KEY WEST INTL, FL	
Latitude = 24.56 N	Station ID = ICAO_KEYW
Longitude = 81.76 W	Elevation = 3 Feet
Period of Record = 1988 To 2017	Average Pressure = 30.01 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	92	79	132	8.9	ESE
0.4% Occurrence	91	79	133	8.9	ESE
1.0% Occurrence	90	79	133	9	ESE
2.0% Occurrence	90	79	133	9	ESE
Mean Daily Range	9	-	-	-	N
97.5% Occurrence	62	56	58	11.5	N
99.0% Occurrence	57	52	50	11.1	N
99.6% Occurrence	55	50	45	10.4	N
Median of Extreme Lows	52	48	42	9.5	N

Wet Bulb Temperature (T_{wb})	**Design Value (°F)**	**Dry Bulb Temperature (°F)**	**Humidity Ratio (gr/lb)**	**Wind Speed (mph)**	**Prevailing Direction (NSEW)**
Median of Extreme Highs	82	88	150	10.2	ESE
0.4% Occurrence	81	87	146	9.8	ESE
1.0% Occurrence	81	87	146	9.8	ESE
2.0% Occurrence	80	87	140	9.4	ESE

Humidity Ratio (HR)	**Design Value (gr/lb)**	**Dry Bulb Temperature (°F)**	**Vapor Pressure (in. Hg)**	**Wind Speed (mph)**	**Prevailing Direction (NSEW)**
Median of Extreme Highs	160	85	1.07	10.4	ESE
0.4% Occurrence	151	84	1	10.5	SE
1.0% Occurrence	151	85	1	9.7	ESE
2.0% Occurrence	150	85	1	9.3	ESE

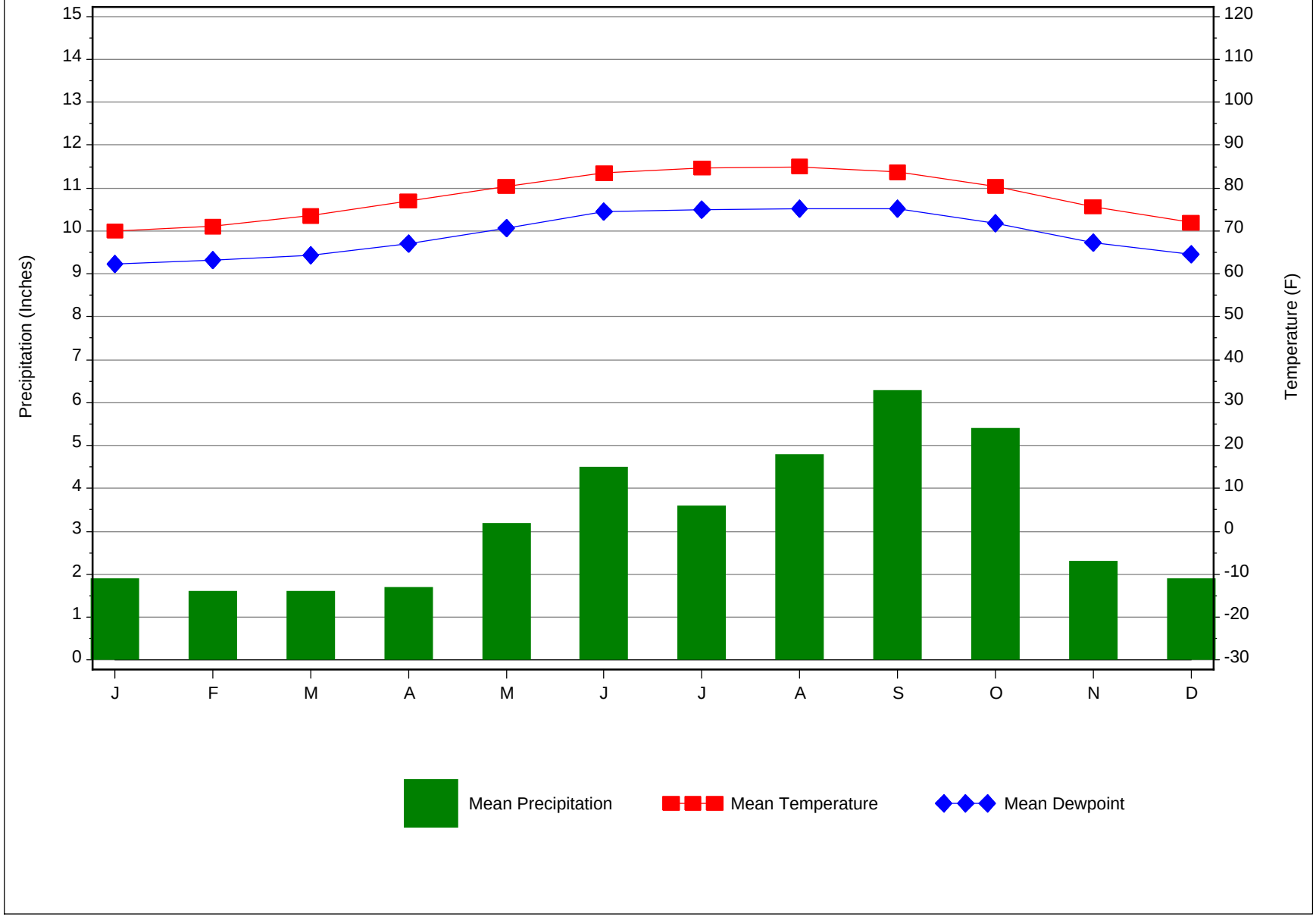
Air Conditioning/ Humid Area Criteria	**Threshold**	**T ≥ 93°F**	**T ≥ 80°F**	**Twb ≥ 73°F**	**Twb ≥ 67°F**
	# of Hours	4	4074	4906	6958

Other Site Data

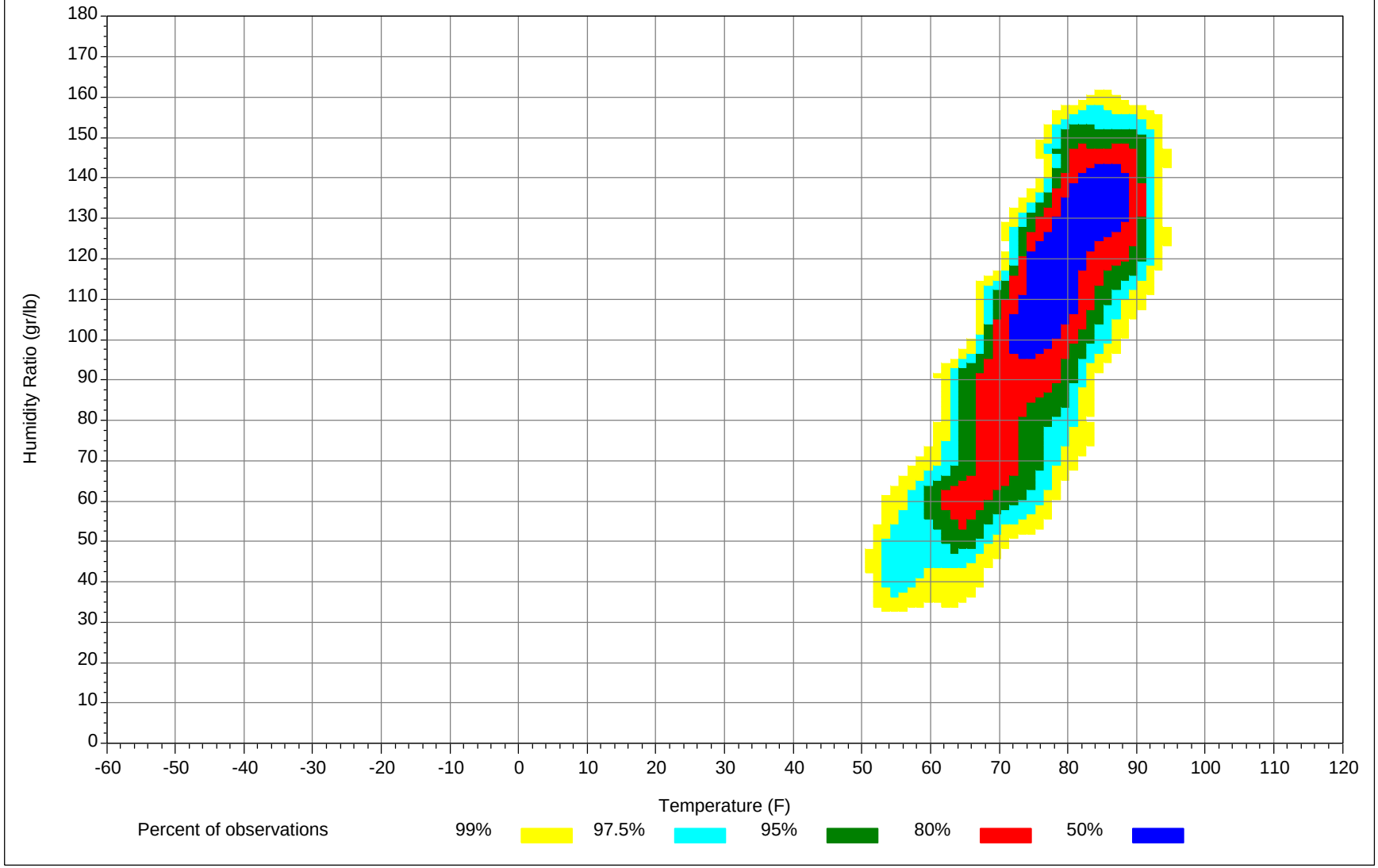
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
10	4.3	150	16.1 + 3.7
Ground Water Temperature (°F) 50 Foot Depth*	Frost Depth 50 Year Recurrence (in)	Ground Snow Load 50 Year Recurrence (lb/ft^2)	Average Annual Freeze-Thaw Cycles (#)
80.5	0	0	0

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

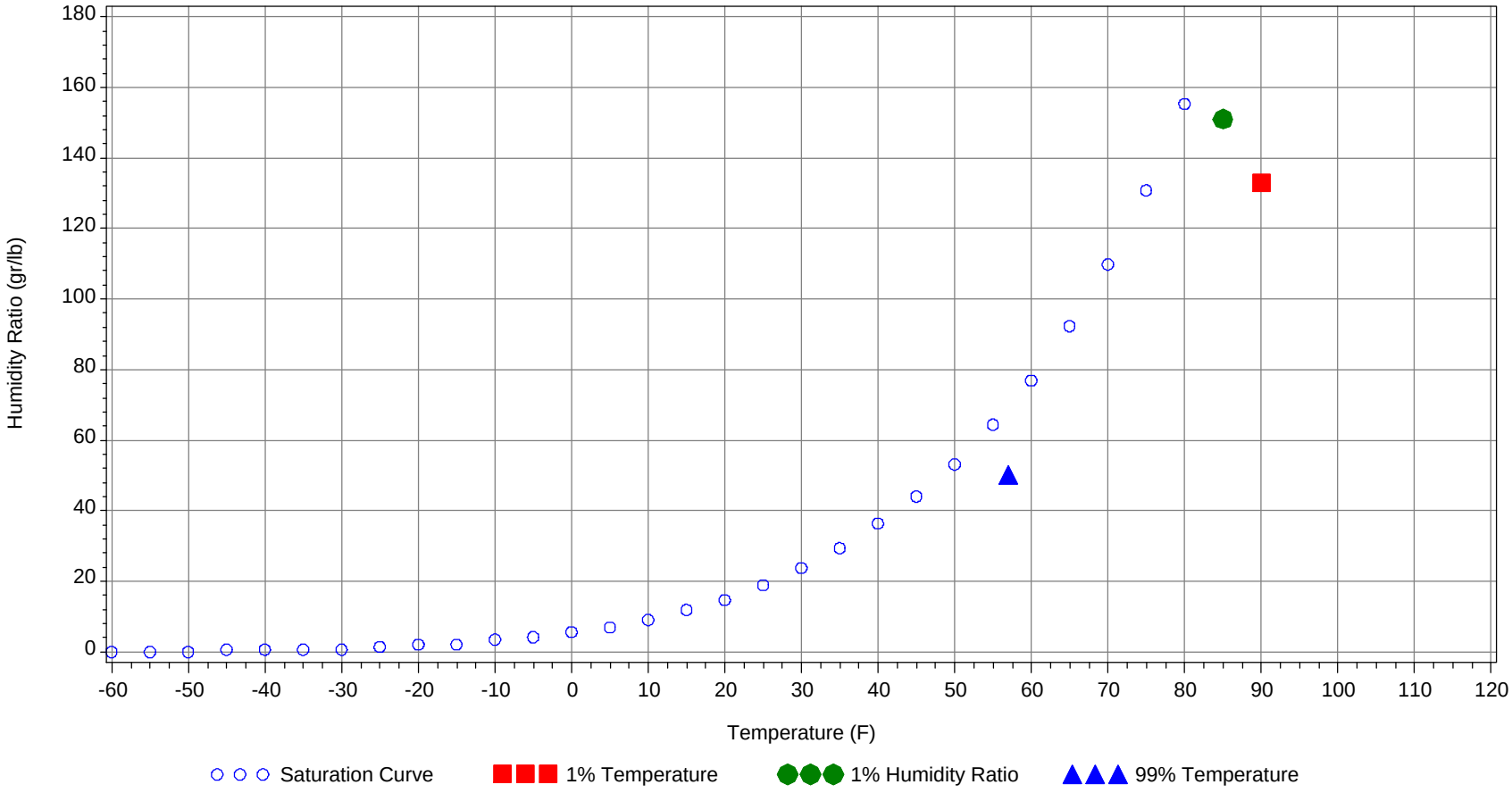
Average Annual Climate



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	90.0		79		133.0	42.5
99.0% Dry Bulb	57.0				50.0	21.4
1.0% Humidity Ratio	151.0	85.0	80.5	79.0		44.0

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**	**MCWB (°F)**	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**
90/ 94															
85/ 89							0		0	81		1	0	1	77.3
80/ 84		25	1	26	74		34	2	36	74	1	74	13	88	74
75/ 79	35	88	55	178	71.5	38	88	63	189	71.4	72	105	99	276	71
70/ 74	88	68	93	249	67.6	84	58	86	228	67.3	102	44	88	234	66.6
65/ 69	50	33	43	126	62.5	49	23	37	109	62.2	39	13	27	79	61.5
60/ 64	45	24	37	106	57.3	35	15	25	75	57.2	27	9	18	54	56.7
55/ 59	20	8	15	43	52.2	14	5	9	28	52	7	1	3	11	52.8
50/ 54	7	2	4	13	48.1	4	1	2	7	47.8	1		0	1	48.1
45/ 49	2	0	0	2	43.3	1	0	0	1	42.4					
40/ 44	0			0	38										

Caution: This summary reflects the typical distribtion of temperature in a typical year. It does not reflect the typical mositure 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**	**MCWB (°F)**	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**
90/ 94							1	0	1	78.6		16	1	17	79.2
85/ 89	0	11	1	12	76.9	1	68	8	77	76.9	8	150	46	204	78.2
80/ 84	14	133	43	190	73.9	95	154	143	392	74.7	196	66	172	434	76.7
75/ 79	128	74	133	335	70.9	119	23	84	226	71.8	35	7	19	61	74.3
70/ 74	75	19	52	146	66	30	3	12	45	67.8	1	0	1	2	71.4
65/ 69	18	2	9	29	61	3	0	1	4	63					
60/ 64	4	0	1	5	57.4	0			0	60.5					
55/ 59	1		0	1	52.3										
50/ 54															
45/ 49															
40/ 44															

Caution: This summary reflects the typical distribtion of temperature in a typical year. It does not reflect the typical mositure 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

	July					August					September				
Temperature Range (°F)	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**
90/ 94	0	55	6	61	79.3	0	77	8	85	79.3	0	26	1	27	79.4
85/ 89	34	152	89	275	78.4	46	132	100	278	78.6	15	144	52	211	78.5
80/ 84	195	34	142	371	77	183	33	128	344	77.3	189	60	166	415	77.2
75/ 79	19	6	10	35	75	19	5	11	35	75.3	35	10	20	65	75.1
70/ 74	1	0	0	1	72.2	0	0	0	0	72	1	0	0	1	71.9
65/ 69															
60/ 64															
55/ 59															
50/ 54															
45/ 49															
40/ 44															

Caution: This summary reflects the typical distribtion of temperature in a typical year. It does not reflect the typical mositure 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**	**MCWB (°F)**	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**
90/ 94		3		3	79.5										
85/ 89	1	72	8	81	78		5	0	5	77.8					
80/ 84	110	130	139	379	75.8	16	97	31	144	74.5	1	46	4	51	74.7
75/ 79	104	36	84	224	72.5	91	94	114	299	71.4	57	96	79	232	72
70/ 74	30	6	15	51	67.3	101	34	77	212	67.3	97	62	94	253	67.8
65/ 69	3	1	2	6	60.7	21	8	14	43	61.3	45	24	38	107	62.3
60/ 64	1		0	1	54.7	10	2	4	16	57.4	34	15	26	75	57.6
55/ 59						1	0	0	1	54.2	11	3	5	19	52.7
50/ 54						0		0	0	51.9	3	1	2	6	48
45/ 49											1	0	0	1	44.3
40/ 44											0			0	43

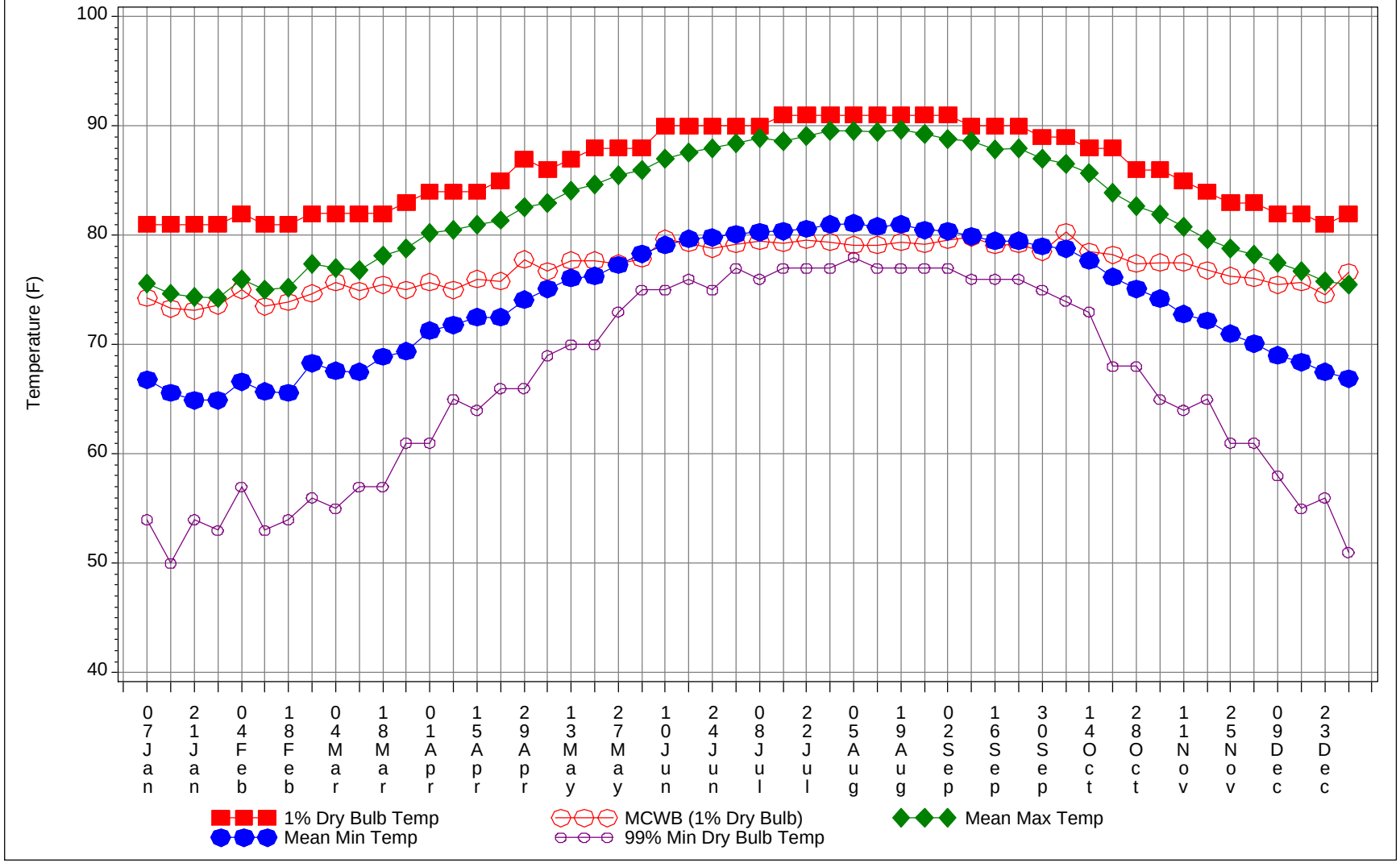
Caution: This summary reflects the typical distribtion of temperature in a typical year. It does not reflect the typical mositure distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

Dry-Bulb Temperature Hours For An Average Year

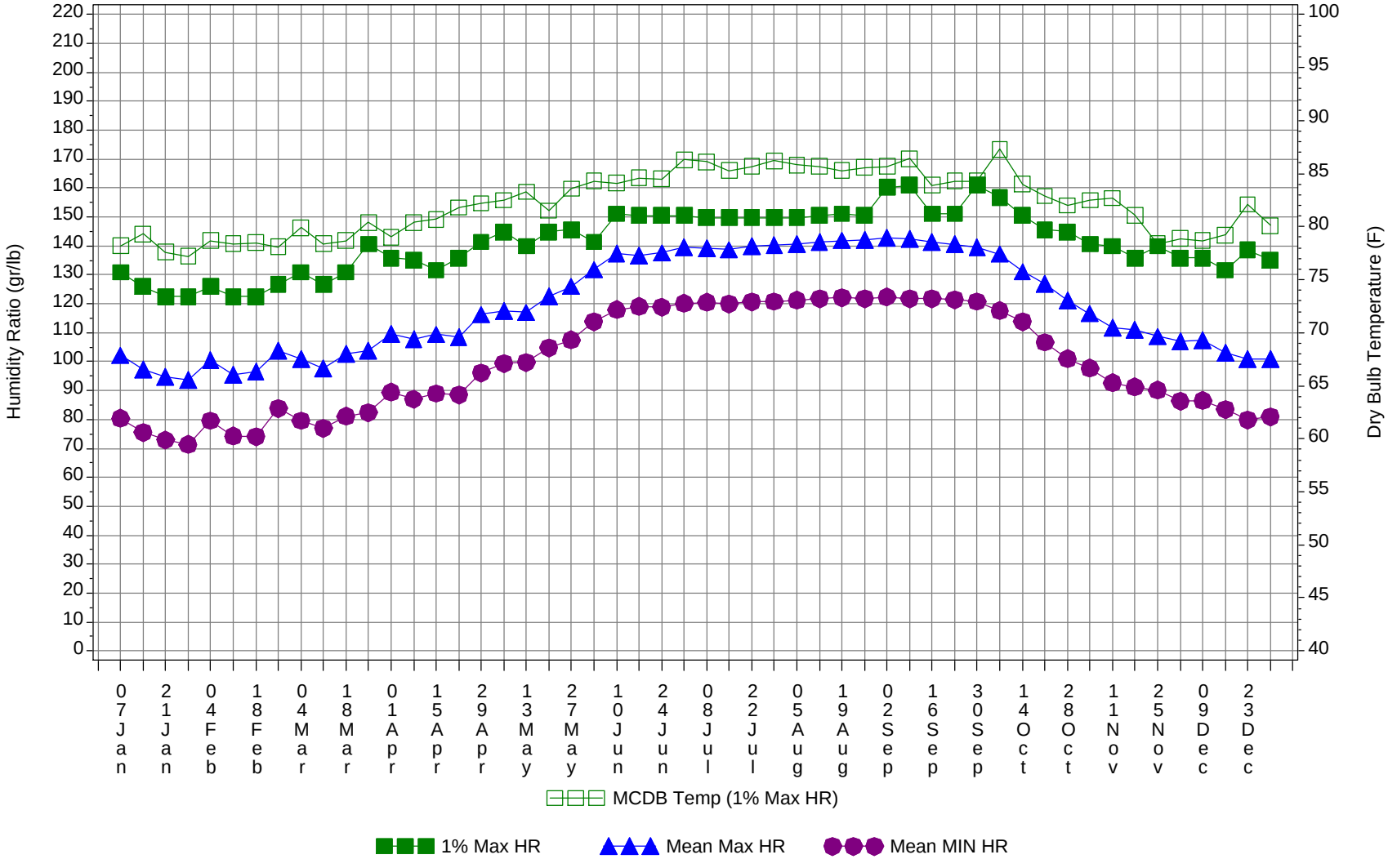
	Annual				
Temperature Range (°F)	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**
90/ 94	0	177	16	193	79.3
85/ 89	104	730	302	1136	78.3
80/ 84	994	887	977	2858	76
75/ 79	752	637	774	2163	71.8
70/ 74	612	297	524	1433	67.2
65/ 69	230	105	172	507	62
60/ 64	156	66	112	334	57.2
55/ 59	54	18	34	106	52.3
50/ 54	15	4	8	27	48.1
45/ 49	3	1	1	5	43.4
40/ 44	0			0	39

Caution: This summary reflects the typical distribtion of temperature in a typical year. It does not reflect the typical mositure 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



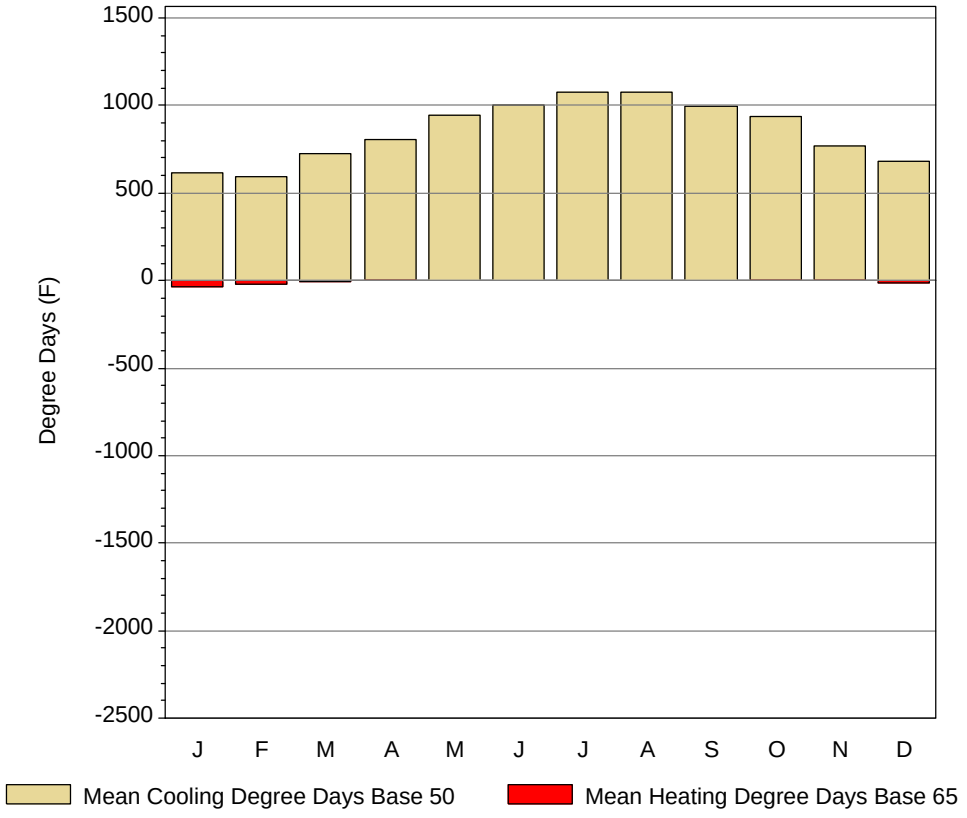
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

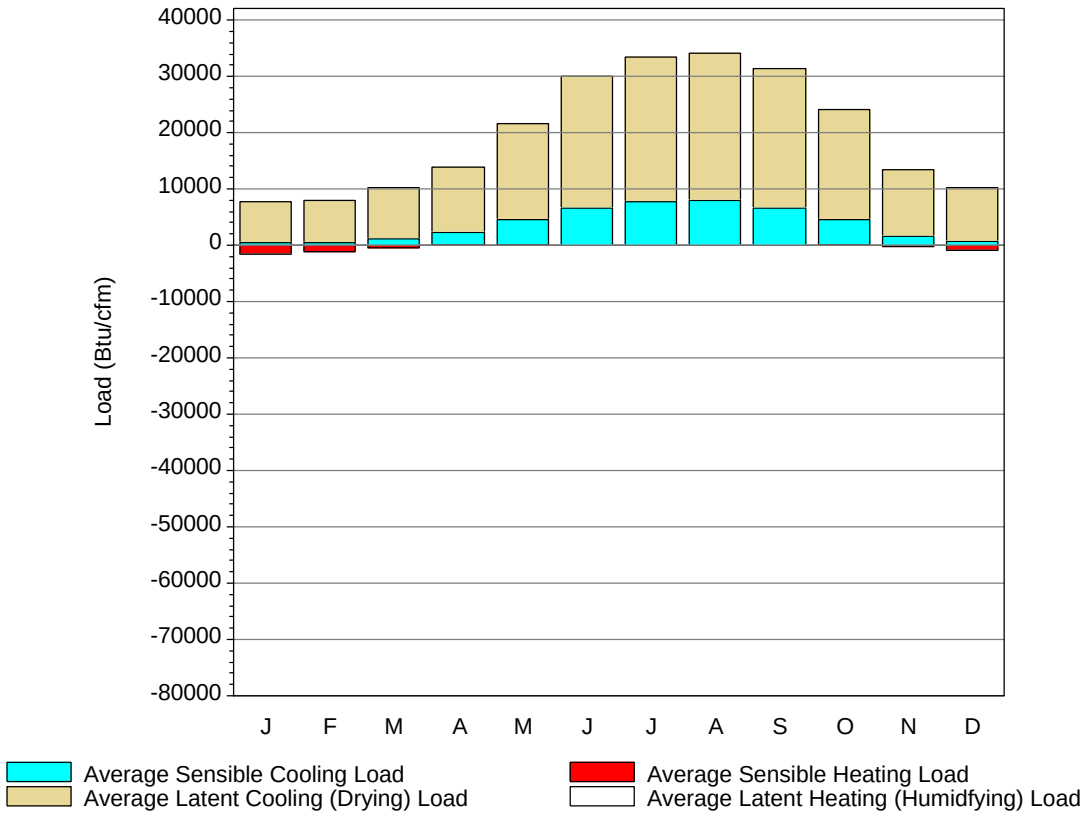
Week Ending	1.0% Temp (°F)	MCWB@ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB@ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	81	74.3	75.6	66.8	54	130.9	78.2	102.2	80.4
14-Jan	81	73.3	74.7	65.6	50	126	79.3	97.2	75.6
21-Jan	81	73.1	74.4	64.9	54	122.5	77.6	94.8	72.9
28-Jan	81	73.6	74.3	64.9	53	122.5	77.2	93.8	71.3
4-Feb	82	75	76	66.6	57	126	78.7	100.5	79.6
11-Feb	81	73.5	75	65.7	53	122.5	78.4	95.5	74.3
18-Feb	81	73.9	75.2	65.6	54	122.5	78.5	96.6	74
25-Feb	82	74.7	77.4	68.3	56	126.7	78.1	103.9	83.8
4-Mar	82	75.7	77	67.6	55	130.9	79.9	100.8	79.6
11-Mar	82	74.9	76.8	67.5	57	126.7	78.4	97.8	76.9
18-Mar	82	75.5	78.1	68.9	57	130.9	78.7	102.6	81.2
25-Mar	83	75	78.8	69.4	61	140.7	80.4	103.7	82.4
1-Apr	84	75.7	80.2	71.3	61	135.8	79	109.5	89.5
8-Apr	84	75	80.5	71.8	65	135.1	80.4	107.8	87
15-Apr	84	76	81	72.5	64	131.6	80.7	109.4	89
22-Apr	85	75.8	81.4	72.5	66	135.8	81.8	108.6	88.5
29-Apr	87	77.8	82.6	74.1	66	141.4	82.2	116.3	96.1
6-May	86	76.7	83	75.1	69	144.9	82.5	117.4	99.3
13-May	87	77.7	84.1	76.1	70	140	83.3	117	99.7
20-May	88	77.7	84.7	76.3	70	144.9	81.5	122.7	104.8
27-May	88	77.4	85.5	77.3	73	145.6	83.6	126	107.5
4-Jun	88	77.9	86	78.3	75	141.4	84.3	131.8	113.9
10-Jun	90	79.7	87	79.1	75	151.2	84.1	137.3	118
17-Jun	90	79.3	87.6	79.7	76	150.5	84.6	136.7	119.1
24-Jun	90	78.8	88	79.8	75	150.5	84.5	137.6	118.8
1-Jul	90	79.2	88.4	80.1	77	150.5	86.3	139.7	120.2
8-Jul	90	79.5	88.9	80.3	76	149.8	86.1	139.3	120.5
15-Jul	91	79.3	88.6	80.4	77	149.8	85.3	138.7	120
22-Jul	91	79.6	89.1	80.6	77	149.8	85.7	139.9	120.7
29-Jul	91	79.4	89.6	81	77	149.8	86.2	140.4	120.8
5-Aug	91	79.1	89.6	81.1	78	149.8	85.8	140.8	121.2
12-Aug	91	79.1	89.5	80.8	77	150.5	85.7	141.3	121.7
19-Aug	91	79.4	89.7	81	77	151.2	85.3	141.9	122.1
26-Aug	91	79.2	89.3	80.5	77	150.5	85.6	142	121.8
2-Sep	91	79.6	88.8	80.4	77	160.3	85.7	142.9	122.4
9-Sep	90	79.8	88.6	79.9	76	161	86.4	142.5	121.7
16-Sep	90	79.1	87.9	79.5	76	151.2	83.9	141.5	121.8
23-Sep	90	79.2	88	79.5	76	151.2	84.3	140.6	121.4
30-Sep	89	78.5	87	79	75	161	84.3	139.7	120.8
7-Oct	89	80.3	86.5	78.8	74	156.8	87.3	137.2	117.7
14-Oct	88	78.5	85.7	77.7	73	150.5	84	131.1	113.9
21-Oct	88	78.2	83.9	76.2	68	145.6	82.9	126.8	106.7
28-Oct	86	77.4	82.7	75.1	68	144.9	82	121.1	101
4-Nov	86	77.5	81.9	74.2	65	140.7	82.5	116.6	97.8
11-Nov	85	77.5	80.8	72.8	64	140	82.7	111.8	92.7
18-Nov	84	76.8	79.7	72.2	65	135.8	81.1	110.9	91.3
25-Nov	83	76.3	78.8	71	61	140	78.4	108.7	90.2
2-Dec	83	76.1	78.2	70.1	61	135.8	78.9	107.1	86.4
9-Dec	82	75.5	77.5	69	58	135.8	78.7	107.3	86.5
16-Dec	82	75.7	76.7	68.4	55	131.6	79.2	103.2	83.5
23-Dec	81	74.6	75.8	67.5	56	138.6	82.1	100.9	79.8
31-Dec	82	76.6	75.5	66.9	51	135.1	80.1	100.8	80.9

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	619.3	186	32
FEB	595.7	191.6	20
MAR	727	271.1	9.1
APR	808.8	359.5	0.7
MAY	941.7	477.2	0
JUN	1003.3	553.3	0
JUL	1075.7	610.7	0
AUG	1080	617	0
SEP	996.3	552.3	0
OCT	939.4	475.5	0.1
NOV	766.1	318.7	1.6
DEC	679.2	230.7	16.6
ANN	10232.5	4843.6	80.1

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	465	-1501	7278	-6
FEB	546	-1008	7320	-4
MAR	1118	-538	9164	0
APR	2266	-63	11638	0
MAY	4480	-3	17022	0
JUN	6576	0	23514	0
JUL	7797	0	25716	0
AUG	7996	0	26077	0
SEP	6646	0	24771	0
OCT	4486	-9	19630	0
NOV	1679	-142	11650	0
DEC	776	-881	9506	-2
ANN	44831	-4145	193286	-12

Station Information		Shading Geometry in Dimensionless Units	
City, State, WBAN	KEYWEST, FL 12836	Window:	1.000
Lat, Lon, Elev	24.55N 81.75W 3ft	Overhang:	1.335
Press, Stn_Type	14.7psia Secondary	Vert Gap:	0.200

AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day) Percentage Uncertainty = 9

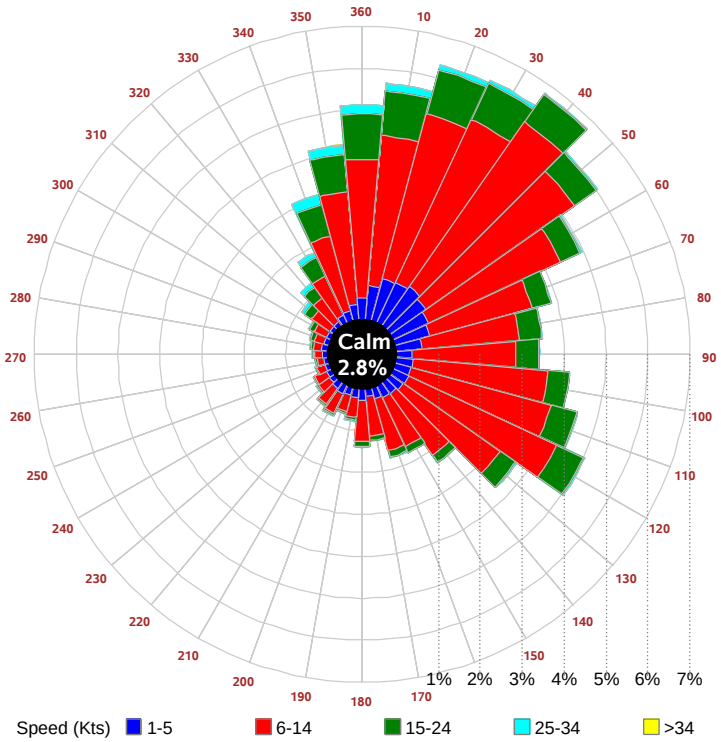
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ.	Global	1160	1410	1730	2000	2010	1940	1940	1850	1650	1450	1220	1090	1620
	Std.Dev.	85	86	105	91	99	115	71	73	71	94	77	64	33
	Minimum	950	1170	1460	1810	1740	1640	1760	1660	1460	1280	1040	960	1560
	Maximum	1290	1540	1910	2180	2160	2130	2040	1950	1760	1620	1340	1210	1680
	Diffuse	390	440	530	610	750	830	840	800	720	560	440	380	610
Clear Day	Global	1490	1770	2100	2360	2470	2480	2440	2330	2120	1810	1510	1390	2020
NORTH	Global	280	320	380	450	570	650	610	490	420	360	300	270	430
	Diffuse	280	320	380	430	480	520	510	470	420	360	300	270	400
Clear Day	Global	270	310	360	440	610	750	670	490	400	350	290	260	430
EAST	Global	710	820	960	1070	1040	980	990	960	890	830	720	660	890
	Diffuse	350	410	480	550	590	600	610	590	540	460	380	340	490
Clear Day	Global	940	1070	1210	1290	1290	1270	1250	1230	1170	1060	930	880	1130
SOUTH	Global	1380	1320	1120	790	550	480	510	650	890	1170	1330	1380	960
	Diffuse	460	480	500	490	480	480	480	510	540	530	490	460	490
Clear Day	Global	1960	1780	1380	870	560	470	500	730	1160	1590	1840	1950	1230
WEST	Global	700	830	990	1090	1040	980	980	950	870	820	720	670	890
	Diffuse	350	400	480	550	590	600	610	590	540	460	390	340	490
Clear Day	Global	940	1070	1210	1290	1290	1270	1250	1230	1170	1060	930	880	1130

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	810	1010	1260	1470	1480	1420	1420	1350	1200	1050	860	760	1170
NORTH	Unshaded	200	230	260	300	360	400	380	330	290	250	210	190	280
	Shaded	150	170	210	240	260	270	260	240	220	190	160	140	210
EAST	Unshaded	500	580	680	760	730	690	700	680	630	580	500	460	620
	Shaded	280	320	360	400	380	360	360	350	330	310	280	260	330
SOUTH	Unshaded	1000	920	700	450	340	330	340	390	550	790	960	1020	650
	Shaded	280	220	240	260	250	250	250	250	250	230	240	310	250
WEST	Unshaded	490	590	700	780	740	690	690	670	620	580	500	460	630
	Shaded	280	320	370	410	380	360	360	350	320	310	280	270	330

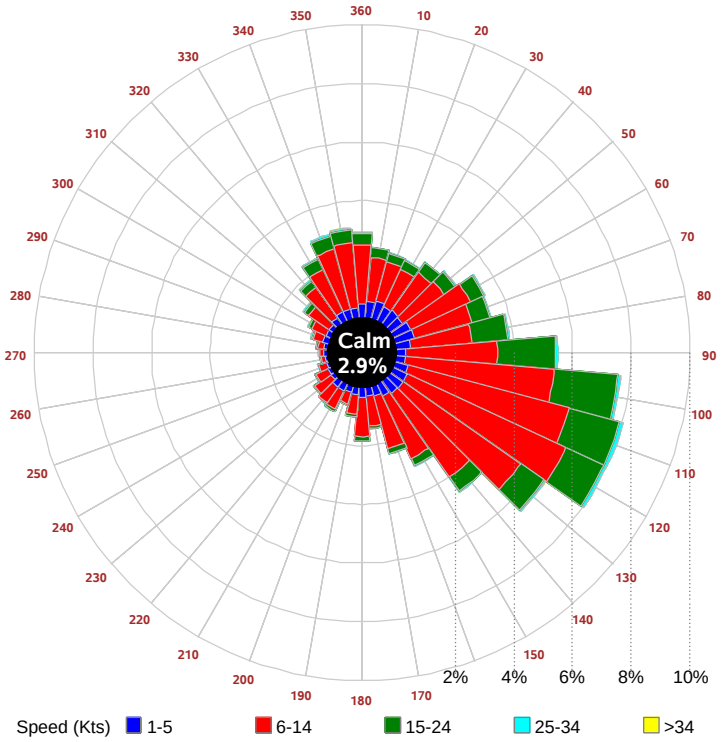
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS Percentage Uncertainty = 9											
				March					June		
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	37	79	96	82	42	30	74	100	99	72
	M.Cloudy	27	60	72	64	31	23	57	81	79	57
NORTH	M.Clear	10	15	16	16	11	23	24	17	18	25
	M.Cloudy	10	17	18	17	11	16	22	19	19	22
EAST	M.Clear	71	67	19	16	11	54	73	41	18	17
	M.Cloudy	40	48	20	17	11	32	53	36	19	17
SOUTH	M.Clear	26	53	64	55	30	10	17	19	19	17
	M.Cloudy	18	40	49	43	21	9	17	20	20	17
WEST	M.Clear	10	15	16	63	75	10	17	17	44	73
	M.Cloudy	10	17	18	48	44	9	17	19	37	54
M.Clear	(% hrs)	53	53	54	54	56	33	34	31	32	35

				Sept					Dec		
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	19	66	93	91	60	23	58	71	55	18
	M.Cloudy	16	53	76	74	48	16	42	51	40	13
NORTH	M.Clear	8	16	18	18	16	7	13	14	12	6
	M.Cloudy	7	16	19	19	16	7	14	15	13	6
EAST	M.Clear	41	72	41	18	16	51	52	14	12	6
	M.Cloudy	26	54	36	19	16	25	34	15	13	6
SOUTH	M.Clear	10	37	55	53	34	39	75	86	72	33
	M.Cloudy	8	30	45	44	27	20	46	55	44	16
WEST	M.Clear	8	16	18	47	72	7	13	17	55	46
	M.Cloudy	7	16	19	40	52	7	14	17	35	21
M.Clear	(% hrs)	27	27	25	22	23	44	46	46	46	48

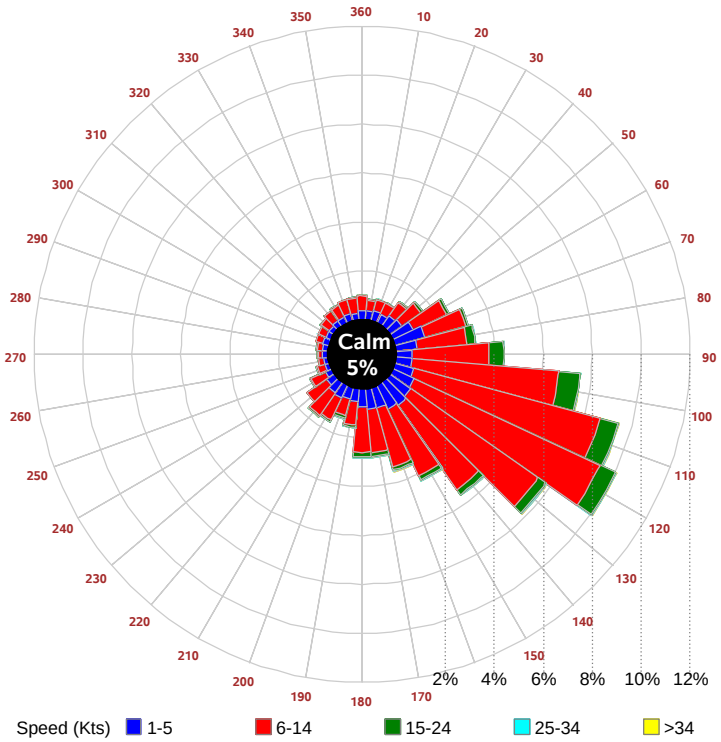
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November