

SEYCHELLES INTL, SE	
Latitude = 4.67 S	Station ID = ICAO_FSIA
Longitude = 55.52 E	Elevation = 10 Feet
Period of Record = 1988 To 2017	Average Pressure = 29.84 inches Hg

Design Criteria Data

	Mean Coincident (Average) Values				
Dry Bulb Temperature (T)	Design Value (°F)	Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	91	80	137	9.7	E
0.4% Occurrence	90	80	137	9.5	E
1.0% Occurrence	89	79	136	9.2	E
2.0% Occurrence	88	79	136	9.1	ESE
Mean Daily Range	8	-	-	-	SSE
97.5% Occurrence	76	74	122	8.1	SSE
99.0% Occurrence	75	73	120	7	SSE
99.6% Occurrence	74	73	119	6.9	SSE
Median of Extreme Lows	72	72	113	6.6	SSE

	Design Value (°F)	Dry Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Wet Bulb Temperature (T _{wb})					
Median of Extreme Highs	83	88	155	8.2	E
0.4% Occurrence	81	87	146	8.1	E
1.0% Occurrence	81	87	146	8.1	E
2.0% Occurrence	80	86	142	8.2	ESE

	Design Value (gr/lb)	Dry Bulb Temperature (°F)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Humidity Ratio (HR)					
Median of Extreme Highs	162	87	1.07	7.7	ESE
0.4% Occurrence	151	85	0.99	7.2	SE
1.0% Occurrence	150	85	0.99	7.2	SE
2.0% Occurrence	147	85	0.97	7.1	E

Air Conditioning/ Humid Area Criteria	Threshold	T ≥ 93 °F	T ≥ 80 °F	Twb ≥ 73 °F	Twb ≥ 67 °F
	# of Hours	5	5552	7858	8175

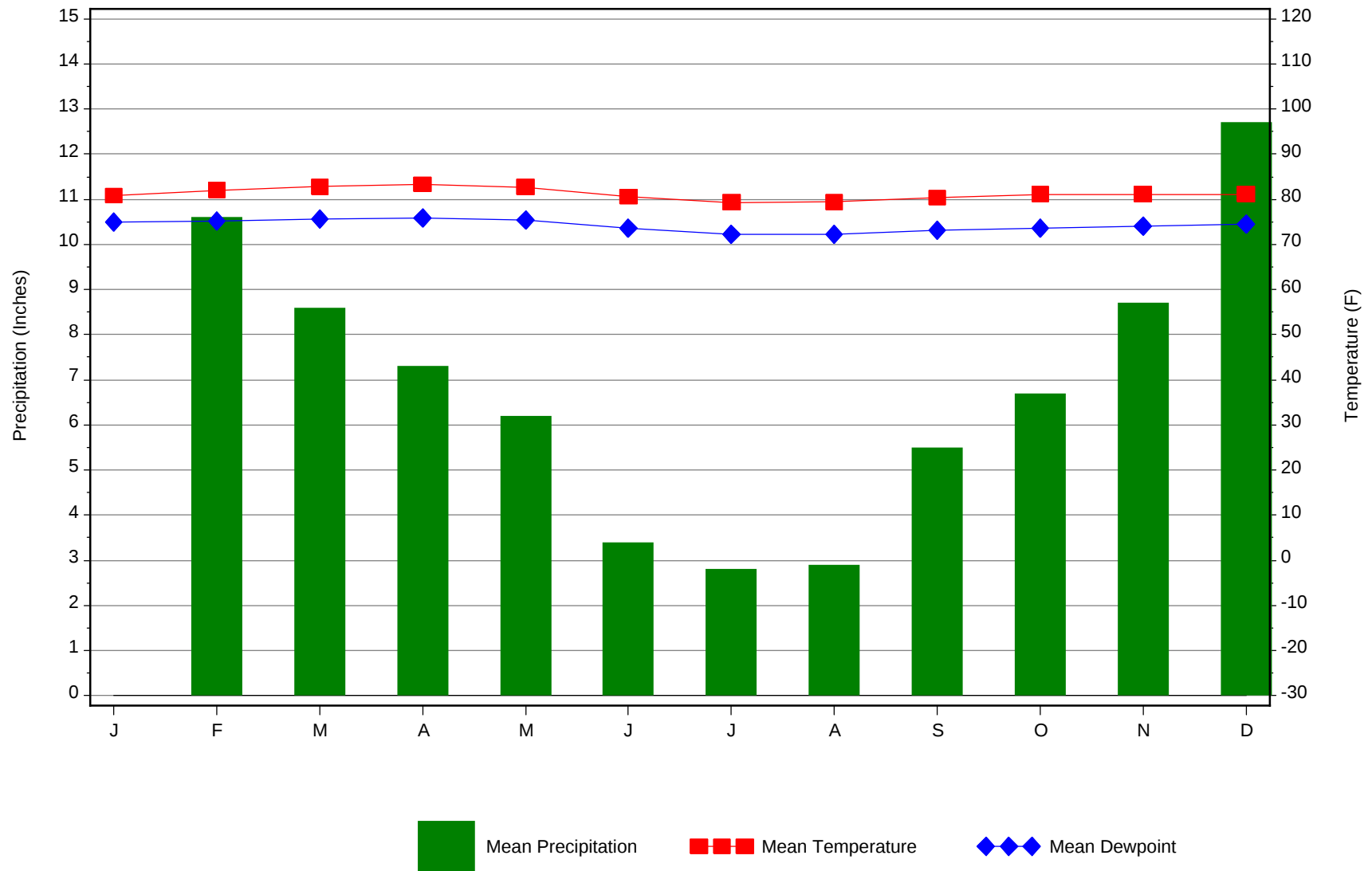
Other Site Data

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	24.3 + 4.9
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 (#)
83.7	N/A	N/A	0

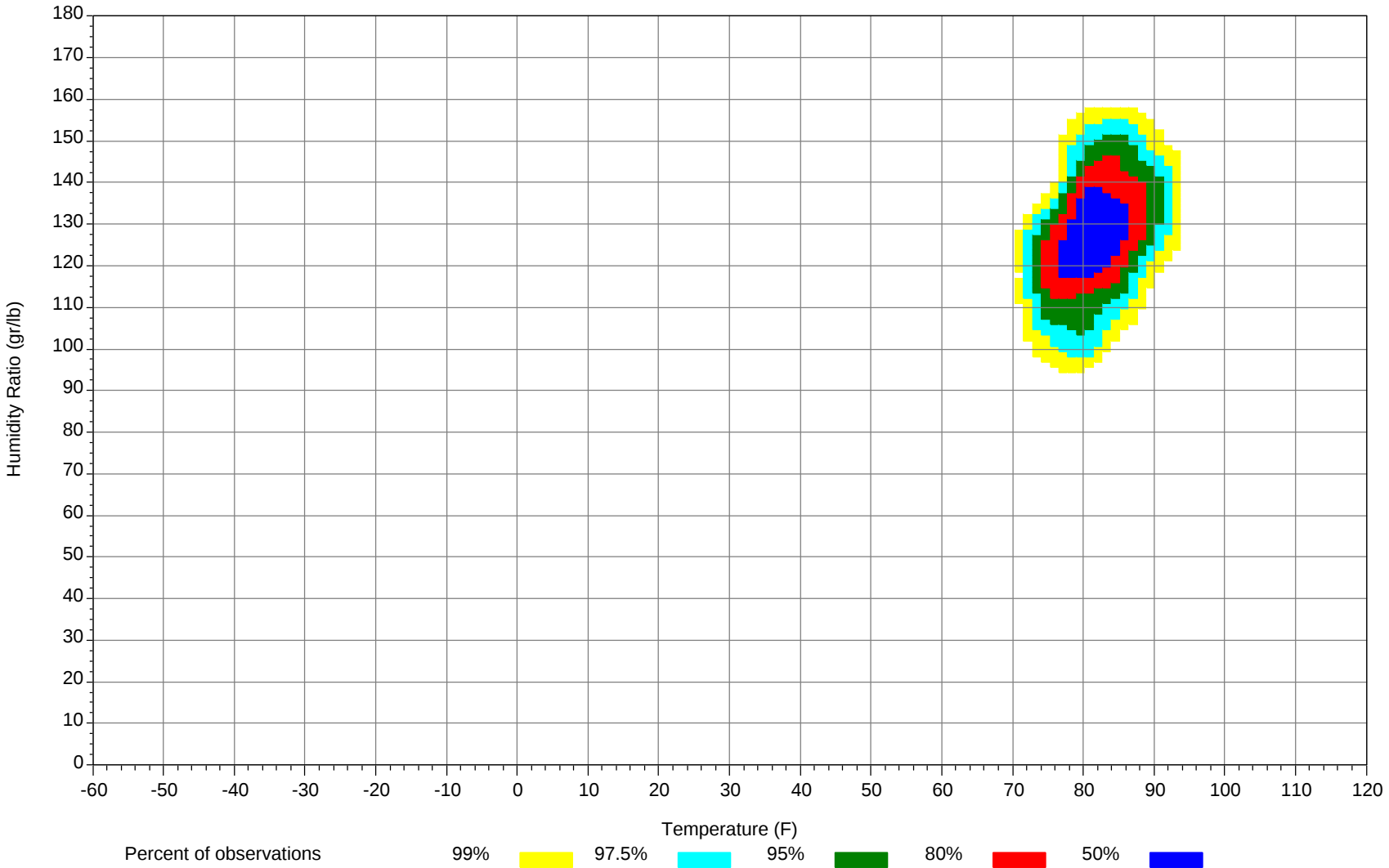
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.



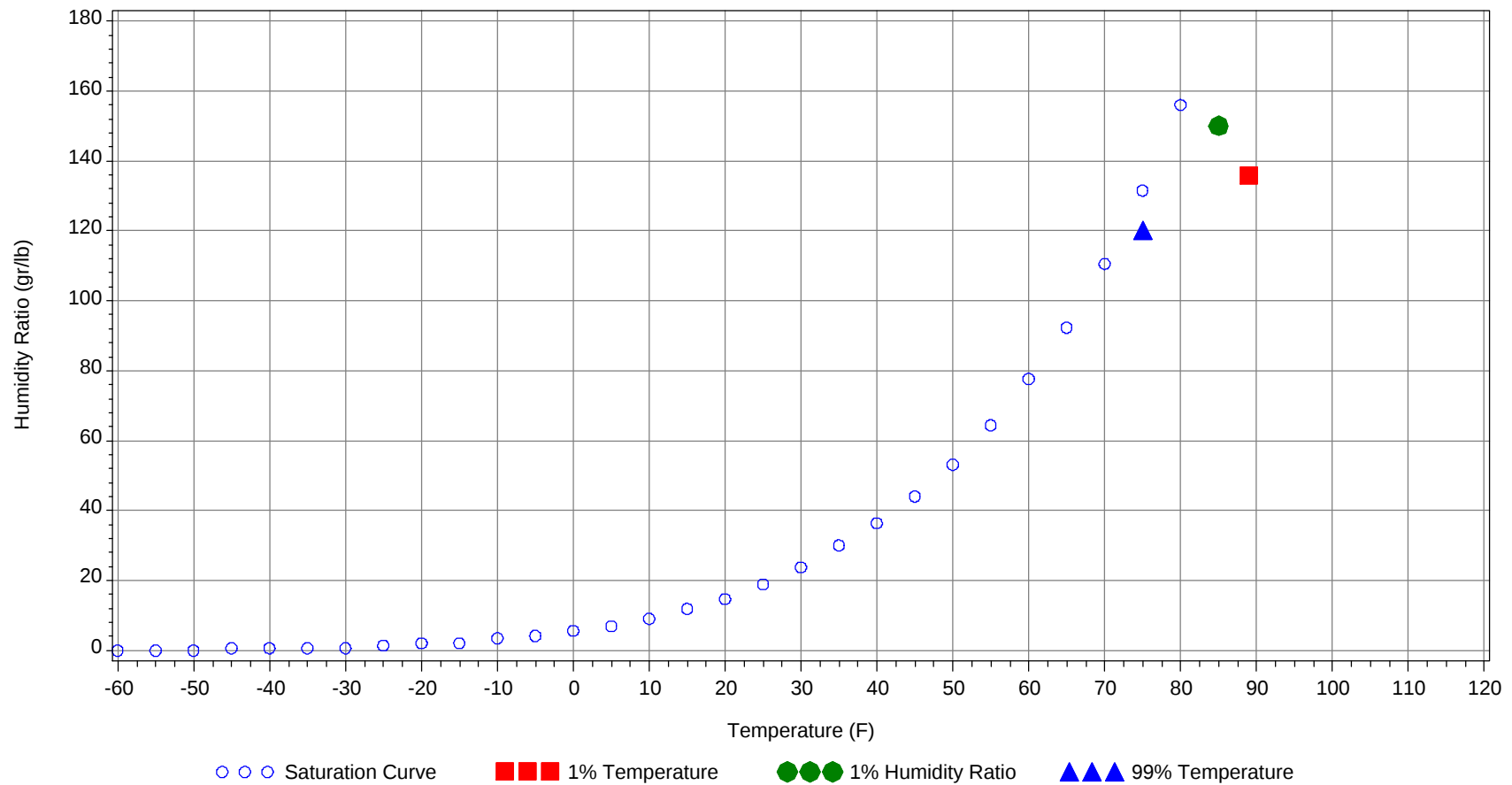
Average Annual Climate



Long Term Psychrometric Summary



Psychrometric Summary of Peak Design Values



	(° F) / (gr/lb)	MCDB (° F)	MCWB (° F)	MCDP (° F)	MCHR (gr/lb)	Enthalpy (btu/lb)
1.0% Dry Bulb	89.0		79		136.0	42.9
99.0% Dry Bulb	75.0				120.0	36.6
1.0% Humidity Ratio	150.0	85.0	80.4	78.8		43.9

Dry-Bulb Temperature Hours For An Average Year

	January					February					March				
Temperature Range (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)
95/ 99											0			0	81
90/ 94		1		1	78.8		3		3	80.2	0	13	1	14	79.8
85/ 89	1	88	6	95	78.5	1	124	15	140	78.6	4	175	32	211	78.9
80/ 84	83	134	148	365	77.1	121	85	166	372	77	143	53	181	377	77.3
75/ 79	162	25	92	279	75.3	101	11	42	154	75.4	100	7	34	141	75.8
70/ 74	3	1	1	5	72.5	1	0	1	2	72.3	1	0	0	1	71.9
65/ 69												0		0	56.5

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.

Dry-Bulb Temperature Hours For An Average Year

	April					May					June				
Temperature Range (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)
95/ 99		0		0	79										
90/ 94		28	1	29	79.8		6	0	6	80.1		0		0	78.7
85/ 89	9	174	39	222	79.1	4	159	13	176	78.7	0	40	1	41	77.7
80/ 84	150	34	171	355	77.5	188	77	210	475	77	98	184	134	416	75.9
75/ 79	81	4	29	114	76	56	5	25	86	75.6	140	15	104	259	74.4
70/ 74	0	0	0	0	72.9	0	0	0	0	73.5	2	0	1	3	72
65/ 69															

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Dry-Bulb Temperature Hours For An Average Year

	July					August					September				
Temperature Range (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)
95/ 99															
90/ 94															
85/ 89		7	0	7	76.1		7	0	7	76.8	0	34	0	34	77.4
80/ 84	20	210	53	283	75.2	21	207	61	289	75.1	74	184	119	377	75.6
75/ 79	224	30	193	447	73.7	223	33	185	441	73.7	164	21	120	305	74.3
70/ 74	4	1	1	6	71.2	4	1	2	7	71.8	2	0	0	2	71.9
65/ 69						0			0	63					

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.

Dry-Bulb Temperature Hours For An Average Year

	October					November					December				
Temperature Range (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)
95/ 99															
90/ 94		0		0	77.3		2		2	77.7		2		2	78
85/ 89	0	88	1	89	77.3	1	110	4	115	77.5	1	112	7	120	77.9
80/ 84	106	148	167	421	75.9	88	116	149	353	76.3	84	118	149	351	76.7
75/ 79	140	11	80	231	74.5	146	13	86	245	74.8	160	16	90	266	75.1
70/ 74	2	0	0	2	72.5	5	0	1	6	72.4	3	0	1	4	72.2
65/ 69								0	0	69					

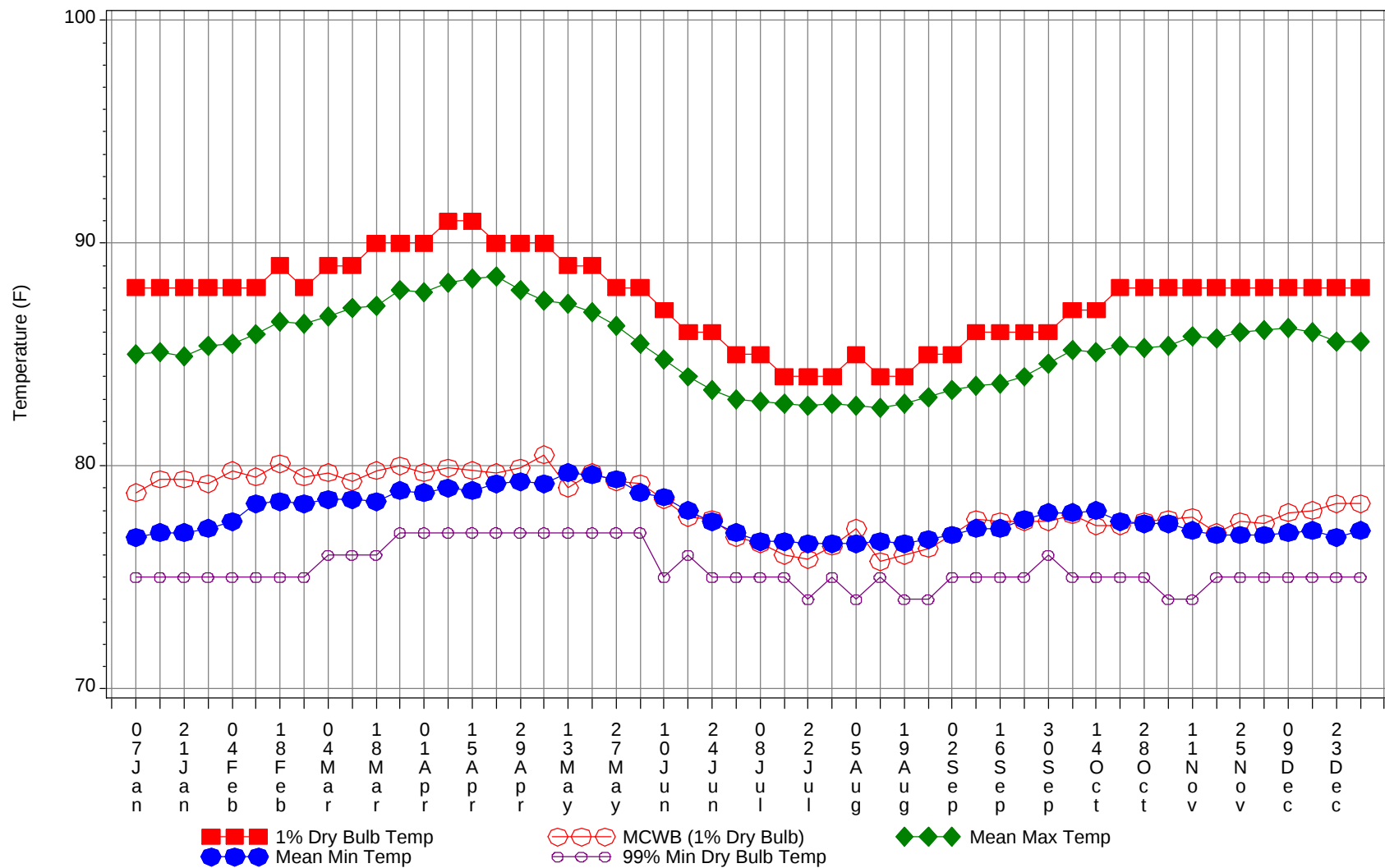
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

Dry-Bulb Temperature Hours For An Average Year

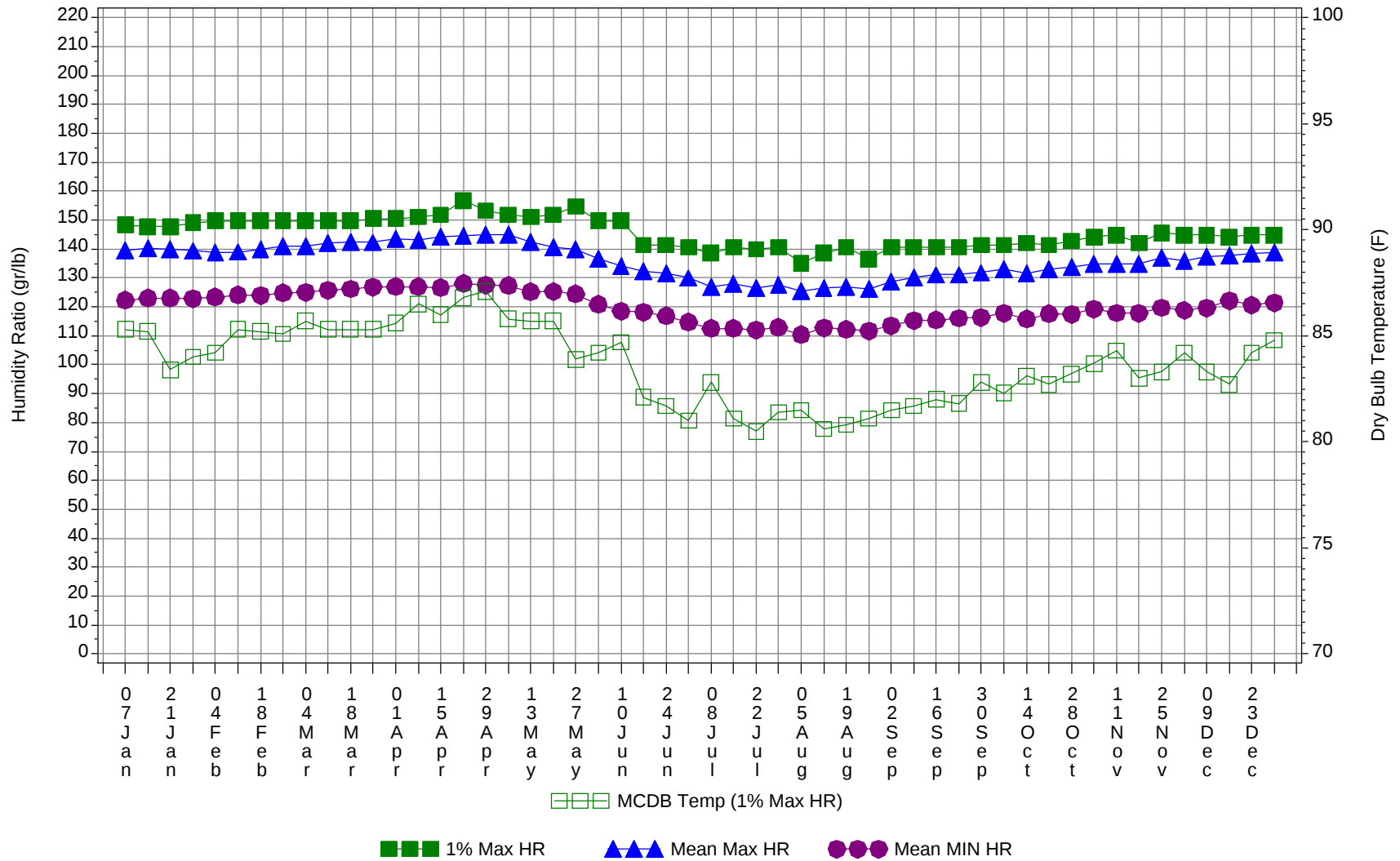
	Annual				
Temperature Range (° F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (° F)
95/ 99	0	0		0	80.5
90/ 94	0	55	1	56	79.7
85/ 89	21	1115	118	1254	78.4
80/ 84	1170	1554	1707	4431	76.4
75/ 79	1703	192	1085	2980	74.6
70/ 74	26	4	9	39	72
65/ 69	0	0	0	0	61.3

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.

Annual Summary of Temperatures



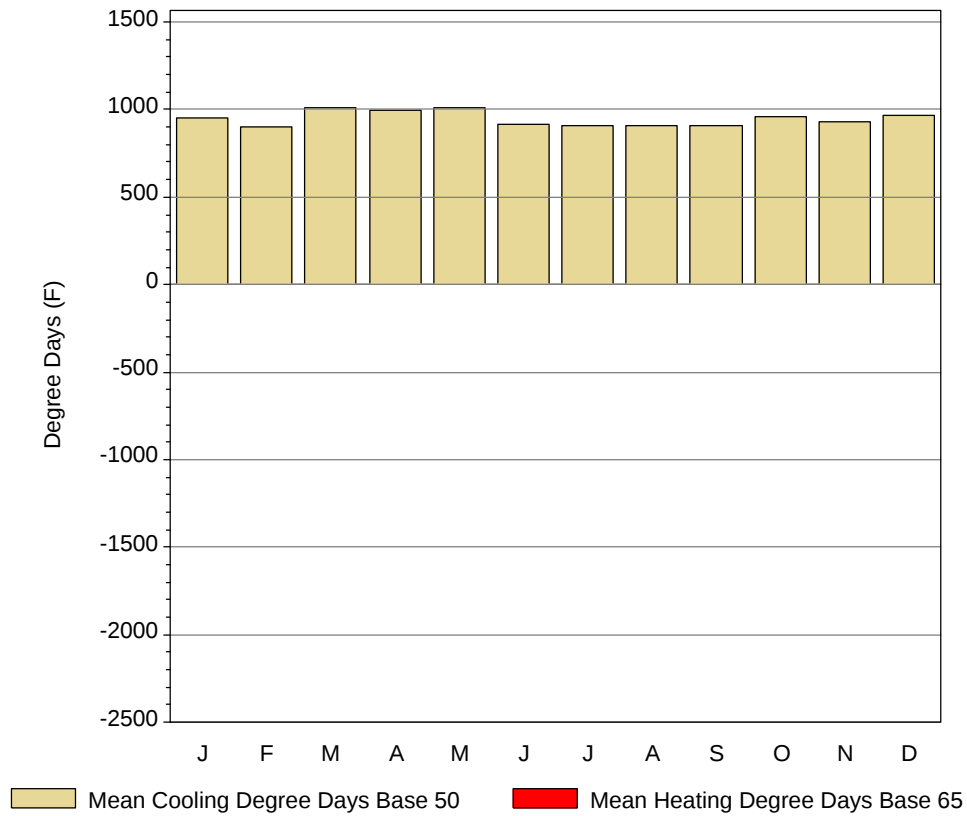
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

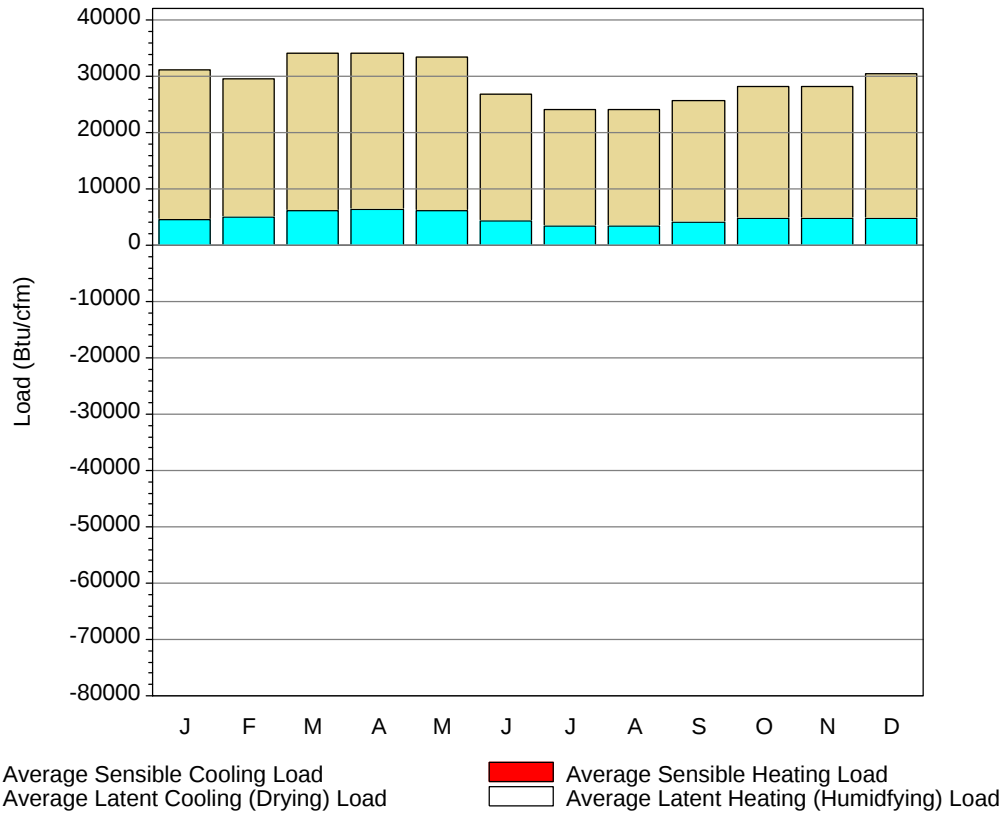
Week Ending	1.0% Temp (° F)	MCWB@ 1% Temp (° F)	Mean Max Temp (° F)	Mean Min Temp (° F)	99% Temp (° F)	1.0% HR (gr/lb)	MCDB@ 1% HR (° F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	88	78.8	85	76.8	75	148.4	85.3	139.6	122.3
14-Jan	88	79.4	85.1	77	75	147.7	85.2	140.3	123
21-Jan	88	79.4	84.9	77	75	147.7	83.4	140	123
28-Jan	88	79.2	85.4	77.2	75	149.1	84	139.4	122.9
4-Feb	88	79.8	85.5	77.5	75	149.8	84.2	138.9	123.4
11-Feb	88	79.5	85.9	78.3	75	149.8	85.3	139	124.1
18-Feb	89	80.1	86.5	78.4	75	149.8	85.2	140	124
25-Feb	88	79.5	86.4	78.3	75	149.8	85.1	141	124.9
4-Mar	89	79.7	86.7	78.5	76	149.8	85.7	140.9	125.1
11-Mar	89	79.3	87.1	78.5	76	149.8	85.3	142.1	125.7
18-Mar	90	79.8	87.2	78.4	76	149.8	85.3	142.5	126.2
25-Mar	90	80	87.9	78.9	77	150.5	85.3	142.3	126.9
1-Apr	90	79.7	87.8	78.8	77	150.5	85.6	143.6	127
8-Apr	91	79.9	88.2	79	77	151.2	86.5	143.1	127
15-Apr	91	79.8	88.4	78.9	77	151.9	86	144.4	126.6
22-Apr	90	79.7	88.5	79.2	77	156.8	86.8	144.7	128.1
29-Apr	90	79.9	87.9	79.3	77	153.3	87.1	144.9	127.6
6-May	90	80.5	87.4	79.2	77	151.9	85.8	144.9	127.4
13-May	89	79	87.3	79.7	77	151.2	85.7	142.5	125.2
20-May	89	79.7	86.9	79.6	77	151.9	85.7	140.8	125.3
27-May	88	79.3	86.3	79.4	77	154.7	83.9	139.9	124.5
4-Jun	88	79.2	85.5	78.8	77	149.8	84.2	136.8	120.9
10-Jun	87	78.5	84.8	78.6	75	149.8	84.7	134.1	118.6
17-Jun	86	77.7	84	78	76	141.4	82.1	132.4	118.1
24-Jun	86	77.6	83.4	77.5	75	141.4	81.7	131.7	116.9
1-Jul	85	76.8	83	77	75	140.7	81	130	114.8
8-Jul	85	76.5	82.9	76.6	75	138.6	82.8	127	112.5
15-Jul	84	76	82.8	76.6	75	140.7	81.1	128.1	112.5
22-Jul	84	75.8	82.7	76.5	74	140	80.5	126.6	112
29-Jul	84	76.4	82.8	76.5	75	140.7	81.4	127.7	112.9
5-Aug	85	77.2	82.7	76.5	74	135.1	81.5	125.4	110.4
12-Aug	84	75.7	82.6	76.6	75	138.6	80.6	126.7	112.7
19-Aug	84	76	82.8	76.5	74	140.7	80.8	127	112.2
26-Aug	85	76.3	83.1	76.7	74	136.5	81.1	126.3	111.7
2-Sep	85	76.9	83.4	76.9	75	140.7	81.5	128.8	113.5
9-Sep	86	77.6	83.6	77.2	75	140.7	81.7	130.1	115.2
16-Sep	86	77.5	83.7	77.2	75	140.7	82	131.1	115.5
23-Sep	86	77.5	84	77.6	75	140.7	81.8	131.1	116.1
30-Sep	86	77.5	84.6	77.9	76	141.4	82.8	131.8	116.4
7-Oct	87	77.8	85.2	77.9	75	141.4	82.3	133	117.8
14-Oct	87	77.3	85.1	78	75	142.1	83.1	131.6	115.8
21-Oct	88	77.3	85.4	77.5	75	141.4	82.7	133.1	117.6
28-Oct	88	77.5	85.3	77.4	75	142.8	83.2	133.8	117.4
4-Nov	88	77.6	85.4	77.4	74	144.2	83.7	135	119.2
11-Nov	88	77.7	85.8	77.1	74	144.9	84.3	134.9	117.9
18-Nov	88	77	85.7	76.9	75	142.1	83	134.8	117.8
25-Nov	88	77.5	86	76.9	75	145.6	83.3	137	119.7
2-Dec	88	77.4	86.1	76.9	75	144.9	84.2	136.1	118.8
9-Dec	88	77.9	86.2	77	75	144.9	83.3	137.3	119.6
16-Dec	88	78	86	77.1	75	144.2	82.7	137.8	122.2
23-Dec	88	78.3	85.6	76.8	75	144.9	84.2	138.5	120.6
31-Dec	88	78.3	85.6	77.1	75	144.9	84.8	138.8	121.4

Degree Days, Heating and Cooling (Base 65 F) & Cooling (Base 50F)



Month	Mean Cooling Degree Days (°F) Base 50	Mean Cooling Degree Days (°F) Base 65	Mean Heating Degree Days (°F) Base 65
JAN	953.7	488.7	0
FEB	901.5	477.5	0
MAR	1012.7	547.7	0
APR	996.5	546.5	0
MAY	1013.1	548.1	0
JUN	916.1	466.1	0
JUL	906.3	441.3	0
AUG	908.7	443.7	0
SEP	908.5	458.5	0
OCT	961.9	496.9	0
NOV	932.4	482.4	0
DEC	963.3	498.3	0
ANN	11374.7	5895.7	0

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



Month	Average Sensible Cooling Load (Btu/cfm)	Average Sensible Heating Load (Btu/cfm)	Average Latent Cooling Load (Btu/cfm)	Average Latent Heating Load (Btu/cfm)
JAN	4644	0	26509	0
FEB	5055	0	24438	0
MAR	6163	0	28021	0
APR	6391	0	27690	0
MAY	6171	0	27327	0
JUN	4309	0	22475	0
JUL	3416	0	20664	0
AUG	3479	0	20590	0
SEP	4113	0	21654	0
OCT	4847	0	23371	0
NOV	4740	0	23528	0
DEC	4888	0	25539	0
ANN	58216	0	291806	0

Station Information		Shading Geometry in Dimensionless Units	
City, State, WBAN	N/A	N/A	N/A
Lat, Lon, Elev	N/A	N/A	N/A
Press Stn Type	N/A	N/A	N/A

AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day), Percentage Uncertainty = 9														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ.	Global													
	Std.Dev.													
	Minimum													
	Maximum													
	Diffuse													
Clear Day	Global													
NORTH	Global													
	Diffuse													
Clear Day	Global													
EAST	Global													
	Diffuse													
Clear Day	Global													
SOUTH	Global													
	Diffuse													
Clear Day	Global													
WEST	Global													
	Diffuse													
Clear Day	Global													

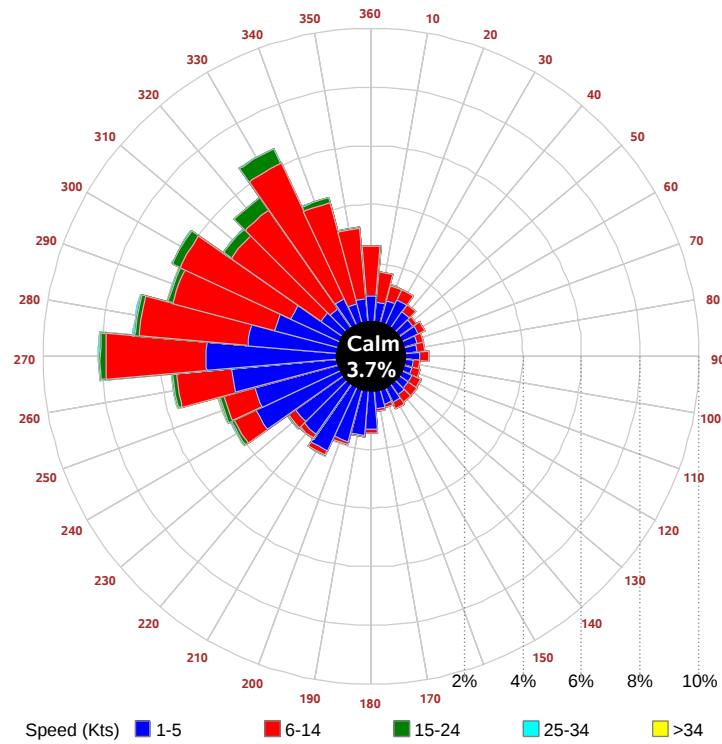
Average Annual Solar Radiation - Nearest Available Site Source: National Renewable Energy Laboratory, Golden CO, 1995

AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ.	Unshaded													
NORTH	Unshaded													
	Shaded													
EAST	Unshaded													
	Shaded													
SOUTH	Unshaded													
	Shaded													
WEST	Unshaded													
	Shaded													

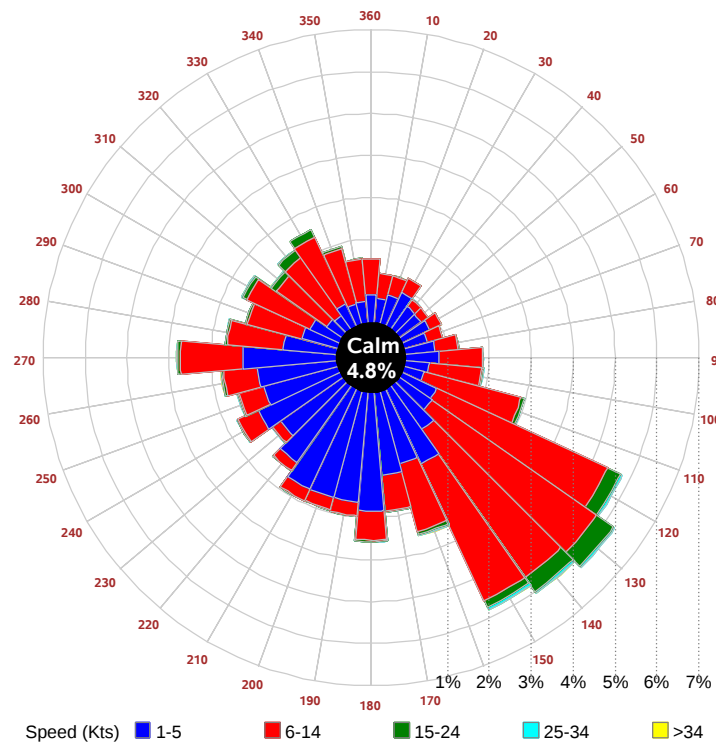
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9												
		March						June				
		9am	11am	1pm	3pm	5pm		9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear											
	M.Cloudy											
NORTH	M.Clear											
	M.Cloudy											
EAST	M.Clear											
	M.Cloudy											
SOUTH	M.Clear											
	M.Cloudy											
WEST	M.Clear											
	M.Cloudy											
M.Clear	(% hrs)											

		Sept						Dec				
		9am	11am	1pm	3pm	5pm		9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear											
	M.Cloudy											
NORTH	M.Clear											
	M.Cloudy											
EAST	M.Clear											
	M.Cloudy											
SOUTH	M.Clear											
	M.Cloudy											
WEST	M.Clear											
	M.Cloudy											
M.Clear	(% hrs)											

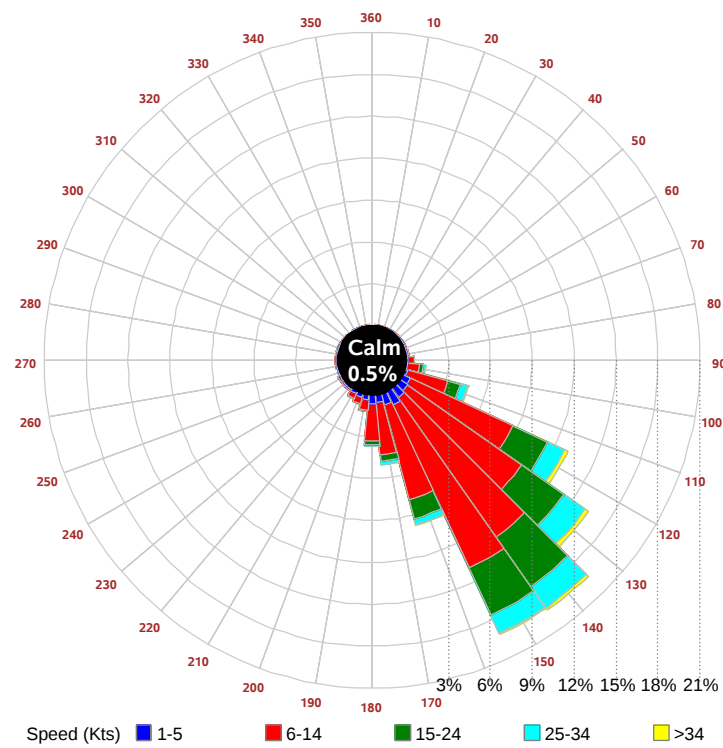
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November

