

**AMMAN, JORDAN**

Latitude = 31.98 N

Longitude = 35.98 E

Period of Record = 1967 to 1996

WMO No. 402700

Elevation = 2536 feet

Average Pressure = 27.29 inches Hg

**Design Criteria Data**

|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|--------------------------------------------------|---------------------|----------------------------------|-------------------------|------------------------|-----------------------------|
|                                                  |                     | Wet Bulb Temperature (°F)        | Humidity Ratio (gr/lb)  | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Dry Bulb Temperature (T)</b>                  | <b>(°F)</b>         |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 100                 | 67                               | 54                      | 8.4                    | WNW                         |
| 0.4% Occurrence                                  | 96                  | 66                               | 57                      | 8.9                    | WNW                         |
| 1.0% Occurrence                                  | 93                  | 65                               | 58                      | 8.9                    | W                           |
| 2.0% Occurrence                                  | 91                  | 65                               | 59                      | 9.8                    | W                           |
| Mean Daily Range                                 | 19                  | -                                | -                       | -                      | -                           |
| 97.5% Occurrence                                 | 39                  | 37                               | 33                      | 5.8                    | W                           |
| 99.0% Occurrence                                 | 36                  | 35                               | 30                      | 5.0                    | W                           |
| 99.6% Occurrence                                 | 34                  | 32                               | 26                      | 5.2                    | W                           |
| Median of Extreme Lows                           | 32                  | 30                               | 23                      | 5.5                    | W                           |
|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|                                                  |                     | Dry Bulb Temperature (°F)        | Humidity Ratio (gr/lb)  | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Wet Bulb Temperature (T<sub>wb</sub>)</b>     | <b>(°F)</b>         |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 74                  | 84                               | 119                     | 9.0                    | W                           |
| 0.4% Occurrence                                  | 72                  | 84                               | 108                     | 8.8                    | W                           |
| 1.0% Occurrence                                  | 70                  | 83                               | 98                      | 9.1                    | W                           |
| 2.0% Occurrence                                  | 68                  | 82                               | 88                      | 9.0                    | W                           |
|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|                                                  |                     | Dry Bulb Temperature (°F)        | Vapor Pressure (in. Hg) | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Humidity Ratio (HR)</b>                       | <b>(gr/lb)</b>      |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 125                 | 79                               | 0.76                    | 10.9                   | WSW                         |
| 0.4% Occurrence                                  | 114                 | 75                               | 0.69                    | 7.1                    | W                           |
| 1.0% Occurrence                                  | 106                 | 75                               | 0.65                    | 7.4                    | W                           |
| 2.0% Occurrence                                  | 100                 | 73                               | 0.61                    | 7.2                    | W                           |
| <b>Air Conditioning/<br/>Humid Area Criteria</b> | <b># of Hours</b>   | T ≥ 93°F                         | T ≥ 80°F                | T <sub>wb</sub> ≥ 73°F | T <sub>wb</sub> ≥ 67°F      |
|                                                  |                     | 105                              | 1300                    | 21                     | 405                         |

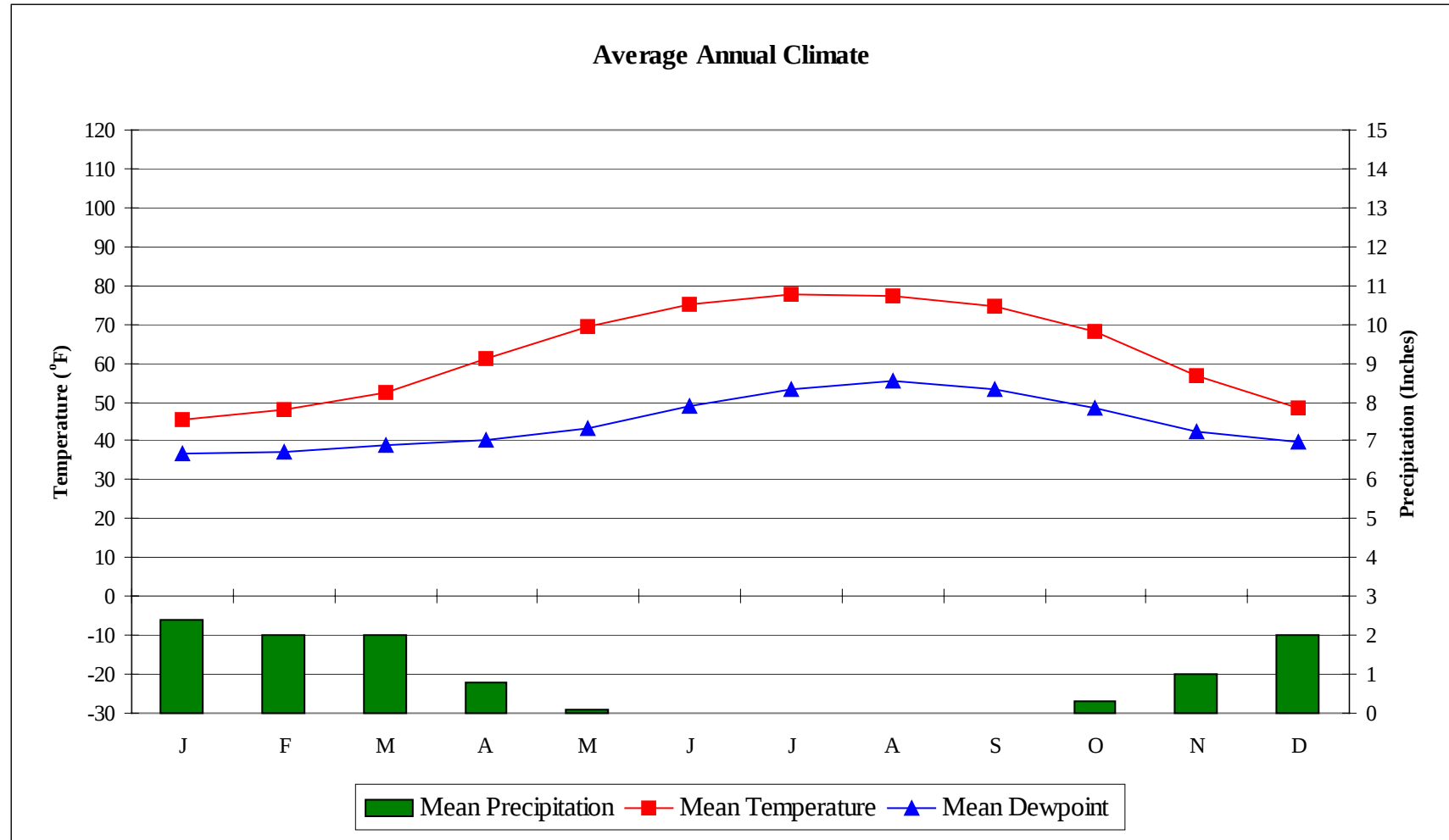
**Other Site Data**

| Weather Region                                   | Rain Rate<br>100 Year Recurrence<br>(in./hr) | Basic Wind Speed<br>3 sec gust @ 33 ft<br>50 Year Recurrence (mph) | Ventilation Cooling Load Index<br>(Ton-hr/cfm/yr) Base 75°F-RH 60%<br>Latent + Sensible |
|--------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 8                                                | N/A                                          | N/A                                                                | 0.2 + 1.2                                                                               |
| Ground Water Temperature (°F)<br>50 Foot Depth * | Frost Depth<br>50 Year Recurrence<br>(in.)   | Ground Snow Load<br>50 Year Recurrence<br>(lb/ft <sup>2</sup> )    | Average Annual<br>Freeze-Thaw Cycles<br>(#)                                             |
| 65.4                                             | N/A                                          | N/A                                                                | 2                                                                                       |

\*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

AMMAN, JORDAN

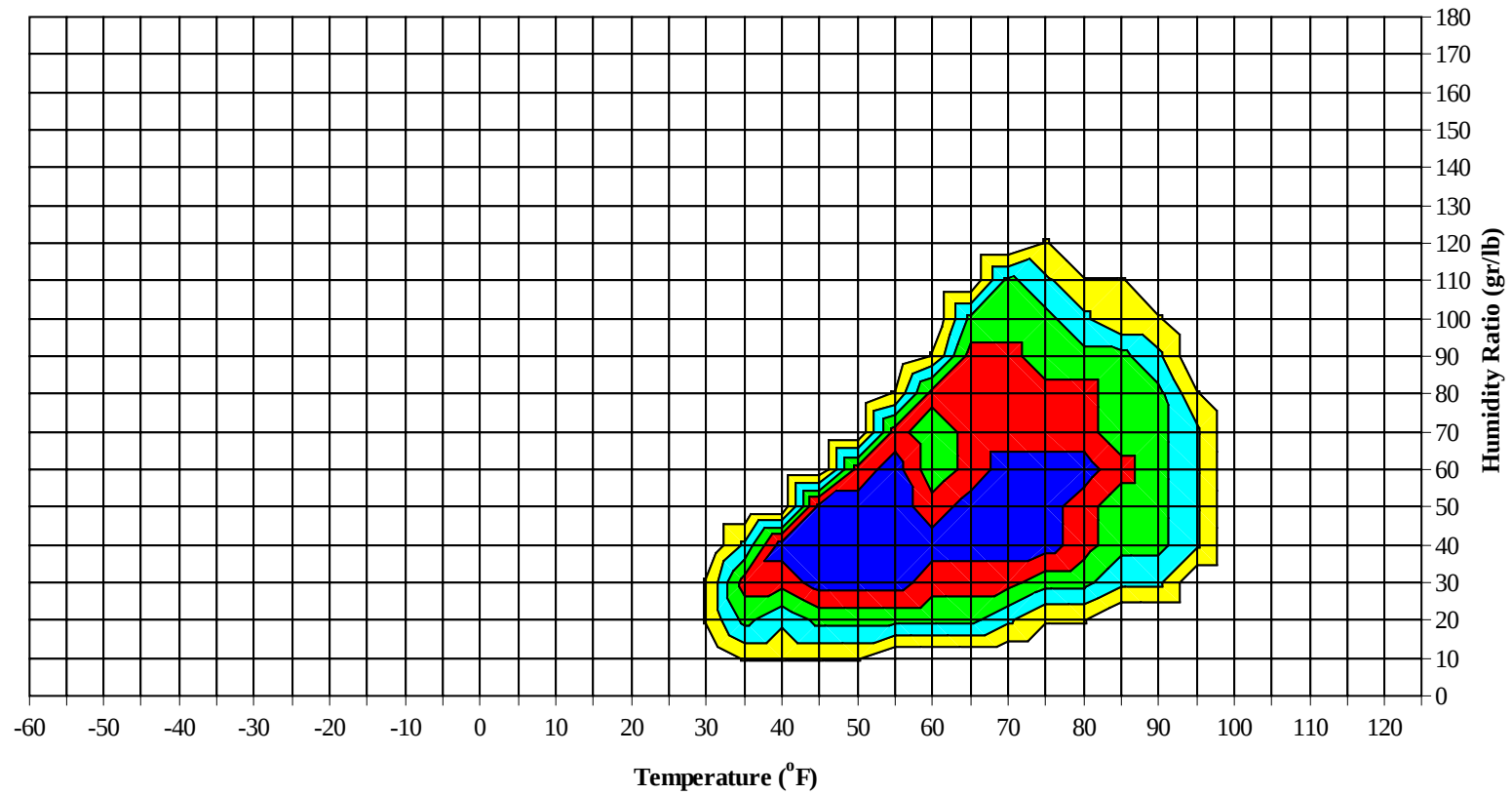
WMO No. 402700



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### Long Term Psychrometric Summary

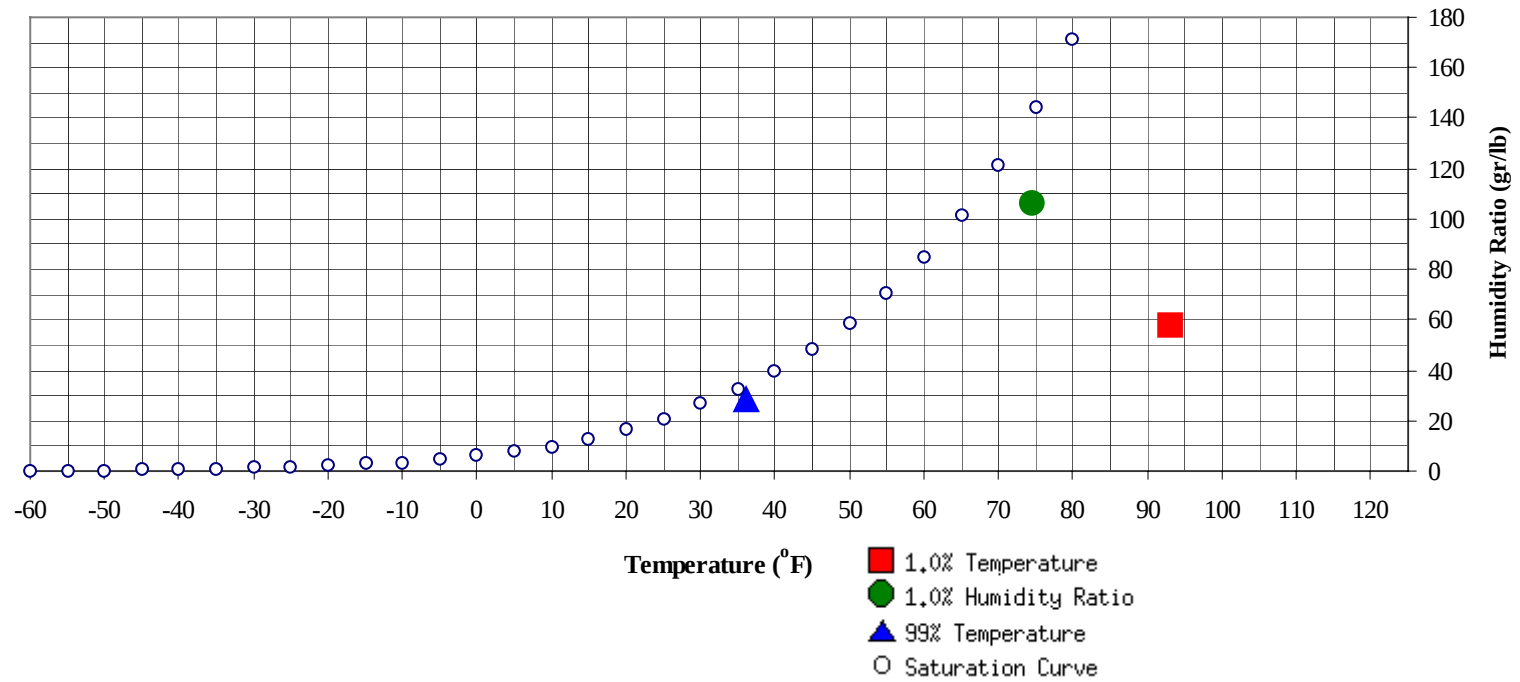


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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### Psychrometric Summary of Peak Design Values



|              | (°F) | MCHR<br>(gr/lb) | Enthalpy<br>(btu/lb) | 1.0% Humidity<br>Ratio | (gr/lb) | MCDB<br>(°F) | MCWB<br>(°F) | MC Dewpt<br>(°F) | Enthalpy<br>(btu/lb) |
|--------------|------|-----------------|----------------------|------------------------|---------|--------------|--------------|------------------|----------------------|
|              |      |                 |                      |                        |         |              |              |                  |                      |
| 99% Dry Bulb | 36   | 28.6            | 13.0                 |                        | 106.4   | 74.6         | 68.7         | 66.2             | 34.5                 |

| 1.0% Dry Bulb | (°F) | MCHR<br>(gr/lb) | MCWB<br>(°F) | Enthalpy<br>(btu/lb) |
|---------------|------|-----------------|--------------|----------------------|
|               |      |                 |              |                      |
|               | 93   | 58.1            | 65.4         | 31.5                 |

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**Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)**

Period of Record = 1967 to 1996

| Temperature<br>Range<br>(°F) | January             |                |                |              |                          | February            |                |                |              |                          | March               |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 105 / 109                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 100 / 104                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 95 / 99                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 90 / 94                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 85 / 89                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 80 / 84                      |                     |                |                |              |                          |                     | 0              |                | 0            | 55.7                     |                     | 1              | 0              | 1            | 57.2                     |
| 75 / 79                      |                     |                |                |              |                          |                     | 2              | 0              | 2            | 53.9                     | 0                   | 9              | 1              | 10           | 55.4                     |
| 70 / 74                      |                     | 0              | 0              | 0            | 54.2                     |                     | 5              | 1              | 6            | 51.9                     | 0                   | 22             | 7              | 29           | 53.1                     |
| 65 / 69                      |                     | 3              | 0              | 3            | 51.7                     | 0                   | 10             | 2              | 12           | 50.2                     | 1                   | 25             | 11             | 37           | 51.2                     |
| 60 / 64                      | 0                   | 10             | 2              | 12           | 49.0                     | 1                   | 23             | 10             | 34           | 48.3                     | 6                   | 42             | 26             | 74           | 49.8                     |
| 55 / 59                      | 1                   | 36             | 11             | 48           | 46.9                     | 5                   | 43             | 25             | 73           | 46.6                     | 24                  | 58             | 46             | 128          | 48.0                     |
| 50 / 54                      | 7                   | 77             | 41             | 125          | 45.1                     | 17                  | 66             | 46             | 129          | 45.0                     | 49                  | 52             | 62             | 163          | 46.3                     |
| 45 / 49                      | 61                  | 82             | 101            | 244          | 43.0                     | 69                  | 48             | 80             | 197          | 43.2                     | 87                  | 29             | 66             | 182          | 43.8                     |
| 40 / 44                      | 82                  | 29             | 62             | 173          | 39.7                     | 73                  | 17             | 40             | 130          | 40.1                     | 51                  | 7              | 22             | 79           | 40.7                     |
| 35 / 39                      | 77                  | 11             | 29             | 116          | 36.0                     | 47                  | 10             | 17             | 74           | 36.2                     | 27                  | 3              | 7              | 37           | 36.4                     |
| 30 / 34                      | 19                  | 1              | 3              | 23           | 30.3                     | 10                  | 1              | 3              | 14           | 31.3                     | 4                   | 0              | 1              | 5            | 31.5                     |
| 25 / 29                      | 1                   |                | 0              | 1            | 23.6                     | 1                   |                | 0              | 1            | 25.0                     | 0                   |                |                | 0            | 26.7                     |
| 20 / 24                      |                     |                |                |              |                          | 0                   |                |                | 0            | 23.3                     |                     |                |                |              |                          |

**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

AMMAN, JORDAN

WMO No. 402700

**Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)**

Period of Record = 1967 to 1996

| Temperature<br>Range<br>(°F) | April               |                |                |              |                          | May                 |                |                |              |                          | June                |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 105 / 109                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 100 / 104                    |                     |                |                |              |                          |                     | 1              |                | 1            | 62.8                     |                     | 0              |                | 0            | 67.5                     |
| 95 / 99                      |                     | 0              |                | 0            | 61.0                     |                     | 5              | 1              | 6            | 63.5                     |                     | 8              | 1              | 9            | 65.3                     |
| 90 / 94                      | 0                   | 2              | 0              | 2            | 60.4                     | 0                   | 19             | 4              | 22           | 61.9                     | 0                   | 35             | 5              | 40           | 64.2                     |
| 85 / 89                      | 0                   | 8              | 1              | 9            | 59.4                     | 1                   | 25             | 7              | 33           | 60.6                     | 1                   | 48             | 14             | 63           | 63.1                     |
| 80 / 84                      | 0                   | 21             | 5              | 26           | 57.3                     | 5                   | 46             | 19             | 70           | 59.1                     | 9                   | 72             | 37             | 118          | 62.0                     |
| 75 / 79                      | 2                   | 38             | 14             | 54           | 55.3                     | 15                  | 58             | 36             | 109          | 57.4                     | 30                  | 51             | 59             | 139          | 60.0                     |
| 70 / 74                      | 8                   | 41             | 26             | 75           | 53.3                     | 34                  | 47             | 48             | 129          | 55.5                     | 56                  | 22             | 64             | 142          | 58.1                     |
| 65 / 69                      | 15                  | 33             | 29             | 77           | 52.0                     | 35                  | 25             | 38             | 99           | 53.9                     | 58                  | 5              | 35             | 98           | 56.5                     |
| 60 / 64                      | 36                  | 42             | 42             | 119          | 50.5                     | 57                  | 18             | 48             | 122          | 52.5                     | 61                  | 0              | 22             | 82           | 55.7                     |
| 55 / 59                      | 47                  | 38             | 49             | 134          | 49.1                     | 54                  | 5              | 32             | 91           | 50.8                     | 22                  | 0              | 4              | 26           | 53.9                     |
| 50 / 54                      | 59                  | 15             | 48             | 122          | 47.6                     | 38                  | 0              | 13             | 51           | 48.4                     | 3                   |                | 0              | 3            | 48.8                     |
| 45 / 49                      | 56                  | 3              | 23             | 82           | 45.0                     | 9                   | 0              | 1              | 10           | 45.0                     | 0                   |                |                | 0            | 43.7                     |
| 40 / 44                      | 14                  | 1              | 2              | 17           | 41.0                     | 0                   |                |                | 0            | 42.0                     |                     |                |                |              |                          |
| 35 / 39                      | 3                   | 0              | 0              | 3            | 37.9                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 30 / 34                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 25 / 29                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 20 / 24                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

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AMMAN, JORDAN

WMO No. 402700

**Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)**

Period of Record = 1967 to 1996

| Temperature<br>Range<br>(°F) | July                |                |                |              |                          | August              |                |                |              |                          | September           |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 105 / 109                    |                     | 0              |                | 0            | 69.3                     |                     | 0              |                | 0            | 69.0                     |                     |                |                |              |                          |
| 100 / 104                    |                     | 3              | 0              | 3            | 69.3                     |                     | 3              | 0              | 3            | 67.3                     |                     |                |                |              |                          |
| 95 / 99                      | 0                   | 13             | 2              | 15           | 66.9                     |                     | 12             | 2              | 14           | 67.0                     | 0                   | 9              | 1              | 10           | 66.0                     |
| 90 / 94                      | 1                   | 44             | 7              | 52           | 65.7                     | 0                   | 43             | 7              | 50           | 66.3                     | 0                   | 27             | 4              | 31           | 64.5                     |
| 85 / 89                      | 2                   | 60             | 22             | 84           | 64.9                     | 2                   | 65             | 19             | 86           | 65.6                     | 0                   | 41             | 10             | 51           | 63.9                     |
| 80 / 84                      | 15                  | 84             | 53             | 153          | 64.1                     | 10                  | 82             | 51             | 143          | 64.8                     | 4                   | 82             | 32             | 118          | 63.0                     |
| 75 / 79                      | 43                  | 36             | 73             | 152          | 62.2                     | 39                  | 34             | 72             | 145          | 63.6                     | 19                  | 56             | 60             | 134          | 62.5                     |
| 70 / 74                      | 87                  | 9              | 64             | 159          | 60.8                     | 84                  | 10             | 70             | 164          | 62.2                     | 56                  | 23             | 69             | 148          | 61.2                     |
| 65 / 69                      | 58                  | 0              | 22             | 80           | 59.9                     | 68                  | 0              | 24             | 92           | 61.1                     | 67                  | 2              | 42             | 111          | 60.3                     |
| 60 / 64                      | 39                  |                | 5              | 44           | 58.6                     | 42                  | 0              | 3              | 45           | 59.4                     | 77                  | 0              | 20             | 97           | 58.7                     |
| 55 / 59                      | 3                   |                |                | 3            | 55.3                     | 3                   | 0              |                | 3            | 54.1                     | 16                  |                | 1              | 17           | 54.8                     |
| 50 / 54                      |                     |                |                |              |                          | 0                   |                |                | 0            | 52.0                     | 1                   |                | 0              | 1            | 49.5                     |
| 45 / 49                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 40 / 44                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 35 / 39                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 30 / 34                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 25 / 29                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 20 / 24                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

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AMMAN, JORDAN

WMO No. 402700

**Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)**

Period of Record = 1967 to 1996

| Temperature<br>Range<br>(°F) | October             |                |                |              |                          | November            |                |                |              |                          | December            |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 105 / 109                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 100 / 104                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 95 / 99                      |                     | 0              |                | 0            | 67.0                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 90 / 94                      |                     | 7              | 0              | 7            | 61.9                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 85 / 89                      |                     | 22             | 3              | 25           | 61.1                     |                     | 0              |                | 0            | 61.0                     |                     |                |                |              |                          |
| 80 / 84                      | 0                   | 47             | 10             | 57           | 60.4                     |                     | 2              | 0              | 2            | 58.3                     |                     |                |                |              |                          |
| 75 / 79                      | 3                   | 62             | 26             | 91           | 59.2                     |                     | 13             | 1              | 14           | 56.6                     |                     | 1              |                | 1            | 59.6                     |
| 70 / 74                      | 16                  | 60             | 52             | 128          | 57.9                     | 0                   | 38             | 8              | 45           | 54.5                     |                     | 2              | 0              | 2            | 55.3                     |
| 65 / 69                      | 36                  | 28             | 53             | 116          | 56.9                     | 2                   | 39             | 16             | 56           | 53.5                     | 0                   | 8              | 1              | 9            | 51.9                     |
| 60 / 64                      | 85                  | 17             | 70             | 172          | 55.7                     | 14                  | 61             | 46             | 120          | 52.4                     | 1                   | 27             | 5              | 33           | 50.0                     |
| 55 / 59                      | 80                  | 5              | 29             | 114          | 53.6                     | 52                  | 50             | 74             | 176          | 50.5                     | 3                   | 57             | 24             | 84           | 48.4                     |
| 50 / 54                      | 24                  | 0              | 6              | 30           | 49.8                     | 88                  | 25             | 60             | 173          | 47.7                     | 30                  | 82             | 66             | 178          | 46.7                     |
| 45 / 49                      | 4                   |                |                | 4            | 45.2                     | 59                  | 11             | 28             | 97           | 43.6                     | 92                  | 53             | 101            | 246          | 43.9                     |
| 40 / 44                      | 0                   |                |                | 0            | 39.0                     | 17                  | 2              | 7              | 25           | 39.1                     | 70                  | 13             | 36             | 118          | 40.3                     |
| 35 / 39                      |                     |                |                |              |                          | 7                   | 0              | 1              | 8            | 34.4                     | 45                  | 5              | 14             | 64           | 36.3                     |
| 30 / 34                      |                     |                |                |              |                          | 1                   |                |                | 1            | 29.6                     | 7                   | 1              | 1              | 9            | 31.3                     |
| 25 / 29                      |                     |                |                |              |                          |                     |                |                |              |                          | 0                   | 0              |                | 0            | 26.8                     |
| 20 / 24                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

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AMMAN, JORDAN

WMO No. 402700

**Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)**

Period of Record = 1967 to 1996

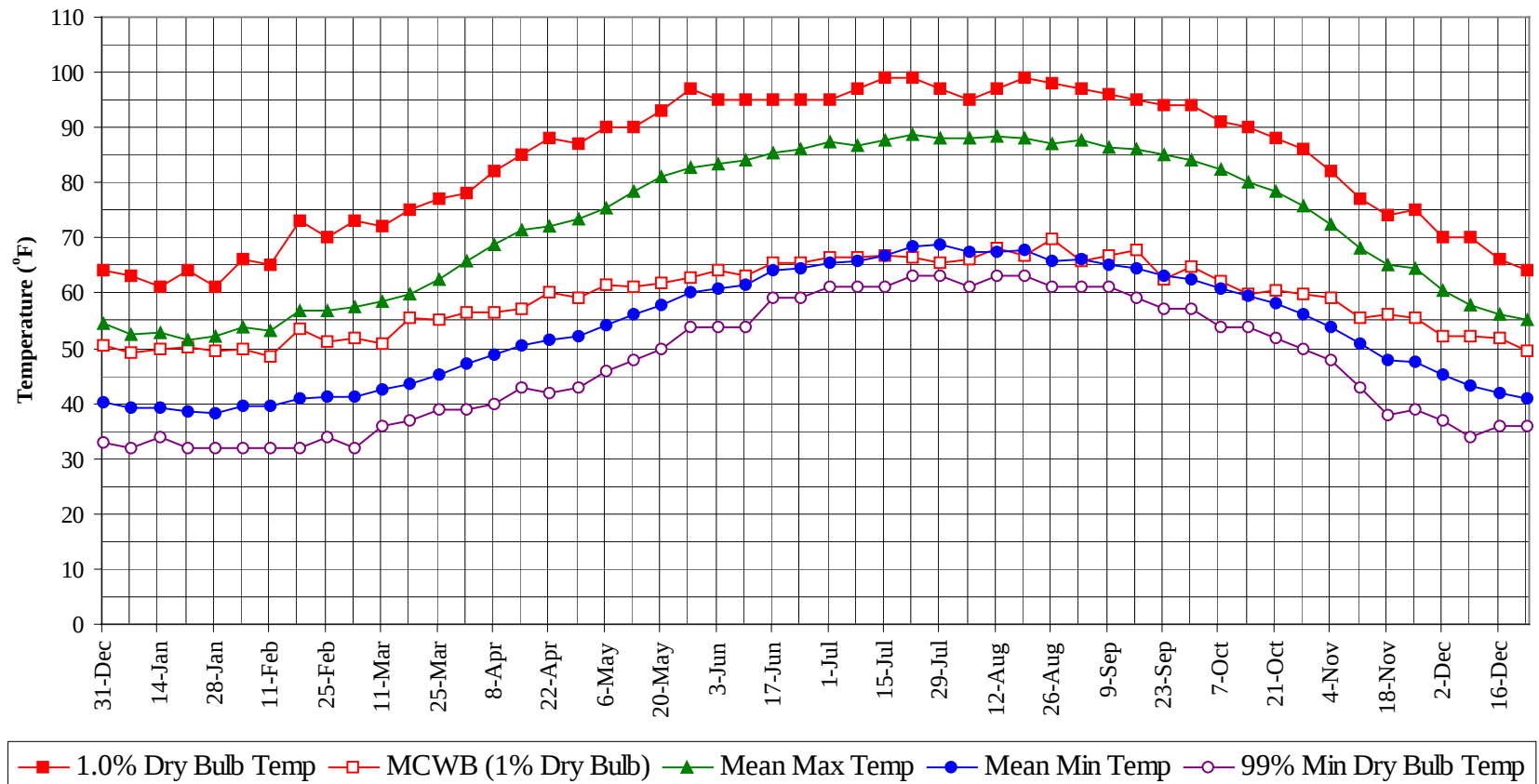
| Annual Totals                |                     |                |                |              |                          |      |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|------|
| Temperature<br>Range<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |      |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |      |
| 105 / 109                    | 0                   |                |                | 0            | 69.3                     |      |
| 100 / 104                    | 8                   |                |                | 1            | 9                        | 67.6 |
| 95 / 99                      | 0                   | 46             | 7              | 53           | 66.1                     |      |
| 90 / 94                      | 1                   | 177            | 28             | 206          | 64.7                     |      |
| 85 / 89                      | 6                   | 266            | 75             | 347          | 63.8                     |      |
| 80 / 84                      | 45                  | 435            | 203            | 683          | 62.6                     |      |
| 75 / 79                      | 151                 | 355            | 340            | 847          | 60.5                     |      |
| 70 / 74                      | 340                 | 275            | 404            | 1020         | 58.5                     |      |
| 65 / 69                      | 340                 | 179            | 272            | 791          | 56.5                     |      |
| 60 / 64                      | 418                 | 240            | 301            | 959          | 53.8                     |      |
| 55 / 59                      | 310                 | 294            | 296            | 900          | 49.8                     |      |
| 50 / 54                      | 316                 | 319            | 345            | 980          | 46.7                     |      |
| 45 / 49                      | 438                 | 227            | 401            | 1066         | 43.6                     |      |
| 40 / 44                      | 307                 | 67             | 171            | 544          | 40.1                     |      |
| 35 / 39                      | 204                 | 28             | 68             | 300          | 36.1                     |      |
| 30 / 34                      | 42                  | 4              | 8              | 54           | 30.9                     |      |
| 25 / 29                      | 2                   | 0              | 0              | 2            | 24.7                     |      |
| 20 / 24                      | 0                   |                |                | 0            | 23.3                     |      |
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**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

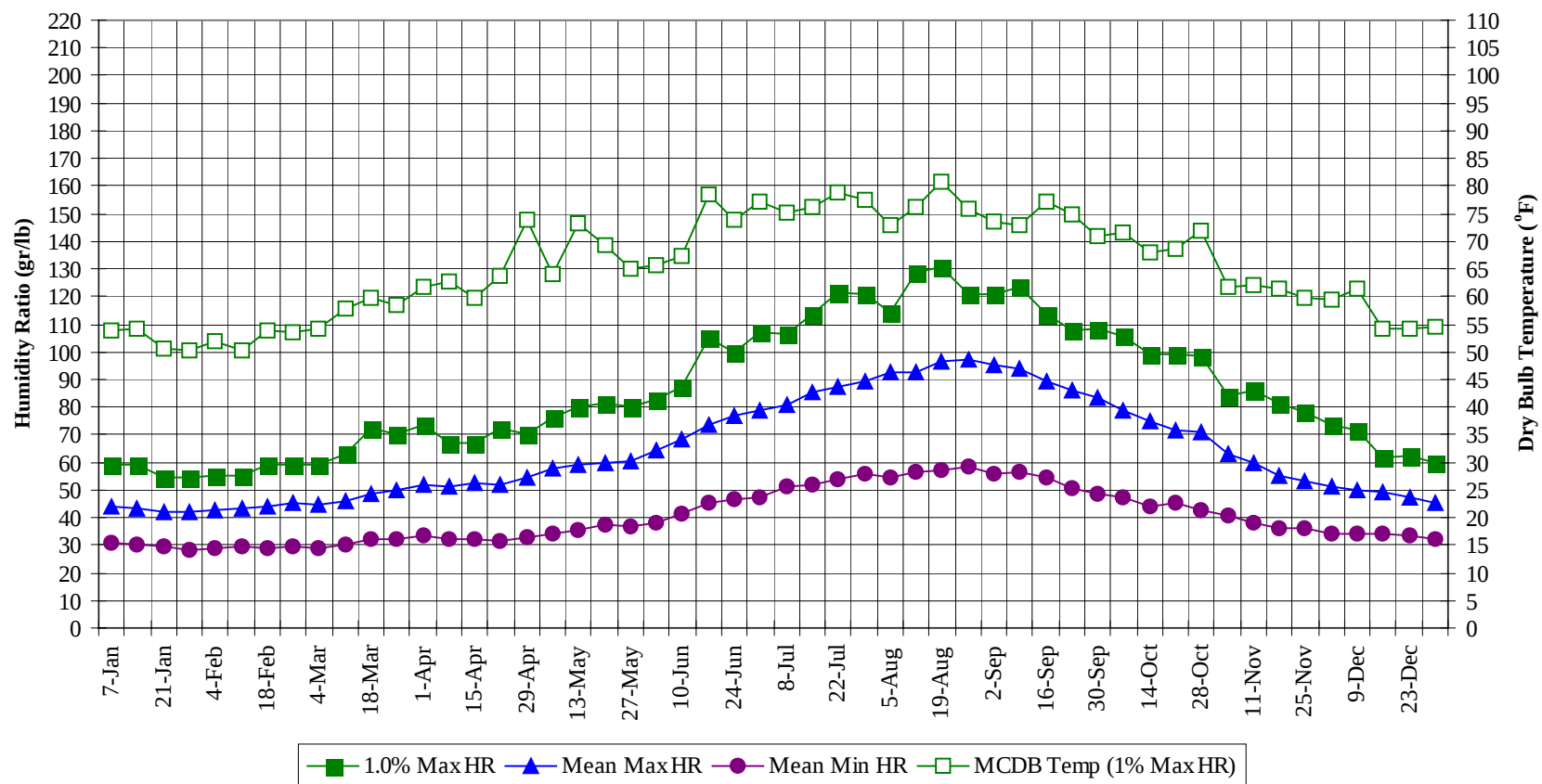
AMMAN, JORDAN

WMO No. 402700

### Annual Summary of Temperatures



## Long Term Humidity and Dry Bulb Temperature Summary



## AMMAN, JORDAN

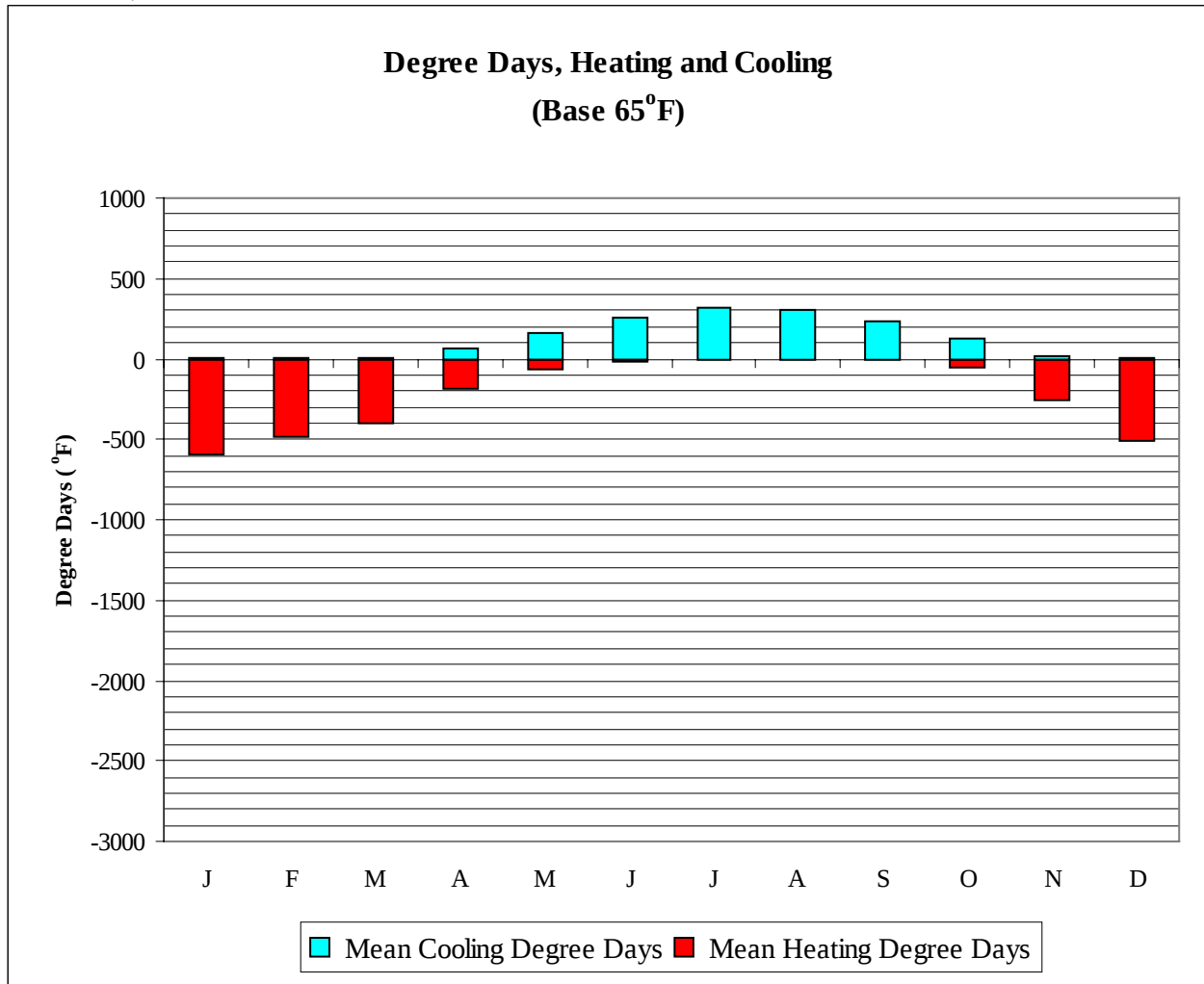
WMO No. 402700

## Long Term Dry Bulb Temperature and Humidity Summary

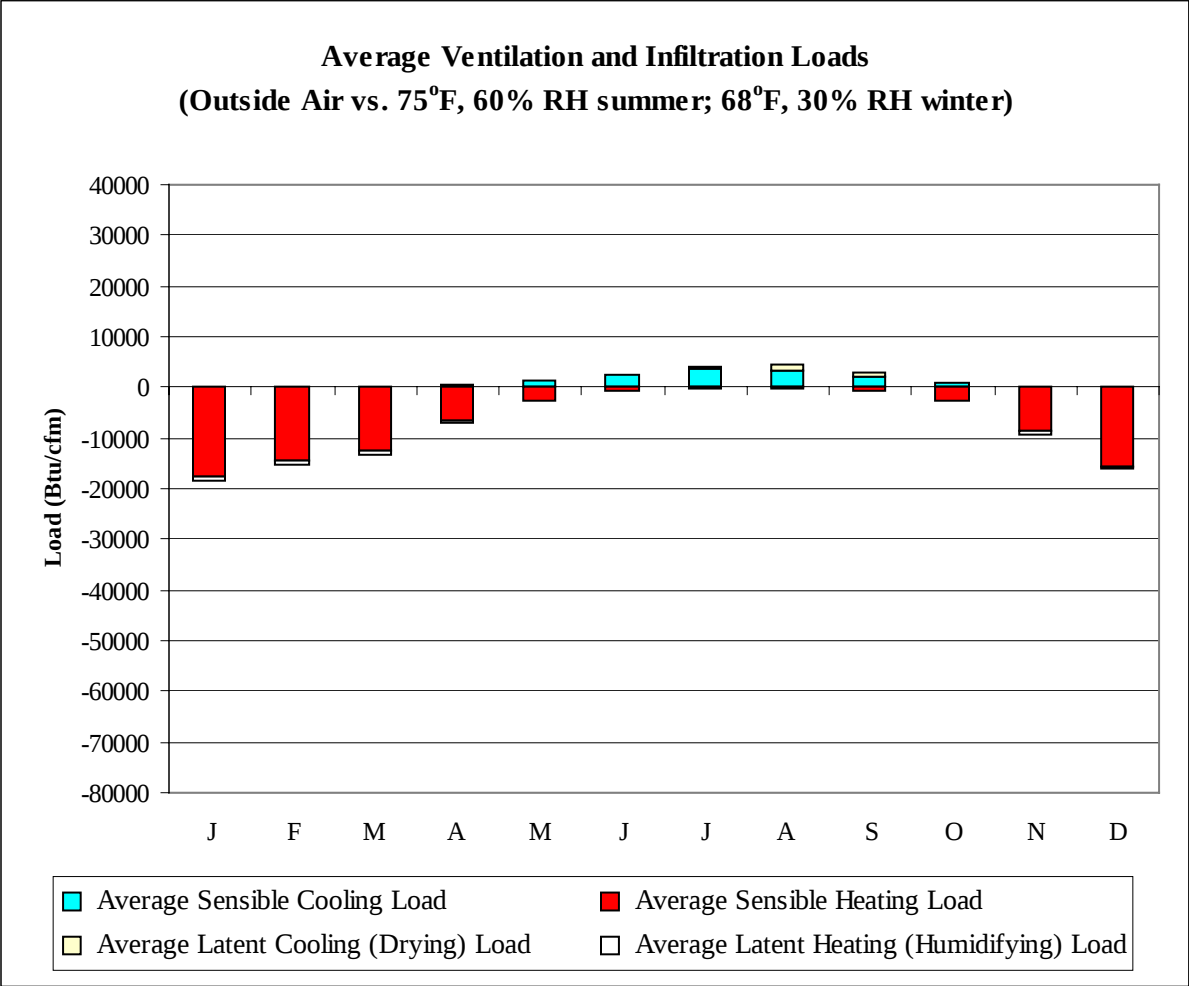
| Week Ending | 1.0% Temp (°F) | MCWB @ 1% Temp (°F) | Mean Max Temp (°F) | Mean Min Temp (°F) | 99% Temp (°F) | 1.0% HR (gr/lb) | MCDB @ 1% HR (°F) | Mean Max HR (gr/lb) | Mean Min HR (gr/lb) |
|-------------|----------------|---------------------|--------------------|--------------------|---------------|-----------------|-------------------|---------------------|---------------------|
| 7-Jan       | 63.0           | 49.1                | 52.6               | 39.1               | 32.0          | 58.8            | 53.7              | 44.0                | 30.7                |
| 14-Jan      | 61.0           | 49.8                | 52.8               | 39.1               | 34.0          | 58.8            | 54.1              | 43.1                | 30.2                |
| 21-Jan      | 64.0           | 50.2                | 51.4               | 38.7               | 32.0          | 54.6            | 50.4              | 42.3                | 29.8                |
| 28-Jan      | 61.0           | 49.5                | 52.3               | 38.4               | 32.0          | 54.6            | 50.2              | 41.9                | 28.4                |
| 4-Feb       | 66.0           | 50.0                | 53.7               | 39.4               | 32.0          | 55.3            | 51.9              | 43.0                | 29.1                |
| 11-Feb      | 65.0           | 48.7                | 53.2               | 39.6               | 32.0          | 55.3            | 50.4              | 43.2                | 29.3                |
| 18-Feb      | 73.0           | 53.4                | 56.7               | 40.8               | 32.0          | 58.8            | 53.9              | 44.1                | 28.9                |
| 25-Feb      | 70.0           | 51.3                | 56.8               | 41.3               | 34.0          | 58.8            | 53.4              | 45.1                | 29.7                |
| 4-Mar       | 73.0           | 51.8                | 57.6               | 41.3               | 32.0          | 58.8            | 54.2              | 44.7                | 28.6                |
| 11-Mar      | 72.0           | 50.8                | 58.5               | 42.6               | 36.0          | 63.0            | 57.8              | 46.2                | 30.5                |
| 18-Mar      | 75.0           | 55.6                | 59.9               | 43.7               | 37.0          | 72.1            | 59.9              | 48.4                | 32.4                |
| 25-Mar      | 77.0           | 55.1                | 62.4               | 45.1               | 39.0          | 70.0            | 58.5              | 50.1                | 32.2                |
| 1-Apr       | 78.0           | 56.5                | 65.7               | 47.1               | 39.0          | 73.5            | 61.8              | 51.7                | 33.3                |
| 8-Apr       | 82.0           | 56.3                | 68.9               | 48.8               | 40.0          | 67.2            | 62.7              | 51.5                | 32.4                |
| 15-Apr      | 85.0           | 57.0                | 71.3               | 50.4               | 43.0          | 67.2            | 59.6              | 52.4                | 32.2                |
| 22-Apr      | 88.0           | 60.2                | 72.1               | 51.5               | 42.0          | 72.1            | 63.6              | 52.1                | 31.7                |
| 29-Apr      | 87.0           | 59.2                | 73.4               | 52.3               | 43.0          | 70.0            | 74.0              | 54.4                | 33.0                |
| 6-May       | 90.0           | 61.4                | 75.6               | 54.1               | 46.0          | 76.3            | 64.2              | 57.9                | 34.3                |
| 13-May      | 90.0           | 61.2                | 78.4               | 56.0               | 48.0          | 79.8            | 73.2              | 59.1                | 35.6                |
| 20-May      | 93.0           | 61.9                | 81.1               | 58.0               | 50.0          | 81.2            | 69.4              | 59.5                | 37.2                |
| 27-May      | 97.0           | 62.9                | 82.6               | 60.2               | 54.0          | 79.8            | 65.0              | 60.7                | 36.7                |
| 3-Jun       | 95.0           | 64.3                | 83.5               | 61.0               | 54.0          | 82.6            | 65.5              | 64.2                | 38.2                |
| 10-Jun      | 95.0           | 63.0                | 84.2               | 61.3               | 54.0          | 87.5            | 67.5              | 68.3                | 41.1                |
| 17-Jun      | 95.0           | 65.4                | 85.6               | 64.2               | 59.0          | 105.0           | 78.6              | 73.9                | 45.1                |
| 24-Jun      | 95.0           | 65.5                | 85.9               | 64.5               | 59.0          | 100.1           | 73.8              | 76.6                | 46.4                |
| 1-Jul       | 95.0           | 66.3                | 87.3               | 65.6               | 61.0          | 107.1           | 77.3              | 79.1                | 47.6                |
| 8-Jul       | 97.0           | 66.6                | 86.9               | 66.0               | 61.0          | 106.4           | 75.3              | 80.8                | 51.1                |
| 15-Jul      | 99.0           | 66.9                | 87.7               | 66.7               | 61.0          | 113.4           | 76.1              | 85.5                | 51.9                |
| 22-Jul      | 99.0           | 66.3                | 88.7               | 68.4               | 63.0          | 121.8           | 78.9              | 87.3                | 53.6                |
| 29-Jul      | 97.0           | 65.4                | 88.2               | 68.6               | 63.0          | 121.1           | 77.6              | 89.4                | 56.0                |
| 5-Aug       | 95.0           | 66.3                | 88.2               | 67.5               | 61.0          | 114.1           | 72.8              | 92.4                | 54.4                |
| 12-Aug      | 97.0           | 68.1                | 88.4               | 67.4               | 63.0          | 128.8           | 76.1              | 92.8                | 56.4                |
| 19-Aug      | 99.0           | 66.9                | 88.0               | 67.7               | 63.0          | 130.9           | 80.7              | 96.5                | 57.1                |
| 26-Aug      | 98.0           | 69.7                | 87.2               | 65.8               | 61.0          | 121.1           | 75.8              | 97.2                | 58.7                |
| 2-Sep       | 97.0           | 65.9                | 87.9               | 66.0               | 61.0          | 121.1           | 73.5              | 95.0                | 55.9                |
| 9-Sep       | 96.0           | 66.8                | 86.4               | 65.1               | 61.0          | 123.2           | 73.0              | 93.7                | 56.7                |
| 16-Sep      | 95.0           | 67.7                | 86.1               | 64.4               | 59.0          | 113.4           | 77.0              | 89.6                | 54.5                |
| 23-Sep      | 94.0           | 62.5                | 85.2               | 63.2               | 57.0          | 107.8           | 75.0              | 85.8                | 50.3                |
| 30-Sep      | 94.0           | 64.8                | 84.0               | 62.4               | 57.0          | 108.5           | 71.0              | 83.7                | 48.5                |
| 7-Oct       | 91.0           | 62.2                | 82.3               | 60.7               | 54.0          | 105.7           | 71.7              | 78.5                | 47.1                |
| 14-Oct      | 90.0           | 59.8                | 80.2               | 59.4               | 54.0          | 99.4            | 67.9              | 75.0                | 43.9                |
| 21-Oct      | 88.0           | 60.6                | 78.5               | 58.0               | 52.0          | 99.4            | 68.7              | 71.6                | 45.0                |
| 28-Oct      | 86.0           | 59.9                | 75.7               | 56.0               | 50.0          | 98.7            | 72.0              | 71.0                | 42.9                |
| 4-Nov       | 82.0           | 59.3                | 72.4               | 53.9               | 48.0          | 84.0            | 61.7              | 63.2                | 40.7                |
| 11-Nov      | 77.0           | 55.7                | 68.1               | 50.7               | 43.0          | 86.1            | 62.0              | 59.5                | 38.1                |
| 18-Nov      | 74.0           | 56.0                | 65.1               | 47.7               | 38.0          | 81.2            | 61.4              | 55.2                | 36.0                |
| 25-Nov      | 75.0           | 55.5                | 64.5               | 47.6               | 39.0          | 78.4            | 59.9              | 53.1                | 35.9                |
| 2-Dec       | 70.0           | 52.3                | 60.6               | 45.1               | 37.0          | 73.5            | 59.4              | 51.1                | 34.3                |
| 9-Dec       | 70.0           | 52.1                | 57.8               | 43.4               | 34.0          | 71.4            | 61.4              | 50.0                | 34.1                |
| 16-Dec      | 66.0           | 51.7                | 56.2               | 42.0               | 36.0          | 61.6            | 54.2              | 49.1                | 34.1                |
| 23-Dec      | 64.0           | 49.7                | 55.2               | 41.0               | 36.0          | 62.3            | 54.2              | 47.1                | 33.6                |
| 31-Dec      | 64.0           | 50.5                | 54.4               | 40.2               | 33.0          | 59.5            | 54.4              | 45.3                | 32.4                |

AMMAN, JORDAN

WMO No. 402700



|     | Mean Cooling<br>Degree Days (°F) | Mean Heating<br>Degree Days (°F) |
|-----|----------------------------------|----------------------------------|
| JAN | 0                                | 595                              |
| FEB | 2                                | 484                              |
| MAR | 9                                | 404                              |
| APR | 60                               | 184                              |
| MAY | 160                              | 63                               |
| JUN | 253                              | 12                               |
| JUL | 317                              | 3                                |
| AUG | 310                              | 3                                |
| SEP | 237                              | 9                                |
| OCT | 123                              | 57                               |
| NOV | 16                               | 258                              |
| DEC | 1                                | 513                              |
| ANN | 1487                             | 2585                             |



|     | Average Sensible Cooling Load | Average Sensible Heating Load | Average Latent Cooling Load | Average Latent Heating Load |
|-----|-------------------------------|-------------------------------|-----------------------------|-----------------------------|
|     | (Btu/cfm)                     | (Btu/cfm)                     | (Btu/cfm)                   | (Btu/cfm)                   |
| JAN | 0                             | -17735                        | 0                           | -786                        |
| FEB | 2                             | -14657                        | 0                           | -686                        |
| MAR | 14                            | -12677                        | 0                           | -620                        |
| APR | 337                           | -6429                         | 0                           | -467                        |
| MAY | 1354                          | -2589                         | 3                           | -220                        |
| JUN | 2367                          | -631                          | 117                         | -48                         |
| JUL | 3519                          | -215                          | 574                         | -8                          |
| AUG | 3386                          | -228                          | 997                         | -5                          |
| SEP | 2174                          | -546                          | 593                         | -34                         |
| OCT | 791                           | -2546                         | 132                         | -109                        |
| NOV | 25                            | -8728                         | 6                           | -544                        |
| DEC | 1                             | -15632                        | 0                           | -444                        |
| ANN | 13970                         | -82613                        | 2422                        | -3971                       |

**Average Annual Solar Radiation – Nearest Available Site**  
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

No Solar Radiation  
Data Available



**Average Annual Solar Heat and Illumination – Nearest Available Site**

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

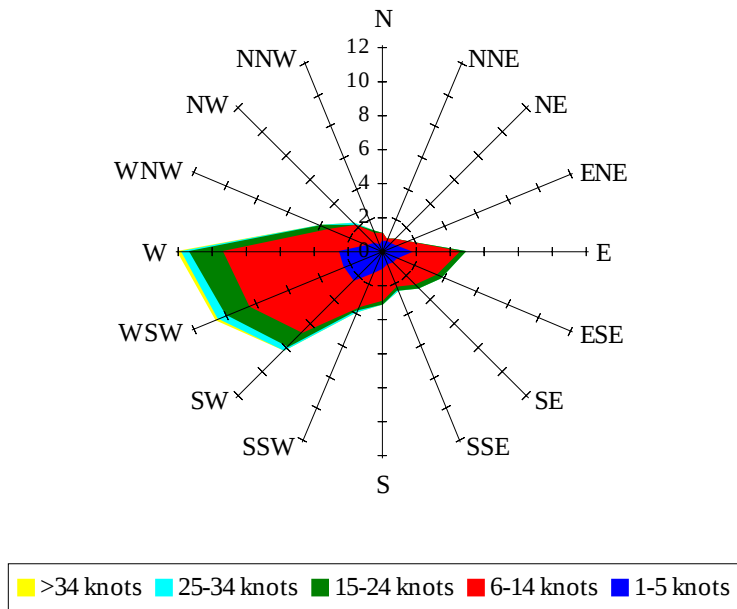
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## Wind Summary - December, January, and February

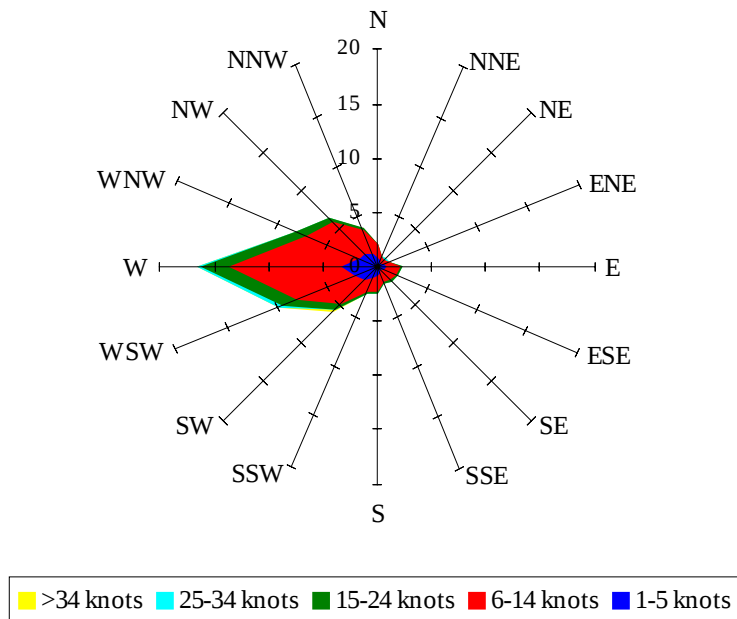
Labels of Percent Frequency on North Axis



Percent Calm = 36.93

## Wind Summary - March, April, and May

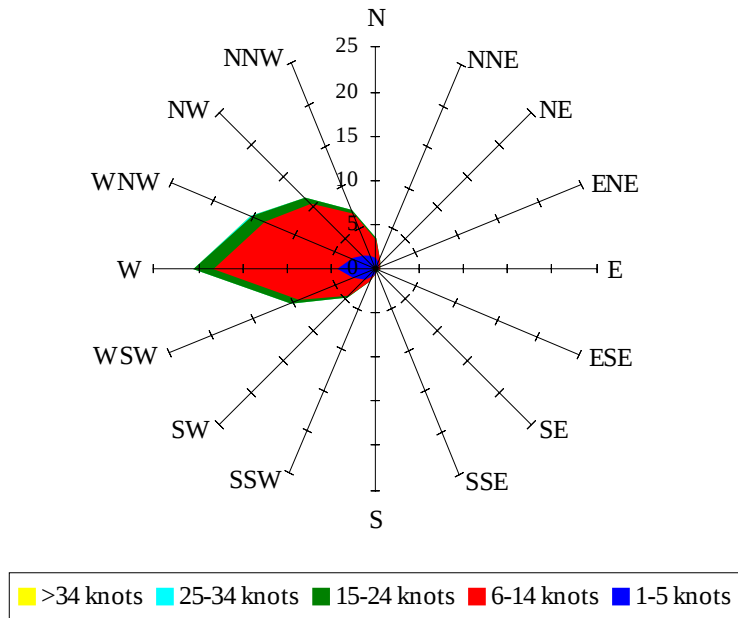
Labels of Percent Frequency on North Axis



Percent Calm = 32.44

### Wind Summary - June, July, and August

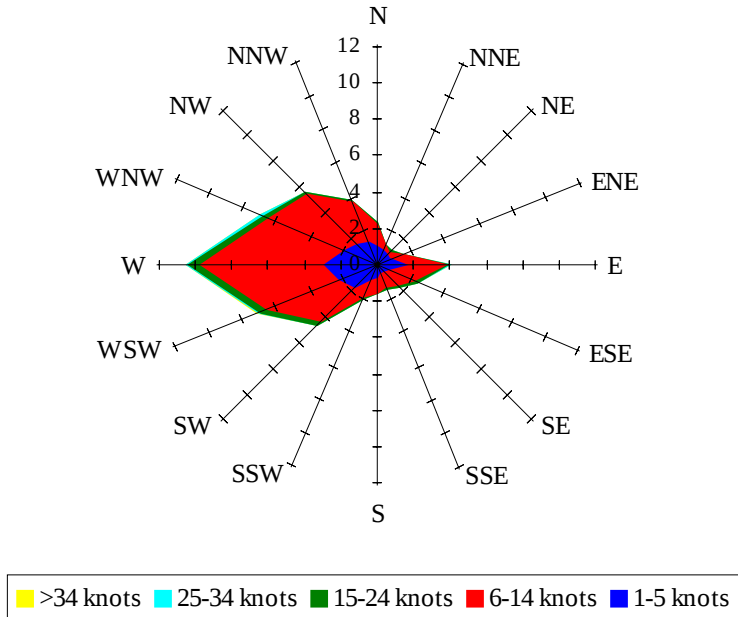
Labels of Percent Frequency on North Axis



Percent Calm = 23.65

### Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 42.81