | 18746            | 18751            | 18788            | 18792            | 18810            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.02             | 1.02             | 1.02             | 1.02             | 1.03             | 1.02             | 1.02             | 1.02             | 1.02             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             |
|                | 68°F<br>20°C          | TC          | 15590            | 16093            | 16685            | 16790            | 17496            | 16564            | 16570            | 16699            | 16808            | 17516            | 17285            | 17300            | 17304            | 17305            | 17502            | 18664            | 18671            | 18701            | 18704            | 18717            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.03             | 1.04             | 1.04             | 1.04             | 1.05             | 1.04             | 1.04             | 1.04             | 1.04             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 77°F<br>25°C          | TC          | 15391            | 15980            | 16600            | 16710            | 17449            | 16391            | 16399            | 16587            | 16730            | 17469            | 17140            | 17159            | 17167            | 17187            | 17485            | 18563            | 18580            | 18621            | 18626            | 18646            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.06             | 1.06             | 1.07             | 1.07             | 1.08             | 1.07             | 1.07             | 1.07             | 1.07             | 1.08             | 1.07             | 1.07             | 1.07             | 1.07             | 1.08             | 1.09             | 1.09             | 1.08             | 1.08             | 1.08             |
|                | 82°F<br>27.8°C        | TC          | 15803            | 16473            | 17129            | 17246            | 18030            | 16846            | 16873            | 17150            | 17267            | 18050            | 17634            | 17657            | 17666            | 17694            | 18067            | 19127            | 19151            | 19199            | 19205            | 19227            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.22             | 1.22             | 1.23             | 1.23             | 1.24             | 1.23             | 1.23             | 1.23             | 1.23             | 1.24             | 1.23             | 1.23             | 1.23             | 1.23             | 1.24             | 1.25             | 1.25             | 1.25             | 1.25             | 1.24             |
|                | 86°F<br>30°C          | TC          | 16778            | 17555            | 18267            | 18393            | 19251            | 17886            | 17923            | 18289            | 18415            | 19266            | 18739            | 18761            | 18791            | 18808            | 19284            | 20350            | 20379            | 20427            | 20432            | 20453            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.52             | 1.53             | 1.54             | 1.54             | 1.55             | 1.54             | 1.54             | 1.54             | 1.54             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.57             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 95°F<br>35°C          | TC          | 19199            | 19233            | 19646            | 19761            | 20536            | 20427            | 20432            | 20439            | 20440            | 20578            | 21309            | 21311            | 21322            | 21323            | 21333            | 23003            | 22995            | 22997            | 22996            | 23013            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.6              |                  |                  |                  |                  |                  |                  |                  |                  |

Table 20 – 24K Cooling — **37MURA + 45MULA (24B)** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 706            | -13°F<br>25°C         | TC          | 21750            | 21740            | 22050            | 22141            | 22750            | 22692            | 22674            | 22659            | 22657            | 22639            | 23371            | 23342            | 23319            | 23316            | 23294            | 24652            | 24645            | 24594            | 24585            | 24533            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.74             | 1.74             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.72             | 1.72             | 1.72             | 1.72             | 1.73             | 1.73             | 1.73             | 1.73             | 1.74             |                  |
|                | -4°F<br>20°C          | TC          | 23423            | 23412            | 23746            | 23844            | 24500            | 24438            | 24418            | 24402            | 24400            | 24380            | 25169            | 25137            | 25113            | 25110            | 25086            | 26548            | 26541            | 26486            | 26476            | 26420            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.80             | 1.80             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             |
|                | 0°F<br>17.8°C         | TC          | 24200            | 24186            | 24634            | 24737            | 25417            | 25238            | 25210            | 25190            | 25187            | 25441            | 25980            | 25943            | 25910            | 25907            | 25894            | 27377            | 27370            | 27368            | 27372            | 27390            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             |
|                | 5°F<br>15°C           | TC          | 24894            | 24979            | 25550            | 25668            | 26459            | 26061            | 26068            | 26070            | 26096            | 26485            | 26895            | 26901            | 26907            | 26908            | 26944            | 28472            | 28463            | 28478            | 28481            | 28494            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.83             | 1.83             | 1.83             | 1.83             | 1.84             | 1.83             | 1.84             | 1.84             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 14°F<br>10°C          | TC          | 25080            | 25068            | 25579            | 25699            | 26496            | 26325            | 26302            | 26284            | 26281            | 26527            | 27227            | 27193            | 27165            | 27161            | 27134            | 28951            | 28942            | 28887            | 28877            | 28815            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.77             | 1.77             | 1.77             | 1.77             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             |
|                | 17°F<br>10°C          | TC          | 25083            | 25165            | 25747            | 25872            | 26713            | 26332            | 26343            | 26348            | 26370            | 26741            | 27231            | 27241            | 27252            | 27253            | 27287            | 28960            | 28952            | 28948            | 28953            | 28978            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             |
|                | 23°F<br>5°C           | TC          | 24999            | 25106            | 25756            | 25883            | 26736            | 26265            | 26272            | 26275            | 26310            | 26765            | 27170            | 27180            | 27187            | 27188            | 27231            | 28890            | 28881            | 28902            | 28906            | 28923            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.82             | 1.82             | 1.83             | 1.83             | 1.84             | 1.83             | 1.83             | 1.83             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             |
|                | 35°F<br>1.7°C         | TC          | 25065            | 25066            | 25213            | 25283            | 26099            | 26236            | 26235            | 26238            | 26238            | 26308            | 27058            | 27056            | 27057            | 27058            | 27061            | 28581            | 28574            | 28573            | 28572            | 28574            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.87             | 1.87             | 1.89             | 1.89             | 1.97             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.25             | 2.25             | 2.25             | 2.25             | 2.25             |
|                | 41°F<br>5°C           | TC          | 23117            | 23118            | 23302            | 23464            | 24157            | 24192            | 24192            | 24193            | 24193            | 24278            | 24947            | 24945            | 24947            | 24947            | 24949            | 26347            | 26340            | 26339            | 26337            | 26340            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.51             | 1.51             | 1.52             | 1.54             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.61             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             |
|                | 47°F<br>8.3°C         | TC          | 21168            | 21182            | 21466            | 21562            | 22200            | 22149            | 22148            | 22149            | 22149            | 22251            | 22837            | 22835            | 22837            | 22836            | 22836            | 24115            | 24109            | 24107            | 24106            | 24109            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 1.14             | 1.14             | 1.17             | 1.17             | 1.22             | 1.22             | 1.22             | 1.22             | 1.22             | 1.23             | 1.28             | 1.27             | 1.27             | 1.28             | 1.28             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 50°F<br>10°C          | TC          | 20713            | 21283            | 22001            | 22129            | 22987            | 21882            | 21894            | 22045            | 22115            | 23008            | 22736            | 22765            | 22777            | 22779            | 22998            | 24303            | 24367            | 24430            | 24437            | 24468            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             |
|                | 59°F<br>15°C          | TC          | 20486            | 21204            | 21957            | 22090            | 22989            | 21675            | 21704            | 21951            | 22114            | 23012            | 22569            | 22592            | 22599            | 22632            | 23031            | 24234            | 24283            | 24331            | 24337            | 24357            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.33             | 1.32             | 1.32             | 1.32             | 1.32             |
|                | 68°F<br>20°C          | TC          | 20250            | 21114            | 21897            | 22037            | 22972            | 21438            | 21486            | 21921            | 22060            | 22995            | 22365            | 22382            | 22422            | 22441            | 23013            | 24098            | 24143            | 24181            | 24184            | 24197            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 1.33             | 1.33             | 1.34             | 1.34             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.37             | 1.37             | 1.36             | 1.36             | 1.36             |
|                | 77°F<br>25°C          | TC          | 20000            | 20963            | 21783            | 21928            | 22908            | 21202            | 21269            | 21807            | 21952            | 22931            | 22162            | 22187            | 22244            | 22269            | 22950            | 23936            | 24009            | 24064            | 24070            | 24093            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 1.36             | 1.37             | 1.37             | 1.38             | 1.38             | 1.37             | 1.37             | 1.37             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 82°F<br>27.8°C        | TC          | 20551            | 21600            | 22471            | 22624            | 23660            | 21778            | 21862            | 22491            | 22649            | 23684            | 22791            | 22819            | 22890            | 22919            | 23705            | 24641            | 24734            | 24799            | 24805            | 24832            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 1.56             | 1.57             | 1.58             | 1.58             | 1.59             | 1.57             | 1.57             | 1.58             | 1.58             | 1.59             | 1.58             | 1.58             | 1.58             | 1.58             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             |
|                | 86°F<br>30°C          | TC          | 21937            | 23032            | 23974            | 24142            | 25266            | 23135            | 23241            | 24001            | 24169            | 25292            | 24231            | 24259            | 24348            | 24383            | 25314            | 26233            | 26334            | 26397            | 26403            | 26428            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 1.96             | 1.97             | 1.98             | 1.98             | 1.99             | 1.97             | 1.97             | 1.98             | 1.98             | 1.99             | 1.98             | 1.98             | 1.98             | 1.98             | 1.99             | 2.01             | 2.01             | 2.01             | 2.00             | 2.00             |
|                | 95°F<br>35°C          | TC          | 24905            | 25039            | 25848            | 26001            | 27029            | 26468            | 26484            | 26492            | 26523            | 27063            | 27604            | 27610            | 27627            | 27629            | 27675            | 29745            | 29733            | 29740            | 29748            | 29788            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             |                  |                  |                  |                  |                  |                  |                  |

Table 21 – 30K Cooling — 37MURA + 45MULA (36A)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 507            | -13°F<br>25°C         | TC          | 16758            | 16753            | 16748            | 16845            | 17341            | 17496            | 17487            | 17479            | 17478            | 17465            | 18019            | 18009            | 17997            | 17995            | 17983            | 19007            | 19002            | 18988            | 18984            | 18955            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.36             | 1.36             | 1.36             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             |
|                | -4°F<br>20°C          | TC          | 18048            | 18041            | 18036            | 18141            | 18675            | 18842            | 18832            | 18823            | 18822            | 18809            | 19405            | 19395            | 19382            | 19379            | 19366            | 20469            | 20464            | 20449            | 20444            | 20413            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             |
|                | 0°F<br>17.8°C         | TC          | 18643            | 18635            | 18707            | 18850            | 19372            | 19456            | 19441            | 19430            | 19428            | 19425            | 20027            | 20015            | 19997            | 19994            | 19976            | 21106            | 21100            | 21101            | 21103            | 21119            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             |
|                | 5°F<br>15°C           | TC          | 19192            | 19209            | 19468            | 19557            | 20155            | 20104            | 20108            | 20111            | 20111            | 20210            | 20762            | 20760            | 20766            | 20767            | 20769            | 22003            | 21996            | 21996            | 21998            | 22010            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.47             | 1.47             | 1.47             | 1.47             | 1.47             |
|                | 14°F<br>10°C          | TC          | 19321            | 19313            | 19393            | 19563            | 20170            | 20290            | 20279            | 20269            | 20267            | 20257            | 20992            | 20982            | 20966            | 20963            | 20945            | 22312            | 22305            | 22289            | 22284            | 22249            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             |
|                | 17°F<br>10°C          | TC          | 19388            | 19393            | 19630            | 19743            | 20379            | 20361            | 20363            | 20367            | 20368            | 20464            | 21010            | 21018            | 21032            | 21033            | 21038            | 22408            | 22401            | 22403            | 22408            | 22428            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             |
|                | 23°F<br>5°C           | TC          | 19273            | 19299            | 19613            | 19710            | 20354            | 20262            | 20267            | 20270            | 20270            | 20390            | 20976            | 20975            | 20982            | 20983            | 20986            | 22328            | 22322            | 22323            | 22325            | 22341            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.46             | 1.46             | 1.46             | 1.46             | 1.47             |
|                | 35°F<br>1.7°C         | TC          | 19309            | 19309            | 19347            | 19368            | 19866            | 20235            | 20233            | 20233            | 20234            | 20234            | 20886            | 20884            | 20882            | 20882            | 20884            | 22095            | 22090            | 22085            | 22088            | 22084            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.46             | 1.46             | 1.47             | 1.47             | 1.51             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             |
|                | 41°F<br>5°C           | TC          | 17810            | 17810            | 17859            | 17883            | 18391            | 18660            | 18658            | 18658            | 18659            | 18675            | 19257            | 19255            | 19253            | 19254            | 19256            | 20366            | 20361            | 20356            | 20359            | 20356            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.18             | 1.18             | 1.18             | 1.18             | 1.22             | 1.25             | 1.25             | 1.25             | 1.25             | 1.25             | 1.31             | 1.31             | 1.30             | 1.30             | 1.31             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             |
|                | 47°F<br>8.3°C         | TC          | 16308            | 16308            | 16371            | 16399            | 16904            | 17084            | 17081            | 17082            | 17082            | 17108            | 17628            | 17626            | 17625            | 17625            | 17626            | 18639            | 18635            | 18633            | 18633            | 18630            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 0.89             | 0.89             | 0.90             | 0.90             | 0.94             | 0.95             | 0.95             | 0.95             | 0.95             | 0.95             | 0.99             | 0.99             | 0.99             | 0.99             | 0.99             | 1.08             | 1.08             | 1.08             | 1.08             | 1.08             |
|                | 50°F<br>10°C          | TC          | 15944            | 16205            | 16746            | 16842            | 17487            | 16881            | 16891            | 16946            | 16968            | 17508            | 17546            | 17569            | 17579            | 17580            | 17659            | 18810            | 18819            | 18865            | 18870            | 18895            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             |
|                | 59°F<br>15°C          | TC          | 15760            | 16139            | 16707            | 16808            | 17484            | 16722            | 16729            | 16812            | 16844            | 17504            | 17416            | 17434            | 17442            | 17442            | 17558            | 18746            | 18751            | 18788            | 18792            | 18810            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.02             | 1.02             | 1.02             | 1.02             | 1.03             | 1.02             | 1.02             | 1.02             | 1.02             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             | 1.03             |
|                | 68°F<br>20°C          | TC          | 15590            | 16093            | 16685            | 16790            | 17496            | 16564            | 16570            | 16699            | 16808            | 17516            | 17285            | 17300            | 17304            | 17305            | 17502            | 18664            | 18671            | 18701            | 18704            | 18717            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.03             | 1.04             | 1.04             | 1.04             | 1.05             | 1.04             | 1.04             | 1.04             | 1.04             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.05             | 1.06             | 1.06             | 1.06             | 1.06             | 1.06             |
|                | 77°F<br>25°C          | TC          | 15391            | 15980            | 16600            | 16710            | 17449            | 16391            | 16399            | 16587            | 16730            | 17469            | 17140            | 17159            | 17167            | 17187            | 17485            | 18563            | 18580            | 18621            | 18626            | 18646            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.06             | 1.06             | 1.07             | 1.07             | 1.08             | 1.07             | 1.07             | 1.07             | 1.07             | 1.08             | 1.07             | 1.07             | 1.07             | 1.07             | 1.08             | 1.09             | 1.09             | 1.08             | 1.08             | 1.08             |
|                | 82°F<br>27.8°C        | TC          | 15803            | 16473            | 17129            | 17246            | 18030            | 16846            | 16873            | 17150            | 17267            | 18050            | 17634            | 17657            | 17666            | 17694            | 18067            | 19127            | 19151            | 19199            | 19205            | 19227            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.22             | 1.22             | 1.23             | 1.23             | 1.24             | 1.23             | 1.23             | 1.23             | 1.23             | 1.24             | 1.23             | 1.23             | 1.23             | 1.23             | 1.24             | 1.25             | 1.25             | 1.25             | 1.25             | 1.24             |
|                | 86°F<br>30°C          | TC          | 16778            | 17555            | 18267            | 18393            | 19251            | 17886            | 17923            | 18289            | 18415            | 19266            | 18739            | 18761            | 18791            | 18808            | 19284            | 20350            | 20379            | 20427            | 20432            | 20453            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.52             | 1.53             | 1.54             | 1.54             | 1.55             | 1.54             | 1.54             | 1.54             | 1.54             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             | 1.57             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 95°F<br>35°C          | TC          | 19199            | 19233            | 19646            | 19761            | 20536            | 20427            | 20432            | 20439            | 20440            | 20578            | 21309            | 21311            | 21322            | 21323            | 21333            | 23003            | 22995            | 22997            | 22996            | 23013            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 21 – 30K Cooling — **37MURA + 45MULA (36A)** (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 676            | -13°F<br>25°C         | TC          | 21750            | 21740            | 22050            | 22141            | 22750            | 22692            | 22674            | 22659            | 22657            | 22639            | 23371            | 23342            | 23319            | 23316            | 23294            | 24652            | 24645            | 24594            | 24585            | 24533            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.74             | 1.74             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.72             | 1.72             | 1.72             | 1.72             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.74             |
|                | -4°F<br>20°C          | TC          | 23423            | 23412            | 23746            | 23844            | 24500            | 24438            | 24418            | 24402            | 24400            | 24380            | 25169            | 25137            | 25113            | 25110            | 25086            | 26548            | 26541            | 26486            | 26476            | 26420            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.80             | 1.80             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             |
|                | 0°F<br>17.8°C         | TC          | 24200            | 24186            | 24634            | 24737            | 25417            | 25238            | 25210            | 25190            | 25187            | 25441            | 25980            | 25943            | 25910            | 25907            | 25894            | 27377            | 27370            | 27368            | 27372            | 27390            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             |
|                | 5°F<br>15°C           | TC          | 24894            | 24979            | 25550            | 25668            | 26459            | 26061            | 26068            | 26070            | 26096            | 26485            | 26895            | 26901            | 26907            | 26908            | 26944            | 28472            | 28463            | 28478            | 28481            | 28494            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.83             | 1.83             | 1.83             | 1.83             | 1.84             | 1.83             | 1.84             | 1.84             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 14°F<br>10°C          | TC          | 25080            | 25068            | 25579            | 25699            | 26496            | 26325            | 26302            | 26284            | 26281            | 26527            | 27227            | 27193            | 27165            | 27161            | 27134            | 28951            | 28942            | 28887            | 28877            | 28815            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.77             | 1.77             | 1.77             | 1.77             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             |
|                | 17°F<br>10°C          | TC          | 25083            | 25165            | 25747            | 25872            | 26713            | 26332            | 26343            | 26348            | 26370            | 26741            | 27231            | 27241            | 27252            | 27253            | 27287            | 28960            | 28952            | 28948            | 28953            | 28978            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             |
|                | 23°F<br>5°C           | TC          | 24999            | 25106            | 25756            | 25883            | 26736            | 26265            | 26272            | 26275            | 26310            | 26765            | 27170            | 27180            | 27187            | 27188            | 27231            | 28890            | 28881            | 28902            | 28906            | 28923            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.82             | 1.82             | 1.83             | 1.83             | 1.84             | 1.83             | 1.83             | 1.83             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             |
|                | 35°F<br>1.7°C         | TC          | 25065            | 25066            | 25213            | 25283            | 26099            | 26236            | 26235            | 26238            | 26238            | 26308            | 27058            | 27056            | 27057            | 27058            | 27061            | 28581            | 28574            | 28573            | 28572            | 28574            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.87             | 1.87             | 1.89             | 1.89             | 1.97             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.25             | 2.25             | 2.25             | 2.25             | 2.25             |
|                | 41°F<br>5°C           | TC          | 23117            | 23118            | 23302            | 23464            | 24157            | 24192            | 24192            | 24193            | 24193            | 24278            | 24947            | 24945            | 24947            | 24947            | 24949            | 26347            | 26340            | 26339            | 26337            | 26340            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.51             | 1.51             | 1.52             | 1.54             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.61             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             |
|                | 47°F<br>8.3°C         | TC          | 21168            | 21182            | 21466            | 21562            | 22200            | 22149            | 22148            | 22149            | 22149            | 22251            | 22837            | 22835            | 22837            | 22836            | 22836            | 24115            | 24109            | 24107            | 24106            | 24109            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 1.14             | 1.14             | 1.17             | 1.17             | 1.22             | 1.22             | 1.22             | 1.22             | 1.22             | 1.23             | 1.28             | 1.27             | 1.27             | 1.28             | 1.28             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 50°F<br>10°C          | TC          | 20713            | 21283            | 22001            | 22129            | 22987            | 21882            | 21894            | 22045            | 22115            | 23008            | 22736            | 22765            | 22777            | 22779            | 22998            | 24303            | 24367            | 24430            | 24437            | 24468            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.29             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             |
|                | 59°F<br>15°C          | TC          | 20486            | 21204            | 21957            | 22090            | 22989            | 21675            | 21704            | 21951            | 22114            | 23012            | 22569            | 22592            | 22599            | 22632            | 23031            | 24234            | 24283            | 24331            | 24337            | 24357            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.31             | 1.31             | 1.31             | 1.31             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.33             | 1.32             | 1.32             | 1.32             | 1.32             |
|                | 68°F<br>20°C          | TC          | 20250            | 21114            | 21897            | 22037            | 22972            | 21438            | 21486            | 21921            | 22060            | 22995            | 22365            | 22382            | 22422            | 22441            | 23013            | 24098            | 24143            | 24181            | 24184            | 24197            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 1.33             | 1.33             | 1.34             | 1.34             | 1.35             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             | 1.37             | 1.37             | 1.36             | 1.36             | 1.36             |
|                | 77°F<br>25°C          | TC          | 20000            | 20963            | 21783            | 21928            | 22908            | 21202            | 21269            | 21807            | 21952            | 22931            | 22162            | 22187            | 22244            | 22269            | 22950            | 23936            | 24009            | 24064            | 24070            | 24093            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 1.36             | 1.37             | 1.37             | 1.38             | 1.38             | 1.37             | 1.37             | 1.37             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.38             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 82°F<br>27.8°C        | TC          | 20551            | 21600            | 22471            | 22624            | 23660            | 21778            | 21862            | 22491            | 22649            | 23684            | 22791            | 22819            | 22890            | 22919            | 23705            | 24641            | 24734            | 24799            | 24805            | 24832            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 1.56             | 1.57             | 1.58             | 1.58             | 1.59             | 1.57             | 1.57             | 1.58             | 1.58             | 1.59             | 1.58             | 1.58             | 1.58             | 1.58             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             |
|                | 86°F<br>30°C          | TC          | 21937            | 23032            | 23974            | 24142            | 25266            | 23135            | 23241            | 24001            | 24169            | 25292            | 24231            | 24259            | 24348            | 24383            | 25314            | 26233            | 26334            | 26397            | 26403            | 26428            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 1.96             | 1.97             | 1.98             | 1.98             | 1.99             | 1.97             | 1.97             | 1.98             | 1.98             | 1.99             | 1.98             | 1.98             | 1.98             | 1.98             | 1.99             | 2.01             | 2.01             | 2.01             | 2.00             | 2.00             |
|                | 95°F<br>35°C          | TC          | 24905            | 25039            | 25848            | 26001            | 27029            | 26468            | 26484            | 26492            | 26523            | 27063            | 27604            | 27610            | 27627            | 27629            | 27675            | 29745            | 29733            | 29740            | 297              |                  |

Table 22 – 30K Cooling — 37MURA + 45MULA (36B)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 662            | -13°F<br>25°C         | TC          | 24142            | 24133            | 24126            | 24267            | 24981            | 25205            | 25191            | 25179            | 25178            | 25160            | 25957            | 25943            | 25926            | 25923            | 25905            | 27381            | 27374            | 27354            | 27347            | 27306            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.29             | 1.29             | 1.29             | 1.29             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             |
|                | -4°F<br>20°C          | TC          | 25999            | 25990            | 25982            | 26133            | 26903            | 27143            | 27129            | 27116            | 27114            | 27096            | 27954            | 27939            | 27921            | 27917            | 27898            | 29488            | 29480            | 29458            | 29451            | 29407            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.32             | 1.32             | 1.33             | 1.33             | 1.33             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             |
|                | 0°F<br>17.8°C         | TC          | 26857            | 26845            | 26949            | 27154            | 27906            | 28028            | 28007            | 27990            | 27988            | 27983            | 28850            | 28833            | 28807            | 28803            | 28777            | 30405            | 30396            | 30397            | 30400            | 30423            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             |
|                | 5°F<br>15°C           | TC          | 27647            | 27672            | 28045            | 28173            | 29035            | 28961            | 28967            | 28971            | 28971            | 29114            | 29909            | 29907            | 29915            | 29916            | 29919            | 31696            | 31687            | 31687            | 31690            | 31707            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 14°F<br>10°C          | TC          | 27059            | 27049            | 27161            | 27399            | 28249            | 28417            | 28401            | 28387            | 28385            | 28370            | 29399            | 29386            | 29363            | 29359            | 29334            | 31248            | 31239            | 31216            | 31209            | 31161            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.42             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.42             | 1.42             | 1.42             |
|                | 17°F<br>10°C          | TC          | 26898            | 26904            | 27234            | 27391            | 28273            | 28248            | 28250            | 28256            | 28257            | 28391            | 29149            | 29160            | 29179            | 29180            | 29188            | 31088            | 31078            | 31081            | 31087            | 31116            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.43             | 1.43             | 1.43             | 1.43             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             |
|                | 23°F<br>5°C           | TC          | 26065            | 26101            | 26526            | 26656            | 27528            | 27403            | 27410            | 27414            | 27414            | 27576            | 28369            | 28368            | 28377            | 28378            | 28383            | 30198            | 30189            | 30190            | 30194            | 30215            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.41             | 1.41             | 1.41             | 1.41             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.45             | 1.45             | 1.45             | 1.45             | 1.45             |
|                | 35°F<br>1.7°C         | TC          | 24756            | 24757            | 24805            | 24833            | 25471            | 25944            | 25941            | 25942            | 25942            | 25943            | 26778            | 26776            | 26773            | 26773            | 26776            | 28329            | 28322            | 28316            | 28320            | 28315            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.29             | 1.29             | 1.30             | 1.30             | 1.34             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             |
|                | 41°F<br>5°C           | TC          | 24292            | 24293            | 24360            | 24393            | 25085            | 25452            | 25449            | 25450            | 25450            | 25473            | 26267            | 26264            | 26262            | 26262            | 26265            | 27779            | 27772            | 27766            | 27769            | 27765            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.29             | 1.29             | 1.30             | 1.30             | 1.34             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 47°F<br>8.3°C         | TC          | 23826            | 23826            | 23918            | 23959            | 24697            | 24960            | 24956            | 24957            | 24957            | 24995            | 25755            | 25752            | 25750            | 25750            | 25752            | 27233            | 27226            | 27224            | 27223            | 27219            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.29             | 1.29             | 1.29             | 1.30             | 1.35             | 1.37             | 1.37             | 1.37             | 1.37             | 1.38             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             |
|                | 50°F<br>10°C          | TC          | 23019            | 23395            | 24177            | 24315            | 25247            | 24372            | 24386            | 24465            | 24497            | 25276            | 25331            | 25364            | 25379            | 25380            | 25495            | 27156            | 27170            | 27235            | 27243            | 27279            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.45             |
|                | 59°F<br>15°C          | TC          | 21926            | 22454            | 23244            | 23384            | 24325            | 23264            | 23274            | 23389            | 23434            | 24353            | 24230            | 24255            | 24265            | 24266            | 24427            | 26080            | 26087            | 26138            | 26144            | 26169            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.51             | 1.51             | 1.51             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.53             | 1.53             | 1.53             | 1.53             | 1.53             |
|                | 68°F<br>20°C          | TC          | 20858            | 21531            | 22323            | 22464            | 23409            | 22162            | 22169            | 22342            | 22488            | 23435            | 23127            | 23146            | 23152            | 23153            | 23416            | 24972            | 24980            | 25020            | 25025            | 25042            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.56             | 1.57             | 1.57             | 1.58             | 1.58             | 1.57             | 1.57             | 1.57             | 1.58             | 1.59             | 1.58             | 1.58             | 1.58             | 1.58             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             |
|                | 77°F<br>25°C          | TC          | 19758            | 20515            | 21311            | 21452            | 22400            | 21043            | 21053            | 21295            | 21477            | 22426            | 22003            | 22029            | 22039            | 22064            | 22447            | 23831            | 23852            | 23906            | 23912            | 23937            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.62             | 1.63             | 1.64             | 1.64             | 1.65             | 1.64             | 1.64             | 1.64             | 1.64             | 1.65             | 1.65             | 1.65             | 1.65             | 1.65             | 1.65             | 1.66             | 1.66             | 1.66             | 1.66             | 1.66             |
|                | 82°F<br>27.8°C        | TC          | 19891            | 20734            | 21560            | 21707            | 22694            | 21203            | 21238            | 21586            | 21733            | 22720            | 22195            | 22225            | 22236            | 22271            | 22741            | 24075            | 24106            | 24166            | 24173            | 24201            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.76             | 1.76             | 1.77             | 1.77             | 1.78             | 1.77             | 1.77             | 1.77             | 1.77             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.80             | 1.80             | 1.80             | 1.80             | 1.79             |
|                | 86°F<br>30°C          | TC          | 20915            | 21883            | 22771            | 22928            | 23997            | 22296            | 22342            | 22798            | 22956            | 24015            | 23359            | 23387            | 23424            | 23445            | 24038            | 25367            | 25404            | 25463            | 25470            | 25496            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.98             | 1.99             | 2.00             | 2.00             | 2.02             | 2.00             | 2.00             | 2.00             | 2.00             | 2.01             | 2.01             | 2.01             | 2.01             | 2.01             | 2.01             | 2.03             | 2.03             | 2.03             | 2.03             | 2.03             |
|                | 95°F<br>35°C          | TC          | 23497            | 23539            | 24044            | 24186            | 25134            | 25000            | 25006            | 25015            | 25016            | 25185            | 26079            | 26082            | 26095            | 26098            | 26109            | 28153            | 28143            | 28146            | 28145            | 28166            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 22 – 30K Cooling — 37MURA + 45MULA (36B) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 882            | -13°F<br>25°C         | TC          | 31278            | 31264            | 31710            | 31841            | 32718            | 32634            | 32608            | 32587            | 32584            | 32557            | 33610            | 33568            | 33536            | 33531            | 33499            | 35452            | 35443            | 35370            | 35357            | 35282            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.64             | 1.65             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.63             | 1.63             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             |
|                | -4°F<br>20°C          | TC          | 33684            | 33669            | 34149            | 34291            | 35235            | 35145            | 35116            | 35094            | 35090            | 35061            | 36196            | 36150            | 36116            | 36111            | 36076            | 38179            | 38169            | 38091            | 38076            | 37996            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.69             | 1.69             | 1.70             | 1.70             | 1.70             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             |
|                | 0°F<br>17.8°C         | TC          | 34802            | 34782            | 35427            | 35575            | 36552            | 36295            | 36255            | 36227            | 36222            | 36587            | 37362            | 37309            | 37262            | 37257            | 37239            | 39371            | 39362            | 39358            | 39364            | 39389            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             |
|                | 5°F<br>15°C           | TC          | 35800            | 35923            | 36744            | 36914            | 38052            | 37479            | 37488            | 37491            | 37530            | 38089            | 38678            | 38687            | 38695            | 38697            | 38748            | 40946            | 40934            | 40955            | 40960            | 40978            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.73             | 1.73             | 1.73             | 1.74             | 1.75             | 1.74             | 1.74             | 1.74             | 1.74             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             |
|                | 14°F<br>10°C          | TC          | 35066            | 35048            | 35764            | 35931            | 37046            | 36807            | 36774            | 36749            | 36745            | 37089            | 38068            | 38020            | 37982            | 37976            | 37937            | 40478            | 40466            | 40388            | 40374            | 40288            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.82             |
|                | 17°F<br>10°C          | TC          | 34740            | 34854            | 35659            | 35833            | 36997            | 36470            | 36485            | 36491            | 36522            | 37037            | 37714            | 37729            | 37744            | 37745            | 37792            | 40110            | 40099            | 40093            | 40100            | 40134            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.83             | 1.83             | 1.83             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             |
|                | 23°F<br>5°C           | TC          | 33752            | 33897            | 34774            | 34946            | 36097            | 35461            | 35472            | 35476            | 35522            | 36136            | 36684            | 36697            | 36706            | 36707            | 36767            | 39006            | 38994            | 39022            | 39027            | 39050            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.80             | 1.80             | 1.81             | 1.81             | 1.82             | 1.81             | 1.81             | 1.81             | 1.82             | 1.82             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.86             | 1.86             | 1.86             | 1.86             | 1.86             |
|                | 35°F<br>1.7°C         | TC          | 32082            | 32083            | 32271            | 32361            | 33405            | 33581            | 33580            | 33583            | 33583            | 33672            | 34632            | 34630            | 34632            | 34633            | 34636            | 36582            | 36574            | 36572            | 36570            | 36574            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.66             | 1.66             | 1.67             | 1.67             | 1.74             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             |
|                | 41°F<br>5°C           | TC          | 31478            | 31479            | 31729            | 31950            | 32894            | 32943            | 32942            | 32943            | 32944            | 33059            | 33970            | 33968            | 33970            | 33970            | 33973            | 35876            | 35867            | 35865            | 35863            | 35867            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.65             | 1.65             | 1.67             | 1.68             | 1.75             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 2.00             | 2.00             | 2.00             | 2.00             | 2.00             |
|                | 47°F<br>8.3°C         | TC          | 30874            | 30894            | 31309            | 31449            | 32379            | 32305            | 32304            | 32305            | 32305            | 32454            | 33309            | 33306            | 33308            | 33308            | 33308            | 35173            | 35165            | 35162            | 35160            | 35164            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 1.65             | 1.65             | 1.68             | 1.69             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.77             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 2.01             | 2.01             | 2.01             | 2.01             | 2.01             |
|                | 50°F<br>10°C          | TC          | 29852            | 30674            | 31709            | 31893            | 33130            | 31538            | 31555            | 31773            | 31873            | 33161            | 32768            | 32811            | 32828            | 32830            | 33145            | 35027            | 35119            | 35210            | 35220            | 35264            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.86             | 1.86             | 1.86             | 1.86             |
|                | 59°F<br>15°C          | TC          | 28452            | 29450            | 30495            | 30681            | 31929            | 30103            | 30145            | 30486            | 30714            | 31961            | 31345            | 31377            | 31388            | 31434            | 31987            | 33659            | 33726            | 33793            | 33801            | 33829            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.93             | 1.94             | 1.94             | 1.94             | 1.95             | 1.94             | 1.94             | 1.94             | 1.94             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             |
|                | 68°F<br>20°C          | TC          | 27047            | 28202            | 29247            | 29433            | 30682            | 28634            | 28698            | 29279            | 29465            | 30713            | 29872            | 29894            | 29948            | 29974            | 30738            | 32187            | 32246            | 32297            | 32302            | 32319            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 2.00             | 2.01             | 2.02             | 2.02             | 2.03             | 2.01             | 2.01             | 2.02             | 2.02             | 2.03             | 2.03             | 2.03             | 2.03             | 2.03             | 2.04             | 2.06             | 2.06             | 2.05             | 2.05             | 2.05             |
|                | 77°F<br>25°C          | TC          | 25631            | 26865            | 27917            | 28103            | 29359            | 27172            | 27259            | 27947            | 28134            | 29388            | 28403            | 28435            | 28508            | 28540            | 29413            | 30677            | 30770            | 30841            | 30848            | 30877            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 2.08             | 2.09             | 2.10             | 2.10             | 2.11             | 2.10             | 2.10             | 2.10             | 2.10             | 2.11             | 2.11             | 2.11             | 2.11             | 2.11             | 2.11             | 2.13             | 2.13             | 2.13             | 2.13             | 2.13             |
|                | 82°F<br>27.8°C        | TC          | 25823            | 27142            | 28236            | 28428            | 29730            | 27365            | 27470            | 28261            | 28460            | 29761            | 28638            | 28674            | 28763            | 28798            | 29787            | 30963            | 31080            | 31161            | 31169            | 31203            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 2.25             | 2.26             | 2.27             | 2.28             | 2.29             | 2.27             | 2.27             | 2.27             | 2.28             | 2.29             | 2.28             | 2.28             | 2.28             | 2.28             | 2.29             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             |
|                | 86°F<br>30°C          | TC          | 27299            | 28662            | 29834            | 30042            | 31441            | 28789            | 28922            | 29867            | 30077            | 31474            | 30154            | 30188            | 30299            | 30343            | 31501            | 32645            | 32771            | 32849            | 32857            | 32887            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 2.54             | 2.56             | 2.57             | 2.57             | 2.58             | 2.56             | 2.56             | 2.57             | 2.57             | 2.58             | 2.57             | 2.57             | 2.57             | 2.57             | 2.58             | 2.61             | 2.60             | 2.60             | 2.60             | 2.60             |
|                | 95°F<br>35°C          | TC          | 30429            | 30593            | 31582            | 31769            | 33024            | 32339            | 32358            | 32368            | 32407            | 33066            | 33727            | 33734            | 33755            | 33758            | 33814            | 36343            | 36329            | 36336            | 36347            | 36395            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.               |                  |                  |                  |                  |                  |                  |                  |                  |

Table 23 – 30K Cooling — 37MURA + 45MULA (36C)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 662            | -13°F<br>25°C         | TC          | 24142            | 24133            | 24126            | 24267            | 24981            | 25205            | 25191            | 25179            | 25178            | 25160            | 25957            | 25943            | 25926            | 25923            | 25905            | 27381            | 27374            | 27354            | 27347            | 27306            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.29             | 1.29             | 1.29             | 1.29             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             | 1.28             |
|                | -4°F<br>20°C          | TC          | 25999            | 25990            | 25982            | 26133            | 26903            | 27143            | 27129            | 27116            | 27114            | 27096            | 27954            | 27939            | 27921            | 27917            | 27898            | 29488            | 29480            | 29458            | 29451            | 29407            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             | 1.32             | 1.32             | 1.33             | 1.33             | 1.33             | 1.32             | 1.32             | 1.32             | 1.32             | 1.32             | 1.33             | 1.33             | 1.33             | 1.33             | 1.33             |
|                | 0°F<br>17.8°C         | TC          | 26857            | 26845            | 26949            | 27154            | 27906            | 28028            | 28007            | 27990            | 27988            | 27983            | 28850            | 28833            | 28807            | 28803            | 28777            | 30405            | 30396            | 30397            | 30400            | 30423            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.34             | 1.35             | 1.35             | 1.35             | 1.35             | 1.35             |
|                | 5°F<br>15°C           | TC          | 27647            | 27672            | 28045            | 28173            | 29035            | 28961            | 28967            | 28971            | 28971            | 29114            | 29909            | 29907            | 29915            | 29916            | 29919            | 31696            | 31687            | 31687            | 31690            | 31707            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.36             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             |
|                | 14°F<br>10°C          | TC          | 27059            | 27049            | 27161            | 27399            | 28249            | 28417            | 28401            | 28387            | 28385            | 28370            | 29399            | 29386            | 29363            | 29359            | 29334            | 31248            | 31239            | 31216            | 31209            | 31161            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.42             | 1.42             | 1.42             | 1.42             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.41             | 1.42             | 1.42             | 1.42             |
|                | 17°F<br>10°C          | TC          | 26898            | 26904            | 27234            | 27391            | 28273            | 28248            | 28250            | 28256            | 28257            | 28391            | 29149            | 29160            | 29179            | 29180            | 29188            | 31088            | 31078            | 31081            | 31087            | 31116            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.43             | 1.43             | 1.43             | 1.43             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.44             |
|                | 23°F<br>5°C           | TC          | 26065            | 26101            | 26526            | 26656            | 27528            | 27403            | 27410            | 27414            | 27414            | 27576            | 28369            | 28368            | 28377            | 28378            | 28383            | 30198            | 30189            | 30190            | 30194            | 30215            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.41             | 1.41             | 1.41             | 1.41             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.42             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.45             | 1.45             | 1.45             | 1.45             | 1.45             |
|                | 35°F<br>1.7°C         | TC          | 24756            | 24757            | 24805            | 24833            | 25471            | 25944            | 25941            | 25942            | 25942            | 25943            | 26778            | 26776            | 26773            | 26773            | 26776            | 28329            | 28322            | 28316            | 28320            | 28315            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.29             | 1.29             | 1.30             | 1.30             | 1.34             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.55             | 1.55             | 1.55             | 1.55             | 1.55             |
|                | 41°F<br>5°C           | TC          | 24292            | 24293            | 24360            | 24393            | 25085            | 25452            | 25449            | 25450            | 25450            | 25473            | 26267            | 26264            | 26262            | 26262            | 26265            | 27779            | 27772            | 27766            | 27769            | 27765            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.29             | 1.29             | 1.30             | 1.30             | 1.34             | 1.37             | 1.37             | 1.37             | 1.37             | 1.37             | 1.43             | 1.43             | 1.43             | 1.43             | 1.43             | 1.56             | 1.56             | 1.56             | 1.56             | 1.56             |
|                | 47°F<br>8.3°C         | TC          | 23826            | 23826            | 23918            | 23959            | 24697            | 24960            | 24956            | 24957            | 24957            | 24995            | 25755            | 25752            | 25750            | 25750            | 25752            | 27233            | 27226            | 27224            | 27223            | 27219            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.29             | 1.29             | 1.29             | 1.30             | 1.35             | 1.37             | 1.37             | 1.37             | 1.37             | 1.38             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.57             | 1.57             | 1.57             | 1.57             | 1.57             |
|                | 50°F<br>10°C          | TC          | 23019            | 23395            | 24177            | 24315            | 25247            | 24372            | 24386            | 24465            | 24497            | 25276            | 25331            | 25364            | 25379            | 25380            | 25495            | 27156            | 27170            | 27235            | 27243            | 27279            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.45             |
|                | 59°F<br>15°C          | TC          | 21926            | 22454            | 23244            | 23384            | 24325            | 23264            | 23274            | 23389            | 23434            | 24353            | 24230            | 24255            | 24265            | 24266            | 24427            | 26080            | 26087            | 26138            | 26144            | 26169            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.51             | 1.51             | 1.51             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             | 1.53             | 1.53             | 1.53             | 1.53             | 1.53             |
|                | 68°F<br>20°C          | TC          | 20858            | 21531            | 22323            | 22464            | 23409            | 22162            | 22169            | 22342            | 22488            | 23435            | 23127            | 23146            | 23152            | 23153            | 23416            | 24972            | 24980            | 25020            | 25025            | 25042            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.56             | 1.57             | 1.57             | 1.58             | 1.58             | 1.57             | 1.57             | 1.57             | 1.58             | 1.59             | 1.58             | 1.58             | 1.58             | 1.58             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             |
|                | 77°F<br>25°C          | TC          | 19758            | 20515            | 21311            | 21452            | 22400            | 21043            | 21053            | 21295            | 21477            | 22426            | 22003            | 22029            | 22039            | 22064            | 22447            | 23831            | 23852            | 23906            | 23912            | 23937            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.62             | 1.63             | 1.64             | 1.64             | 1.65             | 1.64             | 1.64             | 1.64             | 1.64             | 1.65             | 1.65             | 1.65             | 1.65             | 1.65             | 1.65             | 1.66             | 1.66             | 1.66             | 1.66             | 1.66             |
|                | 82°F<br>27.8°C        | TC          | 19891            | 20734            | 21560            | 21707            | 22694            | 21203            | 21238            | 21586            | 21733            | 22720            | 22195            | 22225            | 22236            | 22271            | 22741            | 24075            | 24106            | 24166            | 24173            | 24201            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.76             | 1.76             | 1.77             | 1.77             | 1.78             | 1.77             | 1.77             | 1.77             | 1.77             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.80             | 1.80             | 1.80             | 1.80             | 1.79             |
|                | 86°F<br>30°C          | TC          | 20915            | 21883            | 22771            | 22928            | 23997            | 22296            | 22342            | 22798            | 22956            | 24015            | 23359            | 23387            | 23424            | 23445            | 24038            | 25367            | 25404            | 25463            | 25470            | 25496            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 1.98             | 1.99             | 2.00             | 2.00             | 2.02             | 2.00             | 2.00             | 2.00             | 2.00             | 2.01             | 2.01             | 2.01             | 2.01             | 2.01             | 2.01             | 2.03             | 2.03             | 2.03             | 2.03             | 2.03             |
|                | 95°F<br>35°C          | TC          | 23497            | 23539            | 24044            | 24186            | 25134            | 25000            | 25006            | 25015            | 25016            | 25185            | 26079            | 26082            | 26095            | 26098            | 26109            | 28153            | 28143            | 28146            | 28145            | 28166            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 23 – 30K Cooling — 37MURA + 45MULA (36C) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 882            | -13°F<br>25°C         | TC          | 31278            | 31264            | 31710            | 31841            | 32718            | 32634            | 32608            | 32587            | 32584            | 32557            | 33610            | 33568            | 33536            | 33531            | 33499            | 35452            | 35443            | 35370            | 35357            | 35282            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.64             | 1.65             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.63             | 1.63             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             |
|                | -4°F<br>20°C          | TC          | 33684            | 33669            | 34149            | 34291            | 35235            | 35145            | 35116            | 35094            | 35090            | 35061            | 36196            | 36150            | 36116            | 36111            | 36076            | 38179            | 38169            | 38091            | 38076            | 37996            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.69             | 1.69             | 1.70             | 1.70             | 1.70             | 1.69             | 1.69             | 1.69             | 1.69             | 1.69             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             |
|                | 0°F<br>17.8°C         | TC          | 34802            | 34782            | 35427            | 35575            | 36552            | 36295            | 36255            | 36227            | 36222            | 36587            | 37362            | 37309            | 37262            | 37257            | 37239            | 39371            | 39362            | 39358            | 39364            | 39389            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             |
|                | 5°F<br>15°C           | TC          | 35800            | 35923            | 36744            | 36914            | 38052            | 37479            | 37488            | 37491            | 37530            | 38089            | 38678            | 38687            | 38695            | 38697            | 38748            | 40946            | 40934            | 40955            | 40960            | 40978            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.73             | 1.73             | 1.73             | 1.74             | 1.75             | 1.74             | 1.74             | 1.74             | 1.74             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             |
|                | 14°F<br>10°C          | TC          | 35066            | 35048            | 35764            | 35931            | 37046            | 36807            | 36774            | 36749            | 36745            | 37089            | 38068            | 38020            | 37982            | 37976            | 37937            | 40478            | 40466            | 40388            | 40374            | 40288            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.81             | 1.82             |
|                | 17°F<br>10°C          | TC          | 34740            | 34854            | 35659            | 35833            | 36997            | 36470            | 36485            | 36491            | 36522            | 37037            | 37714            | 37729            | 37744            | 37745            | 37792            | 40110            | 40099            | 40093            | 40100            | 40134            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.82             | 1.83             | 1.83             | 1.83             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             |
|                | 23°F<br>5°C           | TC          | 33752            | 33897            | 34774            | 34946            | 36097            | 35461            | 35472            | 35476            | 35522            | 36136            | 36684            | 36697            | 36706            | 36707            | 36767            | 39006            | 38994            | 39022            | 39027            | 39050            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.80             | 1.80             | 1.81             | 1.81             | 1.82             | 1.81             | 1.81             | 1.81             | 1.82             | 1.82             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.86             | 1.86             | 1.86             | 1.86             | 1.86             |
|                | 35°F<br>1.7°C         | TC          | 32082            | 32083            | 32271            | 32361            | 33405            | 33581            | 33580            | 33583            | 33583            | 33672            | 34632            | 34630            | 34632            | 34633            | 34636            | 36582            | 36574            | 36572            | 36570            | 36574            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.66             | 1.66             | 1.67             | 1.67             | 1.74             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             |
|                | 41°F<br>5°C           | TC          | 31478            | 31479            | 31729            | 31950            | 32894            | 32943            | 32942            | 32943            | 32944            | 33059            | 33970            | 33968            | 33970            | 33970            | 33973            | 35876            | 35867            | 35865            | 35863            | 35867            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 1.65             | 1.65             | 1.67             | 1.68             | 1.75             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 2.00             | 2.00             | 2.00             | 2.00             | 2.00             |
|                | 47°F<br>8.3°C         | TC          | 30874            | 30894            | 31309            | 31449            | 32379            | 32305            | 32304            | 32305            | 32305            | 32454            | 33309            | 33306            | 33308            | 33308            | 33308            | 35173            | 35165            | 35162            | 35160            | 35164            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 1.65             | 1.65             | 1.68             | 1.69             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.77             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 2.01             | 2.01             | 2.01             | 2.01             | 2.01             |
|                | 50°F<br>10°C          | TC          | 29852            | 30674            | 31709            | 31893            | 33130            | 31538            | 31555            | 31773            | 31873            | 33161            | 32768            | 32811            | 32828            | 32830            | 33145            | 35027            | 35119            | 35210            | 35220            | 35264            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.86             | 1.86             | 1.86             | 1.86             |
|                | 59°F<br>15°C          | TC          | 28452            | 29450            | 30495            | 30681            | 31929            | 30103            | 30145            | 30486            | 30714            | 31961            | 31345            | 31377            | 31388            | 31434            | 31987            | 33659            | 33726            | 33793            | 33801            | 33829            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.93             | 1.94             | 1.94             | 1.94             | 1.95             | 1.94             | 1.94             | 1.94             | 1.94             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             |
|                | 68°F<br>20°C          | TC          | 27047            | 28202            | 29247            | 29433            | 30682            | 28634            | 28698            | 29279            | 29465            | 30713            | 29872            | 29894            | 29948            | 29974            | 30738            | 32187            | 32246            | 32297            | 32302            | 32319            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 2.00             | 2.01             | 2.02             | 2.02             | 2.03             | 2.01             | 2.01             | 2.02             | 2.02             | 2.03             | 2.03             | 2.03             | 2.03             | 2.03             | 2.04             | 2.06             | 2.06             | 2.05             | 2.05             | 2.05             |
|                | 77°F<br>25°C          | TC          | 25631            | 26865            | 27917            | 28103            | 29359            | 27172            | 27259            | 27947            | 28134            | 29388            | 28403            | 28435            | 28508            | 28540            | 29413            | 30677            | 30770            | 30841            | 30848            | 30877            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 2.08             | 2.09             | 2.10             | 2.10             | 2.11             | 2.10             | 2.10             | 2.10             | 2.10             | 2.11             | 2.11             | 2.11             | 2.11             | 2.11             | 2.11             | 2.13             | 2.13             | 2.13             | 2.13             | 2.13             |
|                | 82°F<br>27.8°C        | TC          | 25823            | 27142            | 28236            | 28428            | 29730            | 27365            | 27470            | 28261            | 28460            | 29761            | 28638            | 28674            | 28763            | 28798            | 29787            | 30963            | 31080            | 31161            | 31169            | 31203            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 2.25             | 2.26             | 2.27             | 2.28             | 2.29             | 2.27             | 2.27             | 2.27             | 2.28             | 2.29             | 2.28             | 2.28             | 2.28             | 2.28             | 2.29             | 2.30             | 2.30             | 2.30             | 2.30             | 2.30             |
|                | 86°F<br>30°C          | TC          | 27299            | 28662            | 29834            | 30042            | 31441            | 28789            | 28922            | 29867            | 30077            | 31474            | 30154            | 30188            | 30299            | 30343            | 31501            | 32645            | 32771            | 32849            | 32857            | 32887            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 2.54             | 2.56             | 2.57             | 2.57             | 2.58             | 2.56             | 2.56             | 2.57             | 2.57             | 2.58             | 2.57             | 2.57             | 2.57             | 2.57             | 2.58             | 2.61             | 2.60             | 2.60             | 2.60             | 2.60             |
|                | 95°F<br>35°C          | TC          | 30429            | 30593            | 31582            | 31769            | 33024            | 32339            | 32358            | 32368            | 32407            | 33066            | 33727            | 33734            | 33755            | 33758            | 33814            | 36343            | 36329            | 36336            | 36347            | 36395            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.               |                  |                  |                  |                  |                  |                  |                  |                  |

Table 24 – 36K Cooling — 37MURA + 45MULA (36A)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
| 525            | -13°F<br>25°C         | TC          | 23715            | 23707            | 23700            | 23838            | 24540            | 24759            | 24746            | 24735            | 24733            | 24715            | 25498            | 25485            | 25468            | 25465            | 25447            | 26897            | 26890            | 26870            | 26864            | 26824            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.63             | 1.63             | 1.63             | 1.63             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.63             |
|                | -4°F<br>20°C          | TC          | 25539            | 25530            | 25523            | 25671            | 26427            | 26664            | 26649            | 26637            | 26635            | 26617            | 27460            | 27445            | 27427            | 27424            | 27405            | 28967            | 28959            | 28937            | 28930            | 28887            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.69             | 1.69             | 1.69             | 1.69             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             |
|                | 0°F<br>17.8°C         | TC          | 26382            | 26371            | 26473            | 26675            | 27413            | 27533            | 27512            | 27496            | 27493            | 27488            | 28340            | 28324            | 28298            | 28294            | 28269            | 29867            | 29859            | 29860            | 29863            | 29885            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.71             | 1.71             | 1.71             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             | 1.72             | 1.72             | 1.72             | 1.72             | 1.72             |
|                | 5°F<br>15°C           | TC          | 27158            | 27183            | 27549            | 27675            | 28522            | 28450            | 28455            | 28459            | 28459            | 28599            | 29381            | 29378            | 29386            | 29387            | 29390            | 31136            | 31127            | 31127            | 31130            | 31147            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.72             | 1.72             | 1.72             | 1.72             | 1.73             | 1.72             | 1.72             | 1.72             | 1.72             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.74             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             |
|                | 14°F<br>10°C          | TC          | 26778            | 26768            | 26879            | 27114            | 27956            | 28122            | 28106            | 28093            | 28091            | 28076            | 29094            | 29080            | 29058            | 29054            | 29030            | 30924            | 30914            | 30892            | 30885            | 30838            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.75             | 1.75             | 1.75             | 1.75             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             |
|                | 17°F<br>10°C          | TC          | 26685            | 26692            | 27019            | 27175            | 28050            | 28025            | 28028            | 28033            | 28034            | 28167            | 28919            | 28930            | 28949            | 28950            | 28957            | 30842            | 30833            | 30836            | 30842            | 30870            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.75             | 1.75             | 1.75             | 1.75             | 1.75             |
|                | 23°F<br>5°C           | TC          | 26366            | 26403            | 26832            | 26964            | 27845            | 27719            | 27726            | 27730            | 27730            | 27894            | 28696            | 28695            | 28704            | 28706            | 28710            | 30546            | 30537            | 30538            | 30542            | 30563            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.72             | 1.72             | 1.72             | 1.72             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.73             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             |
|                | 35°F<br>1.7°C         | TC          | 26090            | 26091            | 26141            | 26171            | 26844            | 27342            | 27338            | 27339            | 27340            | 27341            | 28221            | 28219            | 28216            | 28216            | 28219            | 29855            | 29848            | 29842            | 29846            | 29841            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.57             | 1.57             | 1.58             | 1.58             | 1.63             | 1.67             | 1.67             | 1.67             | 1.67             | 1.67             | 1.74             | 1.74             | 1.74             | 1.74             | 1.74             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 41°F<br>5°C           | TC          | 26420            | 26420            | 26493            | 26529            | 27282            | 27681            | 27678            | 27679            | 27679            | 27703            | 28567            | 28563            | 28561            | 28562            | 28565            | 30211            | 30204            | 30198            | 30201            | 30197            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.72             | 1.72             | 1.73             | 1.73             | 1.79             | 1.83             | 1.83             | 1.83             | 1.83             | 1.83             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             |
|                | 47°F<br>8.3°C         | TC          | 26747            | 26747            | 26850            | 26897            | 27724            | 28019            | 28016            | 28016            | 28016            | 28059            | 28912            | 28909            | 28906            | 28907            | 28908            | 30571            | 30563            | 30561            | 30560            | 30556            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.87             | 1.87             | 1.88             | 1.88             | 1.96             | 1.99             | 1.99             | 1.99             | 1.99             | 2.00             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             |
|                | 50°F<br>10°C          | TC          | 25747            | 26168            | 27042            | 27197            | 28239            | 27260            | 27276            | 27365            | 27400            | 28272            | 28333            | 28370            | 28386            | 28388            | 28516            | 30375            | 30389            | 30463            | 30471            | 30512            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 2.04             | 2.05             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             |
|                | 59°F<br>15°C          | TC          | 24239            | 24823            | 25696            | 25851            | 26891            | 25718            | 25730            | 25857            | 25907            | 26922            | 26786            | 26815            | 26826            | 26827            | 27004            | 28832            | 28839            | 28896            | 28902            | 28931            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.91             | 1.91             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.93             | 1.93             | 1.93             | 1.93             | 1.93             |
|                | 68°F<br>20°C          | TC          | 22762            | 23496            | 24361            | 24514            | 25545            | 24185            | 24192            | 24382            | 24541            | 25574            | 25237            | 25258            | 25265            | 25266            | 25553            | 27251            | 27260            | 27304            | 27309            | 27328            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.77             | 1.78             | 1.79             | 1.79             | 1.80             | 1.79             | 1.79             | 1.79             | 1.79             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.83             | 1.82             | 1.82             | 1.82             | 1.82             |
|                | 77°F<br>25°C          | TC          | 21251            | 22065            | 22921            | 23073            | 24093            | 22633            | 22644            | 22904            | 23101            | 24121            | 23666            | 23694            | 23705            | 23732            | 24143            | 25632            | 25655            | 25713            | 25719            | 25747            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.66             | 1.67             | 1.67             | 1.67             | 1.68             | 1.67             | 1.67             | 1.67             | 1.67             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.70             | 1.70             | 1.70             | 1.70             | 1.70             |
|                | 82°F<br>27.8°C        | TC          | 21201            | 22100            | 22980            | 23137            | 24189            | 22600            | 22637            | 23008            | 23165            | 24216            | 23657            | 23689            | 23701            | 23738            | 24238            | 25661            | 25693            | 25758            | 25765            | 25795            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.81             | 1.82             | 1.83             | 1.83             | 1.84             | 1.83             | 1.83             | 1.83             | 1.83             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.86             | 1.86             | 1.85             | 1.85             | 1.85             |
|                | 86°F<br>30°C          | TC          | 22132            | 23157            | 24096            | 24262            | 25393            | 23593            | 23642            | 24125            | 24291            | 25413            | 24719            | 24748            | 24787            | 24809            | 25437            | 26843            | 26882            | 26945            | 26952            | 26980            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 2.21             | 2.22             | 2.23             | 2.24             | 2.25             | 2.23             | 2.23             | 2.24             | 2.24             | 2.25             | 2.24             | 2.24             | 2.24             | 2.24             | 2.25             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             |
|                | 95°F<br>35°C          | TC          | 24519            | 24563            | 25090            | 25238            | 26227            | 26087            | 26093            | 26102            | 26104            | 26281            | 27213            | 27216            | 27230            | 27232            | 27245            | 29378            | 29367            | 29370            | 29369            | 29391            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 24 – 36K Cooling — 37MURA + 45MULA (36A) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
| 700            | -13°F<br>25°C         | TC          | 30749            | 30735            | 31173            | 31302            | 32164            | 32082            | 32055            | 32035            | 32032            | 32006            | 33041            | 33000            | 32968            | 32964            | 32932            | 34852            | 34843            | 34771            | 34758            | 34684            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.09             | 2.09             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.07             | 2.07             | 2.08             | 2.08             | 2.08             | 2.09             | 2.09             | 2.09             | 2.09             | 2.09             |
|                | -4°F<br>20°C          | TC          | 33114            | 33099            | 33571            | 33710            | 34638            | 34550            | 34521            | 34499            | 34496            | 34468            | 35583            | 35538            | 35504            | 35499            | 35465            | 37533            | 37523            | 37446            | 37432            | 37352            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.16             | 2.16             | 2.16             | 2.16             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.16             | 2.16             | 2.16             | 2.16             | 2.16             |
|                | 0°F<br>17.8°C         | TC          | 34213            | 34193            | 34827            | 34973            | 35933            | 35681            | 35641            | 35613            | 35609            | 35967            | 36729            | 36677            | 36631            | 36626            | 36609            | 38704            | 38695            | 38692            | 38697            | 38723            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.21             | 2.21             | 2.21             | 2.21             | 2.21             |
|                | 5°F<br>15°C           | TC          | 35194            | 35315            | 36122            | 36289            | 37407            | 36845            | 36854            | 36856            | 36894            | 37444            | 38023            | 38033            | 38040            | 38041            | 38092            | 40253            | 40241            | 40262            | 40266            | 40284            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.20             | 2.20             | 2.20             | 2.20             | 2.22             | 2.21             | 2.21             | 2.21             | 2.21             | 2.22             | 2.22             | 2.22             | 2.22             | 2.22             | 2.23             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             |
|                | 14°F<br>10°C          | TC          | 34728            | 34711            | 35419            | 35585            | 36689            | 36452            | 36420            | 36395            | 36391            | 36732            | 37701            | 37654            | 37616            | 37610            | 37572            | 40088            | 40076            | 39999            | 39985            | 39900            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.24             | 2.24             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.24             | 2.24             | 2.24             | 2.24             | 2.24             |
|                | 17°F<br>10°C          | TC          | 34492            | 34605            | 35404            | 35577            | 36733            | 36209            | 36224            | 36231            | 36261            | 36772            | 37445            | 37459            | 37474            | 37476            | 37522            | 39824            | 39813            | 39807            | 39814            | 39847            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.25             | 2.25             | 2.25             | 2.25             | 2.25             |
|                | 23°F<br>5°C           | TC          | 34167            | 34314            | 35202            | 35376            | 36541            | 35897            | 35908            | 35912            | 35959            | 36581            | 37135            | 37148            | 37158            | 37159            | 37219            | 39486            | 39474            | 39502            | 39507            | 39530            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.20             | 2.20             | 2.21             | 2.21             | 2.22             | 2.21             | 2.21             | 2.21             | 2.21             | 2.22             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             |
|                | 35°F<br>1.7°C         | TC          | 33836            | 33837            | 34036            | 34131            | 35232            | 35417            | 35416            | 35419            | 35419            | 35513            | 36526            | 36524            | 36525            | 36526            | 36530            | 38583            | 38574            | 38572            | 38570            | 38573            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.01             | 2.01             | 2.03             | 2.04             | 2.12             | 2.13             | 2.13             | 2.13             | 2.14             | 2.14             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             |
|                | 41°F<br>5°C           | TC          | 34261            | 34261            | 34534            | 34774            | 35802            | 35854            | 35853            | 35855            | 35855            | 35981            | 36973            | 36970            | 36972            | 36973            | 36975            | 39047            | 39038            | 39035            | 39033            | 39038            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 2.20             | 2.20             | 2.23             | 2.25             | 2.34             | 2.34             | 2.34             | 2.34             | 2.34             | 2.35             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.67             | 2.67             | 2.67             | 2.67             | 2.67             |
|                | 47°F<br>8.3°C         | TC          | 34685            | 34708            | 35173            | 35331            | 36376            | 36293            | 36292            | 36293            | 36292            | 36460            | 37420            | 37417            | 37419            | 37419            | 37419            | 39515            | 39505            | 39502            | 39500            | 39504            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 2.40             | 2.40             | 2.44             | 2.46             | 2.56             | 2.55             | 2.55             | 2.55             | 2.55             | 2.57             | 2.67             | 2.67             | 2.67             | 2.67             | 2.67             | 2.91             | 2.91             | 2.91             | 2.91             | 2.91             |
|                | 50°F<br>10°C          | TC          | 33415            | 34335            | 35494            | 35700            | 37084            | 35302            | 35321            | 35565            | 35677            | 37119            | 36679            | 36727            | 36746            | 36748            | 37101            | 39207            | 39311            | 39412            | 39424            | 39473            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             |
|                | 59°F<br>15°C          | TC          | 31478            | 32582            | 33738            | 33944            | 35325            | 33305            | 33350            | 33729            | 33980            | 35360            | 34679            | 34714            | 34726            | 34777            | 35389            | 37238            | 37313            | 37387            | 37395            | 37427            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 2.45             | 2.45             | 2.46             | 2.46             | 2.47             | 2.46             | 2.46             | 2.46             | 2.46             | 2.47             | 2.47             | 2.46             | 2.46             | 2.46             | 2.47             | 2.48             | 2.48             | 2.48             | 2.48             | 2.48             |
|                | 68°F<br>20°C          | TC          | 29538            | 30799            | 31941            | 32144            | 33508            | 31271            | 31341            | 31976            | 32179            | 33541            | 32623            | 32647            | 32706            | 32734            | 33569            | 35151            | 35216            | 35271            | 35277            | 35295            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 2.27             | 2.29             | 2.30             | 2.30             | 2.32             | 2.29             | 2.29             | 2.30             | 2.30             | 2.32             | 2.31             | 2.31             | 2.31             | 2.31             | 2.32             | 2.34             | 2.34             | 2.34             | 2.34             | 2.34             |
|                | 77°F<br>25°C          | TC          | 27589            | 28918            | 30050            | 30250            | 31601            | 29248            | 29341            | 30082            | 30283            | 31633            | 30573            | 30607            | 30686            | 30720            | 31660            | 33020            | 33120            | 33197            | 33205            | 33236            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 2.13             | 2.14             | 2.15             | 2.15             | 2.16             | 2.14             | 2.14             | 2.15             | 2.15             | 2.16             | 2.15             | 2.15             | 2.15             | 2.15             | 2.16             | 2.18             | 2.18             | 2.18             | 2.17             | 2.17             |
|                | 82°F<br>27.8°C        | TC          | 27545            | 28951            | 30119            | 30323            | 31712            | 29189            | 29302            | 30145            | 30357            | 31745            | 30547            | 30585            | 30680            | 30718            | 31773            | 33028            | 33152            | 33238            | 33247            | 33283            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 2.33             | 2.34             | 2.35             | 2.35             | 2.36             | 2.34             | 2.34             | 2.35             | 2.35             | 2.36             | 2.35             | 2.35             | 2.35             | 2.35             | 2.36             | 2.38             | 2.38             | 2.38             | 2.38             | 2.37             |
|                | 86°F<br>30°C          | TC          | 28910            | 30353            | 31594            | 31815            | 33296            | 30488            | 30628            | 31629            | 31851            | 33331            | 31932            | 31969            | 32086            | 32133            | 33359            | 34570            | 34704            | 34786            | 34795            | 34827            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 2.84             | 2.86             | 2.87             | 2.87             | 2.89             | 2.86             | 2.86             | 2.87             | 2.87             | 2.89             | 2.88             | 2.87             | 2.88             | 2.88             | 2.89             | 2.91             | 2.91             | 2.91             | 2.91             | 2.90             |
|                | 95°F<br>35°C          | TC          | 31776            | 31947            | 32980            | 33175            | 34487            | 33771            | 33791            | 33801            | 33841            | 34530            | 35220            | 35228            | 35249            | 35253            | 35311            | 37952            | 37937            | 37945            | 37956            | 38007            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 3.84             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Table 25 – 36K Cooling — 37MURA + 45MULA (36B)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 684            | -13°F<br>25°C         | TC          | 26861            | 26851            | 26844            | 27000            | 27795            | 28043            | 28028            | 28015            | 28013            | 27994            | 28880            | 28865            | 28846            | 28843            | 28823            | 30465            | 30457            | 30435            | 30427            | 30382            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.06             | 2.06             | 2.06             | 2.06             | 2.05             | 2.05             | 2.05             | 2.05             | 2.05             | 2.05             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.05             | 2.05             | 2.05             | 2.05             | 2.05             |
|                | -4°F<br>20°C          | TC          | 28927            | 28917            | 28909            | 29077            | 29933            | 30201            | 30184            | 30170            | 30168            | 30147            | 31102            | 31086            | 31065            | 31062            | 31040            | 32809            | 32800            | 32776            | 32768            | 32719            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.13             | 2.13             | 2.13             | 2.13             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.11             | 2.11             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             |
|                | 0°F<br>17.8°C         | TC          | 29882            | 29869            | 29984            | 30213            | 31049            | 31185            | 31161            | 31143            | 31140            | 31135            | 32099            | 32081            | 32051            | 32047            | 32018            | 33829            | 33819            | 33821            | 33824            | 33850            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.14             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.17             | 2.17             | 2.17             | 2.17             | 2.17             |
|                | 5°F<br>15°C           | TC          | 30760            | 30788            | 31203            | 31346            | 32305            | 32223            | 32230            | 32234            | 32234            | 32393            | 33278            | 33275            | 33284            | 33285            | 33289            | 35266            | 35256            | 35256            | 35259            | 35278            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.17             | 2.17             | 2.17             | 2.17             | 2.18             | 2.17             | 2.18             | 2.18             | 2.18             | 2.18             | 2.19             | 2.19             | 2.19             | 2.19             | 2.19             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             |
|                | 14°F<br>10°C          | TC          | 31251            | 31239            | 31369            | 31643            | 32625            | 32820            | 32801            | 32785            | 32783            | 32765            | 33954            | 33938            | 33912            | 33907            | 33878            | 36089            | 36078            | 36052            | 36044            | 35988            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.00             | 2.00             | 2.00             | 2.00             | 2.00             | 1.99             | 1.99             | 1.99             | 1.99             | 2.00             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             | 2.00             | 2.00             | 2.00             | 2.00             | 2.00             |
|                | 17°F<br>10°C          | TC          | 31453            | 31461            | 31846            | 32030            | 33061            | 33032            | 33035            | 33042            | 33043            | 33199            | 34085            | 34099            | 34121            | 34122            | 34131            | 36353            | 36341            | 36345            | 36352            | 36386            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.93             | 1.93             | 1.93             | 1.93             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             |
|                | 23°F<br>5°C           | TC          | 31172            | 31215            | 31723            | 31879            | 32921            | 32772            | 32780            | 32784            | 32785            | 32979            | 33927            | 33926            | 33937            | 33938            | 33944            | 36114            | 36104            | 36105            | 36110            | 36134            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.88             | 1.88             | 1.89             | 1.89             | 1.90             | 1.90             | 1.90             | 1.90             | 1.90             | 1.90             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             |
|                | 35°F<br>1.7°C         | TC          | 31040            | 31040            | 31100            | 31135            | 31936            | 32529            | 32524            | 32526            | 32527            | 32527            | 33574            | 33572            | 33568            | 33568            | 33572            | 35519            | 35510            | 35503            | 35508            | 35502            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.70             | 1.70             | 1.70             | 1.70             | 1.76             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             |
|                | 41°F<br>5°C           | TC          | 30550            | 30551            | 30636            | 30677            | 31548            | 32009            | 32005            | 32006            | 32007            | 32035            | 33033            | 33029            | 33027            | 33027            | 33031            | 34935            | 34926            | 34919            | 34923            | 34918            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.82             | 1.82             | 1.83             | 1.83             | 1.90             | 1.93             | 1.93             | 1.93             | 1.93             | 1.94             | 2.02             | 2.02             | 2.02             | 2.02             | 2.02             | 2.20             | 2.20             | 2.20             | 2.20             | 2.20             |
|                | 47°F<br>8.3°C         | TC          | 30058            | 30058            | 30174            | 30226            | 31156            | 31488            | 31484            | 31485            | 31485            | 31532            | 32491            | 32488            | 32485            | 32485            | 32487            | 34356            | 34347            | 34344            | 34343            | 34338            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.94             | 1.94             | 1.95             | 1.96             | 2.04             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.17             | 2.17             | 2.17             | 2.17             | 2.17             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             |
|                | 50°F<br>10°C          | TC          | 28858            | 29329            | 30309            | 30482            | 31650            | 30553            | 30571            | 30670            | 30710            | 31687            | 31756            | 31797            | 31816            | 31818            | 31961            | 34044            | 34061            | 34143            | 34153            | 34198            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.11             | 2.11             | 2.11             |
|                | 59°F<br>15°C          | TC          | 26933            | 27582            | 28552            | 28724            | 29880            | 28577            | 28589            | 28731            | 28787            | 29914            | 29763            | 29795            | 29807            | 29809            | 30005            | 32036            | 32045            | 32108            | 32115            | 32146            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.96             | 1.96             | 1.96             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.98             | 1.98             | 1.98             | 1.98             | 1.98             |
|                | 68°F<br>20°C          | TC          | 25045            | 25853            | 26804            | 26973            | 28107            | 26610            | 26619            | 26827            | 27002            | 28139            | 27768            | 27791            | 27799            | 27800            | 28116            | 29984            | 29994            | 30042            | 30047            | 30069            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.80             | 1.80             | 1.81             | 1.82             | 1.83             | 1.81             | 1.81             | 1.81             | 1.82             | 1.83             | 1.83             | 1.82             | 1.82             | 1.82             | 1.83             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                | 77°F<br>25°C          | TC          | 23121            | 24007            | 24938            | 25104            | 26213            | 24625            | 24637            | 24920            | 25133            | 26244            | 25749            | 25779            | 25791            | 25820            | 26268            | 27888            | 27913            | 27975            | 27982            | 28013            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.66             | 1.66             | 1.67             | 1.67             | 1.68             | 1.67             | 1.67             | 1.67             | 1.67             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.70             | 1.70             | 1.70             | 1.70             | 1.69             |
|                | 82°F<br>27.8°C        | TC          | 23057            | 24034            | 24992            | 25162            | 26307            | 24578            | 24618            | 25022            | 25193            | 26336            | 25728            | 25763            | 25776            | 25816            | 26360            | 27907            | 27943            | 28012            | 28020            | 28054            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.81             | 1.82             | 1.83             | 1.83             | 1.83             | 1.82             | 1.82             | 1.83             | 1.83             | 1.84             | 1.83             | 1.83             | 1.83             | 1.83             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                | 86°F<br>30°C          | TC          | 24244            | 25367            | 26396            | 26578            | 27817            | 25845            | 25899            | 26428            | 26610            | 27838            | 27078            | 27110            | 27152            | 27177            | 27864            | 29405            | 29448            | 29517            | 29524            | 29555            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 2.22             | 2.23             | 2.24             | 2.25             | 2.26             | 2.24             | 2.24             | 2.24             | 2.25             | 2.26             | 2.25             | 2.25             | 2.25             | 2.25             | 2.26             | 2.28             | 2.28             | 2.28             | 2.28             | 2.27             |
|                | 95°F<br>35°C          | TC          | 27238            | 27287            | 27873            | 28037            | 29136            | 28980            | 28987            | 28997            | 28999            | 29195            | 30232            | 30235            | 30250            | 30253            | 30266            | 32636            | 32624            | 32628            | 32626            | 32651            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             |                  |                  |                  |                  |                  |

Table 25 – 36K Cooling — 37MURA + 45MULA (36B) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 912            | -13°F<br>25°C         | TC          | 34828            | 34812            | 35308            | 35455            | 36430            | 36337            | 36308            | 36285            | 36281            | 36251            | 37424            | 37377            | 37341            | 37336            | 37301            | 39475            | 39464            | 39383            | 39369            | 39285            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.63             | 2.63             | 2.63             | 2.63             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             |
|                | -4°F<br>20°C          | TC          | 37507            | 37489            | 38024            | 38182            | 39233            | 39133            | 39100            | 39076            | 39072            | 39040            | 40303            | 40252            | 40214            | 40208            | 40170            | 42512            | 42500            | 42413            | 42397            | 42307            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.73             | 2.73             | 2.72             | 2.72             | 2.71             | 2.71             | 2.71             | 2.72             | 2.72             | 2.72             | 2.71             | 2.71             | 2.71             | 2.71             | 2.71             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             |
|                | 0°F<br>17.8°C         | TC          | 38751            | 38728            | 39447            | 39612            | 40700            | 40413            | 40369            | 40337            | 40333            | 40738            | 41601            | 41542            | 41491            | 41484            | 41465            | 43839            | 43828            | 43825            | 43831            | 43859            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             |
|                | 5°F<br>15°C           | TC          | 39862            | 40000            | 40914            | 41103            | 42369            | 41732            | 41742            | 41745            | 41788            | 42411            | 43066            | 43077            | 43086            | 43087            | 43145            | 45593            | 45579            | 45602            | 45607            | 45627            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.77             | 2.77             | 2.78             | 2.78             | 2.79             | 2.79             | 2.79             | 2.79             | 2.79             | 2.80             | 2.80             | 2.80             | 2.80             | 2.81             | 2.81             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             |
|                | 14°F<br>10°C          | TC          | 40529            | 40508            | 41335            | 41529            | 42817            | 42541            | 42503            | 42474            | 42470            | 42867            | 43998            | 43943            | 43899            | 43892            | 43847            | 46784            | 46770            | 46680            | 46664            | 46564            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.56             | 2.56             | 2.56             | 2.56             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             |
|                | 17°F<br>10°C          | TC          | 40655            | 40788            | 41730            | 41934            | 43296            | 42679            | 42696            | 42704            | 42740            | 43342            | 44135            | 44152            | 44169            | 44171            | 44226            | 46939            | 46926            | 46919            | 46927            | 46967            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             |
|                | 23°F<br>5°C           | TC          | 40395            | 40569            | 41618            | 41824            | 43202            | 42441            | 42453            | 42458            | 42514            | 43249            | 43904            | 43920            | 43931            | 43932            | 44003            | 46684            | 46669            | 46702            | 46709            | 46736            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.41             | 2.41             | 2.42             | 2.42             | 2.44             | 2.43             | 2.43             | 2.43             | 2.43             | 2.44             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             |
|                | 35°F<br>1.7°C         | TC          | 40254            | 40256            | 40492            | 40605            | 41915            | 42136            | 42134            | 42138            | 42138            | 42250            | 43455            | 43452            | 43454            | 43455            | 43460            | 45902            | 45891            | 45889            | 45887            | 45890            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.17             | 2.18             | 2.19             | 2.20             | 2.29             | 2.31             | 2.31             | 2.31             | 2.31             | 2.31             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             |
|                | 41°F<br>5°C           | TC          | 39617            | 39618            | 39933            | 40211            | 41400            | 41460            | 41459            | 41461            | 41461            | 41607            | 42753            | 42751            | 42753            | 42754            | 42756            | 45152            | 45141            | 45138            | 45136            | 45141            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 2.33             | 2.33             | 2.36             | 2.38             | 2.47             | 2.48             | 2.48             | 2.48             | 2.48             | 2.49             | 2.59             | 2.59             | 2.59             | 2.59             | 2.59             | 2.82             | 2.82             | 2.82             | 2.82             | 2.82             |
|                | 47°F<br>8.3°C         | TC          | 38979            | 39005            | 39528            | 39704            | 40879            | 40786            | 40785            | 40786            | 40785            | 40974            | 42053            | 42049            | 42052            | 42051            | 42051            | 44407            | 44396            | 44392            | 44390            | 44395            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 2.49             | 2.49             | 2.54             | 2.56             | 2.66             | 2.65             | 2.65             | 2.65             | 2.65             | 2.67             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 3.03             | 3.03             | 3.03             | 3.03             | 3.03             |
|                | 50°F<br>10°C          | TC          | 37452            | 38483            | 39782            | 40013            | 41564            | 39567            | 39588            | 39862            | 39988            | 41603            | 41110            | 41164            | 41185            | 41188            | 41584            | 43944            | 44060            | 44173            | 44186            | 44242            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.71             | 2.71             | 2.71             | 2.71             | 2.71             | 2.71             |
|                | 59°F<br>15°C          | TC          | 34976            | 36203            | 37488            | 37716            | 39251            | 37007            | 37057            | 37478            | 37757            | 39290            | 38533            | 38572            | 38586            | 38642            | 39322            | 41377            | 41460            | 41542            | 41552            | 41586            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 2.51             | 2.52             | 2.52             | 2.52             | 2.53             | 2.52             | 2.52             | 2.52             | 2.52             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             | 2.55             | 2.54             | 2.54             | 2.54             | 2.54             |
|                | 68°F<br>20°C          | TC          | 32500            | 33888            | 35144            | 35368            | 36868            | 34407            | 34484            | 35182            | 35406            | 36905            | 35894            | 35921            | 35986            | 36017            | 36935            | 38676            | 38748            | 38809            | 38815            | 38835            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 2.30             | 2.32             | 2.33             | 2.33             | 2.35             | 2.32             | 2.32             | 2.33             | 2.33             | 2.35             | 2.34             | 2.34             | 2.34             | 2.34             | 2.35             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             |
|                | 77°F<br>25°C          | TC          | 30017            | 31463            | 32694            | 32912            | 34382            | 31822            | 31923            | 32730            | 32949            | 34417            | 33264            | 33301            | 33386            | 33423            | 34446            | 35926            | 36035            | 36118            | 36127            | 36161            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 2.12             | 2.14             | 2.15             | 2.15             | 2.16             | 2.14             | 2.14             | 2.15             | 2.15             | 2.16             | 2.15             | 2.15             | 2.15             | 2.15             | 2.16             | 2.18             | 2.18             | 2.17             | 2.17             | 2.17             |
|                | 82°F<br>27.8°C        | TC          | 29956            | 31486            | 32756            | 32978            | 34488            | 31744            | 31867            | 32784            | 33015            | 34524            | 33221            | 33263            | 33366            | 33408            | 34554            | 35919            | 36054            | 36148            | 36158            | 36197            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 2.32             | 2.33             | 2.34             | 2.34             | 2.36             | 2.34             | 2.34             | 2.34             | 2.35             | 2.36             | 2.35             | 2.35             | 2.35             | 2.35             | 2.36             | 2.38             | 2.37             | 2.37             | 2.37             | 2.37             |
|                | 86°F<br>30°C          | TC          | 31669            | 33250            | 34610            | 34851            | 36474            | 33398            | 33551            | 34648            | 34891            | 36512            | 34980            | 35020            | 35149            | 35199            | 36543            | 37870            | 38016            | 38106            | 38116            | 38151            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 2.85             | 2.87             | 2.88             | 2.88             | 2.90             | 2.87             | 2.87             | 2.88             | 2.88             | 2.90             | 2.89             | 2.89             | 2.89             | 2.89             | 2.90             | 2.93             | 2.92             | 2.92             | 2.92             | 2.92             |
|                | 95°F<br>35°C          | TC          | 35300            | 35491            | 36638            | 36855            | 38312            | 37517            | 37538            | 37550            | 37595            | 38360            | 39127            | 39135            | 39159            | 39162            | 39227            | 42161            | 42145            | 42153            | 42165            | 42222            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             |                  |                  |                  |

Table 26 – 36K Cooling — 37MURA + 45MULA (36C)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 684            | -13°F<br>25°C         | TC          | 26861            | 26851            | 26844            | 27000            | 27795            | 28043            | 28028            | 28015            | 28013            | 27994            | 28880            | 28865            | 28846            | 28843            | 28823            | 30465            | 30457            | 30435            | 30427            | 30382            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.06             | 2.06             | 2.06             | 2.06             | 2.05             | 2.05             | 2.05             | 2.05             | 2.05             | 2.05             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.05             | 2.05             | 2.05             | 2.05             | 2.05             |
|                | -4°F<br>20°C          | TC          | 28927            | 28917            | 28909            | 29077            | 29933            | 30201            | 30184            | 30170            | 30168            | 30147            | 31102            | 31086            | 31065            | 31062            | 31040            | 32809            | 32800            | 32776            | 32768            | 32719            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.13             | 2.13             | 2.13             | 2.13             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.11             | 2.11             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             |
|                | 0°F<br>17.8°C         | TC          | 29882            | 29869            | 29984            | 30213            | 31049            | 31185            | 31161            | 31143            | 31140            | 31135            | 32099            | 32081            | 32051            | 32047            | 32018            | 33829            | 33819            | 33821            | 33824            | 33850            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.14             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.17             | 2.17             | 2.17             | 2.17             | 2.17             |
|                | 5°F<br>15°C           | TC          | 30760            | 30788            | 31203            | 31346            | 32305            | 32223            | 32230            | 32234            | 32234            | 32393            | 33278            | 33275            | 33284            | 33285            | 33289            | 35266            | 35256            | 35256            | 35259            | 35278            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.17             | 2.17             | 2.17             | 2.17             | 2.18             | 2.17             | 2.18             | 2.18             | 2.18             | 2.18             | 2.19             | 2.19             | 2.19             | 2.19             | 2.19             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             |
|                | 14°F<br>10°C          | TC          | 31251            | 31239            | 31369            | 31643            | 32625            | 32820            | 32801            | 32785            | 32783            | 32765            | 33954            | 33938            | 33912            | 33907            | 33878            | 36089            | 36078            | 36052            | 36044            | 35988            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.00             | 2.00             | 2.00             | 2.00             | 2.00             | 1.99             | 1.99             | 1.99             | 1.99             | 2.00             | 1.99             | 1.99             | 1.99             | 1.99             | 1.99             | 2.00             | 2.00             | 2.00             | 2.00             | 2.00             |
|                | 17°F<br>10°C          | TC          | 31453            | 31461            | 31846            | 32030            | 33061            | 33032            | 33035            | 33042            | 33043            | 33199            | 34085            | 34099            | 34121            | 34122            | 34131            | 36353            | 36341            | 36345            | 36352            | 36386            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.93             | 1.93             | 1.93             | 1.93             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.92             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             |
|                | 23°F<br>5°C           | TC          | 31172            | 31215            | 31723            | 31879            | 32921            | 32772            | 32780            | 32784            | 32785            | 32979            | 33927            | 33926            | 33937            | 33938            | 33944            | 36114            | 36104            | 36105            | 36110            | 36134            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.88             | 1.88             | 1.89             | 1.89             | 1.90             | 1.90             | 1.90             | 1.90             | 1.90             | 1.90             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             | 1.94             | 1.94             | 1.94             | 1.94             | 1.94             |
|                | 35°F<br>1.7°C         | TC          | 31040            | 31040            | 31100            | 31135            | 31936            | 32529            | 32524            | 32526            | 32527            | 32527            | 33574            | 33572            | 33568            | 33568            | 33572            | 35519            | 35510            | 35503            | 35508            | 35502            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.70             | 1.70             | 1.70             | 1.70             | 1.76             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             |
|                | 41°F<br>5°C           | TC          | 30550            | 30551            | 30636            | 30677            | 31548            | 32009            | 32005            | 32006            | 32007            | 32035            | 33033            | 33029            | 33027            | 33027            | 33031            | 34935            | 34926            | 34919            | 34923            | 34918            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.82             | 1.82             | 1.83             | 1.83             | 1.90             | 1.93             | 1.93             | 1.93             | 1.93             | 1.94             | 2.02             | 2.02             | 2.02             | 2.02             | 2.02             | 2.20             | 2.20             | 2.20             | 2.20             | 2.20             |
|                | 47°F<br>8.3°C         | TC          | 30058            | 30058            | 30174            | 30226            | 31156            | 31488            | 31484            | 31485            | 31485            | 31532            | 32491            | 32488            | 32485            | 32485            | 32487            | 34356            | 34347            | 34344            | 34343            | 34338            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.94             | 1.94             | 1.95             | 1.96             | 2.04             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.17             | 2.17             | 2.17             | 2.17             | 2.17             | 2.36             | 2.36             | 2.36             | 2.36             | 2.36             |
|                | 50°F<br>10°C          | TC          | 28858            | 29329            | 30309            | 30482            | 31650            | 30553            | 30571            | 30670            | 30710            | 31687            | 31756            | 31797            | 31816            | 31818            | 31961            | 34044            | 34061            | 34143            | 34153            | 34198            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             | 2.11             | 2.11             | 2.11             |
|                | 59°F<br>15°C          | TC          | 26933            | 27582            | 28552            | 28724            | 29880            | 28577            | 28589            | 28731            | 28787            | 29914            | 29763            | 29795            | 29807            | 29809            | 30005            | 32036            | 32045            | 32108            | 32115            | 32146            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 1.96             | 1.96             | 1.96             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.98             | 1.98             | 1.98             | 1.98             | 1.98             |
|                | 68°F<br>20°C          | TC          | 25045            | 25853            | 26804            | 26973            | 28107            | 26610            | 26619            | 26827            | 27002            | 28139            | 27768            | 27791            | 27799            | 27800            | 28116            | 29984            | 29994            | 30042            | 30047            | 30069            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 1.80             | 1.80             | 1.81             | 1.82             | 1.83             | 1.81             | 1.81             | 1.81             | 1.82             | 1.83             | 1.83             | 1.82             | 1.82             | 1.82             | 1.83             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                | 77°F<br>25°C          | TC          | 23121            | 24007            | 24938            | 25104            | 26213            | 24625            | 24637            | 24920            | 25133            | 26244            | 25749            | 25779            | 25791            | 25820            | 26268            | 27888            | 27913            | 27975            | 27982            | 28013            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 1.66             | 1.66             | 1.67             | 1.67             | 1.68             | 1.67             | 1.67             | 1.67             | 1.67             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             | 1.70             | 1.70             | 1.70             | 1.70             | 1.69             |
|                | 82°F<br>27.8°C        | TC          | 23057            | 24034            | 24992            | 25162            | 26307            | 24578            | 24618            | 25022            | 25193            | 26336            | 25728            | 25763            | 25776            | 25816            | 26360            | 27907            | 27943            | 28012            | 28020            | 28054            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 1.81             | 1.82             | 1.83             | 1.83             | 1.83             | 1.82             | 1.82             | 1.83             | 1.83             | 1.84             | 1.83             | 1.83             | 1.83             | 1.83             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                | 86°F<br>30°C          | TC          | 24244            | 25367            | 26396            | 26578            | 27817            | 25845            | 25899            | 26428            | 26610            | 27838            | 27078            | 27110            | 27152            | 27177            | 27864            | 29405            | 29448            | 29517            | 29524            | 29555            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 2.22             | 2.23             | 2.24             | 2.25             | 2.26             | 2.24             | 2.24             | 2.24             | 2.25             | 2.26             | 2.25             | 2.25             | 2.25             | 2.25             | 2.26             | 2.28             | 2.28             | 2.28             | 2.28             | 2.27             |
|                | 95°F<br>35°C          | TC          | 27238            | 27287            | 27873            | 28037            | 29136            | 28980            | 28987            | 28997            | 28999            | 29195            | 30232            | 30235            | 30250            | 30253            | 30266            | 32636            | 32624            | 32628            | 32626            | 32651            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             |                  |                  |                  |                  |                  |

Table 26 – 36K Cooling — 37MURA + 45MULA (36C) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 912            | -13°F<br>25°C         | TC          | 34828            | 34812            | 35308            | 35455            | 36430            | 36337            | 36308            | 36285            | 36281            | 36251            | 37424            | 37377            | 37341            | 37336            | 37301            | 39475            | 39464            | 39383            | 39369            | 39285            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.63             | 2.63             | 2.63             | 2.63             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             |
|                | -4°F<br>20°C          | TC          | 37507            | 37489            | 38024            | 38182            | 39233            | 39133            | 39100            | 39076            | 39072            | 39040            | 40303            | 40252            | 40214            | 40208            | 40170            | 42512            | 42500            | 42413            | 42397            | 42307            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.73             | 2.73             | 2.72             | 2.72             | 2.71             | 2.71             | 2.71             | 2.72             | 2.72             | 2.72             | 2.71             | 2.71             | 2.71             | 2.71             | 2.71             | 2.73             | 2.73             | 2.73             | 2.73             | 2.73             |
|                | 0°F<br>17.8°C         | TC          | 38751            | 38728            | 39447            | 39612            | 40700            | 40413            | 40369            | 40337            | 40333            | 40738            | 41601            | 41542            | 41491            | 41484            | 41465            | 43839            | 43828            | 43825            | 43831            | 43859            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             |
|                | 5°F<br>15°C           | TC          | 39862            | 40000            | 40914            | 41103            | 42369            | 41732            | 41742            | 41745            | 41788            | 42411            | 43066            | 43077            | 43086            | 43087            | 43145            | 45593            | 45579            | 45602            | 45607            | 45627            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.77             | 2.77             | 2.78             | 2.78             | 2.79             | 2.79             | 2.79             | 2.79             | 2.79             | 2.80             | 2.80             | 2.80             | 2.81             | 2.81             | 2.81             | 2.87             | 2.87             | 2.87             | 2.87             | 2.87             |
|                | 14°F<br>10°C          | TC          | 40529            | 40508            | 41335            | 41529            | 42817            | 42541            | 42503            | 42474            | 42470            | 42867            | 43998            | 43943            | 43899            | 43892            | 43847            | 46784            | 46770            | 46680            | 46664            | 46564            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.56             | 2.56             | 2.56             | 2.56             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.55             | 2.56             | 2.56             | 2.56             | 2.56             | 2.56             |
|                | 17°F<br>10°C          | TC          | 40655            | 40788            | 41730            | 41934            | 43296            | 42679            | 42696            | 42704            | 42740            | 43342            | 44135            | 44152            | 44169            | 44171            | 44226            | 46939            | 46926            | 46919            | 46927            | 46967            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.46             | 2.47             | 2.47             | 2.47             | 2.47             | 2.47             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             |
|                | 23°F<br>5°C           | TC          | 40395            | 40569            | 41618            | 41824            | 43202            | 42441            | 42453            | 42458            | 42514            | 43249            | 43904            | 43920            | 43931            | 43932            | 44003            | 46684            | 46669            | 46702            | 46709            | 46736            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.41             | 2.41             | 2.42             | 2.42             | 2.44             | 2.43             | 2.43             | 2.43             | 2.43             | 2.44             | 2.45             | 2.45             | 2.45             | 2.45             | 2.45             | 2.49             | 2.49             | 2.49             | 2.49             | 2.49             |
|                | 35°F<br>1.7°C         | TC          | 40254            | 40256            | 40492            | 40605            | 41915            | 42136            | 42134            | 42138            | 42138            | 42250            | 43455            | 43452            | 43454            | 43455            | 43460            | 45902            | 45891            | 45889            | 45887            | 45890            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.17             | 2.18             | 2.19             | 2.20             | 2.29             | 2.31             | 2.31             | 2.31             | 2.31             | 2.31             | 2.41             | 2.41             | 2.41             | 2.41             | 2.41             | 2.62             | 2.62             | 2.62             | 2.62             | 2.62             |
|                | 41°F<br>5°C           | TC          | 39617            | 39618            | 39933            | 40211            | 41400            | 41460            | 41459            | 41461            | 41461            | 41607            | 42753            | 42751            | 42753            | 42754            | 42756            | 45152            | 45141            | 45138            | 45136            | 45141            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 2.33             | 2.33             | 2.36             | 2.38             | 2.47             | 2.48             | 2.48             | 2.48             | 2.48             | 2.49             | 2.59             | 2.59             | 2.59             | 2.59             | 2.59             | 2.82             | 2.82             | 2.82             | 2.82             | 2.82             |
|                | 47°F<br>8.3°C         | TC          | 38979            | 39005            | 39528            | 39704            | 40879            | 40786            | 40785            | 40786            | 40785            | 40974            | 42053            | 42049            | 42052            | 42051            | 42051            | 44407            | 44396            | 44392            | 44390            | 44395            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 2.49             | 2.49             | 2.54             | 2.56             | 2.66             | 2.65             | 2.65             | 2.65             | 2.65             | 2.67             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 3.03             | 3.03             | 3.03             | 3.03             | 3.03             |
|                | 50°F<br>10°C          | TC          | 37452            | 38483            | 39782            | 40013            | 41564            | 39567            | 39588            | 39862            | 39988            | 41603            | 41110            | 41164            | 41185            | 41188            | 41584            | 43944            | 44060            | 44173            | 44186            | 44242            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             | 2.71             | 2.71             | 2.71             | 2.71             | 2.71             | 2.71             |
|                | 59°F<br>15°C          | TC          | 34976            | 36203            | 37488            | 37716            | 39251            | 37007            | 37057            | 37478            | 37757            | 39290            | 38533            | 38572            | 38586            | 38642            | 39322            | 41377            | 41460            | 41542            | 41552            | 41586            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 2.51             | 2.52             | 2.52             | 2.52             | 2.53             | 2.52             | 2.52             | 2.52             | 2.52             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             | 2.53             | 2.55             | 2.54             | 2.54             | 2.54             | 2.54             |
|                | 68°F<br>20°C          | TC          | 32500            | 33888            | 35144            | 35368            | 36868            | 34407            | 34484            | 35182            | 35406            | 36905            | 35894            | 35921            | 35986            | 36017            | 36935            | 38676            | 38748            | 38809            | 38815            | 38835            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 2.30             | 2.32             | 2.33             | 2.33             | 2.35             | 2.32             | 2.32             | 2.33             | 2.33             | 2.35             | 2.34             | 2.34             | 2.34             | 2.34             | 2.35             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             |
|                | 77°F<br>25°C          | TC          | 30017            | 31463            | 32694            | 32912            | 34382            | 31822            | 31923            | 32730            | 32949            | 34417            | 33264            | 33301            | 33386            | 33423            | 34446            | 35926            | 36035            | 36118            | 36127            | 36161            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 2.12             | 2.14             | 2.15             | 2.15             | 2.16             | 2.14             | 2.14             | 2.15             | 2.15             | 2.16             | 2.15             | 2.15             | 2.15             | 2.15             | 2.16             | 2.18             | 2.18             | 2.17             | 2.17             | 2.17             |
|                | 82°F<br>27.8°C        | TC          | 29956            | 31486            | 32756            | 32978            | 34488            | 31744            | 31867            | 32784            | 33015            | 34524            | 33221            | 33263            | 33366            | 33408            | 34554            | 35919            | 36054            | 36148            | 36158            | 36197            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 2.32             | 2.33             | 2.34             | 2.34             | 2.36             | 2.34             | 2.34             | 2.34             | 2.35             | 2.36             | 2.35             | 2.35             | 2.35             | 2.35             | 2.36             | 2.38             | 2.37             | 2.37             | 2.37             | 2.37             |
|                | 86°F<br>30°C          | TC          | 31669            | 33250            | 34610            | 34851            | 36474            | 33398            | 33551            | 34648            | 34891            | 36512            | 34980            | 35020            | 35149            | 35199            | 36543            | 37870            | 38016            | 38106            | 38116            | 38151            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 2.85             | 2.87             | 2.88             | 2.88             | 2.90             | 2.87             | 2.87             | 2.88             | 2.88             | 2.90             | 2.89             | 2.89             | 2.89             | 2.89             | 2.90             | 2.93             | 2.92             | 2.92             | 2.92             | 2.92             |
|                | 95°F<br>35°C          | TC          | 35300            | 35491            | 36638            | 36855            | 38312            | 37517            | 37538            | 37550            | 37595            | 38360            | 39127            | 39135            | 39159            | 39162            | 39227            | 42161            | 42145            | 42153            | 42165            | 42222            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.4.             |                  |                  |                  |

Table 27 – 48K Cooling — 37MURA + 45MULA (60C)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 790            | -13°F<br>25°C         | TC          | 29987            | 29977            | 29968            | 30143            | 31030            | 31308            | 31290            | 31276            | 31274            | 31252            | 32242            | 32225            | 32204            | 32200            | 32178            | 34011            | 34002            | 33977            | 33969            | 33918            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.41             | 1.41             | 1.41             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             |
|                | -4°F<br>20°C          | TC          | 32294            | 32283            | 32274            | 32461            | 33417            | 33716            | 33697            | 33682            | 33680            | 33656            | 34722            | 34704            | 34681            | 34677            | 34653            | 36628            | 36618            | 36591            | 36582            | 36527            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.46             | 1.46             | 1.46             | 1.45             | 1.45             | 1.44             | 1.44             | 1.45             | 1.45             | 1.45             | 1.44             | 1.44             | 1.44             | 1.44             | 1.44             | 1.45             | 1.45             | 1.45             | 1.45             | 1.45             |
|                | 0°F<br>17.8°C         | TC          | 33360            | 33345            | 33474            | 33730            | 34664            | 34814            | 34788            | 34768            | 34765            | 34759            | 35835            | 35815            | 35782            | 35777            | 35745            | 37767            | 37756            | 37757            | 37762            | 37790            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.47             | 1.47             | 1.47             | 1.47             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.47             | 1.47             | 1.48             | 1.48             | 1.48             | 1.48             |
|                | 5°F<br>15°C           | TC          | 34341            | 34372            | 34835            | 34995            | 36065            | 35974            | 35982            | 35985            | 35986            | 36163            | 37151            | 37148            | 37158            | 37159            | 37164            | 39371            | 39360            | 39360            | 39363            | 39385            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             |
|                | 14°F<br>10°C          | TC          | 34416            | 34404            | 34546            | 34848            | 35930            | 36144            | 36123            | 36106            | 36103            | 36084            | 37393            | 37375            | 37347            | 37342            | 37310            | 39744            | 39732            | 39703            | 39695            | 39634            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.47             | 1.47             | 1.47             | 1.47             | 1.48             | 1.47             | 1.47             | 1.47             | 1.47             | 1.47             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             |
|                | 17°F<br>10°C          | TC          | 34484            | 34493            | 34916            | 35117            | 36248            | 36216            | 36219            | 36227            | 36228            | 36399            | 37371            | 37385            | 37409            | 37411            | 37421            | 39856            | 39844            | 39848            | 39856            | 39893            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.47             | 1.47             | 1.47             | 1.47             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.47             | 1.47             | 1.47             | 1.47             | 1.48             |
|                | 23°F<br>5°C           | TC          | 33917            | 33964            | 34517            | 34686            | 35820            | 35658            | 35667            | 35672            | 35672            | 35883            | 36915            | 36914            | 36925            | 36927            | 36933            | 39295            | 39283            | 39285            | 39290            | 39317            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.61             | 1.61             | 1.61             | 1.61             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.66             | 1.66             | 1.66             | 1.66             | 1.66             |
|                | 35°F<br>1.7°C         | TC          | 33249            | 33250            | 33314            | 33351            | 34208            | 34844            | 34839            | 34840            | 34842            | 34842            | 35964            | 35961            | 35957            | 35957            | 35961            | 38047            | 38038            | 38030            | 38035            | 38028            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.77             | 1.77             | 1.78             | 1.78             | 1.84             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 2.13             | 2.13             | 2.13             | 2.13             | 2.13             |
|                | 41°F<br>5°C           | TC          | 37008            | 37008            | 37111            | 37161            | 38216            | 38774            | 38770            | 38771            | 38772            | 38806            | 40015            | 40011            | 40007            | 40008            | 40012            | 42319            | 42309            | 42300            | 42304            | 42298            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 2.10             | 2.10             | 2.11             | 2.11             | 2.19             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.54             | 2.54             | 2.54             | 2.54             | 2.54             |
|                | 47°F<br>8.3°C         | TC          | 40766            | 40766            | 40923            | 40994            | 42255            | 42705            | 42699            | 42701            | 42701            | 42765            | 44065            | 44061            | 44057            | 44058            | 44060            | 46594            | 46582            | 46579            | 46578            | 46571            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 2.42             | 2.42             | 2.43             | 2.44             | 2.54             | 2.58             | 2.58             | 2.58             | 2.58             | 2.59             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.95             | 2.95             | 2.95             | 2.95             | 2.94             |
|                | 50°F<br>10°C          | TC          | 39755            | 40404            | 41754            | 41993            | 43602            | 42091            | 42116            | 42252            | 42306            | 43653            | 43748            | 43804            | 43830            | 43833            | 44030            | 46900            | 46923            | 47036            | 47049            | 47112            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.77             | 2.78             | 2.77             | 2.77             | 2.77             | 2.77             | 2.77             | 2.77             | 2.77             |
|                | 59°F<br>15°C          | TC          | 38987            | 39926            | 41331            | 41580            | 43253            | 41366            | 41384            | 41590            | 41670            | 43302            | 43084            | 43130            | 43148            | 43149            | 43434            | 46374            | 46386            | 46477            | 46488            | 46533            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 2.97             | 2.98             | 2.99             | 2.99             | 3.00             | 2.99             | 2.99             | 2.99             | 2.99             | 3.00             | 3.00             | 3.00             | 3.00             | 3.00             | 3.00             | 3.02             | 3.02             | 3.02             | 3.02             | 3.01             |
|                | 68°F<br>20°C          | TC          | 38258            | 39492            | 40945            | 41204            | 42936            | 40649            | 40662            | 40980            | 41248            | 42984            | 42418            | 42453            | 42465            | 42466            | 42950            | 45803            | 45818            | 45891            | 45900            | 45933            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 3.17             | 3.19             | 3.20             | 3.21             | 3.22             | 3.20             | 3.20             | 3.20             | 3.21             | 3.23             | 3.22             | 3.22             | 3.22             | 3.22             | 3.23             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             |
|                | 77°F<br>25°C          | TC          | 37459            | 38894            | 40402            | 40670            | 42468            | 39895            | 39913            | 40372            | 40718            | 42518            | 41716            | 41764            | 41783            | 41831            | 42556            | 45180            | 45221            | 45323            | 45334            | 45383            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 3.40             | 3.41             | 3.43             | 3.43             | 3.45             | 3.43             | 3.42             | 3.43             | 3.43             | 3.45             | 3.44             | 3.44             | 3.44             | 3.44             | 3.45             | 3.48             | 3.48             | 3.48             | 3.48             | 3.48             |
|                | 82°F<br>27.8°C        | TC          | 36758            | 38317            | 39844            | 40115            | 41939            | 39184            | 39248            | 39892            | 40164            | 41987            | 41018            | 41072            | 41093            | 41157            | 42025            | 44491            | 44548            | 44659            | 44671            | 44724            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 3.53             | 3.55             | 3.57             | 3.57             | 3.58             | 3.56             | 3.56             | 3.57             | 3.57             | 3.59             | 3.58             | 3.58             | 3.58             | 3.58             | 3.59             | 3.62             | 3.62             | 3.61             | 3.61             | 3.61             |
|                | 86°F<br>30°C          | TC          | 35847            | 37507            | 39029            | 39298            | 41130            | 38214            | 38294            | 39076            | 39345            | 41162            | 40037            | 40084            | 40148            | 40184            | 41200            | 43479            | 43541            | 43643            | 43655            | 43700            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 3.65             | 3.67             | 3.69             | 3.69             | 3.72             | 3.68             | 3.68             | 3.69             | 3.69             | 3.71             | 3.70             | 3.70             | 3.70             | 3.70             | 3.71             | 3.75             | 3.75             | 3.74             | 3.74             | 3.74             |
|                | 95°F<br>35°C          | TC          | 34235            | 34296            | 35033            | 35239            | 36621            | 36425            | 36434            | 36446            | 36448            | 36695            | 37998            | 38002            | 38021            | 38024            | 38041            | 41020            | 41005            | 41009            | 41007            | 41038            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             |                  |                  |                  |                  |

Table 27 – 48K Cooling — 37MURA + 45MULA (60C) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1050           | -13°F<br>25°C         | TC          | 38758            | 38741            | 39293            | 39456            | 40542            | 40439            | 40405            | 40380            | 40376            | 40343            | 41648            | 41595            | 41556            | 41550            | 41511            | 43930            | 43919            | 43828            | 43812            | 43719            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.79             | 1.79             | 1.79             | 1.79             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             |
|                | -4°F<br>20°C          | TC          | 41740            | 41721            | 42316            | 42491            | 43661            | 43549            | 43514            | 43486            | 43482            | 43446            | 44852            | 44795            | 44753            | 44746            | 44704            | 47310            | 47297            | 47200            | 47182            | 47082            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.85             | 1.86             | 1.85             | 1.85             | 1.85             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                | 0°F<br>17.8°C         | TC          | 43125            | 43100            | 43899            | 44083            | 45293            | 44975            | 44925            | 44890            | 44885            | 45336            | 46297            | 46231            | 46173            | 46167            | 46145            | 48786            | 48775            | 48771            | 48778            | 48809            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 5°F<br>15°C           | TC          | 44362            | 44514            | 45532            | 45742            | 47151            | 46442            | 46454            | 46457            | 46505            | 47198            | 47927            | 47939            | 47949            | 47951            | 48014            | 50738            | 50723            | 50749            | 50755            | 50777            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.89             | 1.89             | 1.89             | 1.89             | 1.90             | 1.89             | 1.89             | 1.89             | 1.89             | 1.90             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             |
|                | 14°F<br>10°C          | TC          | 44493            | 44470            | 45378            | 45591            | 47005            | 46702            | 46661            | 46629            | 46624            | 47060            | 48302            | 48241            | 48192            | 48185            | 48136            | 51360            | 51344            | 51246            | 51228            | 51119            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.89             | 1.89             | 1.89             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 17°F<br>10°C          | TC          | 44432            | 44577            | 45607            | 45830            | 47318            | 46644            | 46663            | 46672            | 46711            | 47369            | 48236            | 48254            | 48273            | 48275            | 48335            | 51300            | 51286            | 51278            | 51288            | 51330            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 23°F<br>5°C           | TC          | 43814            | 44002            | 45140            | 45363            | 46858            | 46032            | 46046            | 46051            | 46111            | 46908            | 47620            | 47636            | 47649            | 47650            | 47727            | 50634            | 50619            | 50655            | 50662            | 50691            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.05             | 2.05             | 2.06             | 2.06             | 2.08             | 2.07             | 2.07             | 2.07             | 2.07             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             |
|                | 35°F<br>1.7°C         | TC          | 42983            | 42984            | 43237            | 43357            | 44756            | 44992            | 44990            | 44994            | 44994            | 45114            | 46400            | 46397            | 46399            | 46401            | 46405            | 49013            | 49001            | 48999            | 48997            | 49001            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.26             | 2.26             | 2.28             | 2.29             | 2.38             | 2.40             | 2.40             | 2.40             | 2.40             | 2.41             | 2.51             | 2.51             | 2.51             | 2.51             | 2.51             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             |
|                | 41°F<br>5°C           | TC          | 47839            | 47840            | 48221            | 48556            | 49991            | 50064            | 50063            | 50066            | 50066            | 50242            | 51626            | 51623            | 51626            | 51626            | 51630            | 54523            | 54509            | 54506            | 54503            | 54509            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 2.68             | 2.68             | 2.71             | 2.73             | 2.84             | 2.85             | 2.85             | 2.85             | 2.85             | 2.86             | 2.98             | 2.98             | 2.98             | 2.98             | 2.98             | 3.24             | 3.24             | 3.24             | 3.24             | 3.24             |
|                | 47°F<br>8.3°C         | TC          | 52697            | 52732            | 53439            | 53678            | 55266            | 55140            | 55138            | 55140            | 55139            | 55395            | 56853            | 56848            | 56852            | 56851            | 56851            | 60036            | 60021            | 60015            | 60013            | 60019            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 3.10             | 3.10             | 3.15             | 3.18             | 3.31             | 3.30             | 3.30             | 3.30             | 3.30             | 3.32             | 3.45             | 3.45             | 3.45             | 3.45             | 3.45             | 3.76             | 3.76             | 3.76             | 3.76             | 3.76             |
|                | 50°F<br>10°C          | TC          | 51432            | 52848            | 54631            | 54948            | 57078            | 54335            | 54365            | 54741            | 54913            | 57132            | 56455            | 56528            | 56558            | 56561            | 57105            | 60346            | 60505            | 60661            | 60679            | 60756            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.54             | 3.54             | 3.54             | 3.54             | 3.54             |
|                | 59°F<br>15°C          | TC          | 50470            | 52240            | 54095            | 54424            | 56638            | 53399            | 53472            | 54079            | 54482            | 56694            | 55602            | 55659            | 55678            | 55759            | 56741            | 59706            | 59825            | 59945            | 59958            | 60008            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 3.80             | 3.81             | 3.82             | 3.82             | 3.83             | 3.82             | 3.82             | 3.82             | 3.82             | 3.84             | 3.83             | 3.83             | 3.83             | 3.83             | 3.84             | 3.86             | 3.86             | 3.85             | 3.85             | 3.85             |
|                | 68°F<br>20°C          | TC          | 49490            | 51602            | 53516            | 53856            | 56141            | 52393            | 52511            | 53574            | 53915            | 56197            | 54658            | 54699            | 54797            | 54845            | 56244            | 58894            | 59003            | 59096            | 59105            | 59136            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 4.05             | 4.08             | 4.10             | 4.10             | 4.13             | 4.09             | 4.09             | 4.10             | 4.10             | 4.13             | 4.12             | 4.12             | 4.12             | 4.12             | 4.13             | 4.17             | 4.17             | 4.17             | 4.17             | 4.16             |
|                | 77°F<br>25°C          | TC          | 48477            | 50811            | 52800            | 53151            | 55526            | 51392            | 51555            | 52857            | 53211            | 55582            | 53719            | 53780            | 53917            | 53977            | 55629            | 58019            | 58195            | 58330            | 58344            | 58398            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 4.34             | 4.37             | 4.39             | 4.39             | 4.41             | 4.38             | 4.38             | 4.39             | 4.39             | 4.41             | 4.40             | 4.40             | 4.40             | 4.40             | 4.41             | 4.45             | 4.45             | 4.45             | 4.44             | 4.44             |
|                | 82°F<br>27.8°C        | TC          | 47607            | 50037            | 52055            | 52408            | 54808            | 50448            | 50643            | 52101            | 52467            | 54866            | 52795            | 52862            | 53026            | 53092            | 54914            | 57083            | 57297            | 57447            | 57462            | 57524            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 4.52             | 4.54             | 4.57             | 4.57             | 4.59             | 4.55             | 4.55             | 4.56             | 4.57             | 4.59             | 4.57             | 4.57             | 4.57             | 4.57             | 4.59             | 4.63             | 4.62             | 4.62             | 4.62             | 4.61             |
|                | 86°F<br>30°C          | TC          | 46677            | 49008            | 51012            | 51368            | 53760            | 49225            | 49452            | 51069            | 51426            | 53816            | 51558            | 51617            | 51806            | 51881            | 53862            | 55817            | 56033            | 56166            | 56180            | 56232            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 4.67             | 4.70             | 4.72             | 4.72             | 4.75             | 4.70             | 4.70             | 4.72             | 4.72             | 4.75             | 4.73             | 4.73             | 4.73             | 4.73             | 4.75             | 4.79             | 4.79             | 4.78             | 4.78             | 4.78             |
|                | 95°F<br>35°C          | TC          | 44228            | 44467            | 45904            | 46176            | 48001            | 47005            | 47032            | 47047            | 47103            | 48061            | 49022            | 49032            | 49062            | 49067            | 49148            | 52824            | 52803            | 52814            | 52829            | 52900            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             |                  |                  |                  |

Table 28 – 48K Cooling — 37MURA + 45MULA (60D)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 790            | -13°F<br>25°C         | TC          | 29987            | 29977            | 29968            | 30143            | 31030            | 31308            | 31290            | 31276            | 31274            | 31252            | 32242            | 32225            | 32204            | 32200            | 32178            | 34011            | 34002            | 33977            | 33969            | 33918            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.41             | 1.41             | 1.41             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             | 1.39             | 1.39             | 1.39             | 1.39             | 1.39             | 1.40             | 1.40             | 1.40             | 1.40             | 1.40             |
|                | -4°F<br>20°C          | TC          | 32294            | 32283            | 32274            | 32461            | 33417            | 33716            | 33697            | 33682            | 33680            | 33656            | 34722            | 34704            | 34681            | 34677            | 34653            | 36628            | 36618            | 36591            | 36582            | 36527            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.46             | 1.46             | 1.46             | 1.45             | 1.45             | 1.44             | 1.44             | 1.45             | 1.45             | 1.45             | 1.45             | 1.44             | 1.44             | 1.44             | 1.44             | 1.45             | 1.45             | 1.45             | 1.45             | 1.45             |
|                | 0°F<br>17.8°C         | TC          | 33360            | 33345            | 33474            | 33730            | 34664            | 34814            | 34788            | 34768            | 34765            | 34759            | 35835            | 35815            | 35782            | 35777            | 35745            | 37767            | 37756            | 37757            | 37762            | 37790            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.47             | 1.47             | 1.47             | 1.47             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.47             | 1.47             | 1.48             | 1.48             | 1.48             | 1.48             |
|                | 5°F<br>15°C           | TC          | 34341            | 34372            | 34835            | 34995            | 36065            | 35974            | 35982            | 35985            | 35986            | 36163            | 37151            | 37148            | 37158            | 37159            | 37164            | 39371            | 39360            | 39360            | 39363            | 39385            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             | 1.49             | 1.52             | 1.52             | 1.52             | 1.52             | 1.52             |
|                | 14°F<br>10°C          | TC          | 34416            | 34404            | 34546            | 34848            | 35930            | 36144            | 36123            | 36106            | 36103            | 36084            | 37393            | 37375            | 37347            | 37342            | 37310            | 39744            | 39732            | 39703            | 39695            | 39634            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             | 1.47             | 1.47             | 1.47             | 1.47             | 1.48             | 1.47             | 1.47             | 1.47             | 1.47             | 1.47             | 1.48             | 1.48             | 1.48             | 1.48             | 1.48             |
|                | 17°F<br>10°C          | TC          | 34484            | 34493            | 34916            | 35117            | 36248            | 36216            | 36219            | 36227            | 36228            | 36399            | 37371            | 37385            | 37409            | 37411            | 37421            | 39856            | 39844            | 39848            | 39856            | 39893            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.47             | 1.47             | 1.47             | 1.47             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.46             | 1.47             | 1.47             | 1.47             | 1.47             | 1.48             |
|                | 23°F<br>5°C           | TC          | 33917            | 33964            | 34517            | 34686            | 35820            | 35658            | 35667            | 35672            | 35672            | 35883            | 36915            | 36914            | 36925            | 36927            | 36933            | 39295            | 39283            | 39285            | 39290            | 39317            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.61             | 1.61             | 1.61             | 1.61             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.66             | 1.66             | 1.66             | 1.66             | 1.66             |
|                | 35°F<br>1.7°C         | TC          | 33249            | 33250            | 33314            | 33351            | 34208            | 34844            | 34839            | 34840            | 34842            | 34842            | 35964            | 35961            | 35957            | 35957            | 35961            | 38047            | 38038            | 38030            | 38035            | 38028            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.77             | 1.77             | 1.78             | 1.78             | 1.84             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.96             | 1.96             | 1.96             | 1.96             | 1.96             | 2.13             | 2.13             | 2.13             | 2.13             | 2.13             |
|                | 41°F<br>5°C           | TC          | 37008            | 37008            | 37111            | 37161            | 38216            | 38774            | 38770            | 38771            | 38772            | 38806            | 40015            | 40011            | 40007            | 40008            | 40012            | 42319            | 42309            | 42300            | 42304            | 42298            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 2.10             | 2.10             | 2.11             | 2.11             | 2.19             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.33             | 2.33             | 2.33             | 2.33             | 2.33             | 2.54             | 2.54             | 2.54             | 2.54             | 2.54             |
|                | 47°F<br>8.3°C         | TC          | 40766            | 40766            | 40923            | 40994            | 42255            | 42705            | 42699            | 42701            | 42701            | 42765            | 44065            | 44061            | 44057            | 44058            | 44060            | 46594            | 46582            | 46579            | 46578            | 46571            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 2.42             | 2.42             | 2.43             | 2.44             | 2.54             | 2.58             | 2.58             | 2.58             | 2.58             | 2.59             | 2.70             | 2.70             | 2.70             | 2.70             | 2.70             | 2.95             | 2.95             | 2.95             | 2.95             | 2.94             |
|                | 50°F<br>10°C          | TC          | 39755            | 40404            | 41754            | 41993            | 43602            | 42091            | 42116            | 42252            | 42306            | 43653            | 43748            | 43804            | 43830            | 43833            | 44030            | 46900            | 46923            | 47036            | 47049            | 47112            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.77             | 2.78             | 2.77             | 2.77             | 2.77             | 2.77             | 2.77             | 2.77             | 2.77             |
|                | 59°F<br>15°C          | TC          | 38987            | 39926            | 41331            | 41580            | 43253            | 41366            | 41384            | 41590            | 41670            | 43302            | 43084            | 43130            | 43148            | 43149            | 43434            | 46374            | 46386            | 46477            | 46488            | 46533            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 2.97             | 2.98             | 2.99             | 2.99             | 3.00             | 2.99             | 2.99             | 2.99             | 2.99             | 3.00             | 3.00             | 3.00             | 3.00             | 3.00             | 3.00             | 3.02             | 3.02             | 3.02             | 3.02             | 3.01             |
|                | 68°F<br>20°C          | TC          | 38258            | 39492            | 40945            | 41204            | 42936            | 40649            | 40662            | 40980            | 41248            | 42984            | 42418            | 42453            | 42465            | 42466            | 42950            | 45803            | 45818            | 45891            | 45900            | 45933            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 3.17             | 3.19             | 3.20             | 3.21             | 3.22             | 3.20             | 3.20             | 3.20             | 3.21             | 3.23             | 3.22             | 3.22             | 3.22             | 3.22             | 3.23             | 3.26             | 3.26             | 3.26             | 3.26             | 3.26             |
|                | 77°F<br>25°C          | TC          | 37459            | 38894            | 40402            | 40670            | 42468            | 39895            | 39913            | 40372            | 40718            | 42518            | 41716            | 41764            | 41783            | 41831            | 42556            | 45180            | 45221            | 45323            | 45334            | 45383            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 3.40             | 3.41             | 3.43             | 3.43             | 3.45             | 3.43             | 3.42             | 3.43             | 3.43             | 3.45             | 3.44             | 3.44             | 3.44             | 3.44             | 3.45             | 3.48             | 3.48             | 3.48             | 3.48             | 3.48             |
|                | 82°F<br>27.8°C        | TC          | 36758            | 38317            | 39844            | 40115            | 41939            | 39184            | 39248            | 39892            | 40164            | 41987            | 41018            | 41072            | 41093            | 41157            | 42025            | 44491            | 44548            | 44659            | 44671            | 44724            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 3.53             | 3.55             | 3.57             | 3.57             | 3.58             | 3.56             | 3.56             | 3.57             | 3.57             | 3.59             | 3.58             | 3.58             | 3.58             | 3.58             | 3.59             | 3.62             | 3.62             | 3.61             | 3.61             | 3.61             |
|                | 86°F<br>30°C          | TC          | 35847            | 37507            | 39029            | 39298            | 41130            | 38214            | 38294            | 39076            | 39345            | 41162            | 40037            | 40084            | 40148            | 40184            | 41200            | 43479            | 43541            | 43643            | 43655            | 43700            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 3.65             | 3.67             | 3.69             | 3.69             | 3.72             | 3.68             | 3.68             | 3.69             | 3.69             | 3.71             | 3.70             | 3.70             | 3.70             | 3.70             | 3.71             | 3.75             | 3.75             | 3.74             | 3.74             | 3.74             |
|                | 95°F<br>35°C          | TC          | 34235            | 34296            | 35033            | 35239            | 36621            | 36425            | 36434            | 36446            | 36448            | 36695            | 37998            | 38002            | 38021            | 38024            | 38041            | 41020            | 41005            | 41009            | 41007            | 41038            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             |                  |                  |                  |                  |

Table 28 – 48K Cooling — 37MURA + 45MULA (60D) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1050           | -13°F<br>25°C         | TC          | 38758            | 38741            | 39293            | 39456            | 40542            | 40439            | 40405            | 40380            | 40376            | 40343            | 41648            | 41595            | 41556            | 41550            | 41511            | 43930            | 43919            | 43828            | 43812            | 43719            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.79             | 1.79             | 1.79             | 1.79             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.78             | 1.79             | 1.79             | 1.79             | 1.79             | 1.79             |
|                | -4°F<br>20°C          | TC          | 41740            | 41721            | 42316            | 42491            | 43661            | 43549            | 43514            | 43486            | 43482            | 43446            | 44852            | 44795            | 44753            | 44746            | 44704            | 47310            | 47297            | 47200            | 47182            | 47082            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.85             | 1.86             | 1.85             | 1.85             | 1.85             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.84             | 1.84             | 1.84             | 1.84             | 1.84             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             |
|                | 0°F<br>17.8°C         | TC          | 43125            | 43100            | 43899            | 44083            | 45293            | 44975            | 44925            | 44890            | 44885            | 45336            | 46297            | 46231            | 46173            | 46167            | 46145            | 48786            | 48775            | 48771            | 48778            | 48809            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 5°F<br>15°C           | TC          | 44362            | 44514            | 45532            | 45742            | 47151            | 46442            | 46454            | 46457            | 46505            | 47198            | 47927            | 47939            | 47949            | 47951            | 48014            | 50738            | 50723            | 50749            | 50755            | 50777            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 1.89             | 1.89             | 1.89             | 1.89             | 1.90             | 1.89             | 1.89             | 1.89             | 1.89             | 1.90             | 1.91             | 1.91             | 1.91             | 1.91             | 1.91             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             |
|                | 14°F<br>10°C          | TC          | 44493            | 44470            | 45378            | 45591            | 47005            | 46702            | 46661            | 46629            | 46624            | 47060            | 48302            | 48241            | 48192            | 48185            | 48136            | 51360            | 51344            | 51246            | 51228            | 51119            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.89             | 1.89             | 1.89             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 17°F<br>10°C          | TC          | 44432            | 44577            | 45607            | 45830            | 47318            | 46644            | 46663            | 46672            | 46711            | 47369            | 48236            | 48254            | 48273            | 48275            | 48335            | 51300            | 51286            | 51278            | 51288            | 51330            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.87             | 1.89             | 1.89             | 1.89             | 1.89             | 1.89             |
|                | 23°F<br>5°C           | TC          | 43814            | 44002            | 45140            | 45363            | 46858            | 46032            | 46046            | 46051            | 46111            | 46908            | 47620            | 47636            | 47649            | 47650            | 47727            | 50634            | 50619            | 50655            | 50662            | 50691            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.05             | 2.05             | 2.06             | 2.06             | 2.08             | 2.07             | 2.07             | 2.07             | 2.07             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.12             | 2.12             | 2.12             | 2.12             | 2.12             |
|                | 35°F<br>1.7°C         | TC          | 42983            | 42984            | 43237            | 43357            | 44756            | 44992            | 44990            | 44994            | 44994            | 45114            | 46400            | 46397            | 46399            | 46401            | 46405            | 49013            | 49001            | 48999            | 48997            | 49001            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.26             | 2.26             | 2.28             | 2.29             | 2.38             | 2.40             | 2.40             | 2.40             | 2.40             | 2.41             | 2.51             | 2.51             | 2.51             | 2.51             | 2.51             | 2.72             | 2.72             | 2.72             | 2.72             | 2.72             |
|                | 41°F<br>5°C           | TC          | 47839            | 47840            | 48221            | 48556            | 49991            | 50064            | 50063            | 50066            | 50066            | 50242            | 51626            | 51623            | 51626            | 51626            | 51630            | 54523            | 54509            | 54506            | 54503            | 54509            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 2.68             | 2.68             | 2.71             | 2.73             | 2.84             | 2.85             | 2.85             | 2.85             | 2.85             | 2.86             | 2.98             | 2.98             | 2.98             | 2.98             | 2.98             | 3.24             | 3.24             | 3.24             | 3.24             | 3.24             |
|                | 47°F<br>8.3°C         | TC          | 52697            | 52732            | 53439            | 53678            | 55266            | 55140            | 55138            | 55140            | 55139            | 55395            | 56853            | 56848            | 56852            | 56851            | 56851            | 60036            | 60021            | 60015            | 60013            | 60019            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 3.10             | 3.10             | 3.15             | 3.18             | 3.31             | 3.30             | 3.30             | 3.30             | 3.30             | 3.32             | 3.45             | 3.45             | 3.45             | 3.45             | 3.45             | 3.76             | 3.76             | 3.76             | 3.76             | 3.76             |
|                | 50°F<br>10°C          | TC          | 51432            | 52848            | 54631            | 54948            | 57078            | 54335            | 54365            | 54741            | 54913            | 57132            | 56455            | 56528            | 56558            | 56561            | 57105            | 60346            | 60505            | 60661            | 60679            | 60756            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.54             | 3.54             | 3.54             | 3.54             | 3.54             |
|                | 59°F<br>15°C          | TC          | 50470            | 52240            | 54095            | 54424            | 56638            | 53399            | 53472            | 54079            | 54482            | 56694            | 55602            | 55659            | 55678            | 55759            | 56741            | 59706            | 59825            | 59945            | 59958            | 60008            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 3.80             | 3.81             | 3.82             | 3.82             | 3.83             | 3.82             | 3.82             | 3.82             | 3.82             | 3.84             | 3.83             | 3.83             | 3.83             | 3.83             | 3.84             | 3.86             | 3.86             | 3.85             | 3.85             | 3.85             |
|                | 68°F<br>20°C          | TC          | 49490            | 51602            | 53516            | 53856            | 56141            | 52393            | 52511            | 53574            | 53915            | 56197            | 54658            | 54699            | 54797            | 54845            | 56244            | 58894            | 59003            | 59096            | 59105            | 59136            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 4.05             | 4.08             | 4.10             | 4.10             | 4.13             | 4.09             | 4.09             | 4.10             | 4.10             | 4.13             | 4.12             | 4.12             | 4.12             | 4.12             | 4.13             | 4.17             | 4.17             | 4.17             | 4.17             | 4.16             |
|                | 77°F<br>25°C          | TC          | 48477            | 50811            | 52800            | 53151            | 55526            | 51392            | 51555            | 52857            | 53211            | 55582            | 53719            | 53780            | 53917            | 53977            | 55629            | 58019            | 58195            | 58330            | 58344            | 58398            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 4.34             | 4.37             | 4.39             | 4.39             | 4.41             | 4.38             | 4.38             | 4.39             | 4.39             | 4.41             | 4.40             | 4.40             | 4.40             | 4.40             | 4.41             | 4.45             | 4.45             | 4.45             | 4.44             | 4.44             |
|                | 82°F<br>27.8°C        | TC          | 47607            | 50037            | 52055            | 52408            | 54808            | 50448            | 50643            | 52101            | 52467            | 54866            | 52795            | 52862            | 53026            | 53092            | 54914            | 57083            | 57297            | 57447            | 57462            | 57524            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 4.52             | 4.54             | 4.57             | 4.57             | 4.59             | 4.55             | 4.55             | 4.56             | 4.57             | 4.59             | 4.57             | 4.57             | 4.57             | 4.57             | 4.59             | 4.63             | 4.62             | 4.62             | 4.62             | 4.61             |
|                | 86°F<br>30°C          | TC          | 46677            | 49008            | 51012            | 51368            | 53760            | 49225            | 49452            | 51069            | 51426            | 53816            | 51558            | 51617            | 51806            | 51881            | 53862            | 55817            | 56033            | 56166            | 56180            | 56232            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 4.67             | 4.70             | 4.72             | 4.72             | 4.75             | 4.70             | 4.70             | 4.72             | 4.72             | 4.75             | 4.73             | 4.73             | 4.73             | 4.73             | 4.75             | 4.79             | 4.79             | 4.78             | 4.78             | 4.78             |
|                | 95°F<br>35°C          | TC          | 44228            | 44467            | 45904            | 46176            | 48001            | 47005            | 47032            | 47047            | 47103            | 48061            | 49022            | 49032            | 49062            | 49067            | 49148            | 52824            | 52803            | 52814            | 52829            | 52900            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             |                  |                  |                  |

Table 29 – 54K Cooling — 37MURA + 45MULA (60C)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 785            | -13°F<br>25°C         | TC          | 37474            | 37461            | 37450            | 37668            | 38777            | 39124            | 39102            | 39085            | 39082            | 39055            | 40292            | 40271            | 40244            | 40239            | 40212            | 42503            | 42491            | 42460            | 42449            | 42386            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.10             | 2.10             | 2.10             | 2.09             | 2.09             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.09             | 2.09             |
|                | -4°F<br>20°C          | TC          | 40357            | 40342            | 40331            | 40566            | 41760            | 42133            | 42110            | 42091            | 42088            | 42059            | 43391            | 43368            | 43340            | 43335            | 43305            | 45772            | 45760            | 45726            | 45715            | 45647            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.17             | 2.17             | 2.17             | 2.17             | 2.16             | 2.16             | 2.16             | 2.16             | 2.16             | 2.16             | 2.15             | 2.15             | 2.15             | 2.15             | 2.15             | 2.16             | 2.16             | 2.16             | 2.16             | 2.16             |
|                | 0°F<br>17.8°C         | TC          | 41688            | 41670            | 41831            | 42150            | 43318            | 43506            | 43473            | 43448            | 43444            | 43437            | 44782            | 44756            | 44716            | 44709            | 44670            | 47196            | 47182            | 47184            | 47189            | 47224            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.19             | 2.19             | 2.19             | 2.19             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.18             | 2.19             | 2.20             | 2.20             | 2.20             | 2.20             | 2.20             |
|                | 5°F<br>15°C           | TC          | 42915            | 42953            | 43532            | 43732            | 45069            | 44955            | 44965            | 44970            | 44970            | 45192            | 46427            | 46423            | 46435            | 46436            | 46442            | 49201            | 49186            | 49187            | 49190            | 49218            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.21             | 2.21             | 2.21             | 2.21             | 2.21             | 2.21             | 2.21             | 2.21             | 2.21             | 2.22             | 2.23             | 2.23             | 2.23             | 2.23             | 2.23             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             |
|                | 14°F<br>10°C          | TC          | 42889            | 42873            | 43050            | 43427            | 44774            | 45042            | 45016            | 44994            | 44991            | 44967            | 46598            | 46576            | 46540            | 46534            | 46495            | 49528            | 49513            | 49477            | 49466            | 49390            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 2.79             | 2.79             | 2.79             | 2.79             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             | 2.77             | 2.77             | 2.77             | 2.77             | 2.77             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             |
|                | 17°F<br>10°C          | TC          | 42934            | 42944            | 43471            | 43721            | 45129            | 45089            | 45093            | 45103            | 45104            | 45317            | 46527            | 46545            | 46575            | 46577            | 46589            | 49622            | 49606            | 49612            | 49621            | 49667            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 2.96             | 2.96             | 2.96             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             | 2.97             | 2.97             | 2.97             | 2.97             | 2.97             |
|                | 23°F<br>5°C           | TC          | 42215            | 42274            | 42961            | 43172            | 44583            | 44382            | 44393            | 44399            | 44400            | 44663            | 45947            | 45945            | 45959            | 45961            | 45969            | 48909            | 48894            | 48896            | 48902            | 48936            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 3.25             | 3.25             | 3.25             | 3.26             | 3.27             | 3.27             | 3.27             | 3.27             | 3.27             | 3.27             | 3.29             | 3.29             | 3.29             | 3.29             | 3.29             | 3.35             | 3.35             | 3.35             | 3.35             | 3.35             |
|                | 35°F<br>1.7°C         | TC          | 41359            | 41360            | 41440            | 41486            | 42552            | 43343            | 43337            | 43339            | 43340            | 43341            | 44736            | 44733            | 44728            | 44728            | 44733            | 47327            | 47316            | 47306            | 47312            | 47304            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 3.59             | 3.59             | 3.60             | 3.60             | 3.71             | 3.80             | 3.80             | 3.80             | 3.80             | 3.80             | 3.96             | 3.96             | 3.96             | 3.96             | 3.97             | 4.31             | 4.31             | 4.31             | 4.31             | 4.31             |
|                | 41°F<br>5°C           | TC          | 39964            | 39965            | 40076            | 40130            | 41269            | 41872            | 41867            | 41869            | 41869            | 41906            | 43212            | 43207            | 43204            | 43204            | 43209            | 45700            | 45689            | 45679            | 45684            | 45678            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 2.85             | 2.85             | 2.86             | 2.87             | 2.97             | 3.03             | 3.03             | 3.03             | 3.03             | 3.03             | 3.17             | 3.17             | 3.17             | 3.16             | 3.17             | 3.45             | 3.45             | 3.45             | 3.45             | 3.45             |
|                | 47°F<br>8.3°C         | TC          | 38565            | 38566            | 38714            | 38781            | 39975            | 40400            | 40395            | 40396            | 40396            | 40457            | 41687            | 41683            | 41679            | 41680            | 41682            | 44079            | 44068            | 44065            | 44064            | 44057            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 2.12             | 2.12             | 2.13             | 2.14             | 2.23             | 2.26             | 2.26             | 2.26             | 2.26             | 2.27             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             |
|                | 50°F<br>10°C          | TC          | 37507            | 38120            | 39394            | 39619            | 41137            | 39711            | 39735            | 39864            | 39915            | 41185            | 41275            | 41328            | 41352            | 41355            | 41541            | 44248            | 44270            | 44377            | 44390            | 44449            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             | 2.42             |
|                | 59°F<br>15°C          | TC          | 36478            | 37356            | 38671            | 38903            | 40469            | 38704            | 38721            | 38913            | 38988            | 40515            | 40311            | 40354            | 40370            | 40372            | 40639            | 43389            | 43401            | 43486            | 43496            | 43538            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 2.56             | 2.57             | 2.57             | 2.58             | 2.58             | 2.58             | 2.57             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             | 2.60             | 2.60             | 2.60             | 2.60             | 2.60             |
|                | 68°F<br>20°C          | TC          | 35487            | 36631            | 37979            | 38219            | 39826            | 37704            | 37716            | 38011            | 38259            | 39870            | 39345            | 39378            | 39389            | 39390            | 39838            | 42485            | 42499            | 42567            | 42575            | 42605            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 2.70             | 2.72             | 2.73             | 2.73             | 2.75             | 2.73             | 2.73             | 2.73             | 2.73             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.75             | 2.78             | 2.78             | 2.78             | 2.78             | 2.78             |
|                | 77°F<br>25°C          | TC          | 34432            | 35751            | 37138            | 37384            | 39037            | 36671            | 36689            | 37110            | 37429            | 39083            | 38345            | 38389            | 38407            | 38452            | 39118            | 41530            | 41568            | 41661            | 41671            | 41716            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 2.87             | 2.88             | 2.90             | 2.90             | 2.91             | 2.89             | 2.89             | 2.90             | 2.90             | 2.91             | 2.91             | 2.91             | 2.91             | 2.91             | 2.91             | 2.94             | 2.94             | 2.94             | 2.94             | 2.94             |
|                | 82°F<br>27.8°C        | TC          | 34120            | 35567            | 36984            | 37236            | 38929            | 36372            | 36431            | 37029            | 37281            | 38973            | 38074            | 38124            | 38143            | 38203            | 39009            | 41298            | 41350            | 41454            | 41465            | 41515            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 3.16             | 3.17             | 3.19             | 3.19             | 3.20             | 3.18             | 3.18             | 3.19             | 3.19             | 3.20             | 3.20             | 3.20             | 3.20             | 3.20             | 3.20             | 3.23             | 3.23             | 3.23             | 3.23             | 3.23             |
|                | 86°F<br>30°C          | TC          | 34186            | 35770            | 37221            | 37477            | 39224            | 36444            | 36520            | 37266            | 37523            | 39255            | 38182            | 38228            | 38288            | 38322            | 39292            | 41464            | 41524            | 41621            | 41632            | 41675            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 3.63             | 3.65             | 3.66             | 3.67             | 3.69             | 3.66             | 3.66             | 3.66             | 3.67             | 3.69             | 3.68             | 3.68             | 3.68             | 3.68             | 3.69             | 3.72             | 3.72             | 3.72             | 3.72             | 3.71             |
|                | 95°F<br>35°C          | TC          | 34768            | 34830            | 35577            | 35787            | 37190            | 36991            | 37000            | 37013            | 37015            | 37266            | 38589            | 38593            | 38612            | 38615            | 38633            | 41657            | 41643            | 41647            | 41645            | 41676            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             |                  |                  |                  |                  |

Table 29 – 54K Cooling — 37MURA + 45MULA (60C) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1047           | -13°F<br>25°C         | TC          | 48604            | 48582            | 49275            | 49479            | 50841            | 50711            | 50669            | 50637            | 50633            | 50591            | 52227            | 52162            | 52112            | 52105            | 52055            | 55090            | 55075            | 54962            | 54941            | 54825            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.68             | 2.68             | 2.68             | 2.67             | 2.67             | 2.67             | 2.67             | 2.67             | 2.67             | 2.67             | 2.66             | 2.66             | 2.66             | 2.66             | 2.67             | 2.68             | 2.68             | 2.68             | 2.68             | 2.68             |
|                | -4°F<br>20°C          | TC          | 52343            | 52319            | 53065            | 53285            | 54752            | 54612            | 54567            | 54533            | 54528            | 54482            | 56245            | 56174            | 56121            | 56113            | 56059            | 59328            | 59311            | 59190            | 59168            | 59042            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.78             | 2.78             | 2.77             | 2.77             | 2.76             | 2.76             | 2.76             | 2.76             | 2.76             | 2.76             | 2.76             | 2.76             | 2.76             | 2.76             | 2.76             | 2.77             | 2.77             | 2.78             | 2.78             | 2.78             |
|                | 0°F<br>17.8°C         | TC          | 54080            | 54048            | 55051            | 55281            | 56799            | 56400            | 56337            | 56293            | 56287            | 56853            | 58057            | 57975            | 57903            | 57894            | 57866            | 61179            | 61165            | 61160            | 61168            | 61208            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.80             | 2.83             | 2.83             | 2.83             | 2.83             | 2.83             |
|                | 5°F<br>15°C           | TC          | 55630            | 55822            | 57098            | 57361            | 59129            | 58240            | 58254            | 58258            | 58318            | 59187            | 60102            | 60117            | 60130            | 60131            | 60211            | 63627            | 63608            | 63641            | 63648            | 63676            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.82             | 2.82             | 2.83             | 2.83             | 2.84             | 2.83             | 2.83             | 2.84             | 2.84             | 2.84             | 2.85             | 2.85             | 2.86             | 2.86             | 2.86             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             |
|                | 14°F<br>10°C          | TC          | 55639            | 55611            | 56746            | 57012            | 58780            | 58402            | 58350            | 58310            | 58304            | 58850            | 60402            | 60327            | 60265            | 60256            | 60195            | 64227            | 64207            | 64084            | 64062            | 63925            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 3.57             | 3.57             | 3.56             | 3.56             | 3.56             | 3.55             | 3.56             | 3.56             | 3.56             | 3.56             | 3.55             | 3.55             | 3.55             | 3.55             | 3.55             | 3.57             | 3.57             | 3.57             | 3.57             | 3.57             |
|                | 17°F<br>10°C          | TC          | 55512            | 55693            | 56980            | 57258            | 59118            | 58275            | 58299            | 58310            | 58359            | 59181            | 60264            | 60287            | 60311            | 60313            | 60388            | 64092            | 64074            | 64065            | 64077            | 64130            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 3.78             | 3.78             | 3.78             | 3.78             | 3.78             | 3.78             | 3.78             | 3.78             | 3.78             | 3.78             | 3.78             | 3.78             | 3.79             | 3.79             | 3.79             | 3.82             | 3.82             | 3.82             | 3.82             | 3.82             |
|                | 23°F<br>5°C           | TC          | 54723            | 54959            | 56380            | 56659            | 58526            | 57494            | 57512            | 57518            | 57593            | 58589            | 59477            | 59498            | 59513            | 59515            | 59611            | 63243            | 63223            | 63268            | 63276            | 63313            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 4.16             | 4.16             | 4.18             | 4.18             | 4.20             | 4.19             | 4.19             | 4.19             | 4.19             | 4.20             | 4.22             | 4.22             | 4.22             | 4.22             | 4.22             | 4.30             | 4.30             | 4.30             | 4.30             | 4.30             |
|                | 35°F<br>1.7°C         | TC          | 53654            | 53655            | 53971            | 54121            | 55867            | 56162            | 56159            | 56164            | 56164            | 56314            | 57920            | 57916            | 57919            | 57920            | 57926            | 61181            | 61166            | 61163            | 61161            | 61166            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 4.60             | 4.60             | 4.63             | 4.64             | 4.84             | 4.87             | 4.87             | 4.87             | 4.87             | 4.89             | 5.08             | 5.08             | 5.08             | 5.08             | 5.08             | 5.53             | 5.53             | 5.53             | 5.52             | 5.53             |
|                | 41°F<br>5°C           | TC          | 51842            | 51843            | 52255            | 52618            | 54174            | 54253            | 54252            | 54254            | 54255            | 54445            | 55945            | 55942            | 55945            | 55946            | 55949            | 59084            | 59070            | 59066            | 59063            | 59070            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 3.65             | 3.65             | 3.69             | 3.72             | 3.87             | 3.88             | 3.88             | 3.88             | 3.88             | 3.90             | 4.06             | 4.06             | 4.06             | 4.06             | 4.06             | 4.42             | 4.42             | 4.42             | 4.42             | 4.42             |
|                | 47°F<br>8.3°C         | TC          | 50027            | 50060            | 50731            | 50958            | 52466            | 52346            | 52345            | 52346            | 52345            | 52588            | 53972            | 53967            | 53971            | 53970            | 53970            | 56994            | 56979            | 56975            | 56972            | 56978            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 2.72             | 2.72             | 2.77             | 2.79             | 2.91             | 2.90             | 2.90             | 2.90             | 2.90             | 2.92             | 3.03             | 3.03             | 3.03             | 3.03             | 3.03             | 3.31             | 3.31             | 3.31             | 3.31             | 3.31             |
|                | 50°F<br>10°C          | TC          | 48694            | 50034            | 51723            | 52022            | 54039            | 51443            | 51471            | 51827            | 51990            | 54091            | 53450            | 53519            | 53547            | 53551            | 54065            | 57134            | 57285            | 57432            | 57449            | 57521            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 3.11             | 3.11             | 3.11             | 3.11             | 3.10             | 3.11             | 3.11             | 3.11             | 3.11             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             | 3.10             |
|                | 59°F<br>15°C          | TC          | 47386            | 49049            | 50790            | 51099            | 53178            | 50137            | 50205            | 50775            | 51153            | 53231            | 52205            | 52258            | 52276            | 52352            | 53274            | 56058            | 56170            | 56282            | 56295            | 56342            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 3.29             | 3.30             | 3.31             | 3.31             | 3.32             | 3.30             | 3.30             | 3.31             | 3.31             | 3.32             | 3.31             | 3.31             | 3.31             | 3.31             | 3.32             | 3.34             | 3.33             | 3.33             | 3.33             | 3.33             |
|                | 68°F<br>20°C          | TC          | 46065            | 48031            | 49812            | 50129            | 52256            | 48767            | 48877            | 49866            | 50183            | 52308            | 50875            | 50914            | 51005            | 51050            | 52351            | 54818            | 54920            | 55006            | 55015            | 55044            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 3.47             | 3.49             | 3.51             | 3.51             | 3.53             | 3.50             | 3.50             | 3.51             | 3.51             | 3.53             | 3.52             | 3.52             | 3.52             | 3.52             | 3.53             | 3.57             | 3.57             | 3.57             | 3.57             | 3.56             |
|                | 77°F<br>25°C          | TC          | 44716            | 46869            | 48703            | 49028            | 51218            | 47405            | 47555            | 48757            | 49082            | 51270            | 49552            | 49607            | 49734            | 49790            | 51313            | 53518            | 53680            | 53804            | 53818            | 53868            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 3.68             | 3.70             | 3.72             | 3.72             | 3.74             | 3.71             | 3.71             | 3.72             | 3.72             | 3.74             | 3.73             | 3.73             | 3.73             | 3.73             | 3.74             | 3.78             | 3.77             | 3.77             | 3.77             | 3.77             |
|                | 82°F<br>27.8°C        | TC          | 44344            | 46608            | 48488            | 48817            | 51052            | 46991            | 47173            | 48530            | 48871            | 51106            | 49177            | 49239            | 49392            | 49453            | 51151            | 53171            | 53371            | 53510            | 53524            | 53582            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 4.05             | 4.07             | 4.09             | 4.09             | 4.11             | 4.08             | 4.08             | 4.09             | 4.09             | 4.11             | 4.10             | 4.10             | 4.10             | 4.10             | 4.11             | 4.15             | 4.14             | 4.14             | 4.14             | 4.14             |
|                | 86°F<br>30°C          | TC          | 44671            | 46901            | 48819            | 49159            | 51449            | 47109            | 47326            | 48873            | 49215            | 51502            | 49341            | 49398            | 49579            | 49651            | 51546            | 53418            | 53624            | 53751            | 53764            | 53814            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 4.66             | 4.68             | 4.71             | 4.71             | 4.73             | 4.69             | 4.69             | 4.71             | 4.71             | 4.73             | 4.72             | 4.71             | 4.72             | 4.72             | 4.74             | 4.78             | 4.77             | 4.77             | 4.77             | 4.76             |
|                | 95°F<br>35°C          | TC          | 45073            | 45316            | 46780            | 47058            | 48918            | 47903            | 47930            | 47946            | 48002            | 48979            | 49958            | 49969            | 49999            | 50004            | 50087            | 53832            | 53812            | 53823            | 53838            | 53910            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             |                  |                  |                  |

Table 30 – 54K Cooling — 37MURA + 45MULA (60D)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 785            | -13°F<br>25°C         | TC          | 31213            | 31202            | 31194            | 31375            | 32298            | 32587            | 32570            | 32555            | 32553            | 32530            | 33560            | 33543            | 33520            | 33517            | 33493            | 35402            | 35392            | 35366            | 35357            | 35305            |
|                |                       | S/T         | 0.77             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.81             | 0.83             | 0.93             | 0.54             | 0.63             | 0.71             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 1.55             | 1.55             | 1.55             | 1.55             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             | 1.53             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             | 1.54             |
|                | -4°F<br>20°C          | TC          | 33614            | 33602            | 33593            | 33788            | 34783            | 35094            | 35075            | 35059            | 35057            | 35032            | 36142            | 36123            | 36099            | 36095            | 36070            | 38125            | 38115            | 38087            | 38077            | 38020            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 1.00             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.64             | 0.72             | 0.73             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.59             | 1.60             | 1.60             | 1.60             | 1.60             | 1.60             |
|                | 0°F<br>17.8°C         | TC          | 34724            | 34709            | 34843            | 35108            | 36081            | 36238            | 36210            | 36189            | 36186            | 36180            | 37300            | 37279            | 37245            | 37240            | 37207            | 39311            | 39299            | 39301            | 39305            | 39334            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.95             | 0.54             | 0.64             | 0.73             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.62             | 1.62             | 1.62             | 1.62             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.62             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             |
|                | 5°F<br>15°C           | TC          | 35745            | 35777            | 36260            | 36426            | 37539            | 37445            | 37452            | 37457            | 37457            | 37642            | 38670            | 38667            | 38677            | 38678            | 38683            | 40981            | 40969            | 40969            | 40972            | 40995            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.63             | 1.63             | 1.63             | 1.63             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.64             | 1.65             | 1.65             | 1.65             | 1.68             | 1.68             | 1.68             | 1.68             | 1.68             |
|                | 14°F<br>10°C          | TC          | 35540            | 35527            | 35674            | 35986            | 37103            | 37324            | 37303            | 37284            | 37282            | 37262            | 38614            | 38595            | 38566            | 38561            | 38528            | 41042            | 41029            | 40999            | 40990            | 40927            |
|                |                       | S/T         | 0.78             | 0.89             | 0.99             | 1.00             | 1.00             | 0.64             | 0.74             | 0.82             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.83             | 0.39             | 0.47             | 0.55             | 0.56             | 0.65             |
|                |                       | PI          | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             | 1.62             | 1.63             | 1.63             | 1.63             | 1.63             | 1.62             | 1.62             | 1.62             | 1.62             | 1.62             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             |
|                | 17°F<br>10°C          | TC          | 35516            | 35525            | 35960            | 36168            | 37332            | 37299            | 37302            | 37310            | 37311            | 37488            | 38489            | 38504            | 38528            | 38530            | 38540            | 41049            | 41036            | 41040            | 41048            | 41086            |
|                |                       | S/T         | 0.79             | 0.89             | 1.00             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.85             | 0.95             | 0.55             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.66             |
|                |                       | PI          | 1.62             | 1.62             | 1.62             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.61             | 1.63             | 1.63             | 1.63             | 1.63             | 1.63             |
|                | 23°F<br>5°C           | TC          | 34698            | 34747            | 35312            | 35485            | 36645            | 36479            | 36489            | 36494            | 36494            | 36710            | 37766            | 37764            | 37776            | 37778            | 37784            | 40200            | 40188            | 40190            | 40195            | 40223            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.97             | 0.54             | 0.65             | 0.74             | 0.75             | 0.85             | 0.39             | 0.47             | 0.56             | 0.57             | 0.66             |
|                |                       | PI          | 1.75             | 1.75             | 1.75             | 1.75             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.76             | 1.77             | 1.77             | 1.77             | 1.77             | 1.77             | 1.80             | 1.80             | 1.80             | 1.80             | 1.80             |
|                | 35°F<br>1.7°C         | TC          | 33539            | 33540            | 33605            | 33643            | 34507            | 35148            | 35144            | 35145            | 35146            | 35147            | 36278            | 36275            | 36272            | 36272            | 36276            | 38379            | 38370            | 38362            | 38367            | 38361            |
|                |                       | S/T         | 0.75             | 0.85             | 0.93             | 0.94             | 1.00             | 0.62             | 0.71             | 0.79             | 0.80             | 0.89             | 0.53             | 0.62             | 0.69             | 0.71             | 0.80             | 0.39             | 0.46             | 0.53             | 0.54             | 0.63             |
|                |                       | PI          | 1.89             | 1.89             | 1.89             | 1.89             | 1.95             | 2.00             | 2.00             | 2.00             | 2.00             | 2.00             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.27             | 2.27             | 2.26             | 2.27             | 2.26             |
|                | 41°F<br>5°C           | TC          | 33483            | 33484            | 33576            | 33622            | 34576            | 35082            | 35077            | 35079            | 35079            | 35110            | 36204            | 36200            | 36197            | 36198            | 36202            | 38288            | 38279            | 38271            | 38275            | 38270            |
|                |                       | S/T         | 0.76             | 0.86             | 0.94             | 0.96             | 1.00             | 0.62             | 0.72             | 0.80             | 0.81             | 0.90             | 0.53             | 0.62             | 0.70             | 0.71             | 0.81             | 0.39             | 0.46             | 0.53             | 0.55             | 0.64             |
|                |                       | PI          | 1.77             | 1.77             | 1.78             | 1.78             | 1.84             | 1.88             | 1.88             | 1.88             | 1.88             | 1.88             | 1.97             | 1.96             | 1.96             | 1.96             | 1.97             | 2.14             | 2.14             | 2.14             | 2.14             | 2.14             |
|                | 47°F<br>8.3°C         | TC          | 33424            | 33424            | 33552            | 33611            | 34645            | 35014            | 35009            | 35010            | 35010            | 35063            | 36129            | 36125            | 36122            | 36123            | 36125            | 38202            | 38193            | 38190            | 38189            | 38183            |
|                |                       | S/T         | 0.77             | 0.87             | 0.95             | 0.97             | 1.00             | 0.63             | 0.72             | 0.81             | 0.82             | 0.91             | 0.53             | 0.63             | 0.71             | 0.72             | 0.82             | 0.39             | 0.46             | 0.54             | 0.55             | 0.64             |
|                |                       | PI          | 1.65             | 1.65             | 1.66             | 1.67             | 1.74             | 1.76             | 1.76             | 1.76             | 1.76             | 1.77             | 1.85             | 1.85             | 1.85             | 1.85             | 1.85             | 2.01             | 2.01             | 2.01             | 2.01             | 2.01             |
|                | 50°F<br>10°C          | TC          | 32879            | 33416            | 34533            | 34730            | 36061            | 34811            | 34831            | 34944            | 34989            | 36103            | 36182            | 36228            | 36249            | 36252            | 36415            | 38788            | 38807            | 38901            | 38912            | 38964            |
|                |                       | S/T         | 0.87             | 1.00             | 1.00             | 1.00             | 1.00             | 0.69             | 0.81             | 0.92             | 0.94             | 1.00             | 0.57             | 0.69             | 0.80             | 0.81             | 0.93             | 0.39             | 0.49             | 0.58             | 0.60             | 0.71             |
|                |                       | PI          | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             | 1.95             |
|                | 59°F<br>15°C          | TC          | 33098            | 33895            | 35088            | 35299            | 36719            | 35118            | 35133            | 35308            | 35376            | 36762            | 36576            | 36615            | 36630            | 36632            | 36874            | 39369            | 39380            | 39457            | 39466            | 39504            |
|                |                       | S/T         | 0.88             | 1.00             | 1.00             | 1.00             | 1.00             | 0.70             | 0.83             | 0.94             | 0.97             | 1.00             | 0.58             | 0.71             | 0.81             | 0.83             | 0.96             | 0.39             | 0.50             | 0.59             | 0.61             | 0.73             |
|                |                       | PI          | 2.26             | 2.26             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.29             | 2.29             | 2.29             | 2.29             | 2.29             |
|                | 68°F<br>20°C          | TC          | 33344            | 34420            | 35686            | 35911            | 37421            | 35428            | 35439            | 35716            | 35950            | 37463            | 36970            | 37000            | 37011            | 37012            | 37433            | 39920            | 39933            | 39997            | 40004            | 40033            |
|                |                       | S/T         | 0.91             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.85             | 0.97             | 1.00             | 1.00             | 0.59             | 0.72             | 0.84             | 0.86             | 0.99             | 0.40             | 0.50             | 0.61             | 0.62             | 0.75             |
|                |                       | PI          | 2.56             | 2.57             | 2.58             | 2.58             | 2.60             | 2.58             | 2.58             | 2.58             | 2.58             | 2.60             | 2.60             | 2.60             | 2.60             | 2.60             | 2.60             | 2.63             | 2.63             | 2.63             | 2.63             | 2.63             |
|                | 77°F<br>25°C          | TC          | 33522            | 34806            | 36156            | 36396            | 38004            | 35701            | 35718            | 36129            | 36439            | 38049            | 37331            | 37374            | 37391            | 37435            | 38083            | 40432            | 40468            | 40559            | 40569            | 40613            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.72             | 0.87             | 0.99             | 1.00             | 1.00             | 0.59             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 2.88             | 2.89             | 2.91             | 2.91             | 2.92             | 2.90             | 2.90             | 2.90             | 2.91             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             | 2.95             | 2.95             | 2.95             | 2.95             | 2.95             |
|                | 82°F<br>27.8°C        | TC          | 33711            | 35141            | 36541            | 36790            | 38463            | 35937            | 35995            | 36586            | 36835            | 38507            | 37618            | 37668            | 37687            | 37746            | 38542            | 40803            | 40855            | 40957            | 40969            | 41018            |
|                |                       | S/T         | 0.94             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.87             | 1.00             | 1.00             | 1.00             | 0.60             | 0.74             | 0.86             | 0.87             | 1.00             | 0.40             | 0.51             | 0.62             | 0.63             | 0.76             |
|                |                       | PI          | 3.20             | 3.22             | 3.23             | 3.23             | 3.25             | 3.23             | 3.23             | 3.23             | 3.23             | 3.25             | 3.24             | 3.24             | 3.24             | 3.24             | 3.25             | 3.28             | 3.28             | 3.27             | 3.27             | 3.27             |
|                | 86°F<br>30°C          | TC          | 33955            | 35528            | 36969            | 37224            | 38959            | 36198            | 36273            | 37014            | 37269            | 38990            | 37924            | 37969            | 38029            | 38064            | 39026            | 41184            | 41244            | 41340            | 41351            | 41394            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.88             | 1.00             | 1.00             | 1.00             | 0.60             | 0.75             | 0.86             | 0.88             | 1.00             | 0.40             | 0.51             | 0.62             | 0.64             | 0.77             |
|                |                       | PI          | 3.64             | 3.66             | 3.67             | 3.68             | 3.70             | 3.67             | 3.67             | 3.67             | 3.68             | 3.70             | 3.69             | 3.69             | 3.69             | 3.69             | 3.70             | 3.73             | 3.73             | 3.73             | 3.73             | 3.73             |
|                | 95°F<br>35°C          | TC          | 34936            | 34998            | 35749            | 35960            | 37370            | 37170            | 37179            | 37192            | 37194            | 37446            | 38775            | 38779            | 38799            | 38802            | 38819            | 41859            | 41844            | 41848            | 41846            | 41877            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.84             | 0.86             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             |                  |                  |                  |                  |

Table 30 – 54K Cooling — 37MURA + 45MULA (60D) (Continued)

| Airflow<br>CFM | Out-<br>door<br>DB °F | ID WB<br>°F | 60.8°F (16.0°C)  |                  |                  |                  |                  | 64.4°F (16.0°C)  |                  |                  |                  |                  | 67.0°F (19.4°C)  |                  |                  |                  |                  | 71.6°F (22.0°C)  |                  |                  |                  |                  |
|----------------|-----------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                       | ID DB<br>°F | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C | 73.4°F<br>23.0°C | 77.0°F<br>25.0°C | 80.0°F<br>26.7°C | 80.6°F<br>27.0°C | 84.2°F<br>29.0°C |
|                |                       |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1047           | -13°F<br>25°C         | TC          | 40484            | 40465            | 41043            | 41213            | 42347            | 42239            | 42204            | 42177            | 42174            | 42139            | 43502            | 43447            | 43406            | 43400            | 43358            | 45886            | 45874            | 45779            | 45762            | 45665            |
|                |                       | S/T         | 0.80             | 0.91             | 1.00             | 1.00             | 1.00             | 0.65             | 0.75             | 0.85             | 0.86             | 0.97             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.47             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 1.98             | 1.98             | 1.98             | 1.98             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.97             | 1.98             | 1.98             | 1.98             | 1.98             | 1.98             |
|                | -4°F<br>20°C          | TC          | 43598            | 43578            | 44200            | 44383            | 45604            | 45488            | 45451            | 45422            | 45418            | 45380            | 46848            | 46789            | 46745            | 46738            | 46694            | 49416            | 49402            | 49301            | 49282            | 49178            |
|                |                       | S/T         | 0.80             | 0.92             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.85             | 0.87             | 0.98             | 0.55             | 0.65             | 0.74             | 0.76             | 0.86             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.05             | 2.05             | 2.05             | 2.05             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.04             | 2.05             | 2.05             | 2.05             | 2.05             | 2.05             |
|                | 0°F<br>17.8°C         | TC          | 45045            | 45018            | 45854            | 46045            | 47309            | 46977            | 46925            | 46889            | 46883            | 47354            | 48358            | 48289            | 48229            | 48222            | 48199            | 50958            | 50946            | 50942            | 50949            | 50982            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.86             | 0.88             | 1.00             | 0.55             | 0.66             | 0.75             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.09             | 2.09             | 2.09             | 2.09             | 2.09             |
|                | 5°F<br>15°C           | TC          | 46336            | 46496            | 47559            | 47778            | 49250            | 48510            | 48522            | 48525            | 48575            | 49299            | 50061            | 50074            | 50084            | 50085            | 50152            | 52997            | 52981            | 53009            | 53014            | 53038            |
|                |                       | S/T         | 0.82             | 0.94             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.87             | 0.88             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.09             | 2.09             | 2.09             | 2.09             | 2.10             | 2.09             | 2.10             | 2.10             | 2.10             | 2.10             | 2.11             | 2.11             | 2.11             | 2.11             | 2.11             | 2.16             | 2.15             | 2.16             | 2.16             | 2.16             |
|                | 14°F<br>10°C          | TC          | 46106            | 46082            | 47023            | 47244            | 48709            | 48395            | 48352            | 48319            | 48314            | 48766            | 50053            | 49990            | 49939            | 49931            | 49881            | 53222            | 53205            | 53103            | 53085            | 52972            |
|                |                       | S/T         | 0.81             | 0.93             | 1.00             | 1.00             | 1.00             | 0.65             | 0.76             | 0.86             | 0.87             | 1.00             | 0.55             | 0.66             | 0.75             | 0.76             | 0.87             | 0.39             | 0.48             | 0.56             | 0.57             | 0.67             |
|                |                       | PI          | 2.09             | 2.09             | 2.09             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.08             | 2.09             | 2.09             | 2.09             | 2.09             | 2.09             |
|                | 17°F<br>10°C          | TC          | 45921            | 46071            | 47136            | 47365            | 48904            | 48207            | 48227            | 48236            | 48276            | 48957            | 49852            | 49871            | 49891            | 49893            | 49955            | 53019            | 53004            | 52996            | 53006            | 53051            |
|                |                       | S/T         | 0.82             | 0.93             | 1.00             | 1.00             | 1.00             | 0.66             | 0.77             | 0.87             | 0.88             | 1.00             | 0.55             | 0.66             | 0.76             | 0.77             | 0.87             | 0.39             | 0.48             | 0.57             | 0.58             | 0.68             |
|                |                       | PI          | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.07             | 2.09             | 2.09             | 2.09             | 2.09             | 2.09             |
|                | 23°F<br>5°C           | TC          | 44980            | 45173            | 46342            | 46570            | 48105            | 47257            | 47272            | 47277            | 47339            | 48157            | 48887            | 48904            | 48917            | 48918            | 48997            | 51982            | 51966            | 52003            | 52010            | 52040            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.89             | 0.39             | 0.48             | 0.57             | 0.59             | 0.69             |
|                |                       | PI          | 2.24             | 2.24             | 2.25             | 2.25             | 2.26             | 2.25             | 2.25             | 2.25             | 2.26             | 2.26             | 2.27             | 2.27             | 2.27             | 2.27             | 2.27             | 2.31             | 2.31             | 2.31             | 2.31             | 2.31             |
|                | 35°F<br>1.7°C         | TC          | 43510            | 43511            | 43767            | 43889            | 45305            | 45544            | 45542            | 45546            | 45546            | 45667            | 46969            | 46966            | 46969            | 46970            | 46974            | 49614            | 49602            | 49600            | 49598            | 49602            |
|                |                       | S/T         | 0.78             | 0.88             | 0.97             | 0.99             | 1.00             | 0.63             | 0.73             | 0.82             | 0.83             | 0.93             | 0.54             | 0.63             | 0.72             | 0.73             | 0.83             | 0.39             | 0.46             | 0.54             | 0.56             | 0.65             |
|                |                       | PI          | 2.42             | 2.42             | 2.43             | 2.44             | 2.54             | 2.56             | 2.56             | 2.56             | 2.56             | 2.57             | 2.67             | 2.67             | 2.67             | 2.67             | 2.67             | 2.91             | 2.91             | 2.91             | 2.90             | 2.91             |
|                | 41°F<br>5°C           | TC          | 43434            | 43435            | 43781            | 44085            | 45388            | 45454            | 45453            | 45456            | 45456            | 45615            | 46872            | 46869            | 46872            | 46873            | 46876            | 49502            | 49490            | 49487            | 49485            | 49490            |
|                |                       | S/T         | 0.78             | 0.89             | 0.98             | 1.00             | 1.00             | 0.64             | 0.74             | 0.83             | 0.84             | 0.94             | 0.54             | 0.64             | 0.72             | 0.74             | 0.84             | 0.39             | 0.47             | 0.55             | 0.56             | 0.66             |
|                |                       | PI          | 2.27             | 2.27             | 2.29             | 2.31             | 2.40             | 2.41             | 2.41             | 2.41             | 2.41             | 2.42             | 2.52             | 2.52             | 2.52             | 2.52             | 2.52             | 2.74             | 2.74             | 2.74             | 2.74             | 2.74             |
|                | 47°F<br>8.3°C         | TC          | 43357            | 43386            | 43967            | 44164            | 45471            | 45367            | 45366            | 45367            | 45366            | 45576            | 46776            | 46772            | 46775            | 46775            | 46775            | 49395            | 49383            | 49378            | 49376            | 49381            |
|                |                       | S/T         | 0.79             | 0.90             | 1.00             | 1.00             | 1.00             | 0.64             | 0.75             | 0.84             | 0.85             | 0.96             | 0.54             | 0.65             | 0.73             | 0.75             | 0.85             | 0.39             | 0.47             | 0.55             | 0.57             | 0.67             |
|                |                       | PI          | 2.12             | 2.12             | 2.16             | 2.18             | 2.27             | 2.26             | 2.26             | 2.26             | 2.26             | 2.28             | 2.37             | 2.37             | 2.37             | 2.37             | 2.37             | 2.58             | 2.58             | 2.58             | 2.58             | 2.58             |
|                | 50°F<br>10°C          | TC          | 42685            | 43860            | 45340            | 45603            | 47371            | 45095            | 45120            | 45432            | 45575            | 47416            | 46854            | 46915            | 46940            | 46942            | 47394            | 50083            | 50216            | 50345            | 50360            | 50423            |
|                |                       | S/T         | 0.90             | 1.00             | 1.00             | 1.00             | 1.00             | 0.71             | 0.85             | 0.96             | 0.99             | 1.00             | 0.59             | 0.72             | 0.83             | 0.85             | 0.99             | 0.40             | 0.50             | 0.60             | 0.62             | 0.74             |
|                |                       | PI          | 2.51             | 2.51             | 2.51             | 2.51             | 2.50             | 2.51             | 2.51             | 2.51             | 2.51             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             |
|                | 59°F<br>15°C          | TC          | 42996            | 44504            | 46084            | 46364            | 48251            | 45492            | 45554            | 46071            | 46414            | 48299            | 47368            | 47416            | 47433            | 47502            | 48338            | 50864            | 50966            | 51068            | 51079            | 51122            |
|                |                       | S/T         | 0.92             | 1.00             | 1.00             | 1.00             | 1.00             | 0.73             | 0.86             | 1.00             | 1.00             | 1.00             | 0.60             | 0.73             | 0.85             | 0.86             | 1.00             | 0.40             | 0.51             | 0.61             | 0.63             | 0.76             |
|                |                       | PI          | 2.89             | 2.90             | 2.91             | 2.91             | 2.92             | 2.91             | 2.91             | 2.91             | 2.91             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             | 2.92             | 2.94             | 2.94             | 2.93             | 2.93             | 2.93             |
|                | 68°F<br>20°C          | TC          | 43284            | 45131            | 46805            | 47103            | 49101            | 45823            | 45926            | 46856            | 47154            | 49150            | 47804            | 47840            | 47926            | 47968            | 49190            | 51509            | 51604            | 51685            | 51693            | 51720            |
|                |                       | S/T         | 0.95             | 1.00             | 1.00             | 1.00             | 1.00             | 0.74             | 0.89             | 1.00             | 1.00             | 1.00             | 0.61             | 0.75             | 0.87             | 0.89             | 1.00             | 0.40             | 0.51             | 0.63             | 0.65             | 0.78             |
|                |                       | PI          | 3.28             | 3.30             | 3.32             | 3.32             | 3.34             | 3.31             | 3.31             | 3.32             | 3.32             | 3.34             | 3.33             | 3.33             | 3.33             | 3.33             | 3.34             | 3.38             | 3.37             | 3.37             | 3.37             | 3.37             |
|                | 77°F<br>25°C          | TC          | 43533            | 45629            | 47415            | 47731            | 49864            | 46151            | 46297            | 47467            | 47784            | 49914            | 48241            | 48295            | 48419            | 48473            | 49956            | 52103            | 52261            | 52381            | 52394            | 52443            |
|                |                       | S/T         | 0.97             | 1.00             | 1.00             | 1.00             | 1.00             | 0.75             | 0.90             | 1.00             | 1.00             | 1.00             | 0.61             | 0.76             | 0.88             | 0.90             | 1.00             | 0.40             | 0.52             | 0.63             | 0.65             | 0.79             |
|                |                       | PI          | 3.69             | 3.71             | 3.73             | 3.73             | 3.75             | 3.72             | 3.72             | 3.73             | 3.73             | 3.75             | 3.74             | 3.74             | 3.74             | 3.74             | 3.75             | 3.79             | 3.78             | 3.78             | 3.78             | 3.78             |
|                | 82°F<br>27.8°C        | TC          | 43814            | 46050            | 47908            | 48232            | 50441            | 46429            | 46608            | 47949            | 48286            | 50494            | 48588            | 48650            | 48801            | 48861            | 50538            | 52534            | 52732            | 52869            | 52883            | 52941            |
|                |                       | S/T         | 0.99             | 1.00             | 1.00             | 1.00             | 1.00             | 0.76             | 0.91             | 1.00             | 1.00             | 1.00             | 0.62             | 0.77             | 0.89             | 0.92             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.80             |
|                |                       | PI          | 4.11             | 4.13             | 4.15             | 4.15             | 4.17             | 4.14             | 4.14             | 4.15             | 4.15             | 4.17             | 4.16             | 4.16             | 4.16             | 4.16             | 4.17             | 4.21             | 4.20             | 4.20             | 4.20             | 4.19             |
|                | 86°F<br>30°C          | TC          | 44369            | 46584            | 48489            | 48827            | 51101            | 46791            | 47006            | 48543            | 48883            | 51154            | 49008            | 49064            | 49244            | 49315            | 51198            | 53057            | 53261            | 53388            | 53401            | 53451            |
|                |                       | S/T         | 1.00             | 1.00             | 1.00             | 1.00             | 1.00             | 0.77             | 0.93             | 1.00             | 1.00             | 1.00             | 0.62             | 0.78             | 0.91             | 0.93             | 1.00             | 0.40             | 0.52             | 0.64             | 0.66             | 0.81             |
|                |                       | PI          | 4.67             | 4.70             | 4.72             | 4.72             | 4.75             | 4.70             | 4.70             | 4.72             | 4.72             | 4.75             | 4.73             | 4.73             | 4.73             | 4.73             | 4.75             | 4.79             | 4.79             | 4.78             | 4.78             | 4.78             |
|                | 95°F<br>35°C          | TC          | 45290            | 45535            | 47006            | 47285            | 49154            | 48134            | 48162            | 48177            | 48234            | 49216            | 50199            | 50210            | 50241            | 50246            | 50329            | 54092            | 54072            | 54083            | 54098            | 54171            |
|                |                       | S/T         | 0.83             | 0.95             | 1.00             | 1.00             | 1.00             | 0.66             | 0.78             | 0.88             | 0.89             | 1.00             | 0.56             | 0.67             | 0.76             | 0.78             | 0.88             | 0.39             | 0.4.             |                  |                  |                  |

## HEATING PERFORMANCE - 37MURA + 45MULA

Extrapolated Data: The highlighted data is tested; other data is simulated and for reference.

Table 31 – 18K Heating — **37MURA + 45MULA** (24A)

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 441              | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| 617              | -13°F (-25.0°C)                                    | 8919                                | 8741             | 8697             | 8662               | 8584               | 1.58                      | 1.59             | 1.59             | 1.60               | 1.60               |
|                  | -4°F (-20.0°C)                                     | 10522                               | 10311            | 10260            | 10219              | 10127              | 1.64                      | 1.65             | 1.66             | 1.66               | 1.67               |
|                  | 0°F (-17.8°C)                                      | 11352                               | 11125            | 11070            | 11025              | 10926              | 1.68                      | 1.69             | 1.69             | 1.70               | 1.70               |
|                  | 5°F (-15.0°C)                                      | 12390                               | 12143            | 12082            | 12034              | 11925              | 1.72                      | 1.74             | 1.74             | 1.74               | 1.75               |
|                  | 14°F (-10.0°C)                                     | 14157                               | 13873            | 13804            | 13749              | 13625              | 1.74                      | 1.75             | 1.76             | 1.76               | 1.77               |
|                  | 17°F (-8.3°C)                                      | 14745                               | 14450            | 14378            | 14321              | 14192              | 1.74                      | 1.76             | 1.76             | 1.76               | 1.77               |
|                  | 22°F (-5.6°C)                                      | 15088                               | 14787            | 14713            | 14654              | 14522              | 1.75                      | 1.76             | 1.77             | 1.77               | 1.78               |
|                  | 27°F (-2.8°C)                                      | 15432                               | 15123            | 15047            | 14987              | 14852              | 1.76                      | 1.77             | 1.78             | 1.78               | 1.79               |
|                  | 32°F (0.0°C)                                       | 15775                               | 15459            | 15382            | 15320              | 15182              | 1.76                      | 1.78             | 1.78             | 1.79               | 1.79               |
|                  | 35°F (1.7°C)                                       | 15981                               | 15661            | 15583            | 15520              | 15381              | 1.77                      | 1.78             | 1.79             | 1.79               | 1.80               |
|                  | 37°F (2.8°C)                                       | 16815                               | 16479            | 16396            | 16331              | 16184              | 1.76                      | 1.77             | 1.78             | 1.78               | 1.79               |
|                  | 42°F (5.6°C)                                       | 18901                               | 18523            | 18431            | 18357              | 18192              | 1.74                      | 1.75             | 1.76             | 1.76               | 1.77               |
|                  | 44.6°F (7.0°C)                                     | 19736                               | 19341            | 19245            | 19168              | 18995              | 1.73                      | 1.74             | 1.75             | 1.75               | 1.76               |
|                  | 47°F (8.3°C)                                       | 20988                               | 20568            | 20465            | 20383              | 20200              | 1.72                      | 1.73             | 1.73             | 1.74               | 1.74               |
|                  | 52°F (11.1°C)                                      | 19632                               | 19240            | 19144            | 19067              | 18895              | 1.61                      | 1.62             | 1.63             | 1.63               | 1.64               |
|                  | 57°F (13.9°C)                                      | 18277                               | 17911            | 17822            | 17751              | 17591              | 1.50                      | 1.52             | 1.52             | 1.52               | 1.53               |
|                  | 59°F (15.0°C)                                      | 17735                               | 17380            | 17293            | 17224              | 17069              | 1.46                      | 1.47             | 1.48             | 1.48               | 1.48               |
|                  | 62°F (16.7°C)                                      | 16922                               | 16583            | 16500            | 16434              | 16286              | 1.40                      | 1.41             | 1.41             | 1.41               | 1.42               |
|                  | 64.4°F (18.0°C)                                    | 16271                               | 15946            | 15866            | 15802              | 15660              | 1.35                      | 1.36             | 1.36             | 1.36               | 1.37               |
|                  | 69.8°F (21.0°C)                                    | 14807                               | 14511            | 14438            | 14381              | 14251              | 1.23                      | 1.24             | 1.24             | 1.25               | 1.25               |
|                  | 75.2°F (24.0°C)                                    | 13343                               | 13076            | 13011            | 12959              | 12842              | 1.11                      | 1.12             | 1.13             | 1.13               | 1.13               |

Table 32 – 18K Heating — **37MURA + 45MULA (24B)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 441              | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57F (13.9°C)                                       | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
| 75.2°F (24.0°C)  | 52232                                              | 51188                               | 50932            | 50728            | 50272              | 2.92               | 2.94                      | 2.95             | 2.95             | 2.96               |                    |
| 617              | -13°F (-25.0°C)                                    | 8919                                | 8741             | 8697             | 8662               | 8584               | 1.58                      | 1.59             | 1.59             | 1.60               | 1.60               |
|                  | -4°F (-20.0°C)                                     | 10522                               | 10311            | 10260            | 10219              | 10127              | 1.64                      | 1.65             | 1.66             | 1.66               | 1.67               |
|                  | 0°F (-17.8°C)                                      | 11352                               | 11125            | 11070            | 11025              | 10926              | 1.68                      | 1.69             | 1.69             | 1.70               | 1.70               |
|                  | 5°F (-15.0°C)                                      | 12390                               | 12143            | 12082            | 12034              | 11925              | 1.72                      | 1.74             | 1.74             | 1.74               | 1.75               |
|                  | 14°F (-10.0°C)                                     | 14157                               | 13873            | 13804            | 13749              | 13625              | 1.74                      | 1.75             | 1.76             | 1.76               | 1.77               |
|                  | 17°F (-8.3°C)                                      | 14745                               | 14450            | 14378            | 14321              | 14192              | 1.74                      | 1.76             | 1.76             | 1.76               | 1.77               |
|                  | 22°F (-5.6°C)                                      | 15088                               | 14787            | 14713            | 14654              | 14522              | 1.75                      | 1.76             | 1.77             | 1.77               | 1.78               |
|                  | 27°F (-2.8°C)                                      | 15432                               | 15123            | 15047            | 14987              | 14852              | 1.76                      | 1.77             | 1.78             | 1.78               | 1.79               |
|                  | 32°F (0.0°C)                                       | 15775                               | 15459            | 15382            | 15320              | 15182              | 1.76                      | 1.78             | 1.78             | 1.79               | 1.79               |
|                  | 35°F (1.7°C)                                       | 15981                               | 15661            | 15583            | 15520              | 15381              | 1.77                      | 1.78             | 1.79             | 1.79               | 1.80               |
|                  | 37°F (2.8°C)                                       | 16815                               | 16479            | 16396            | 16331              | 16184              | 1.76                      | 1.77             | 1.78             | 1.78               | 1.79               |
|                  | 42°F (5.6°C)                                       | 18901                               | 18523            | 18431            | 18357              | 18192              | 1.74                      | 1.75             | 1.76             | 1.76               | 1.77               |
|                  | 44.6°F (7.0°C)                                     | 19736                               | 19341            | 19245            | 19168              | 18995              | 1.73                      | 1.74             | 1.75             | 1.75               | 1.76               |
|                  | 47°F (8.3°C)                                       | 20988                               | 20568            | 20465            | 20383              | 20200              | 1.72                      | 1.73             | 1.73             | 1.74               | 1.74               |
|                  | 52°F (11.1°C)                                      | 19632                               | 19240            | 19144            | 19067              | 18895              | 1.61                      | 1.62             | 1.63             | 1.63               | 1.64               |
|                  | 57F (13.9°C)                                       | 18277                               | 17911            | 17822            | 17751              | 17591              | 1.50                      | 1.52             | 1.52             | 1.52               | 1.53               |
|                  | 59°F (15.0°C)                                      | 17735                               | 17380            | 17293            | 17224              | 17069              | 1.46                      | 1.47             | 1.48             | 1.48               | 1.48               |
|                  | 62°F (16.7°C)                                      | 16922                               | 16583            | 16500            | 16434              | 16286              | 1.40                      | 1.41             | 1.41             | 1.41               | 1.42               |
|                  | 64.4°F (18.0°C)                                    | 16271                               | 15946            | 15866            | 15802              | 15660              | 1.35                      | 1.36             | 1.36             | 1.36               | 1.37               |
|                  | 69.8°F (21.0°C)                                    | 14807                               | 14511            | 14438            | 14381              | 14251              | 1.23                      | 1.24             | 1.24             | 1.25               | 1.25               |
| 75.2°F (24.0°C)  | 13343                                              | 13076                               | 13011            | 12959            | 12842              | 1.11               | 1.12                      | 1.13             | 1.13             | 1.13               |                    |

Table 33 – 24K Heating — **37MURA + 45MULA (24A)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>529</b>       | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| <b>706</b>       | -13°F (-25.0°C)                                    | 16379                               | 16052            | 15972            | 15908              | 15765              | 2.84                      | 2.86             | 2.86             | 2.87               | 2.88               |
|                  | -4°F (-20.0°C)                                     | 19452                               | 19063            | 18967            | 18891              | 18721              | 2.91                      | 2.94             | 2.94             | 2.95               | 2.96               |
|                  | 0°F (-17.8°C)                                      | 20760                               | 20344            | 20243            | 20162              | 19980              | 2.74                      | 2.77             | 2.77             | 2.78               | 2.79               |
|                  | 5°F (-15.0°C)                                      | 22394                               | 21947            | 21837            | 21749              | 21554              | 2.53                      | 2.55             | 2.56             | 2.56               | 2.57               |
|                  | 14°F (-10.0°C)                                     | 23499                               | 23029            | 22914            | 22822              | 22617              | 2.97                      | 2.99             | 3.00             | 3.01               | 3.02               |
|                  | 17°F (-8.3°C)                                      | 23868                               | 23390            | 23273            | 23180              | 22972              | 3.12                      | 3.14             | 3.15             | 3.15               | 3.17               |
|                  | 22°F (-5.6°C)                                      | 23912                               | 23434            | 23317            | 23224              | 23015              | 2.98                      | 3.00             | 3.01             | 3.02               | 3.03               |
|                  | 27°F (-2.8°C)                                      | 23957                               | 23478            | 23360            | 23267              | 23058              | 2.84                      | 2.87             | 2.87             | 2.88               | 2.89               |
|                  | 32°F (0.0°C)                                       | 24002                               | 23522            | 23404            | 23310              | 23101              | 2.71                      | 2.73             | 2.74             | 2.74               | 2.75               |
|                  | 35°F (1.7°C)                                       | 24029                               | 23548            | 23430            | 23336              | 23126              | 2.63                      | 2.65             | 2.65             | 2.66               | 2.67               |
|                  | 37°F (2.8°C)                                       | 25179                               | 24675            | 24552            | 24453              | 24233              | 2.66                      | 2.68             | 2.68             | 2.69               | 2.70               |
|                  | 42°F (5.6°C)                                       | 28054                               | 27493            | 27355            | 27246              | 27001              | 2.74                      | 2.76             | 2.76             | 2.77               | 2.78               |
|                  | 44.6°F (7.0°C)                                     | 29204                               | 28620            | 28477            | 28363              | 28107              | 2.77                      | 2.79             | 2.80             | 2.80               | 2.81               |
|                  | 47°F (8.3°C)                                       | 30929                               | 30310            | 30159            | 30038              | 29768              | 2.82                      | 2.84             | 2.84             | 2.85               | 2.86               |
|                  | 52°F (11.1°C)                                      | 29438                               | 28849            | 28705            | 28590              | 28333              | 2.68                      | 2.70             | 2.70             | 2.71               | 2.72               |
|                  | 57°F (13.9°C)                                      | 27946                               | 27388            | 27251            | 27142              | 26897              | 2.54                      | 2.56             | 2.56             | 2.57               | 2.58               |
|                  | 59°F (15.0°C)                                      | 27350                               | 26803            | 26669            | 26562              | 26323              | 2.48                      | 2.50             | 2.50             | 2.51               | 2.52               |
|                  | 62°F (16.7°C)                                      | 26455                               | 25926            | 25797            | 25693              | 25462              | 2.39                      | 2.41             | 2.42             | 2.42               | 2.43               |
|                  | 64.4°F (18.0°C)                                    | 25740                               | 25225            | 25099            | 24998              | 24773              | 2.33                      | 2.35             | 2.35             | 2.36               | 2.37               |
|                  | 69.8°F (21.0°C)                                    | 24129                               | 23647            | 23528            | 23434              | 23223              | 2.18                      | 2.19             | 2.20             | 2.20               | 2.21               |
|                  | 75.2°F (24.0°C)                                    | 22519                               | 22068            | 21958            | 21870              | 21673              | 2.02                      | 2.04             | 2.05             | 2.05               | 2.06               |

Table 34 – 24K Heating — **37MURA + 45MULA (24B)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 529              | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57F (13.9°C)                                       | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
| 69.8°F (21.0°C)  | 58377                                              | 57210                               | 56924            | 56696            | 56186              | 3.24               | 3.27                      | 3.27             | 3.28             | 3.29               |                    |
| 75.2°F (24.0°C)  | 52232                                              | 51188                               | 50932            | 50728            | 50272              | 2.92               | 2.94                      | 2.95             | 2.95             | 2.96               |                    |
| 706              | -13°F (-25.0°C)                                    | 16379                               | 16052            | 15972            | 15908              | 15765              | 2.84                      | 2.86             | 2.86             | 2.87               | 2.88               |
|                  | -4°F (-20.0°C)                                     | 19452                               | 19063            | 18967            | 18891              | 18721              | 2.91                      | 2.94             | 2.94             | 2.95               | 2.96               |
|                  | 0°F (-17.8°C)                                      | 20760                               | 20344            | 20243            | 20162              | 19980              | 2.74                      | 2.77             | 2.77             | 2.78               | 2.79               |
|                  | 5°F (-15.0°C)                                      | 22394                               | 21947            | 21837            | 21749              | 21554              | 2.53                      | 2.55             | 2.56             | 2.56               | 2.57               |
|                  | 14°F (-10.0°C)                                     | 23499                               | 23029            | 22914            | 22822              | 22617              | 2.97                      | 2.99             | 3.00             | 3.01               | 3.02               |
|                  | 17°F (-8.3°C)                                      | 23868                               | 23390            | 23273            | 23180              | 22972              | 3.12                      | 3.14             | 3.15             | 3.15               | 3.17               |
|                  | 22°F (-5.6°C)                                      | 23912                               | 23434            | 23317            | 23224              | 23015              | 2.98                      | 3.00             | 3.01             | 3.02               | 3.03               |
|                  | 27°F (-2.8°C)                                      | 23957                               | 23478            | 23360            | 23267              | 23058              | 2.84                      | 2.87             | 2.87             | 2.88               | 2.89               |
|                  | 32°F (0.0°C)                                       | 24002                               | 23522            | 23404            | 23310              | 23101              | 2.71                      | 2.73             | 2.74             | 2.74               | 2.75               |
|                  | 35°F (1.7°C)                                       | 24029                               | 23548            | 23430            | 23336              | 23126              | 2.63                      | 2.65             | 2.65             | 2.66               | 2.67               |
|                  | 37°F (2.8°C)                                       | 25179                               | 24675            | 24552            | 24453              | 24233              | 2.66                      | 2.68             | 2.68             | 2.69               | 2.70               |
|                  | 42°F (5.6°C)                                       | 28054                               | 27493            | 27355            | 27246              | 27001              | 2.74                      | 2.76             | 2.76             | 2.77               | 2.78               |
|                  | 44.6°F (7.0°C)                                     | 29204                               | 28620            | 28477            | 28363              | 28107              | 2.77                      | 2.79             | 2.80             | 2.80               | 2.81               |
|                  | 47°F (8.3°C)                                       | 30929                               | 30310            | 30159            | 30038              | 29768              | 2.82                      | 2.84             | 2.84             | 2.85               | 2.86               |
|                  | 52°F (11.1°C)                                      | 29438                               | 28849            | 28705            | 28590              | 28333              | 2.68                      | 2.70             | 2.70             | 2.71               | 2.72               |
|                  | 57F (13.9°C)                                       | 27946                               | 27388            | 27251            | 27142              | 26897              | 2.54                      | 2.56             | 2.56             | 2.57               | 2.58               |
|                  | 59°F (15.0°C)                                      | 27350                               | 26803            | 26669            | 26562              | 26323              | 2.48                      | 2.50             | 2.50             | 2.51               | 2.52               |
|                  | 62°F (16.7°C)                                      | 26455                               | 25926            | 25797            | 25693              | 25462              | 2.39                      | 2.41             | 2.42             | 2.42               | 2.43               |
|                  | 64.4°F (18.0°C)                                    | 25740                               | 25225            | 25099            | 24998              | 24773              | 2.33                      | 2.35             | 2.35             | 2.36               | 2.37               |
|                  | 69.8°F (21.0°C)                                    | 24129                               | 23647            | 23528            | 23434              | 23223              | 2.18                      | 2.19             | 2.20             | 2.20               | 2.21               |
|                  | 75.2°F (24.0°C)                                    | 22519                               | 22068            | 21958            | 21870              | 21673              | 2.02                      | 2.04             | 2.05             | 2.05               | 2.06               |

Table 35 – 30K Heating — **37MURA + 45MULA (36A)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 507              | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57F (13.9°C)                                       | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
| 75.2°F (24.0°C)  | 52232                                              | 51188                               | 50932            | 50728            | 50272              | 2.92               | 2.94                      | 2.95             | 2.95             | 2.96               |                    |
| 676              | -13°F (-25.0°C)                                    | 14231                               | 13946            | 13877            | 13821              | 13697              | 2.86                      | 2.88             | 2.88             | 2.89               | 2.90               |
|                  | -4°F (-20.0°C)                                     | 15802                               | 15486            | 15409            | 15347              | 15209              | 2.83                      | 2.85             | 2.86             | 2.86               | 2.87               |
|                  | 0°F (-17.8°C)                                      | 17799                               | 17443            | 17356            | 17286              | 17131              | 2.89                      | 2.91             | 2.92             | 2.92               | 2.93               |
|                  | 5°F (-15.0°C)                                      | 20295                               | 19889            | 19790            | 19710              | 19533              | 2.97                      | 2.99             | 3.00             | 3.00               | 3.01               |
|                  | 14°F (-10.0°C)                                     | 20578                               | 20167            | 20066            | 19986              | 19806              | 2.85                      | 2.87             | 2.87             | 2.88               | 2.89               |
|                  | 17°F (-8.3°C)                                      | 20673                               | 20259            | 20158            | 20077              | 19897              | 2.81                      | 2.83             | 2.83             | 2.84               | 2.85               |
|                  | 22°F (-5.6°C)                                      | 21088                               | 20666            | 20563            | 20481              | 20296              | 2.79                      | 2.81             | 2.81             | 2.82               | 2.83               |
|                  | 27°F (-2.8°C)                                      | 21503                               | 21073            | 20967            | 20884              | 20696              | 2.77                      | 2.79             | 2.79             | 2.80               | 2.81               |
|                  | 32°F (0.0°C)                                       | 21918                               | 21480            | 21372            | 21287              | 21095              | 2.75                      | 2.77             | 2.77             | 2.78               | 2.79               |
|                  | 35°F (1.7°C)                                       | 22167                               | 21724            | 21615            | 21529              | 21335              | 2.74                      | 2.76             | 2.76             | 2.77               | 2.78               |
|                  | 37°F (2.8°C)                                       | 23445                               | 22976            | 22862            | 22770              | 22565              | 2.74                      | 2.76             | 2.77             | 2.77               | 2.79               |
|                  | 42°F (5.6°C)                                       | 26641                               | 26108            | 25978            | 25874              | 25641              | 2.76                      | 2.78             | 2.78             | 2.79               | 2.80               |
|                  | 44.6°F (7.0°C)                                     | 27920                               | 27361            | 27224            | 27115              | 26871              | 2.76                      | 2.79             | 2.79             | 2.80               | 2.81               |
|                  | 47°F (8.3°C)                                       | 29837                               | 29240            | 29094            | 28978              | 28717              | 2.77                      | 2.79             | 2.80             | 2.81               | 2.82               |
|                  | 52°F (11.1°C)                                      | 28274                               | 27708            | 27570            | 27459              | 27212              | 2.51                      | 2.53             | 2.54             | 2.54               | 2.55               |
|                  | 57F (13.9°C)                                       | 26710                               | 26176            | 26045            | 25941              | 25707              | 2.25                      | 2.27             | 2.27             | 2.28               | 2.29               |
|                  | 59°F (15.0°C)                                      | 26085                               | 25563            | 25435            | 25333              | 25105              | 2.14                      | 2.16             | 2.17             | 2.17               | 2.18               |
|                  | 62°F (16.7°C)                                      | 25146                               | 24643            | 24520            | 24422              | 24202              | 1.99                      | 2.00             | 2.01             | 2.01               | 2.02               |
|                  | 64.4°F (18.0°C)                                    | 24396                               | 23908            | 23788            | 23693              | 23480              | 1.86                      | 1.88             | 1.88             | 1.88               | 1.89               |
|                  | 69.8°F (21.0°C)                                    | 24525                               | 24035            | 23915            | 23819              | 23605              | 1.58                      | 1.59             | 1.60             | 1.60               | 1.61               |
| 75.2°F (24.0°C)  | 21866                                              | 21429                               | 21322            | 21236            | 21045              | 1.30               | 1.31                      | 1.31             | 1.31             | 1.32               |                    |

Table 36 – 30K Heating — **37MURA + 45MULA (36B)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>662</b>       | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| <b>882</b>       | -13°F (-25.0°C)                                    | 15921                               | 15603            | 15525            | 15463              | 15323              | 2.85                      | 2.88             | 2.88             | 2.89               | 2.90               |
|                  | -4°F (-20.0°C)                                     | 18468                               | 18099            | 18009            | 17937              | 17775              | 2.83                      | 2.85             | 2.86             | 2.87               | 2.88               |
|                  | 0°F (-17.8°C)                                      | 19747                               | 19352            | 19255            | 19178              | 19005              | 2.94                      | 2.96             | 2.97             | 2.97               | 2.99               |
|                  | 5°F (-15.0°C)                                      | 21345                               | 20918            | 20813            | 20730              | 20543              | 3.07                      | 3.10             | 3.11             | 3.11               | 3.12               |
|                  | 14°F (-10.0°C)                                     | 24237                               | 23752            | 23633            | 23539              | 23327              | 2.94                      | 2.97             | 2.97             | 2.98               | 2.99               |
|                  | 17°F (-8.3°C)                                      | 25201                               | 24697            | 24573            | 24475              | 24255              | 2.90                      | 2.92             | 2.93             | 2.93               | 2.94               |
|                  | 22°F (-5.6°C)                                      | 25035                               | 24534            | 24411            | 24314              | 24095              | 2.90                      | 2.92             | 2.93             | 2.93               | 2.94               |
|                  | 27°F (-2.8°C)                                      | 24868                               | 24371            | 24249            | 24152              | 23935              | 2.89                      | 2.92             | 2.92             | 2.93               | 2.94               |
|                  | 32°F (0.0°C)                                       | 24702                               | 24208            | 24087            | 23991              | 23775              | 2.89                      | 2.92             | 2.92             | 2.93               | 2.94               |
|                  | 35°F (1.7°C)                                       | 24602                               | 24110            | 23990            | 23894              | 23679              | 2.89                      | 2.92             | 2.92             | 2.93               | 2.94               |
|                  | 37°F (2.8°C)                                       | 26041                               | 25520            | 25392            | 25291              | 25063              | 2.87                      | 2.89             | 2.89             | 2.90               | 2.91               |
|                  | 42°F (5.6°C)                                       | 29636                               | 29043            | 28898            | 28782              | 28523              | 2.80                      | 2.82             | 2.83             | 2.83               | 2.84               |
|                  | 44.6°F (7.0°C)                                     | 31074                               | 30453            | 30300            | 30179              | 29907              | 2.77                      | 2.79             | 2.80             | 2.80               | 2.81               |
|                  | 47°F (8.3°C)                                       | 33231                               | 32567            | 32404            | 32274              | 31984              | 2.73                      | 2.75             | 2.76             | 2.76               | 2.77               |
|                  | 52°F (11.1°C)                                      | 30167                               | 29564            | 29416            | 29299              | 29035              | 2.47                      | 2.49             | 2.49             | 2.50               | 2.51               |
|                  | 57°F (13.9°C)                                      | 27104                               | 26562            | 26429            | 26323              | 26086              | 2.20                      | 2.22             | 2.23             | 2.23               | 2.24               |
|                  | 59°F (15.0°C)                                      | 25878                               | 25361            | 25234            | 25133              | 24907              | 2.10                      | 2.12             | 2.12             | 2.12               | 2.13               |
|                  | 62°F (16.7°C)                                      | 24040                               | 23559            | 23441            | 23348              | 23137              | 1.94                      | 1.96             | 1.96             | 1.96               | 1.97               |
|                  | 64.4°F (18.0°C)                                    | 22569                               | 22118            | 22007            | 21919              | 21722              | 1.81                      | 1.83             | 1.83             | 1.84               | 1.84               |
|                  | 69.8°F (21.0°C)                                    | 22800                               | 22344            | 22233            | 22144              | 21944              | 1.53                      | 1.54             | 1.55             | 1.55               | 1.56               |
|                  | 75.2°F (24.0°C)                                    | 24098                               | 23617            | 23498            | 23404              | 23194              | 1.25                      | 1.26             | 1.26             | 1.26               | 1.27               |

Table 37 – 30K Heating — **37MURA + 45MULA (36C)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 662              | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57F (13.9°C)                                       | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
| 69.8°F (21.0°C)  | 58377                                              | 57210                               | 56924            | 56696            | 56186              | 3.24               | 3.27                      | 3.27             | 3.28             | 3.29               |                    |
| 75.2°F (24.0°C)  | 52232                                              | 51188                               | 50932            | 50728            | 50272              | 2.92               | 2.94                      | 2.95             | 2.95             | 2.96               |                    |
| 882              | -13°F (-25.0°C)                                    | 15921                               | 15603            | 15525            | 15463              | 15323              | 2.85                      | 2.88             | 2.88             | 2.89               | 2.90               |
|                  | -4°F (-20.0°C)                                     | 18468                               | 18099            | 18009            | 17937              | 17775              | 2.83                      | 2.85             | 2.86             | 2.87               | 2.88               |
|                  | 0°F (-17.8°C)                                      | 19747                               | 19352            | 19255            | 19178              | 19005              | 2.94                      | 2.96             | 2.97             | 2.97               | 2.99               |
|                  | 5°F (-15.0°C)                                      | 21345                               | 20918            | 20813            | 20730              | 20543              | 3.07                      | 3.10             | 3.11             | 3.11               | 3.12               |
|                  | 14°F (-10.0°C)                                     | 24237                               | 23752            | 23633            | 23539              | 23327              | 2.94                      | 2.97             | 2.97             | 2.98               | 2.99               |
|                  | 17°F (-8.3°C)                                      | 25201                               | 24697            | 24573            | 24475              | 24255              | 2.90                      | 2.92             | 2.93             | 2.93               | 2.94               |
|                  | 22°F (-5.6°C)                                      | 25035                               | 24534            | 24411            | 24314              | 24095              | 2.90                      | 2.92             | 2.93             | 2.93               | 2.94               |
|                  | 27°F (-2.8°C)                                      | 24868                               | 24371            | 24249            | 24152              | 23935              | 2.89                      | 2.92             | 2.92             | 2.93               | 2.94               |
|                  | 32°F (0.0°C)                                       | 24702                               | 24208            | 24087            | 23991              | 23775              | 2.89                      | 2.92             | 2.92             | 2.93               | 2.94               |
|                  | 35°F (1.7°C)                                       | 24602                               | 24110            | 23990            | 23894              | 23679              | 2.89                      | 2.92             | 2.92             | 2.93               | 2.94               |
|                  | 37°F (2.8°C)                                       | 26041                               | 25520            | 25392            | 25291              | 25063              | 2.87                      | 2.89             | 2.89             | 2.90               | 2.91               |
|                  | 42°F (5.6°C)                                       | 29636                               | 29043            | 28898            | 28782              | 28523              | 2.80                      | 2.82             | 2.83             | 2.83               | 2.84               |
|                  | 44.6°F (7.0°C)                                     | 31074                               | 30453            | 30300            | 30179              | 29907              | 2.77                      | 2.79             | 2.80             | 2.80               | 2.81               |
|                  | 47°F (8.3°C)                                       | 33231                               | 32567            | 32404            | 32274              | 31984              | 2.73                      | 2.75             | 2.76             | 2.76               | 2.77               |
|                  | 52°F (11.1°C)                                      | 30167                               | 29564            | 29416            | 29299              | 29035              | 2.47                      | 2.49             | 2.49             | 2.50               | 2.51               |
|                  | 57F (13.9°C)                                       | 27104                               | 26562            | 26429            | 26323              | 26086              | 2.20                      | 2.22             | 2.23             | 2.23               | 2.24               |
|                  | 59°F (15.0°C)                                      | 25878                               | 25361            | 25234            | 25133              | 24907              | 2.10                      | 2.12             | 2.12             | 2.12               | 2.13               |
|                  | 62°F (16.7°C)                                      | 24040                               | 23559            | 23441            | 23348              | 23137              | 1.94                      | 1.96             | 1.96             | 1.96               | 1.97               |
|                  | 64.4°F (18.0°C)                                    | 22569                               | 22118            | 22007            | 21919              | 21722              | 1.81                      | 1.83             | 1.83             | 1.84               | 1.84               |
|                  | 69.8°F (21.0°C)                                    | 22800                               | 22344            | 22233            | 22144              | 21944              | 1.53                      | 1.54             | 1.55             | 1.55               | 1.56               |
|                  | 75.2°F (24.0°C)                                    | 24098                               | 23617            | 23498            | 23404              | 23194              | 1.25                      | 1.26             | 1.26             | 1.26               | 1.27               |

Table 38 – 36K Heating — **37MURA + 45MULA** (36A)

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>525</b>       | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| <b>700</b>       | -13°F (-25.0°C)                                    | 19293                               | 18907            | 18813            | 18738              | 18569              | 3.36                      | 3.39             | 3.40             | 3.40               | 3.42               |
|                  | -4°F (-20.0°C)                                     | 23286                               | 22820            | 22706            | 22615              | 22412              | 3.67                      | 3.70             | 3.70             | 3.71               | 3.73               |
|                  | 0°F (-17.8°C)                                      | 26642                               | 26109            | 25979            | 25875              | 25642              | 4.08                      | 4.12             | 4.13             | 4.13               | 4.15               |
|                  | 5°F (-15.0°C)                                      | 30837                               | 30220            | 30069            | 29949              | 29680              | 4.61                      | 4.65             | 4.65             | 4.66               | 4.68               |
|                  | 14°F (-10.0°C)                                     | 33385                               | 32717            | 32554            | 32423              | 32132              | 4.60                      | 4.63             | 4.64             | 4.65               | 4.67               |
|                  | 17°F (-8.3°C)                                      | 34234                               | 33549            | 33382            | 33248              | 32949              | 4.59                      | 4.63             | 4.64             | 4.65               | 4.67               |
|                  | 22°F (-5.6°C)                                      | 31809                               | 31173            | 31017            | 30893              | 30615              | 4.21                      | 4.25             | 4.25             | 4.26               | 4.28               |
|                  | 27°F (-2.8°C)                                      | 29384                               | 28796            | 28652            | 28537              | 28281              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 32°F (0.0°C)                                       | 26958                               | 26419            | 26287            | 26182              | 25946              | 3.45                      | 3.48             | 3.49             | 3.49               | 3.51               |
|                  | 35°F (1.7°C)                                       | 25503                               | 24993            | 24868            | 24769              | 24546              | 3.22                      | 3.25             | 3.26             | 3.26               | 3.27               |
|                  | 37°F (2.8°C)                                       | 27801                               | 27245            | 27108            | 27000              | 26757              | 3.34                      | 3.37             | 3.38             | 3.38               | 3.40               |
|                  | 42°F (5.6°C)                                       | 33544                               | 32874            | 32709            | 32578              | 32285              | 3.65                      | 3.68             | 3.69             | 3.69               | 3.71               |
|                  | 44.6°F (7.0°C)                                     | 35842                               | 35125            | 34949            | 34810              | 34496              | 3.77                      | 3.80             | 3.81             | 3.82               | 3.83               |
|                  | 47°F (8.3°C)                                       | 39288                               | 38502            | 38310            | 38157              | 37813              | 3.95                      | 3.98             | 3.99             | 4.00               | 4.02               |
|                  | 52°F (11.1°C)                                      | 40585                               | 39773            | 39574            | 39416              | 39061              | 3.79                      | 3.82             | 3.83             | 3.84               | 3.86               |
|                  | 57°F (13.9°C)                                      | 41882                               | 41044            | 40839            | 40675              | 40309              | 3.64                      | 3.67             | 3.67             | 3.68               | 3.70               |
|                  | 59°F (15.0°C)                                      | 42400                               | 41552            | 41344            | 41179              | 40808              | 3.57                      | 3.60             | 3.61             | 3.62               | 3.63               |
|                  | 62°F (16.7°C)                                      | 43178                               | 42315            | 42103            | 41935              | 41557              | 3.48                      | 3.51             | 3.51             | 3.52               | 3.53               |
|                  | 64.4°F (18.0°C)                                    | 43801                               | 42925            | 42710            | 42539              | 42156              | 3.40                      | 3.43             | 3.44             | 3.44               | 3.46               |
|                  | 69.8°F (21.0°C)                                    | 43529                               | 42659            | 42445            | 42275              | 41895              | 3.23                      | 3.26             | 3.26             | 3.27               | 3.28               |
|                  | 75.2°F (24.0°C)                                    | 33914                               | 33235            | 33069            | 32937              | 32640              | 3.06                      | 3.09             | 3.09             | 3.10               | 3.11               |

Table 39 – 36K Heating — **37MURA + 45MULA (36B)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>684</b>       | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| <b>912</b>       | -13°F (-25.0°C)                                    | 21619                               | 21187            | 21081            | 20997              | 20808              | 3.62                      | 3.65             | 3.66             | 3.66               | 3.68               |
|                  | -4°F (-20.0°C)                                     | 26338                               | 25811            | 25682            | 25579              | 25349              | 3.82                      | 3.85             | 3.86             | 3.87               | 3.88               |
|                  | 0°F (-17.8°C)                                      | 27319                               | 26773            | 26639            | 26533              | 26294              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 5°F (-15.0°C)                                      | 28546                               | 27975            | 27835            | 27724              | 27474              | 3.97                      | 4.00             | 4.01             | 4.02               | 4.03               |
|                  | 14°F (-10.0°C)                                     | 30655                               | 30041            | 29891            | 29772              | 29504              | 4.06                      | 4.09             | 4.10             | 4.10               | 4.12               |
|                  | 17°F (-8.3°C)                                      | 31357                               | 30730            | 30577            | 30454              | 30180              | 4.08                      | 4.12             | 4.13             | 4.13               | 4.15               |
|                  | 22°F (-5.6°C)                                      | 29793                               | 29197            | 29051            | 28935              | 28674              | 3.76                      | 3.79             | 3.79             | 3.80               | 3.82               |
|                  | 27°F (-2.8°C)                                      | 28228                               | 27663            | 27525            | 27415              | 27168              | 3.43                      | 3.46             | 3.46             | 3.47               | 3.48               |
|                  | 32°F (0.0°C)                                       | 26663                               | 26130            | 25999            | 25895              | 25662              | 3.10                      | 3.12             | 3.13             | 3.14               | 3.15               |
|                  | 35°F (1.7°C)                                       | 25725                               | 25210            | 25084            | 24984              | 24759              | 2.90                      | 2.93             | 2.93             | 2.94               | 2.95               |
|                  | 37°F (2.8°C)                                       | 28682                               | 28108            | 27968            | 27856              | 27605              | 3.04                      | 3.06             | 3.07             | 3.07               | 3.09               |
|                  | 42°F (5.6°C)                                       | 36076                               | 35354            | 35178            | 35037              | 34722              | 3.37                      | 3.40             | 3.41             | 3.41               | 3.43               |
|                  | 44.6°F (7.0°C)                                     | 39033                               | 38253            | 38061            | 37909              | 37568              | 3.51                      | 3.54             | 3.54             | 3.55               | 3.57               |
|                  | 47°F (8.3°C)                                       | 43470                               | 42600            | 42387            | 42218              | 41838              | 3.71                      | 3.74             | 3.75             | 3.76               | 3.77               |
|                  | 52°F (11.1°C)                                      | 43565                               | 42693            | 42480            | 42310              | 41929              | 3.55                      | 3.58             | 3.59             | 3.60               | 3.61               |
|                  | 57°F (13.9°C)                                      | 43660                               | 42787            | 42573            | 42402              | 42021              | 3.40                      | 3.42             | 3.43             | 3.44               | 3.45               |
|                  | 59°F (15.0°C)                                      | 43698                               | 42824            | 42610            | 42439              | 42057              | 3.33                      | 3.36             | 3.37             | 3.37               | 3.39               |
|                  | 62°F (16.7°C)                                      | 43755                               | 42880            | 42665            | 42495              | 42112              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 64.4°F (18.0°C)                                    | 43801                               | 42925            | 42710            | 42539              | 42156              | 3.16                      | 3.19             | 3.20             | 3.20               | 3.21               |
|                  | 69.8°F (21.0°C)                                    | 45180                               | 44276            | 44055            | 43878              | 43484              | 2.99                      | 3.02             | 3.02             | 3.03               | 3.04               |
|                  | 75.2°F (24.0°C)                                    | 35567                               | 34855            | 34681            | 34542              | 34232              | 2.82                      | 2.85             | 2.85             | 2.86               | 2.87               |

Table 40 – 36K Heating — **37MURA + 45MULA (36C)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 684              | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| 912              | -13°F (-25.0°C)                                    | 21619                               | 21187            | 21081            | 20997              | 20808              | 3.62                      | 3.65             | 3.66             | 3.66               | 3.68               |
|                  | -4°F (-20.0°C)                                     | 26338                               | 25811            | 25682            | 25579              | 25349              | 3.82                      | 3.85             | 3.86             | 3.87               | 3.88               |
|                  | 0°F (-17.8°C)                                      | 27319                               | 26773            | 26639            | 26533              | 26294              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 5°F (-15.0°C)                                      | 28546                               | 27975            | 27835            | 27724              | 27474              | 3.97                      | 4.00             | 4.01             | 4.02               | 4.03               |
|                  | 14°F (-10.0°C)                                     | 30655                               | 30041            | 29891            | 29772              | 29504              | 4.06                      | 4.09             | 4.10             | 4.10               | 4.12               |
|                  | 17°F (-8.3°C)                                      | 31357                               | 30730            | 30577            | 30454              | 30180              | 4.08                      | 4.12             | 4.13             | 4.13               | 4.15               |
|                  | 22°F (-5.6°C)                                      | 29793                               | 29197            | 29051            | 28935              | 28674              | 3.76                      | 3.79             | 3.79             | 3.80               | 3.82               |
|                  | 27°F (-2.8°C)                                      | 28228                               | 27663            | 27525            | 27415              | 27168              | 3.43                      | 3.46             | 3.46             | 3.47               | 3.48               |
|                  | 32°F (0.0°C)                                       | 26663                               | 26130            | 25999            | 25895              | 25662              | 3.10                      | 3.12             | 3.13             | 3.14               | 3.15               |
|                  | 35°F (1.7°C)                                       | 25725                               | 25210            | 25084            | 24984              | 24759              | 2.90                      | 2.93             | 2.93             | 2.94               | 2.95               |
|                  | 37°F (2.8°C)                                       | 28682                               | 28108            | 27968            | 27856              | 27605              | 3.04                      | 3.06             | 3.07             | 3.07               | 3.09               |
|                  | 42°F (5.6°C)                                       | 36076                               | 35354            | 35178            | 35037              | 34722              | 3.37                      | 3.40             | 3.41             | 3.41               | 3.43               |
|                  | 44.6°F (7.0°C)                                     | 39033                               | 38253            | 38061            | 37909              | 37568              | 3.51                      | 3.54             | 3.54             | 3.55               | 3.57               |
|                  | 47°F (8.3°C)                                       | 43470                               | 42600            | 42387            | 42218              | 41838              | 3.71                      | 3.74             | 3.75             | 3.76               | 3.77               |
|                  | 52°F (11.1°C)                                      | 43565                               | 42693            | 42480            | 42310              | 41929              | 3.55                      | 3.58             | 3.59             | 3.60               | 3.61               |
|                  | 57°F (13.9°C)                                      | 43660                               | 42787            | 42573            | 42402              | 42021              | 3.40                      | 3.42             | 3.43             | 3.44               | 3.45               |
|                  | 59°F (15.0°C)                                      | 43698                               | 42824            | 42610            | 42439              | 42057              | 3.33                      | 3.36             | 3.37             | 3.37               | 3.39               |
|                  | 62°F (16.7°C)                                      | 43755                               | 42880            | 42665            | 42495              | 42112              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 64.4°F (18.0°C)                                    | 43801                               | 42925            | 42710            | 42539              | 42156              | 3.16                      | 3.19             | 3.20             | 3.20               | 3.21               |
|                  | 69.8°F (21.0°C)                                    | 45180                               | 44276            | 44055            | 43878              | 43484              | 2.99                      | 3.02             | 3.02             | 3.03               | 3.04               |
|                  | 75.2°F (24.0°C)                                    | 35567                               | 34855            | 34681            | 34542              | 34232              | 2.82                      | 2.85             | 2.85             | 2.86               | 2.87               |

Table 41 – 48K Heating — **37MURA + 45MULA (60C)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>790</b>       | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| <b>1050</b>      | -13°F (-25.0°C)                                    | 34551                               | 33860            | 33691            | 33556              | 33254              | 5.71                      | 5.76             | 5.77             | 5.78               | 5.80               |
|                  | -4°F (-20.0°C)                                     | 41201                               | 40377            | 40175            | 40014              | 39654              | 6.21                      | 6.26             | 6.27             | 6.29               | 6.31               |
|                  | 0°F (-17.8°C)                                      | 42595                               | 41743            | 41534            | 41368              | 40996              | 6.27                      | 6.32             | 6.34             | 6.35               | 6.37               |
|                  | 5°F (-15.0°C)                                      | 44337                               | 43450            | 43233            | 43060              | 42672              | 6.35                      | 6.40             | 6.41             | 6.43               | 6.45               |
|                  | 14°F (-10.0°C)                                     | 40214                               | 39409            | 39212            | 39056              | 38704              | 5.12                      | 5.16             | 5.18             | 5.19               | 5.21               |
|                  | 17°F (-8.3°C)                                      | 38839                               | 38063            | 37872            | 37721              | 37381              | 4.72                      | 4.75             | 4.76             | 4.77               | 4.79               |
|                  | 22°F (-5.6°C)                                      | 39011                               | 38230            | 38039            | 37887              | 37546              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 27°F (-2.8°C)                                      | 39182                               | 38398            | 38206            | 38054              | 37711              | 4.73                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 32°F (0.0°C)                                       | 39353                               | 38566            | 38373            | 38220              | 37876              | 4.73                      | 4.77             | 4.78             | 4.79               | 4.81               |
|                  | 35°F (1.7°C)                                       | 39456                               | 38667            | 38474            | 38320              | 37975              | 4.74                      | 4.77             | 4.78             | 4.79               | 4.81               |
|                  | 37°F (2.8°C)                                       | 41628                               | 40795            | 40591            | 40429              | 40065              | 4.75                      | 4.79             | 4.80             | 4.80               | 4.82               |
|                  | 42°F (5.6°C)                                       | 47057                               | 46116            | 45886            | 45702              | 45291              | 4.77                      | 4.81             | 4.82             | 4.83               | 4.85               |
|                  | 44.6°F (7.0°C)                                     | 49229                               | 48245            | 48003            | 47811              | 47381              | 4.79                      | 4.82             | 4.83             | 4.84               | 4.86               |
|                  | 47°F (8.3°C)                                       | 52487                               | 51437            | 51180            | 50975              | 50517              | 4.80                      | 4.84             | 4.85             | 4.86               | 4.88               |
|                  | 52°F (11.1°C)                                      | 50170                               | 49166            | 48921            | 48725              | 48286              | 4.32                      | 4.35             | 4.36             | 4.37               | 4.39               |
|                  | 57°F (13.9°C)                                      | 47853                               | 46896            | 46661            | 46475              | 46056              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 59°F (15.0°C)                                      | 46926                               | 45987            | 45758            | 45574              | 45164              | 3.63                      | 3.66             | 3.67             | 3.68               | 3.69               |
|                  | 62°F (16.7°C)                                      | 45536                               | 44625            | 44402            | 44224              | 43826              | 3.34                      | 3.37             | 3.38             | 3.38               | 3.40               |
|                  | 64.4°F (18.0°C)                                    | 44424                               | 43535            | 43317            | 43144              | 42756              | 3.11                      | 3.13             | 3.14             | 3.15               | 3.16               |
|                  | 69.8°F (21.0°C)                                    | 41921                               | 41083            | 40877            | 40714              | 40347              | 2.58                      | 2.60             | 2.61             | 2.61               | 2.63               |
|                  | 75.2°F (24.0°C)                                    | 39419                               | 38630            | 38437            | 38283              | 37939              | 2.06                      | 2.07             | 2.08             | 2.08               | 2.09               |

Table 42 – 48K Heating — **37MURA + 45MULA (60D)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 790              | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| 1050             | -13°F (-25.0°C)                                    | 35327                               | 34620            | 34447            | 34309              | 34001              | 6.08                      | 6.13             | 6.14             | 6.15               | 6.18               |
|                  | -4°F (-20.0°C)                                     | 39295                               | 38509            | 38316            | 38163              | 37819              | 6.29                      | 6.34             | 6.35             | 6.37               | 6.39               |
|                  | 0°F (-17.8°C)                                      | 41597                               | 40765            | 40561            | 40399              | 40036              | 6.52                      | 6.58             | 6.59             | 6.60               | 6.63               |
|                  | 5°F (-15.0°C)                                      | 44476                               | 43586            | 43368            | 43195              | 42806              | 6.82                      | 6.87             | 6.88             | 6.90               | 6.93               |
|                  | 14°F (-10.0°C)                                     | 47961                               | 47002            | 46767            | 46580              | 46160              | 6.89                      | 6.94             | 6.96             | 6.97               | 7.00               |
|                  | 17°F (-8.3°C)                                      | 49123                               | 48140            | 47900            | 47708              | 47279              | 6.91                      | 6.97             | 6.98             | 7.00               | 7.02               |
|                  | 22°F (-5.6°C)                                      | 42860                               | 42002            | 41792            | 41625              | 41251              | 5.90                      | 5.95             | 5.96             | 5.98               | 6.00               |
|                  | 27°F (-2.8°C)                                      | 36596                               | 35864            | 35685            | 35542              | 35223              | 4.90                      | 4.94             | 4.95             | 4.95               | 4.97               |
|                  | 32°F (0.0°C)                                       | 30333                               | 29727            | 29578            | 29460              | 29194              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 35°F (1.7°C)                                       | 26575                               | 26044            | 25914            | 25810              | 25578              | 3.28                      | 3.31             | 3.32             | 3.32               | 3.34               |
|                  | 37°F (2.8°C)                                       | 30858                               | 30241            | 30090            | 29969              | 29700              | 3.54                      | 3.57             | 3.58             | 3.58               | 3.60               |
|                  | 42°F (5.6°C)                                       | 41565                               | 40733            | 40530            | 40368              | 40004              | 4.18                      | 4.22             | 4.22             | 4.23               | 4.25               |
|                  | 44.6°F (7.0°C)                                     | 45847                               | 44930            | 44706            | 44527              | 44126              | 4.44                      | 4.47             | 4.48             | 4.49               | 4.51               |
|                  | 47°F (8.3°C)                                       | 52271                               | 51226            | 50970            | 50766              | 50309              | 4.82                      | 4.86             | 4.87             | 4.88               | 4.90               |
|                  | 52°F (11.1°C)                                      | 50562                               | 49550            | 49303            | 49105              | 48663              | 4.35                      | 4.38             | 4.39             | 4.40               | 4.42               |
|                  | 57°F (13.9°C)                                      | 48852                               | 47875            | 47635            | 47445              | 47018              | 3.87                      | 3.90             | 3.91             | 3.92               | 3.93               |
|                  | 59°F (15.0°C)                                      | 48168                               | 47205            | 46969            | 46781              | 46360              | 3.68                      | 3.71             | 3.72             | 3.73               | 3.74               |
|                  | 62°F (16.7°C)                                      | 47142                               | 46199            | 45968            | 45784              | 45372              | 3.40                      | 3.42             | 3.43             | 3.44               | 3.45               |
|                  | 64.4°F (18.0°C)                                    | 46321                               | 45395            | 45168            | 44987              | 44582              | 3.17                      | 3.19             | 3.20             | 3.21               | 3.22               |
|                  | 69.8°F (21.0°C)                                    | 44475                               | 43585            | 43368            | 43194              | 42805              | 2.65                      | 2.67             | 2.68             | 2.69               | 2.70               |
|                  | 75.2°F (24.0°C)                                    | 42628                               | 41776            | 41567            | 41401              | 41028              | 2.14                      | 2.16             | 2.16             | 2.16               | 2.17               |

Table 43 – 54K Heating — **37MURA + 45MULA (60C)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| 785              | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57F (13.9°C)                                       | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| 1047             | -13°F (-25.0°C)                                    | 28990                               | 28410            | 28268            | 28155              | 27902              | 5.43                      | 5.48             | 5.49             | 5.50               | 5.52               |
|                  | -4°F (-20.0°C)                                     | 33896                               | 33218            | 33052            | 32920              | 32624              | 5.88                      | 5.92             | 5.94             | 5.95               | 5.97               |
|                  | 0°F (-17.8°C)                                      | 36411                               | 35683            | 35504            | 35362              | 35044              | 6.08                      | 6.13             | 6.15             | 6.16               | 6.18               |
|                  | 5°F (-15.0°C)                                      | 39554                               | 38763            | 38570            | 38415              | 38070              | 6.34                      | 6.39             | 6.41             | 6.42               | 6.45               |
|                  | 14°F (-10.0°C)                                     | 43055                               | 42194            | 41983            | 41815              | 41439              | 6.29                      | 6.34             | 6.35             | 6.36               | 6.39               |
|                  | 17°F (-8.3°C)                                      | 44222                               | 43338            | 43121            | 42948              | 42562              | 6.27                      | 6.32             | 6.33             | 6.34               | 6.37               |
|                  | 22°F (-5.6°C)                                      | 43222                               | 42357            | 42146            | 41977              | 41599              | 6.02                      | 6.07             | 6.08             | 6.09               | 6.11               |
|                  | 27°F (-2.8°C)                                      | 42222                               | 41377            | 41170            | 41006              | 40637              | 5.77                      | 5.81             | 5.82             | 5.84               | 5.86               |
|                  | 32°F (0.0°C)                                       | 41221                               | 40397            | 40195            | 40034              | 39674              | 5.51                      | 5.56             | 5.57             | 5.58               | 5.60               |
|                  | 35°F (1.7°C)                                       | 40621                               | 39809            | 39610            | 39451              | 39096              | 5.36                      | 5.41             | 5.42             | 5.43               | 5.45               |
|                  | 37°F (2.8°C)                                       | 42468                               | 41619            | 41411            | 41245              | 40874              | 5.31                      | 5.35             | 5.36             | 5.37               | 5.39               |
|                  | 42°F (5.6°C)                                       | 47086                               | 46144            | 45913            | 45730              | 45318              | 5.16                      | 5.21             | 5.22             | 5.23               | 5.25               |
|                  | 44.6°F (7.0°C)                                     | 48933                               | 47954            | 47714            | 47523              | 47096              | 5.11                      | 5.15             | 5.16             | 5.17               | 5.19               |
|                  | 47°F (8.3°C)                                       | 51703                               | 50669            | 50416            | 50214              | 49762              | 5.02                      | 5.06             | 5.07             | 5.08               | 5.10               |
|                  | 52°F (11.1°C)                                      | 51561                               | 50530            | 50277            | 50076              | 49626              | 4.69                      | 4.73             | 4.74             | 4.74               | 4.76               |
|                  | 57F (13.9°C)                                       | 51420                               | 50391            | 50139            | 49939              | 49489              | 4.35                      | 4.39             | 4.40             | 4.41               | 4.42               |
|                  | 59°F (15.0°C)                                      | 51363                               | 50336            | 50084            | 49884              | 49435              | 4.22                      | 4.25             | 4.26             | 4.27               | 4.29               |
|                  | 62°F (16.7°C)                                      | 51278                               | 50252            | 50001            | 49801              | 49353              | 4.02                      | 4.05             | 4.06             | 4.07               | 4.08               |
|                  | 64.4°F (18.0°C)                                    | 51210                               | 50186            | 49935            | 49735              | 49287              | 3.86                      | 3.89             | 3.90             | 3.91               | 3.92               |
|                  | 69.8°F (21.0°C)                                    | 47903                               | 46945            | 46710            | 46523              | 46105              | 3.50                      | 3.53             | 3.53             | 3.54               | 3.55               |
|                  | 75.2°F (24.0°C)                                    | 42994                               | 42134            | 41923            | 41756              | 41380              | 3.14                      | 3.16             | 3.17             | 3.18               | 3.19               |

Table 44 – 54K Heating — **37MURA + 45MULA (60D)**

| AIRFLOW<br>(CFM) | HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE |                                     |                  |                  |                    |                    |                           |                  |                  |                    |                    |
|------------------|----------------------------------------------------|-------------------------------------|------------------|------------------|--------------------|--------------------|---------------------------|------------------|------------------|--------------------|--------------------|
|                  | OUTDOOR<br>DB (°F)                                 | TC: Total Heating Capacity (BTU/hr) |                  |                  |                    |                    | PI: Power Input (kW)      |                  |                  |                    |                    |
|                  |                                                    | Indoor Conditions (DB °F)           |                  |                  |                    |                    | Indoor Conditions (DB °F) |                  |                  |                    |                    |
|                  |                                                    | 60.8°F<br>(16.0°C)                  | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) | 60.8°F<br>(16.0°C)        | 68°F<br>(20.0°C) | 70°F<br>(21.1°C) | 71.6°F<br>(22.0°C) | 75.2°F<br>(24.0°C) |
| <b>785</b>       | -13°F (-25.0°C)                                    | 21790                               | 21354            | 21248            | 21163              | 20972              | 3.85                      | 3.88             | 3.89             | 3.90               | 3.92               |
|                  | -4°F (-20.0°C)                                     | 28725                               | 28150            | 28010            | 27897              | 27646              | 4.53                      | 4.56             | 4.57             | 4.58               | 4.60               |
|                  | 0°F (-17.8°C)                                      | 31967                               | 31327            | 31171            | 31046              | 30767              | 4.61                      | 4.65             | 4.66             | 4.67               | 4.69               |
|                  | 5°F (-15.0°C)                                      | 36019                               | 35299            | 35122            | 34982              | 34667              | 4.72                      | 4.76             | 4.77             | 4.78               | 4.80               |
|                  | 14°F (-10.0°C)                                     | 36761                               | 36026            | 35846            | 35702              | 35381              | 4.49                      | 4.53             | 4.54             | 4.55               | 4.57               |
|                  | 17°F (-8.3°C)                                      | 37008                               | 36268            | 36087            | 35942              | 35619              | 4.42                      | 4.45             | 4.46             | 4.47               | 4.49               |
|                  | 22°F (-5.6°C)                                      | 36786                               | 36051            | 35870            | 35727              | 35405              | 4.25                      | 4.29             | 4.30             | 4.31               | 4.32               |
|                  | 27°F (-2.8°C)                                      | 36564                               | 35833            | 35654            | 35511              | 35192              | 4.09                      | 4.13             | 4.13             | 4.14               | 4.16               |
|                  | 32°F (0.0°C)                                       | 36343                               | 35616            | 35438            | 35296              | 34978              | 3.93                      | 3.96             | 3.97             | 3.98               | 3.99               |
|                  | 35°F (1.7°C)                                       | 36209                               | 35485            | 35308            | 35167              | 34850              | 3.83                      | 3.86             | 3.87             | 3.88               | 3.89               |
|                  | 37°F (2.8°C)                                       | 40230                               | 39425            | 39228            | 39071              | 38719              | 3.96                      | 3.99             | 4.00             | 4.01               | 4.03               |
|                  | 42°F (5.6°C)                                       | 50281                               | 49275            | 49029            | 48833              | 48393              | 4.28                      | 4.32             | 4.33             | 4.34               | 4.35               |
|                  | 44.6°F (7.0°C)                                     | 54301                               | 53215            | 52949            | 52737              | 52262              | 4.41                      | 4.45             | 4.46             | 4.47               | 4.48               |
|                  | 47°F (8.3°C)                                       | 60332                               | 59125            | 58829            | 58594              | 58067              | 4.61                      | 4.64             | 4.65             | 4.66               | 4.68               |
|                  | 52°F (11.1°C)                                      | 58887                               | 57709            | 57421            | 57191              | 56676              | 4.31                      | 4.34             | 4.35             | 4.36               | 4.38               |
|                  | 57°F (13.9°C)                                      | 57443                               | 56294            | 56012            | 55788              | 55286              | 4.01                      | 4.04             | 4.05             | 4.06               | 4.07               |
|                  | 59°F (15.0°C)                                      | 56865                               | 55728            | 55449            | 55227              | 54730              | 3.89                      | 3.92             | 3.93             | 3.93               | 3.95               |
|                  | 62°F (16.7°C)                                      | 55998                               | 54878            | 54604            | 54385              | 53896              | 3.71                      | 3.74             | 3.75             | 3.75               | 3.77               |
|                  | 64.4°F (18.0°C)                                    | 55305                               | 54199            | 53928            | 53712              | 53229              | 3.56                      | 3.59             | 3.60             | 3.61               | 3.62               |
|                  | 69.8°F (21.0°C)                                    | 58377                               | 57210            | 56924            | 56696              | 56186              | 3.24                      | 3.27             | 3.27             | 3.28               | 3.29               |
|                  | 75.2°F (24.0°C)                                    | 52232                               | 51188            | 50932            | 50728              | 50272              | 2.92                      | 2.94             | 2.95             | 2.95               | 2.96               |
| <b>1047</b>      | -13°F (-25.0°C)                                    | 29001                               | 28421            | 28279            | 28166              | 27912              | 5.48                      | 5.53             | 5.54             | 5.55               | 5.57               |
|                  | -4°F (-20.0°C)                                     | 34816                               | 34120            | 33949            | 33814              | 33509              | 5.87                      | 5.92             | 5.93             | 5.94               | 5.96               |
|                  | 0°F (-17.8°C)                                      | 36445                               | 35716            | 35537            | 35395              | 35077              | 6.06                      | 6.11             | 6.12             | 6.13               | 6.16               |
|                  | 5°F (-15.0°C)                                      | 38481                               | 37711            | 37523            | 37373              | 37036              | 6.29                      | 6.34             | 6.36             | 6.37               | 6.40               |
|                  | 14°F (-10.0°C)                                     | 41115                               | 40293            | 40091            | 39931              | 39571              | 6.28                      | 6.33             | 6.34             | 6.35               | 6.38               |
|                  | 17°F (-8.3°C)                                      | 41993                               | 41153            | 40947            | 40784              | 40417              | 6.27                      | 6.32             | 6.33             | 6.35               | 6.37               |
|                  | 22°F (-5.6°C)                                      | 41873                               | 41035            | 40830            | 40667              | 40301              | 6.07                      | 6.12             | 6.13             | 6.14               | 6.17               |
|                  | 27°F (-2.8°C)                                      | 41752                               | 40917            | 40712            | 40550              | 40185              | 5.87                      | 5.92             | 5.93             | 5.94               | 5.97               |
|                  | 32°F (0.0°C)                                       | 41631                               | 40799            | 40595            | 40432              | 40069              | 5.67                      | 5.72             | 5.73             | 5.74               | 5.77               |
|                  | 35°F (1.7°C)                                       | 41559                               | 40728            | 40524            | 40362              | 39999              | 5.55                      | 5.60             | 5.61             | 5.62               | 5.64               |
|                  | 37°F (2.8°C)                                       | 43319                               | 42452            | 42240            | 42071              | 41692              | 5.48                      | 5.53             | 5.54             | 5.55               | 5.57               |
|                  | 42°F (5.6°C)                                       | 47717                               | 46763            | 46529            | 46343              | 45926              | 5.31                      | 5.35             | 5.36             | 5.37               | 5.39               |
|                  | 44.6°F (7.0°C)                                     | 49477                               | 48487            | 48245            | 48052              | 47619              | 5.24                      | 5.28             | 5.29             | 5.30               | 5.32               |
|                  | 47°F (8.3°C)                                       | 52116                               | 51074            | 50818            | 50615              | 50160              | 5.13                      | 5.17             | 5.19             | 5.20               | 5.22               |
|                  | 52°F (11.1°C)                                      | 50910                               | 49892            | 49643            | 49444              | 48999              | 4.68                      | 4.72             | 4.73             | 4.74               | 4.75               |
|                  | 57°F (13.9°C)                                      | 49705                               | 48711            | 48467            | 48273              | 47839              | 4.22                      | 4.26             | 4.27             | 4.28               | 4.29               |
|                  | 59°F (15.0°C)                                      | 49223                               | 48238            | 47997            | 47805              | 47375              | 4.04                      | 4.08             | 4.08             | 4.09               | 4.11               |
|                  | 62°F (16.7°C)                                      | 48499                               | 47529            | 47292            | 47102              | 46679              | 3.77                      | 3.80             | 3.81             | 3.82               | 3.83               |
|                  | 64.4°F (18.0°C)                                    | 47921                               | 46962            | 46727            | 46540              | 46122              | 3.55                      | 3.58             | 3.59             | 3.60               | 3.61               |
|                  | 69.8°F (21.0°C)                                    | 48778                               | 47802            | 47563            | 47373              | 46947              | 3.06                      | 3.09             | 3.09             | 3.10               | 3.11               |
|                  | 75.2°F (24.0°C)                                    | 41199                               | 40375            | 40173            | 40012              | 39652              | 2.57                      | 2.59             | 2.60             | 2.60               | 2.61               |

## APPLICATION DATA

### UNIT SELECTION

Select equipment that either matches or supports slightly more than the anticipated peak load. This provides better humidity control, fewer unit cycles, and less part-load operation.

For units used in spaces with high sensible loads, base equipment selection on unit sensible load, not on total anticipated load. Adjust for anticipated room wet bulb temperature to avoid undersizing the equipment.

### UNIT MOUNTING (OUTDOOR)

Refer to the unit's installation instructions for further details.

**Unit leveling** – For reliable operation, the units should be level in all planes.

**Clearance** – Minimum clearance (Fig. 6) must be provided for airflow. The condensing units are designed for free-flow application. Air inlets and outlets should not be restricted.

**Unit location** – A location which is convenient to installation and not exposed to strong winds. A location that can bear the weight of the outdoor unit and where the outdoor unit can be mounted in a level position.

Do not install the indoor or outdoor units in a location with special environmental conditions. For those applications, contact your sales representative.

### OPERATING RANGE MIN/MAX °F (MIN/MAX °C)

#### All High Heat Units:

- **Cooling:** -13/130 (-25/55)
- **Heating:** -13/86 (-25/30)

**NOTE:** Without intervention, the unit may continue to run at temperatures outside of the specified operating temperatures. However, operation outside of the specified temperature range may result in decreased performance and may cause damage to the unit.

### METERING DEVICES

The outdoor unit has an electronic expansion valve to manage the refrigerant flow of the connected fan coil.

### DRAIN CONNECTIONS

Install the drains in accordance with the local sanitation codes.

### REFRIGERANT LINES

#### General refrigerant line sizing:

1. The outdoor units are shipped with a full charge of R-454B refrigerant. All charges, line sizing, and capacities are based on runs of 25 ft. (7.6 m). For runs over 25 ft. (7.6 m), review the *Long Line Applications* section for the proper charge adjustments.
2. Refrigerant lines should not be buried in the ground. If it is necessary to bury the lines, do not bury the lines more than 36-in (914 mm). Provide a minimum 6-in (152 mm) vertical rise to the service valves to prevent refrigerant migration.
3. The suction line must be insulated-the liquid line does not require insulation. Use a minimum of 1/2-in. (12.7 mm) thick insulation. Closed-cell insulation is recommended in all long line applications.

4. Special consideration should be given to isolating the interconnecting tubing from the building structure. Isolate the tubing so vibration or noise is not transmitted into the structure.

### WIRING

All wires must be sized per NEC (National Electrical Code) or CEC (Canadian Electrical Code) and local codes. Use Electrical Data table MCA (minimum circuit amps) and MOCP (maximum over current protection) to correctly size the wires and the disconnect fuse or breakers respectively.

#### Power Wiring

1. Remove the electric cover of the outdoor unit.
2. Connect the fork terminal to the terminals.
3. Match the wire labels with the labels on the terminal block.
4. Firmly screw the fork terminal of each wire to its corresponding terminal.
5. Insulate unused wires with electrical tape. Keep them away from any electrical or metal parts.
6. Reinstall the cover of the electric control box.

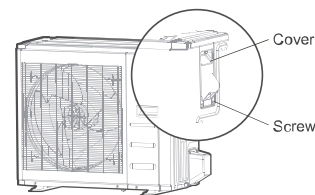


Fig. 8 – Remove Electrical Cover

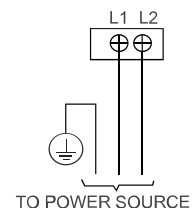


Fig. 9 – Match Fork Terminal to Terminal Labels

### Communication Wiring

There are two options available to establish communications between the outdoor unit and approved indoor unit.

Table 45 — Wiring Sizes 36 – 48

| Options | Communication Type                          | Recommended Cable Size                |
|---------|---------------------------------------------|---------------------------------------|
| 1       | Non-Polarity RS485 Communications (S1 - S2) | 16 AWG<br>(stranded shielded)         |
| 2       | 24V Communication                           | 18 AWG<br>8-conductor thermostat wire |

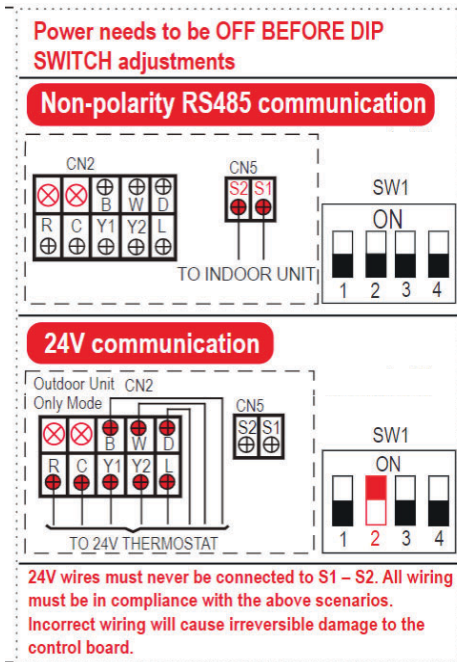


Fig. 10 – Communication Options

Table 46 – Terminal Functions

|           |                                  |
|-----------|----------------------------------|
| <b>R</b>  | 24V Power Connection             |
| <b>C</b>  | Common                           |
| <b>Y1</b> | Low Demand                       |
| <b>Y2</b> | High Demand                      |
| <b>B</b>  | Heating Reversing Valve          |
| <b>W</b>  | Heating Control                  |
| <b>D</b>  | Defrost (24V Output Signal)      |
| <b>L</b>  | System Fault (24V Output Signal) |

**NOTE:** Terminal D will be energized when the outdoor unit goes into defrost mode and can be used to enable electric heat. This feature is not available when the outdoor unit communicates with the indoor unit via non-polarity RS485 Communication S1-S2.

## 24V WIRING

See [Table 47](#) for jumper usage.

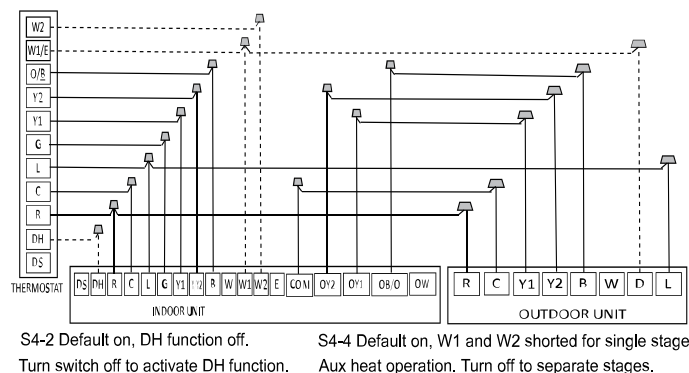


Fig. 11 – Wiring for 4H and 2C Thermostat

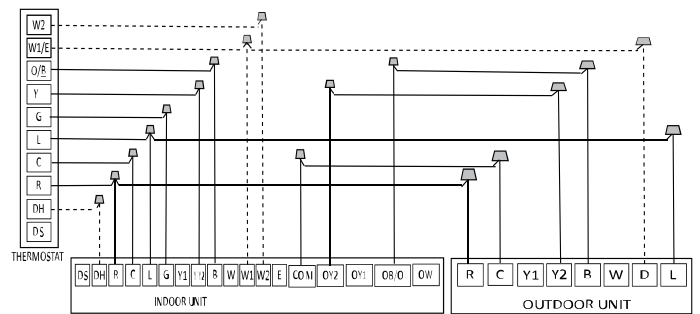


Fig. 12 – Wiring for 3H and 1C Thermostat

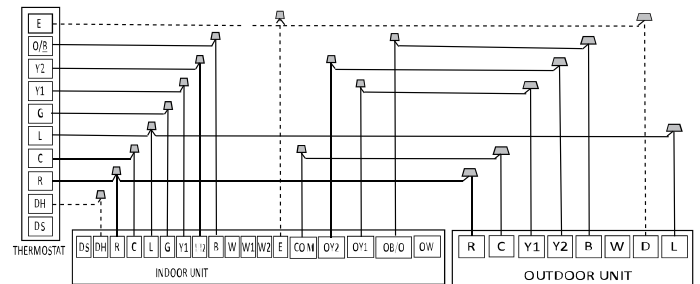


Fig. 13 – Wiring for 3H and 2C Thermostat

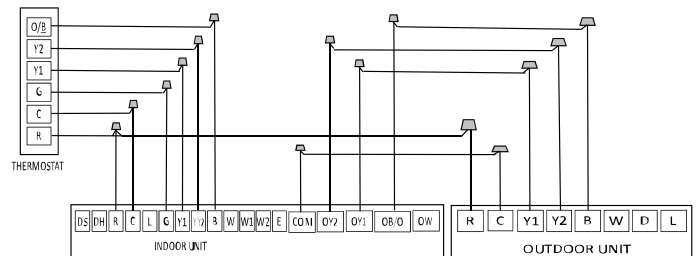


Fig. 14 – Wiring for 2H and 2C Thermostat

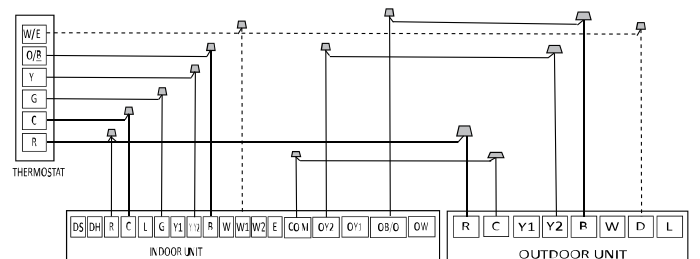


Fig. 15 – Wiring for 2H and 1C Thermostat

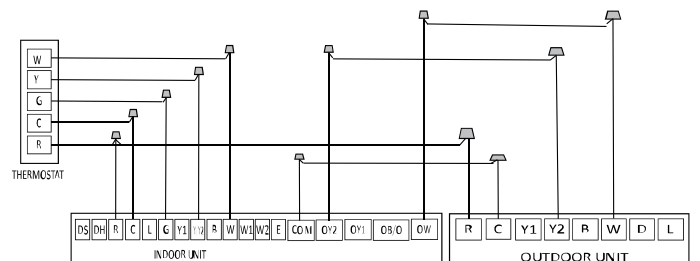


Fig. 16 – Wiring for 1H and 1C Thermostat

**Table 47 – Jumper Usage for Thermostat Wiring**

| <b>S4-1</b>                                                                                                                                                                                       | <b>S4-2</b>                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Default ON: For single-stage supplemental heat, W1 and W2 are connected.<br>OFF: For dual-stage supplemental heat, W1 and W2 are controlled independently. Feature is enabled through thermostat. | Default ON: Dehumidification control not available.<br>OFF: Dehumidification feature is enabled through thermostat. |
| <b>NOTE:</b> Dip switches are located on compatible indoor unit. Refer to the indoor unit installation manual for additional information.                                                         |                                                                                                                     |



## WARNING

### EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation. Wires should be sized based on NEC and local codes.



## CAUTION

### EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation. Be sure to comply with local codes while running wire from the indoor unit to the outdoor unit. Every wire must be connected firmly. Loose wiring may cause the terminal to overheat or result in unit malfunction. A fire hazard may also exist. Ensure all wiring is tightly connected.

No wire should touch the refrigerant tubing, compressor or any moving parts. Disconnecting means must be provided and shall be located within sight and readily accessible from the air conditioner. Route the cable & conduit through the hole in the conduit panel.

**NOTE:** The main power is supplied to the outdoor unit. When disconnecting the power of the outdoor unit, the indoor unit would lose power. A disconnect switch is not required on the Indoor unit side on the wiring between the Outdoor and Indoor unit. A 3-pole disconnect may be used for extra protection between the Indoor and Outdoor Unit. A separate power is required for an Auxiliary Electric Heater.

SPECIFIC WIRING METHODS



WARNING

Refer to the wiring nameplate for the wiring method. Do not connect 24V AC to S1 - S2, as this will damage the system.

SCENARIO 1:

This is the preferred method of control. This allows a 24 volt thermostat to be used with RS485 communication between the indoor and outdoor units. None of the 24 volt terminals in the outdoor unit can be used with this scenario. It is recommended to use 16 AWG stranded shielded cable for RS 485 communication.

- The **B** terminal and **W** terminal should not be used together at the air handler.
- **W** should only be used with a conventional thermostat for the heat demand at the air handler.
- **DS** is a reserve Terminal.

To use a 24V thermostat, Refer to the following wiring:

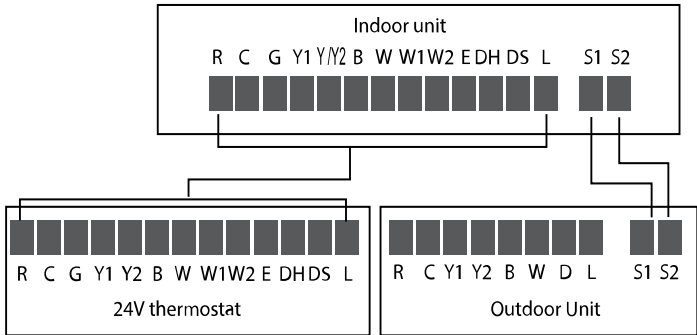


Fig. 17 —Scenario 1

| SW1                                                                                                                                                   | Control type      | IDU and ODU Connection | Note                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|----------------------------------------------------------------------|
| <div><div>ON</div><div><div><div></div><div></div><div></div><div></div></div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div></div> | 24V<br>Thermostat | S1+S2                  | Scenario 1<br>(no outdoor<br>unit clean<br>function <sup>[*]</sup> ) |

Fig. 18 – Dip Switch Settings - Scenario 1

SCENARIO 2 (DEFAULT):

This allows the KSACN1401AAA wired controller to be used with RS485 communication between indoor and outdoor units. It is recommended to use 16 AWG stranded shielded cable for RS 485 communication.

- None of the 24 volt terminals at the air handler or outdoor unit can be used for this scenario
- Using the 1401 wired controller allows for the system to be fully communicating.
- Refer to the 1401 wired controller Owner's Manual for wired controller operating information.

Refer to the wiring method of indoor and outdoor unit communication and wired controller as follows:

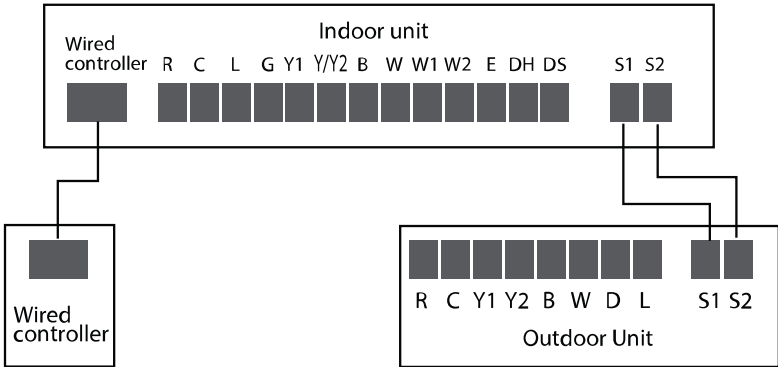


Fig. 19 —Scenario 2 (Default)

| SW1                                                                                                                                                   | Control type     | IDU and ODU Connection | Note       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------|------------|
| <div><div>ON</div><div><div><div></div><div></div><div></div><div></div></div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div></div> | Wired controller | S1+S2                  | Scenario 2 |

Fig. 20 – Dip Switch Settings - Scenario 2

SCENARIO 3:

This allows a 24 volt thermostat to be used with 24 volt communication between the indoor and outdoor units. Some communication features will not be available with this method.

NOTE: This equipment energizes the reversing valve in heat. Ensure that the B terminal is configured at the thermostat for heat.

NOTE: This method should be reserved for a 37MUHA outdoor unit and a third party indoor unit or cased coil and gas furnace. Using RS 485 communication between the indoor and outdoor units is recommended (Scenarios 1 or 2)

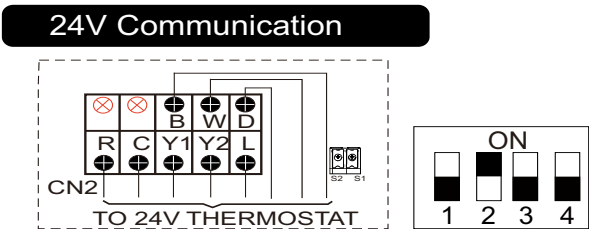
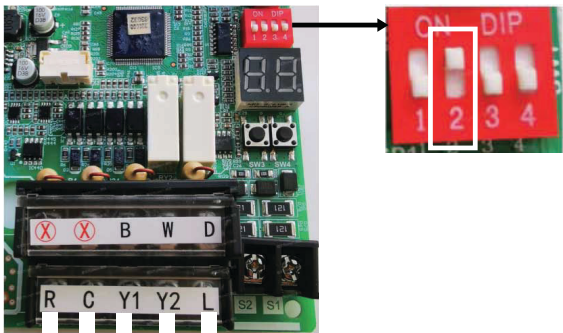


Fig. 21 —Scenario 3 - Wiring to the Outdoor Unit

NOTE: DIP switch 2 in the outdoor unit must be turned on for Scenario 3 and Crossover applications. Leave off for the other 2 scenarios.

NOTE: The 24 volt wire terminals in the outdoor unit should only be used for Scenario 3. S1 and S2 should only be used for Scenarios 1 and 2.

24V must never be connected to S1 – S2. All wiring must be in compliance with the above scenarios. Incorrect wiring can damage the outdoor and indoor control boards.



Scenario 3: DIP Switch 2 = ON.  
Scenarios 1 and 2: DIP Switch 2 = OFF.

**Fig. 22 —24V Connection Dip Switch Setting (as shown in Fig 21)**

The SW3 button is not active.  
SW4 button should be used for point check inquiry and forced defrost.  
**NOTE:** The use of shielded communication or thermostat wire is not required, but is recommended where separation from high voltage conductors can not be maintained, or in areas with high electrical noise. The shield must be grounded at the outdoor unit and stripped back and taped at the indoor unit. Grounding at both ends results in an increase of noise transmitted onto the signal wires.

**AIR FLOW DATA**

Refer to [Table 4](#) for complete specifications.

**Table 48 – Airflow Data**

| System Size   | 36K   | 48K   |
|---------------|-------|-------|
| Outdoor (CFM) | 2,118 | 4,500 |

**SOUND PRESSURE AND SOUND POWER**

Refer to [Table 4](#) for complete specifications.

**Table 49 – Sound Pressure and Sound Power**

|         | System Size                  |       | 36K  | 48K  |
|---------|------------------------------|-------|------|------|
| Cooling | Outdoor Sound Pressure Level | dB(A) | 61.7 | 62.9 |
|         | Outdoor Sound Power Level    | dB(A) | 71   | 72   |
| Heating | Outdoor Sound Pressure Level | dB(A) | 64   | 64   |
|         | Outdoor Sound Power Level    | dB(A) | 73   | 73   |

**SOUND PRESSURE IN OCTAVE BANDS**

Refer to [Table 4](#) for complete specifications.

## OUTDOOR UNIT SOUND PRESSURE TEST CONDITIONS

Refer to [Table 4](#) for complete specifications.

Outdoor Unit

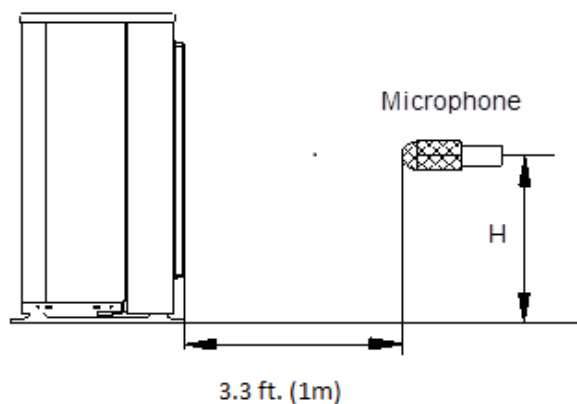


Fig. 23 – Outdoor Unit Sound Pressure Test Conditions

**NOTE:**  $H=0.5 \times$  Height of outdoor unit

Table 50 – Outdoor Unit Sound Pressure Test Conditions

|         | INDOOR CONDITION |               | OUTDOOR CONDITION |               |
|---------|------------------|---------------|-------------------|---------------|
|         | DB               | WB            | DB                | WB            |
| Cooling | 80.6°F (27°C)    | 66.2°F (19°C) | 95°F (35°C)       | 75.2°F (24°C) |
| Heating | 68°F (20°C)      | 59°F (15°C)   | 44.6°F (7°C)      | 42.8°F (6°C)  |

## Sound Pressure Per Distance

| 37MURAQ Sound Pressure (dBA) |                   |                         |       |     |     |     |      |
|------------------------------|-------------------|-------------------------|-------|-----|-----|-----|------|
| Distance from Property Line  |                   |                         |       |     |     |     |      |
| Tonnage                      | Sound power (dBA) | Reflective Service QTY. | 3.3FT | 5FT | 7FT | 9FT | 15FT |
| 1.5                          | 61                | 0                       | 53    | 49  | 46  | 44  | 40   |
|                              |                   | 1                       | 56    | 52  | 49  | 47  | 43   |
|                              |                   | 2                       | 59    | 55  | 53  | 50  | 46   |
| 2                            | 66.7              | 0                       | 59    | 55  | 52  | 50  | 46   |
|                              |                   | 1                       | 62    | 58  | 55  | 53  | 49   |
|                              |                   | 2                       | 65    | 61  | 58  | 56  | 52   |
| 2.5                          | 66.7              | 0                       | 59    | 55  | 52  | 50  | 46   |
|                              |                   | 1                       | 62    | 58  | 55  | 53  | 49   |
|                              |                   | 2                       | 65    | 61  | 58  | 56  | 52   |
| 3                            | 71                | 0                       | 63    | 59  | 56  | 54  | 50   |
|                              |                   | 1                       | 66    | 62  | 59  | 57  | 53   |
|                              |                   | 2                       | 69    | 65  | 63  | 60  | 56   |
| 4                            | 70.5              | 0                       | 63    | 59  | 56  | 54  | 49   |
|                              |                   | 1                       | 66    | 62  | 59  | 57  | 52   |
|                              |                   | 2                       | 69    | 65  | 62  | 60  | 55   |
| 5                            | 70.7              | 0                       | 63    | 59  | 56  | 54  | 50   |
|                              |                   | 1                       | 66    | 62  | 59  | 57  | 53   |
|                              |                   | 2                       | 69    | 65  | 62  | 60  | 56   |

## FAN AND MOTOR AND ELECTRICAL SPECIFICATIONS

Refer to [Table 4](#) for complete specifications.

WIRING DIAGRAMS

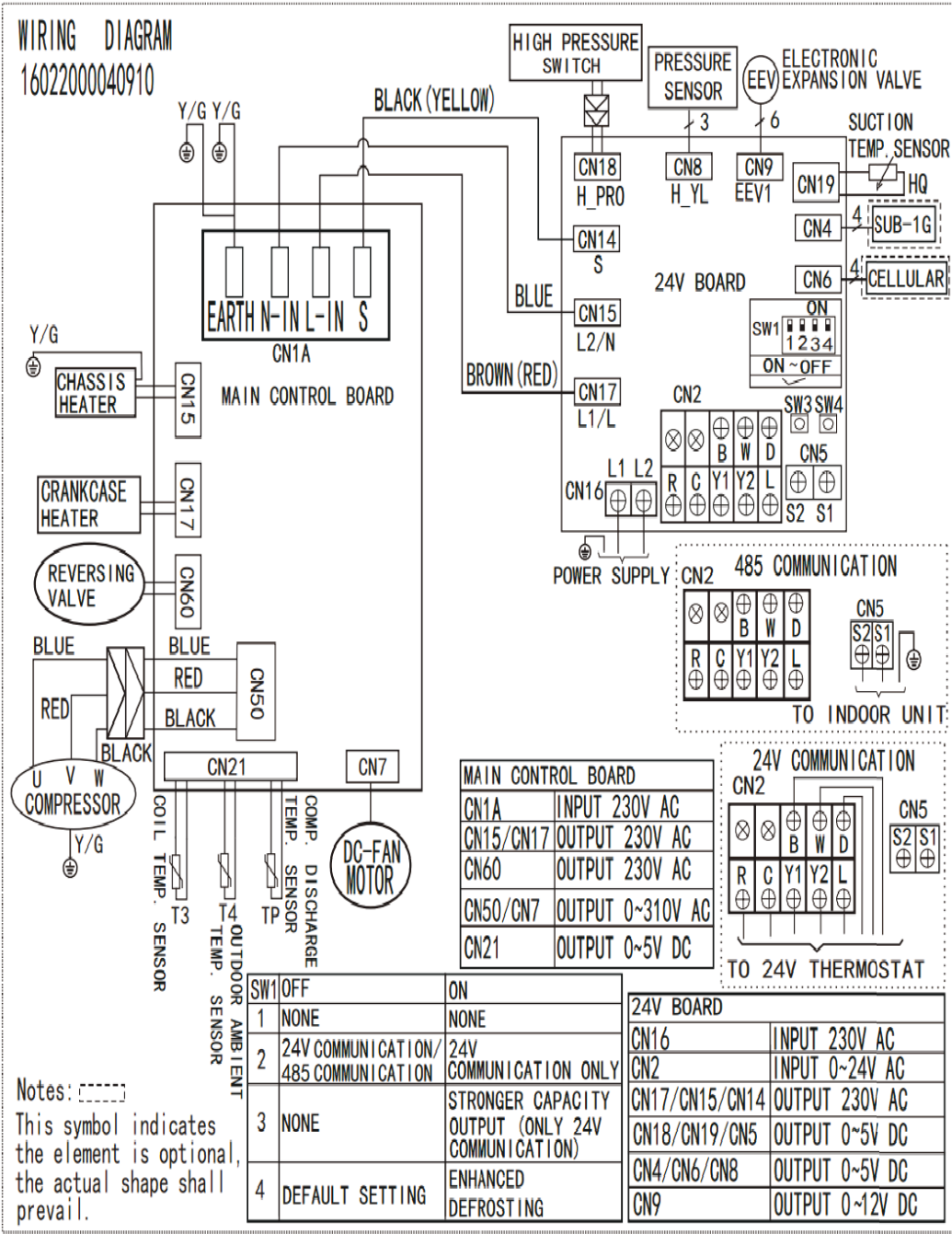


Fig. 24 – 18K Wiring Diagram

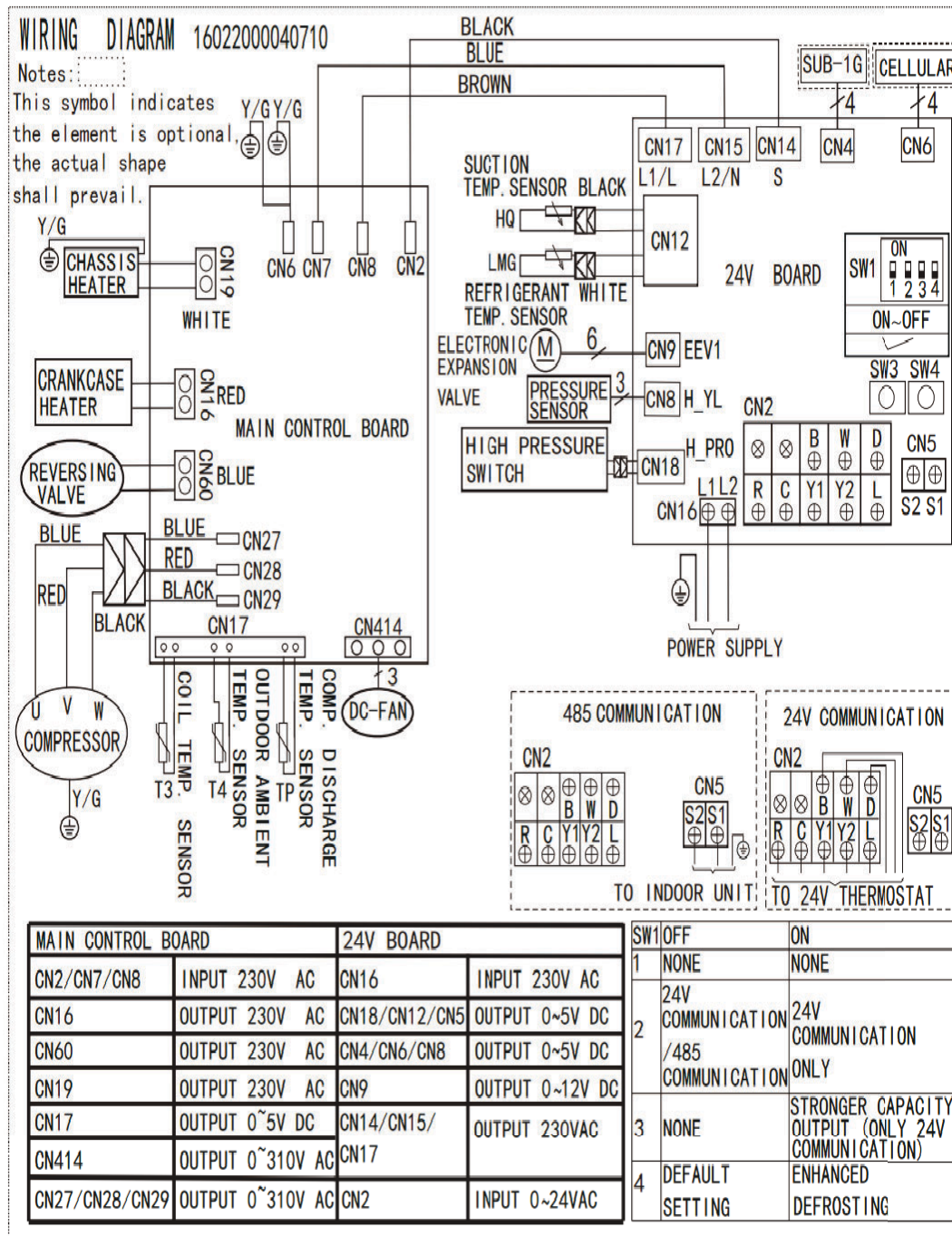


Fig. 25 – 24K Wiring Diagram

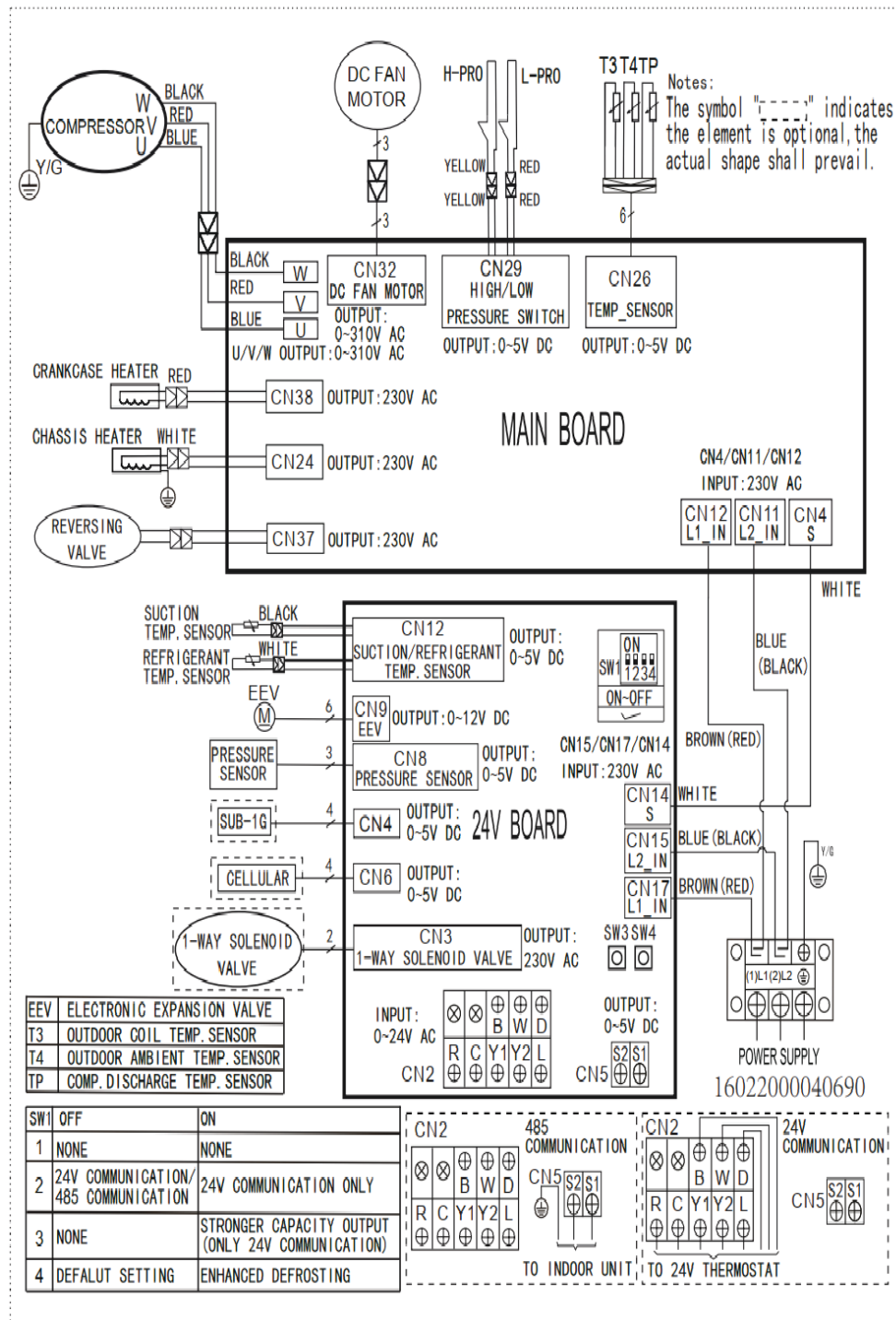


Fig. 26 – 30K Wiring Diagram

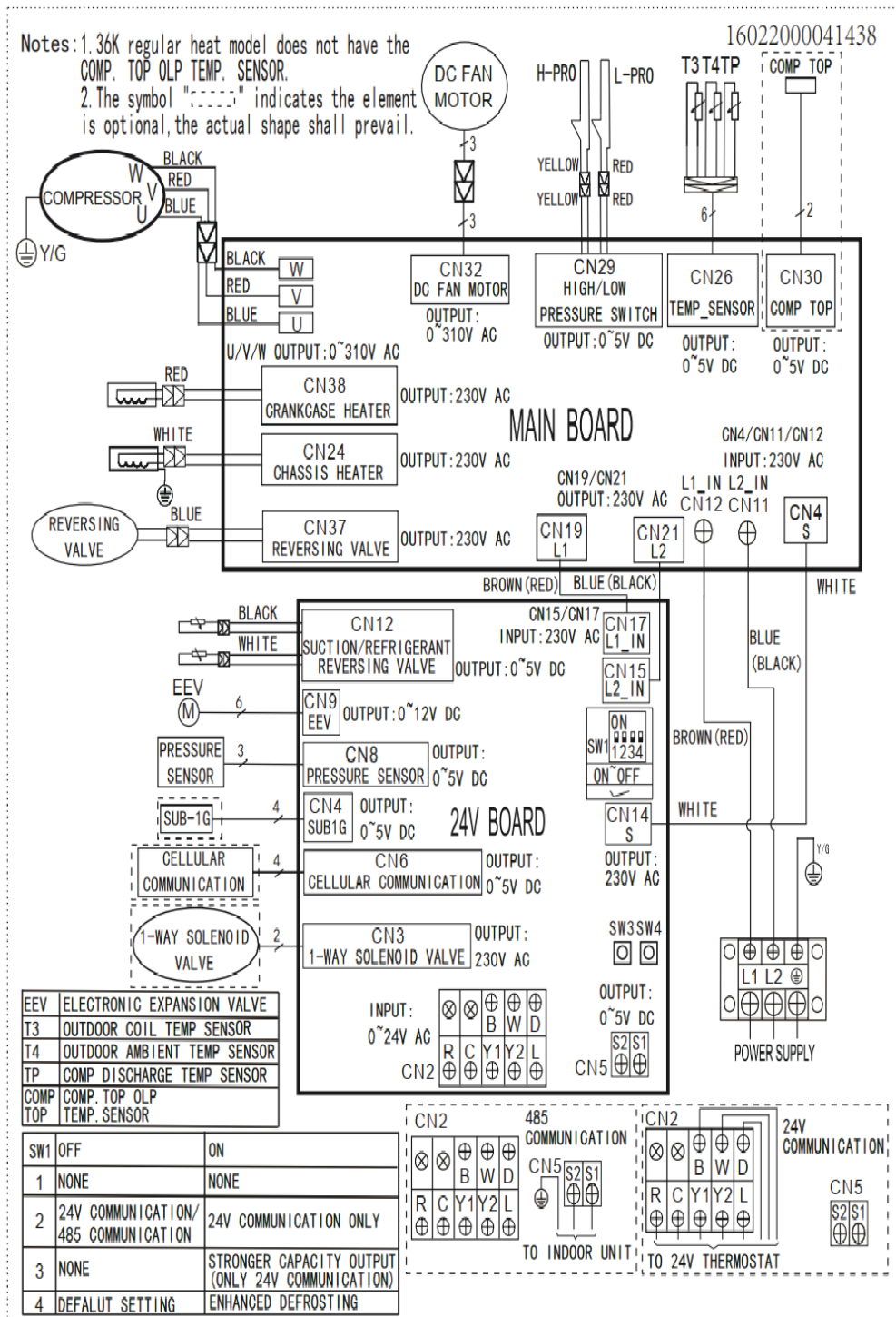


Fig. 27 – 36K Wiring Diagram

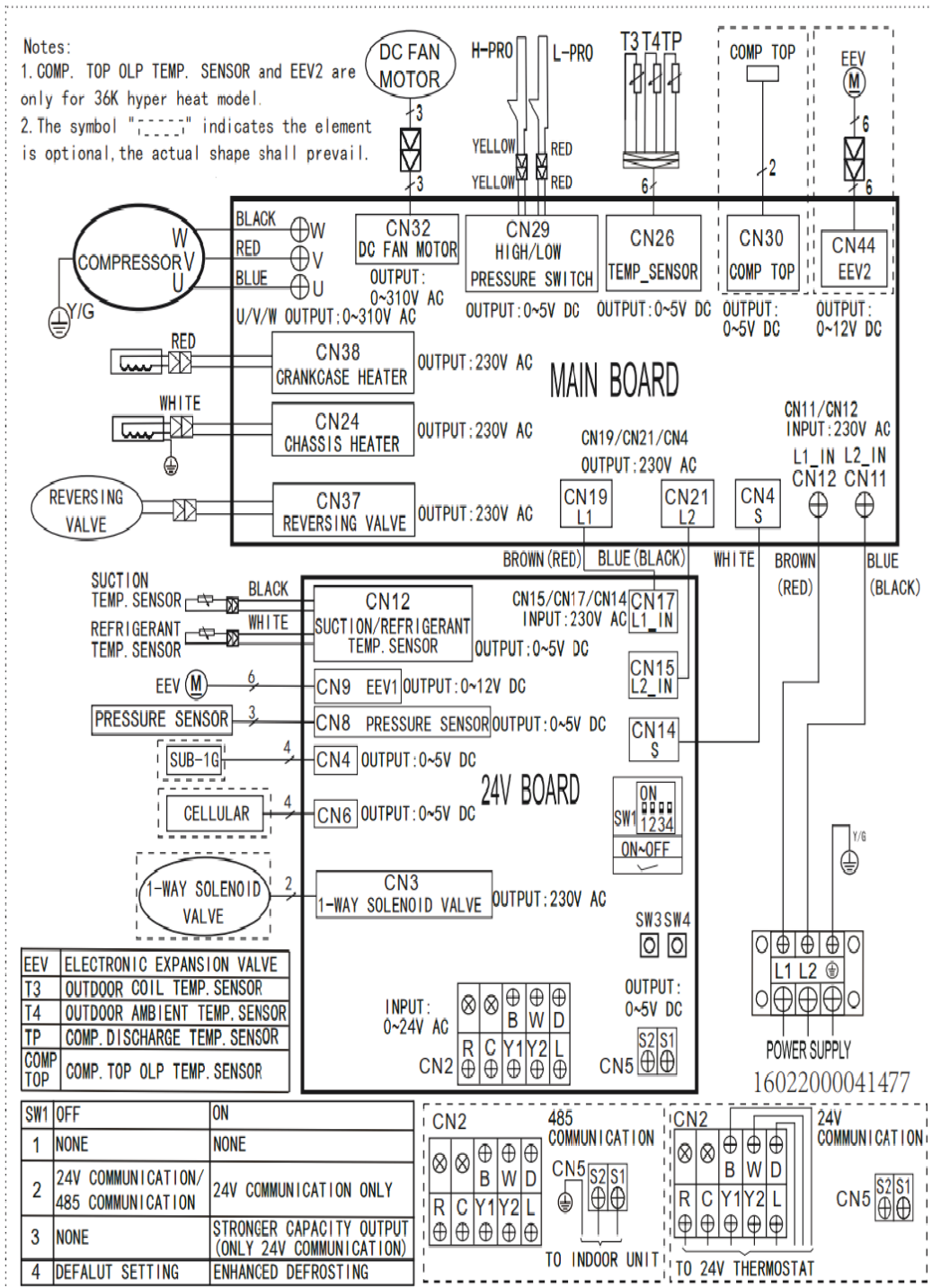


Fig. 28 – 48K / 60K Wiring Diagram

**GUIDE SPECIFICATIONS****HORIZONTAL DISCHARGE SPLIT-SYSTEM HEAT PUMP**

Size Range: 1½ to 5Ton Nominal Cooling and Heating Capacity

Model Number: **37MURA****Part 1 - General****System Description**

- a. Outdoor air-cooled split system compressor sections suitable for on-the-ground, rooftop, wall hung or balcony mounting. Units consist of a rotary compressor, an air-cooled coil, propeller-type draw-through outdoor fan, reversing valve (HP), accumulator (HP units), metering device(s), and a control box. Units discharge air horizontally as shown on the contract drawings. Units function as the outdoor component of an air-to-air heat pump system.
- b. Units are to be used in a refrigeration circuit matched to duct-less heat pump fan coil units.

**Agency Listings**

- a. Unit construction complies with ANSI/ASHRAE 15, latest revision, and with the NEC.
- b. Units are evaluated in accordance with the UL standard 60335-2-40/ CSA C22.2 No. 60335-2-40.
- c. Units are listed in CEC directory.
- d. Unit cabinet is capable of withstanding the 500-hour salt spray test per Federal Test Standard no. 141 (method 6061).
- e. Air-cooled condenser coils are leak tested at 550 psig.

**Delivery, Storage, And Handling**

Units are shipped in one piece and are stored and handled per the manufacturer's recommendations.

**Warranty (For Inclusion By Specifying Engineer)****Products****Equipment****1. General:**

Factory assembled, single piece, air-cooled outdoor unit. Contained within the enclosure are the factory wiring, piping, controls, and the compressor.

**2. Unit Cabinet:**

- a. The unit cabinet is constructed of galvanized steel, bonderized and coated with baked-enamel finish on the inside and outside.
- b. The unit access panels are removable and provide full access to the compressor, fan, and the control components.
- c. The outdoor compartment is isolated and has an acoustic lining to assure a quiet operation.

**3. Fans:**

- a. The outdoor fans are direct-drive propeller type, and discharge air horizontally. The fan draws air through the outdoor coil.
- b. Outdoor fan motors are totally-enclosed, single phase motors with class E insulation and permanently lubricated ball bearings. The motor is protected by internal thermal overload protection.
- c. The shaft has an inherent corrosion resistance.
- d. Fan blades are non-metallic and statically and dynamically balanced.
- e. Outdoor fan openings are equipped with a PVC metal/mesh coated protection grille over the fan.

**4. Compressor:**

- a. The compressor is the fully hermetic variable speed rotary type.
- b. The compressor is equipped with an oil system, operating oil charge, and motor.
- c. The motor is NEMA rated class E, suitable for operation in a refrigerant atmosphere.
- d. The compressor assembly is installed on rubber vibration isolators.

**5. Outdoor Coil:**

The coil is constructed of aluminum hydrophilic pre-coated fins mechanically bonded to seamless copper tubes, which are cleaned, dehydrated and sealed.

**6. Refrigerant Components:**

Refrigerant circuit components include multiple brass external liquid line service valves with a service gauge connection port, multiple suction line service valves with a service gage connection port, accumulator, reversing valve, and electronic expansion valves.

**7. Safety:**

Operating safety features are factory selected, assembled, and tested. The minimum functions include the following:

- a. Compressor discharge over temperature protection.
- b. System low voltage protection.
- c. Compressor overload protection.
- d. Compressor over current protection.
- e. IPM module protection.

**8. Electrical Requirements:**

- a. Units operate on single-phase, 60 Hz power at 208/230V.
- b. The unit electrical power is a single point connection.
- c. All power and control wiring must be installed per NEC and all local electrical codes.
- d. Units have multiple terminal blocks to connect to multiple indoor units.

NOTES: