

KWAJALEIN/BUCHOLZ MH

Latitude = 8.73 N

WMO No. 913660

Longitude = 167.73 E

Elevation = 26 feet

Period of Record = 1973 to 1996

Average Pressure = 29.76 inches Hg

Design Criteria Data

	Design Value	Mean Coincident (Average) Values			
		Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Dry Bulb Temperature (T)	(°F)				
Median of Extreme Highs	90	79	136	10.1	ENE
0.4% Occurrence	88	79	136	11.6	ENE
1.0% Occurrence	88	79	136	11.6	ENE
2.0% Occurrence	88	79	136	11.6	ENE
Mean Daily Range	7	-	-	-	-
97.5% Occurrence	77	75	127	12.2	ENE
99.0% Occurrence	77	75	127	12.2	ENE
99.6% Occurrence	76	75	126	12.2	ENE
Median of Extreme Lows	73	72	118	12.1	ENE
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Wet Bulb Temperature (T_{wb})	(°F)				
Median of Extreme Highs	84	88	168	12.9	ENE
0.4% Occurrence	81	86	146	12.1	ENE
1.0% Occurrence	80	85	142	12.3	ENE
2.0% Occurrence	80	85	142	12.3	ENE
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Humidity Ratio (HR)	(gr/lb)				
Median of Extreme Highs	196	.	.	.	CALM
0.4% Occurrence	151	85	1.00	12.9	ENE
1.0% Occurrence	148	85	0.97	12.9	E
2.0% Occurrence	147	85	0.97	12.8	E
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		0	7526	8403	8562

Other Site Data

Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
10	N/A	N/A	22.3 + 5.7
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
84.8	N/A	N/A	0

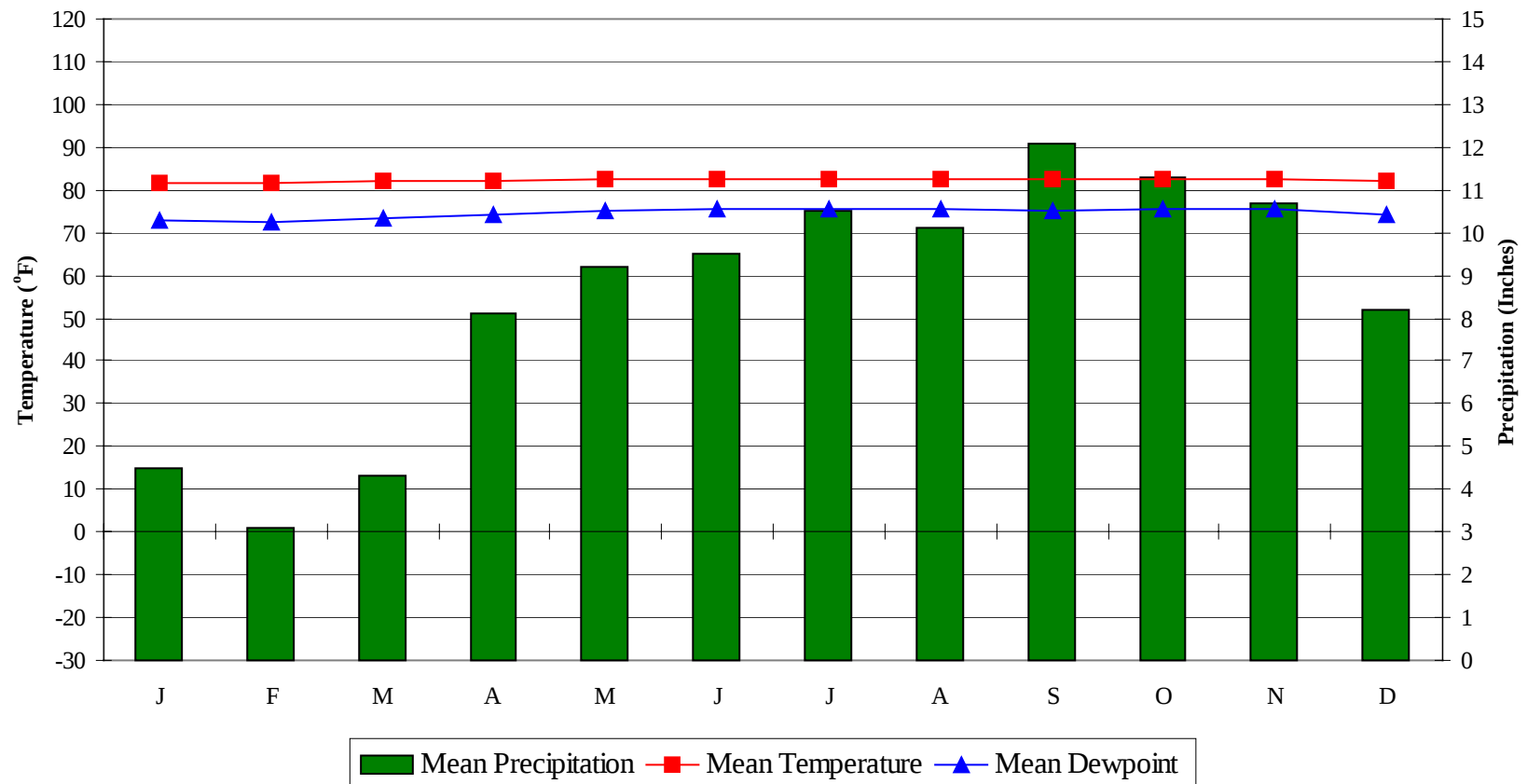
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

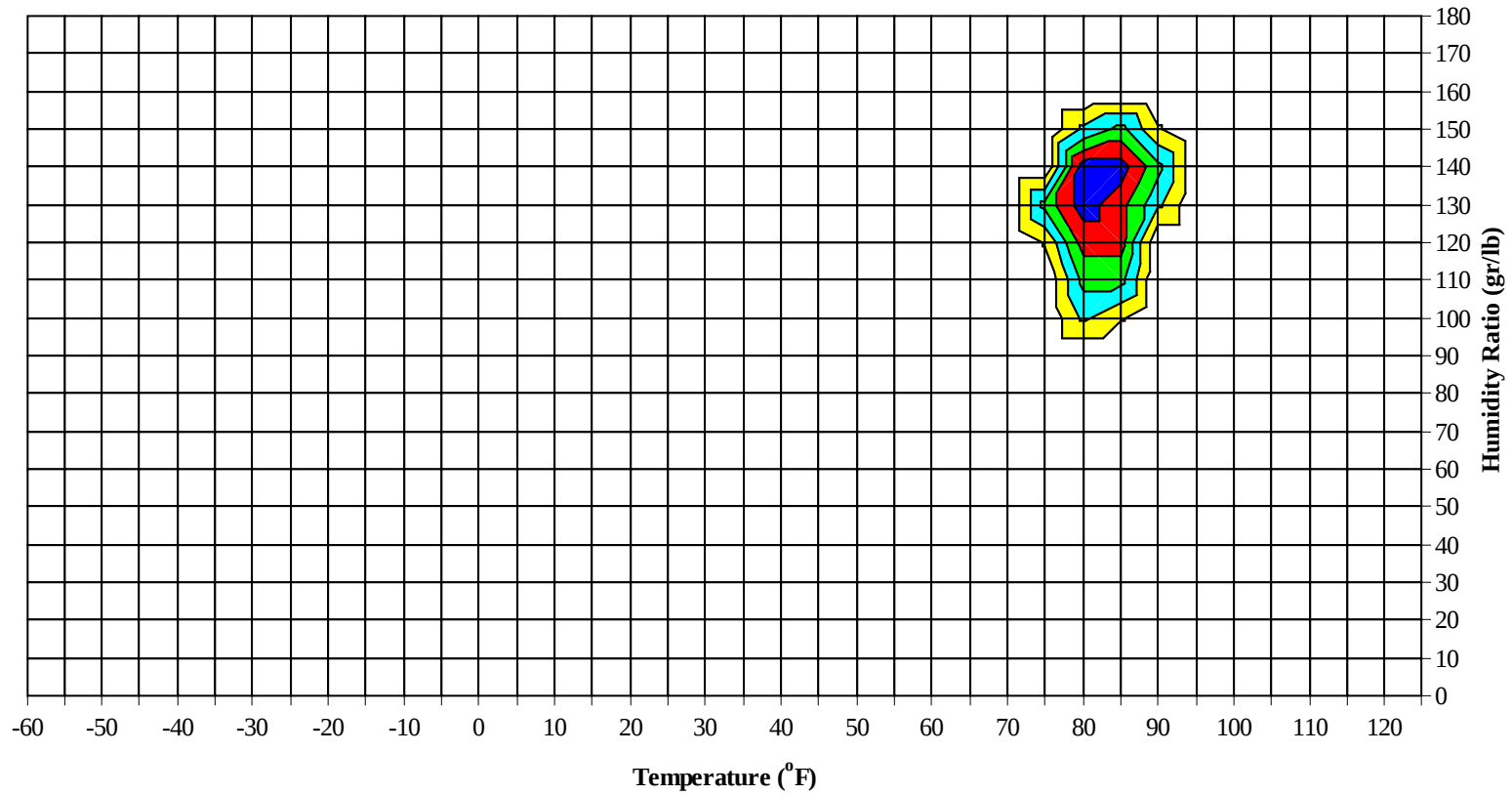


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Long Term Psychrometric Summary



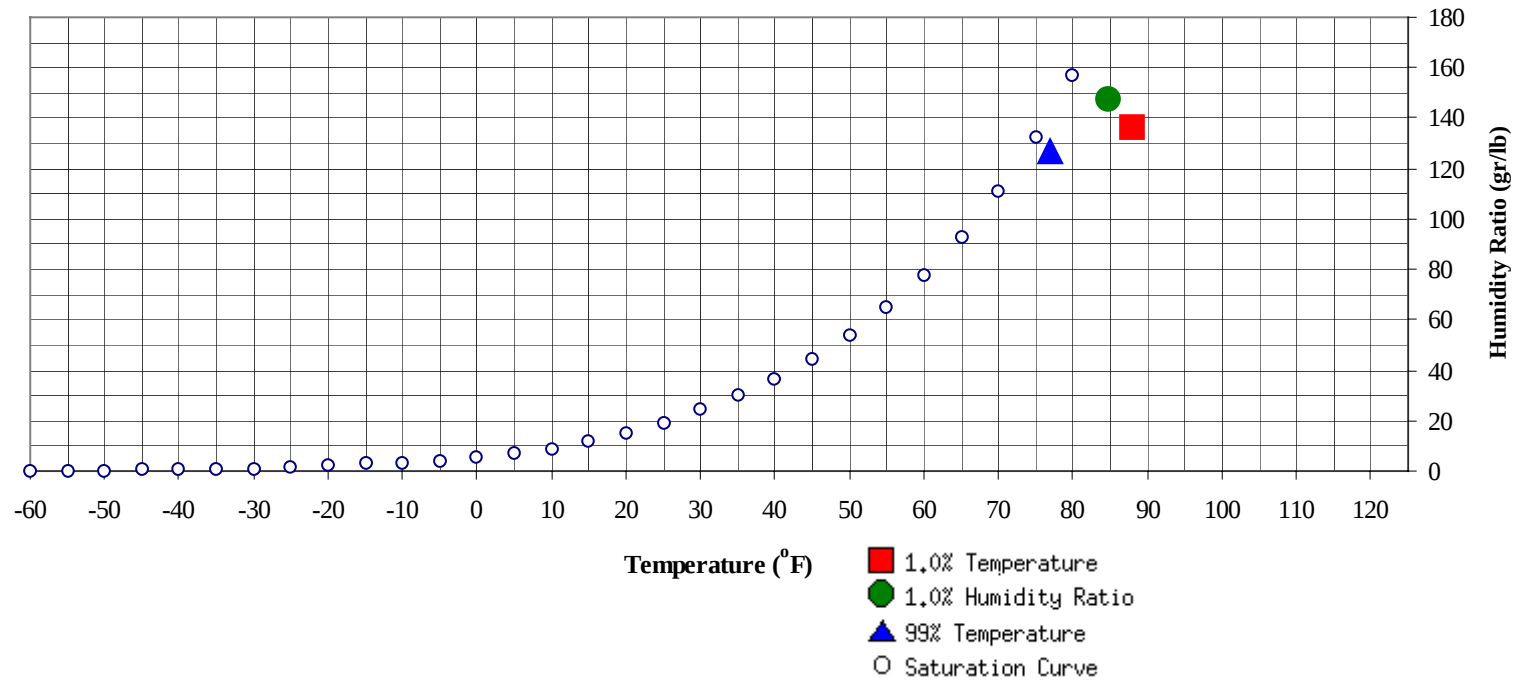
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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Psychrometric Summary of Peak Design Values



99% Dry Bulb	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)	1.0% Humidity Ratio	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
	77	126.6	38.3		147.7	84.6	79.7	78.1	43.5

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	88	136.4	79.2	42.6

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

Period of Record = 1973 to 1996

[illegible]

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.

WMO No. 913660

Period of Record = 1973 to 1996

[illegible]

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.

WMO No. 913660

Period of Record = 1973 to 1996

[illegible]

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.

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WMO No. 913660

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

Period of Record = 1973 to 1996

[illegible]

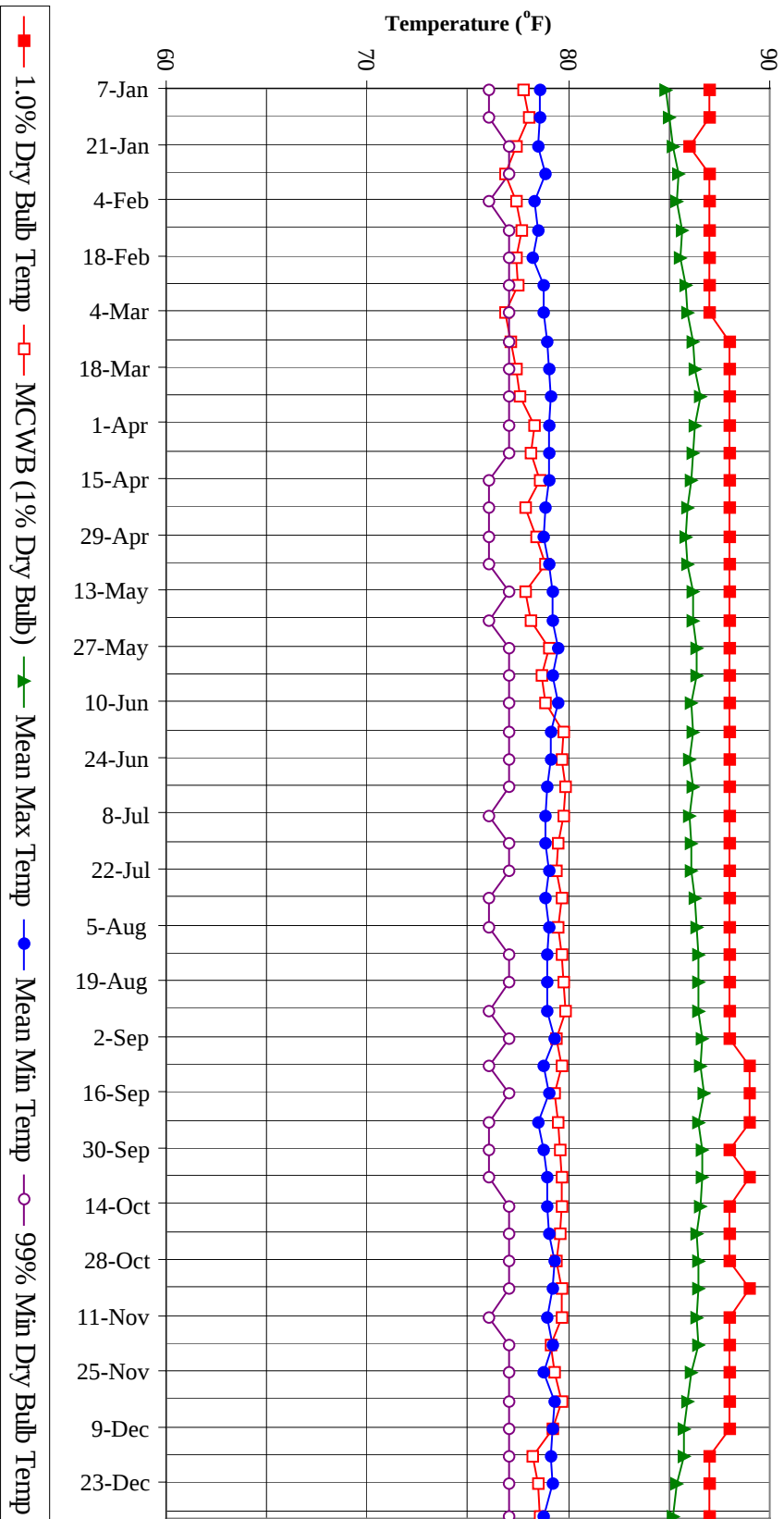
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

KWAJALEIN/BUCHOLZ MH WMO No. 913660
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1973 to 1996

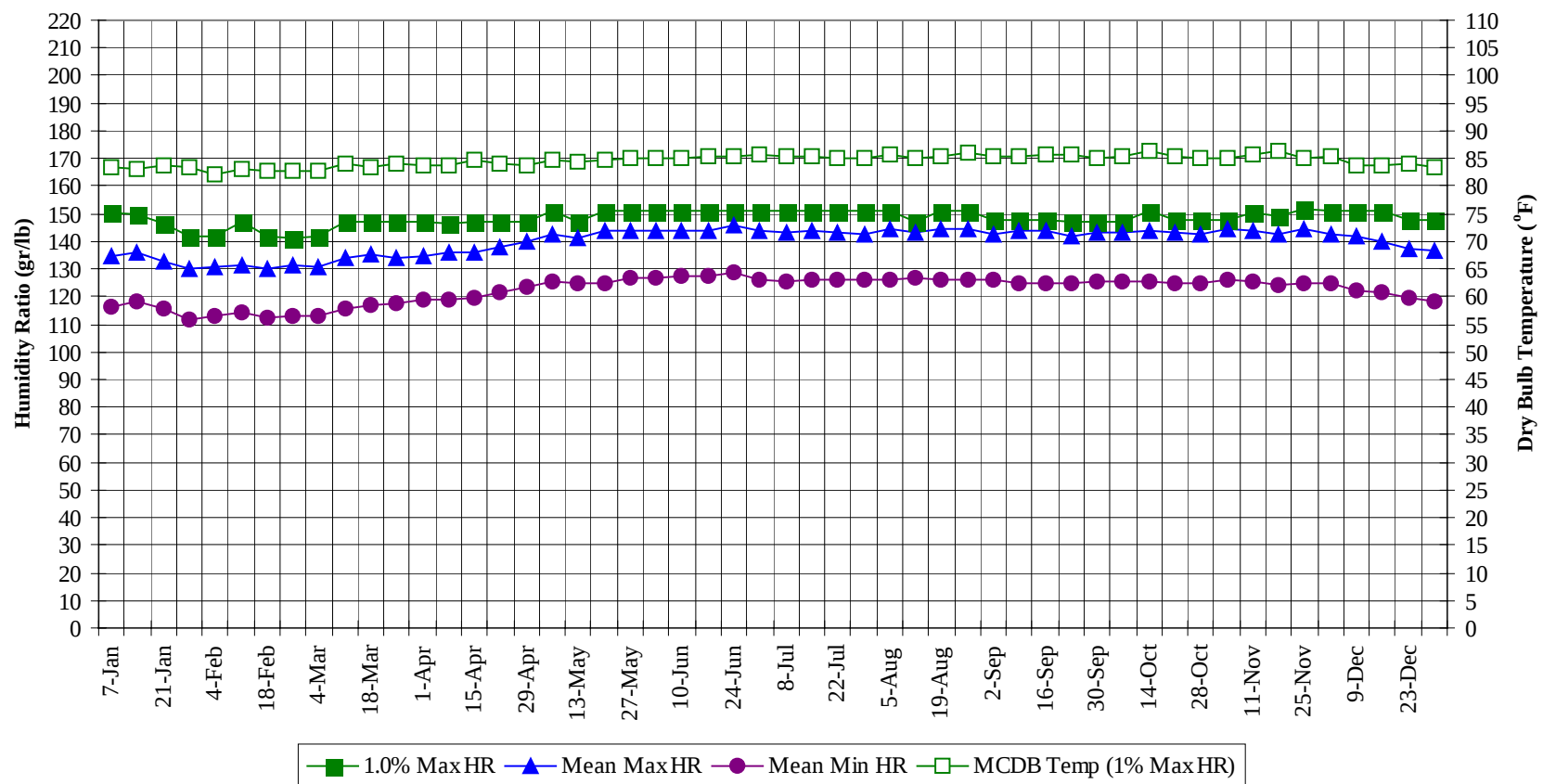
[illegible]

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.

Annual Summary of Temperatures

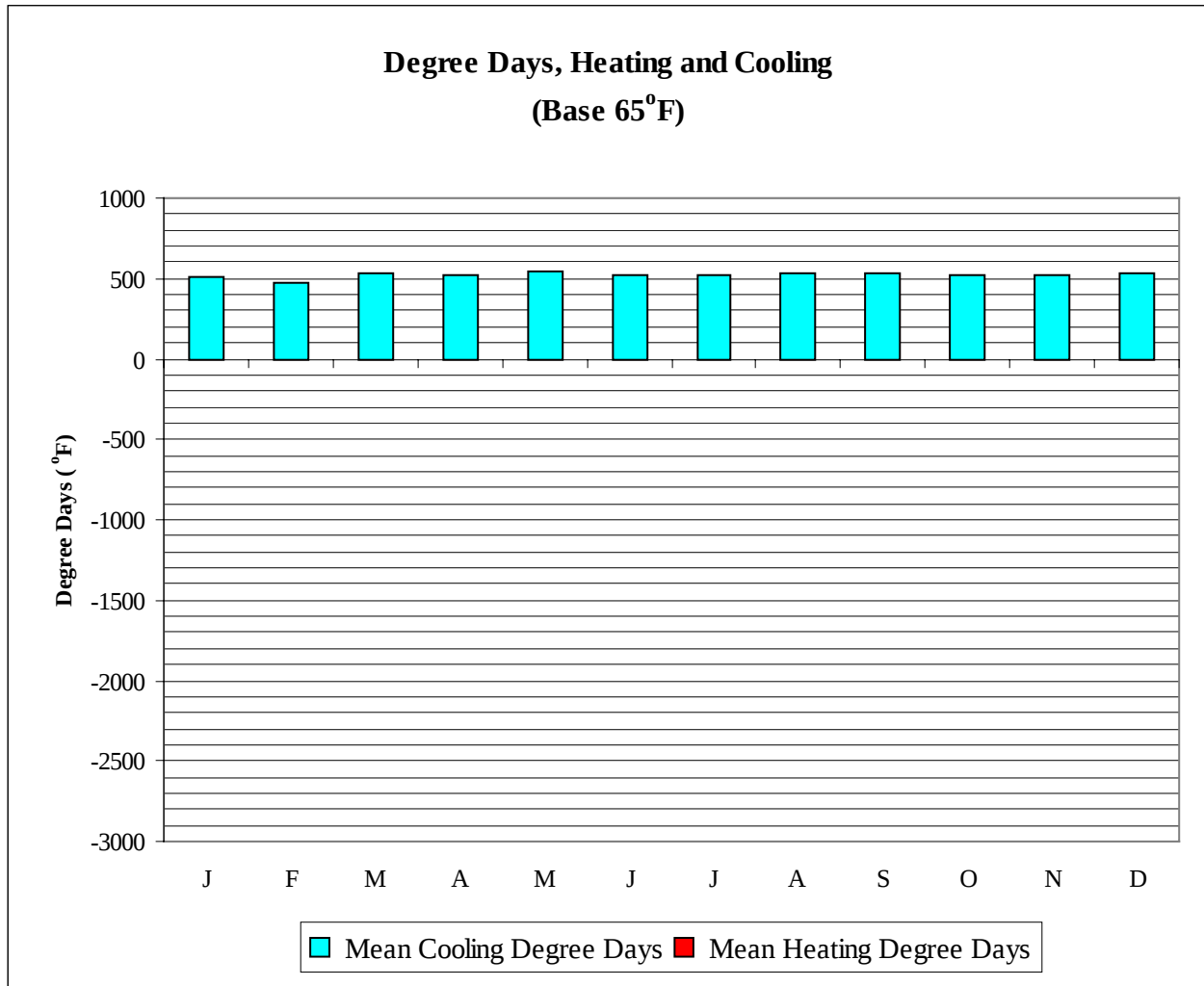


Long Term Humidity and Dry Bulb Temperature Summary



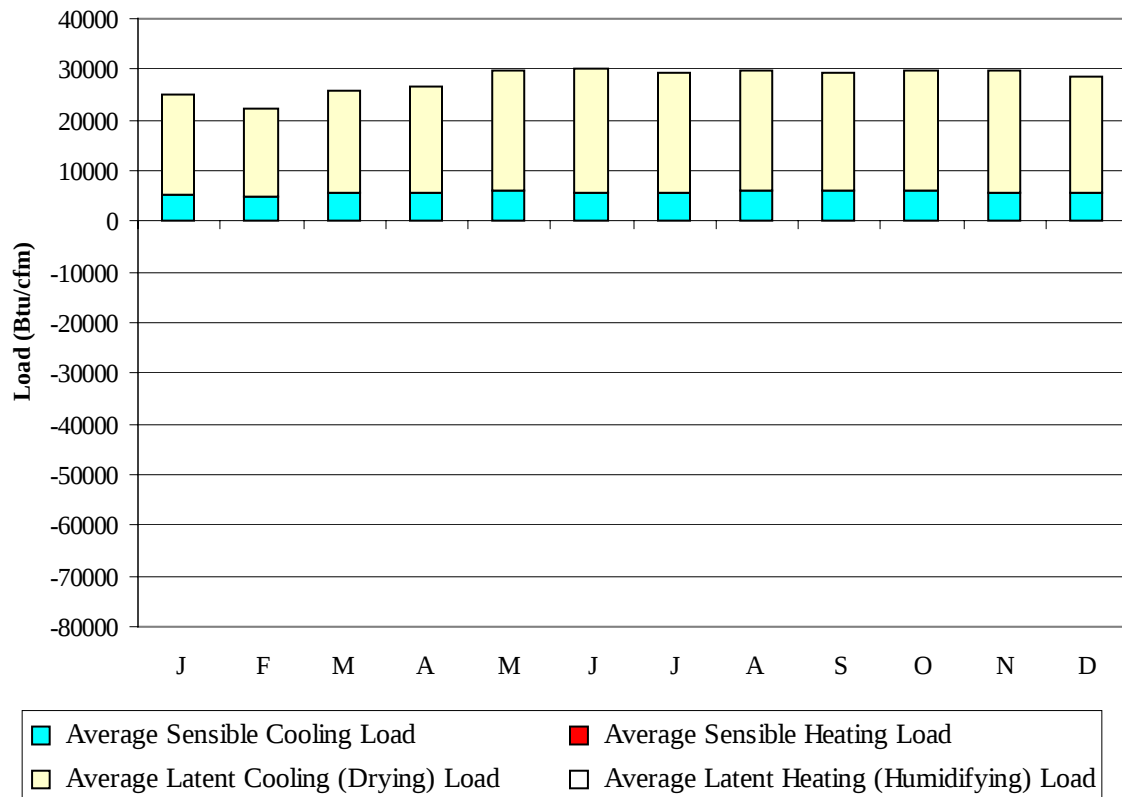
KWAJALEIN/BUCHOLZ**MH****WMO No. 913660****Long Term Dry Bulb Temperature and Humidity Summary**

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	87.0	77.8	84.8	78.6	76.0	150.5	83.5	134.8	116.0
14-Jan	87.0	78.1	85.0	78.6	76.0	149.8	83.0	136.1	118.3
21-Jan	86.0	77.4	85.2	78.5	77.0	146.3	83.8	132.8	115.8
28-Jan	87.0	76.9	85.5	78.8	77.0	142.1	83.3	129.9	111.9
4-Feb	87.0	77.4	85.4	78.3	76.0	142.1	82.1	130.7	112.8
11-Feb	87.0	77.7	85.6	78.5	77.0	147.0	83.2	131.5	114.1
18-Feb	87.0	77.4	85.5	78.2	77.0	142.1	82.7	130.0	112.2
25-Feb	87.0	77.5	85.8	78.8	77.0	141.4	82.8	131.2	113.1
4-Mar	87.0	76.9	85.9	78.8	77.0	142.1	82.9	130.6	112.6
11-Mar	88.0	77.2	86.2	79.0	77.0	147.0	84.0	133.8	115.8
18-Mar	88.0	77.4	86.3	79.0	77.0	147.0	83.3	135.4	117.1
25-Mar	88.0	77.6	86.6	79.1	77.0	147.0	83.9	134.3	117.7
1-Apr	88.0	78.3	86.3	79.1	77.0	147.0	83.9	134.6	118.6
8-Apr	88.0	78.2	86.2	79.1	77.0	146.3	83.8	136.0	118.8
15-Apr	88.0	78.6	86.1	79.0	76.0	147.0	84.6	135.8	119.6
22-Apr	88.0	77.9	86.0	78.8	76.0	147.0	84.2	137.7	121.3
29-Apr	88.0	78.4	85.9	78.8	76.0	147.0	83.8	139.6	123.2
6-May	88.0	78.9	85.9	79.1	76.0	151.2	84.6	142.2	125.4
13-May	88.0	77.8	86.2	79.2	77.0	147.0	84.4	141.4	124.7
20-May	88.0	78.1	86.2	79.2	76.0	151.2	84.6	143.6	124.9
27-May	88.0	79.1	86.4	79.5	77.0	151.2	85.1	143.7	126.7
3-Jun	88.0	78.7	86.4	79.2	77.0	151.2	85.2	143.7	126.6
10-Jun	88.0	78.9	86.1	79.5	77.0	151.2	85.0	143.6	127.4
17-Jun	88.0	79.8	86.2	79.2	77.0	151.2	85.3	143.9	127.3
24-Jun	88.0	79.7	86.1	79.1	77.0	151.2	85.2	145.7	128.5
1-Jul	88.0	79.9	86.2	79.0	77.0	151.2	85.6	143.7	126.4
8-Jul	88.0	79.7	86.0	78.8	76.0	151.2	85.5	143.2	125.7
15-Jul	88.0	79.5	86.1	78.8	77.0	151.2	85.2	143.8	126.0
22-Jul	88.0	79.4	86.1	79.0	77.0	151.2	84.9	142.9	126.1
29-Jul	88.0	79.6	86.3	78.9	76.0	151.2	85.1	142.7	126.0
5-Aug	88.0	79.5	86.4	79.1	76.0	151.2	85.7	144.8	126.2
12-Aug	88.0	79.6	86.4	79.0	77.0	147.0	84.9	143.1	126.5
19-Aug	88.0	79.8	86.5	79.0	77.0	151.2	85.4	144.5	125.8
26-Aug	88.0	79.8	86.5	78.9	76.0	151.2	86.0	144.3	126.1
2-Sep	88.0	79.4	86.7	79.3	77.0	147.7	85.2	142.7	126.0
9-Sep	89.0	79.7	86.5	78.8	76.0	147.7	85.3	143.6	124.9
16-Sep	89.0	79.3	86.8	79.0	77.0	147.7	85.6	143.9	124.8
23-Sep	89.0	79.5	86.5	78.5	76.0	147.0	85.7	142.1	124.5
30-Sep	88.0	79.6	86.6	78.8	76.0	147.0	85.1	142.9	125.4
7-Oct	89.0	79.7	86.6	79.0	76.0	147.0	85.3	143.0	125.5
14-Oct	88.0	79.7	86.5	78.9	77.0	151.2	86.3	143.7	125.6
21-Oct	88.0	79.6	86.4	79.1	77.0	147.7	85.3	143.4	124.8
28-Oct	88.0	79.4	86.5	79.3	77.0	147.7	85.2	142.7	125.0
4-Nov	89.0	79.7	86.4	79.2	77.0	147.7	85.2	144.2	126.1
11-Nov	88.0	79.7	86.4	79.0	76.0	150.5	85.7	143.8	125.4
18-Nov	88.0	79.1	86.4	79.2	77.0	149.1	86.3	142.8	124.4
25-Nov	88.0	79.3	86.1	78.8	77.0	151.9	85.1	144.2	124.8
2-Dec	88.0	79.7	86.0	79.3	77.0	151.2	85.3	142.8	124.5
9-Dec	88.0	79.2	85.8	79.2	77.0	151.2	83.8	141.8	122.1
16-Dec	87.0	78.2	85.7	79.1	77.0	151.2	83.8	140.1	121.8
23-Dec	87.0	78.5	85.4	79.2	77.0	147.7	83.9	137.5	119.5
31-Dec	87.0	78.6	85.2	78.7	77.0	147.7	83.4	136.8	118.2



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	510	0
FEB	470	0
MAR	532	0
APR	515	0
MAY	540	0
JUN	524	0
JUL	525	0
AUG	534	0
SEP	528	0
OCT	526	0
NOV	525	0
DEC	530	0
ANN	6260	0

Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



	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	5220	0	19783	0
FEB	4865	0	17211	0
MAR	5773	0	19953	0
APR	5567	0	21088	0
MAY	5963	0	23826	0
JUN	5817	0	24461	0
JUL	5796	0	23586	0
AUG	6012	0	23848	0
SEP	5910	0	23266	0
OCT	5935	0	23669	0
NOV	5839	0	23708	0
DEC	5700	0	22835	0
ANN	68397	0	267234	0

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

No Solar Radiation
Data Available

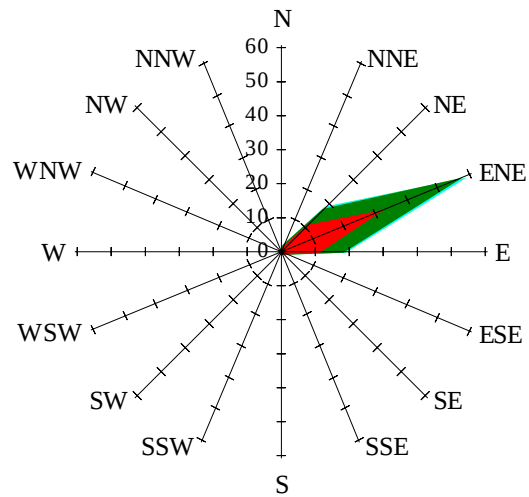


Average Annual Solar Heat and Illumination – Nearest Available Site

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

Wind Summary - December, January, and February

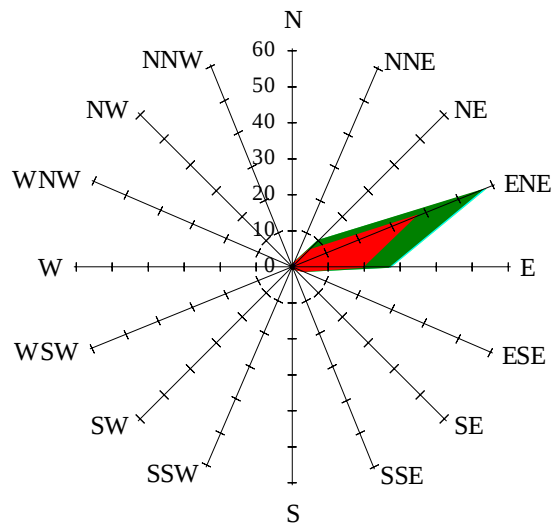
Labels of Percent Frequency on North Axis



Percent Calm = 0.29

Wind Summary - March, April, and May

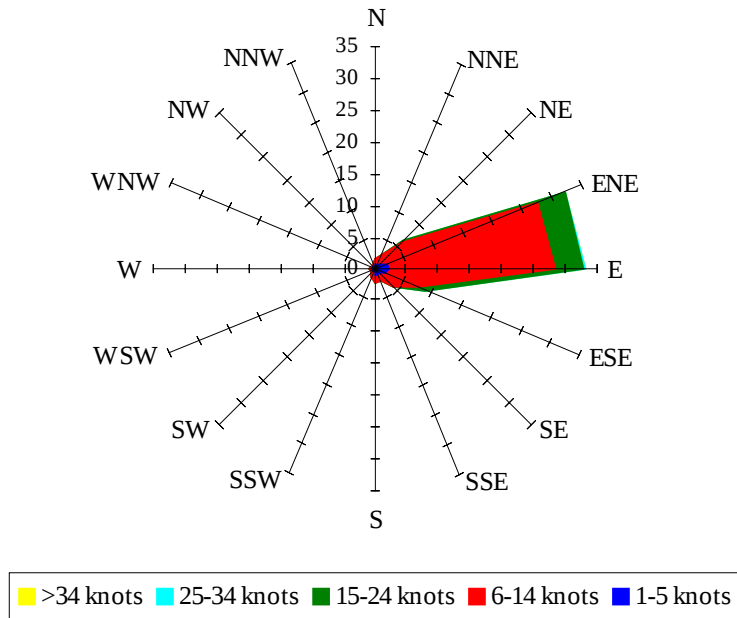
Labels of Percent Frequency on North Axis



Percent Calm = 0.27

Wind Summary - June, July, and August

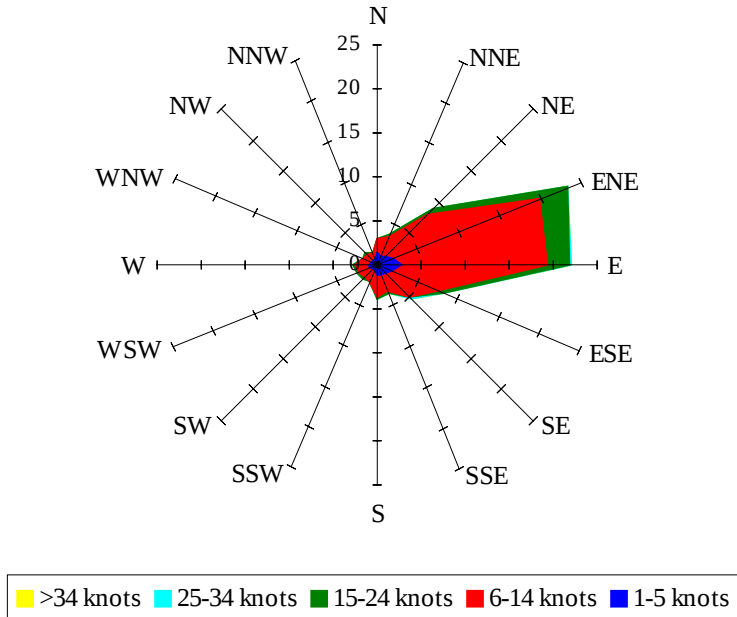
Labels of Percent Frequency on North Axis



Percent Calm = 2.04

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 3.43