

TAMPA FL

Latitude = 27.97 N

Longitude = 82.53 W

Period of Record = 1973 to 1996

WMO No. 722110

Elevation = 10 feet

Average Pressure = 30.01 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	95	77	113	8.7	W
0.4% Occurrence	93	78	118	8.9	W
1.0% Occurrence	91	78	120	9.0	W
2.0% Occurrence	90	77	121	9.0	W
Mean Daily Range	17	-	-	-	-
97.5% Occurrence	45	42	33	6.6	N
99.0% Occurrence	40	37	27	6.4	N
99.6% Occurrence	36	33	22	7.1	N
Median of Extreme Lows	29	26	15	8.4	N
	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	83	90	154	9.4	W
0.4% Occurrence	80	88	137	8.4	W
1.0% Occurrence	80	88	137	8.4	W
2.0% Occurrence	79	87	133	8.1	W
	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	161	87	1.07	6.8	W
0.4% Occurrence	146	85	0.97	7.4	W
1.0% Occurrence	141	84	0.94	7.0	W
2.0% Occurrence	140	84	0.94	6.8	W
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		36	2391	3051	5093

Other Site Data

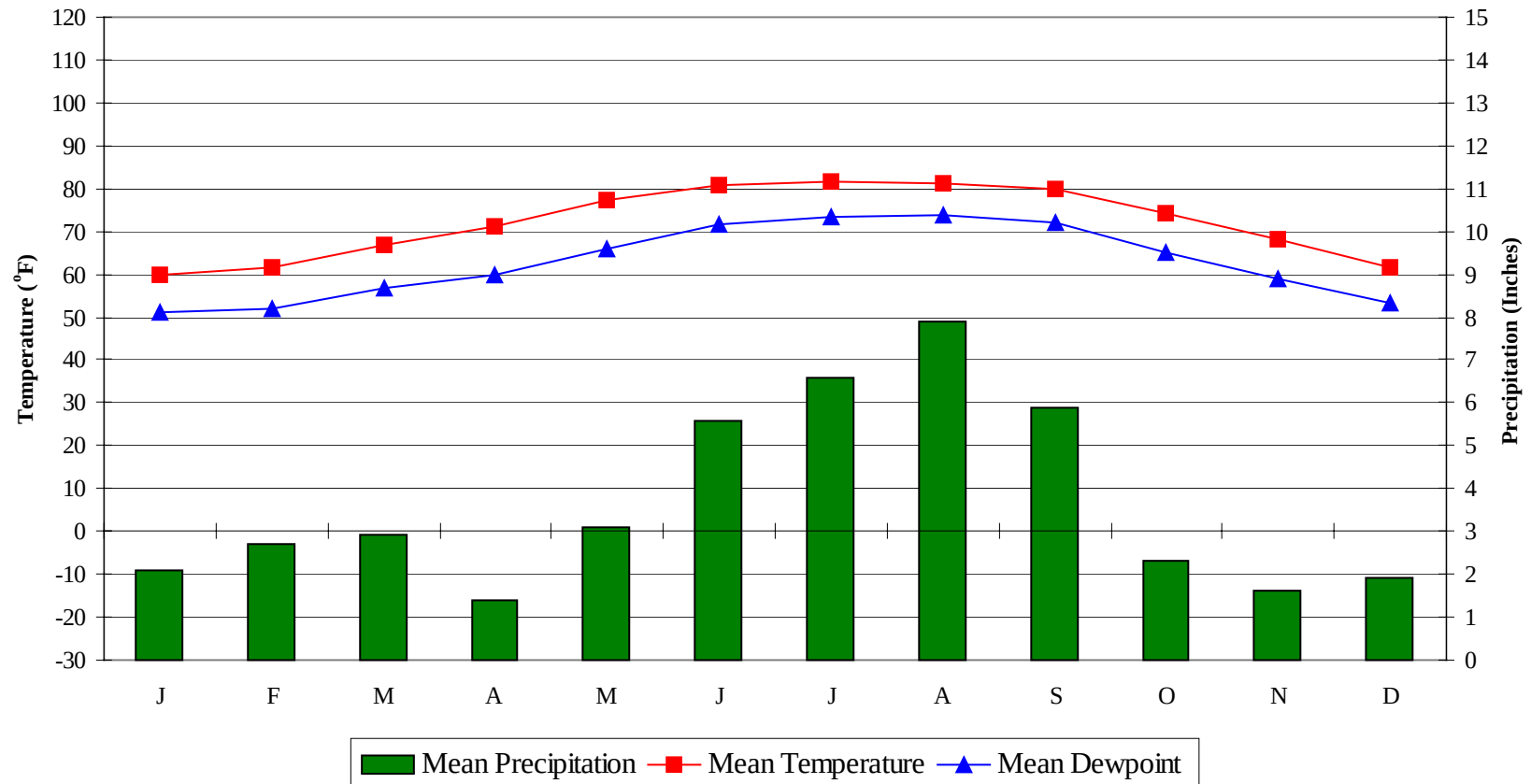
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
10	4.5	130	10.2 + 2.4
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
74.5	0	0	2

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

TAMPA FL

WMO No. 722110

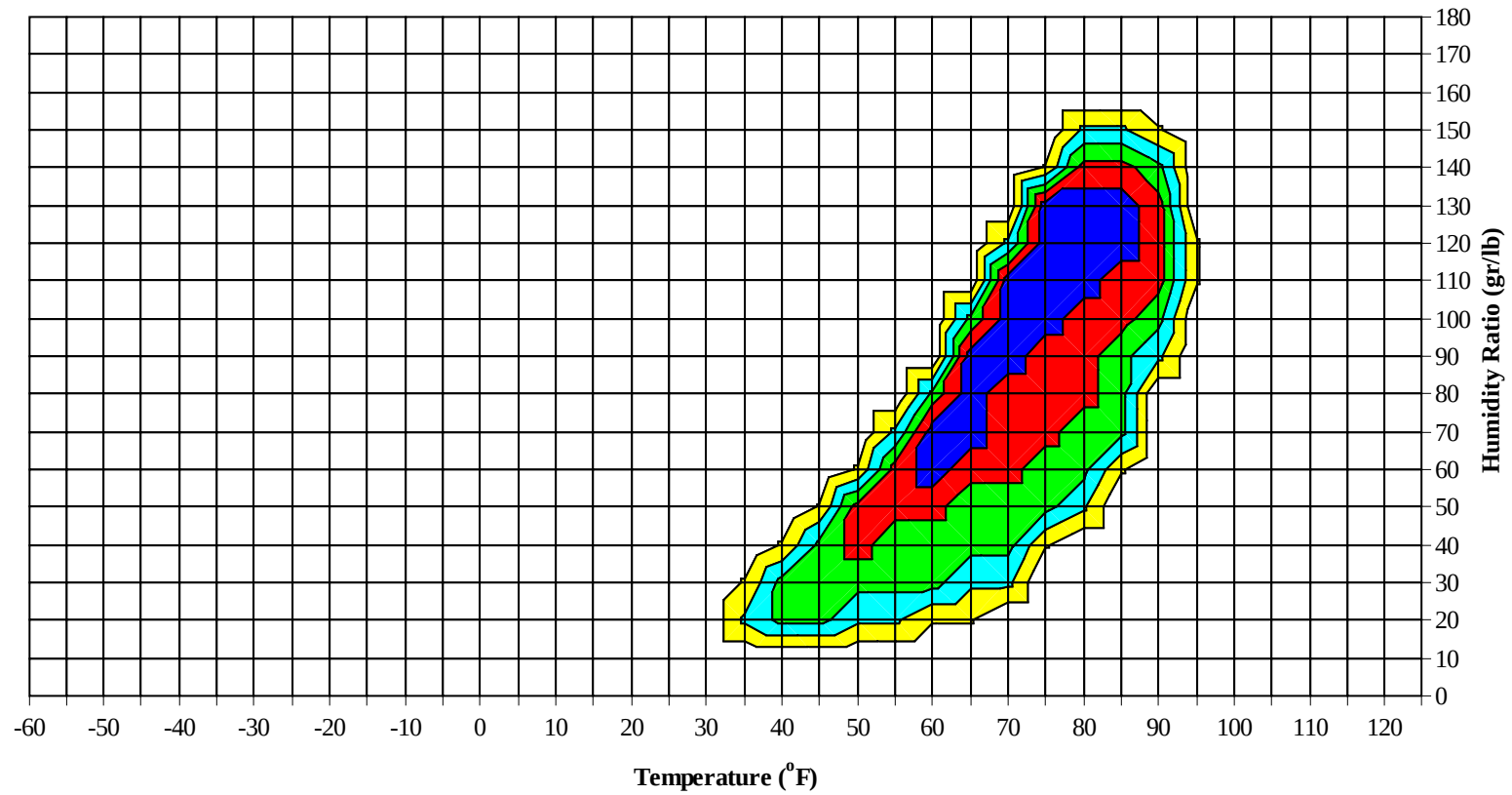
Average Annual Climate



TAMPA FL

WMO No. 722110

Long Term Psychrometric Summary

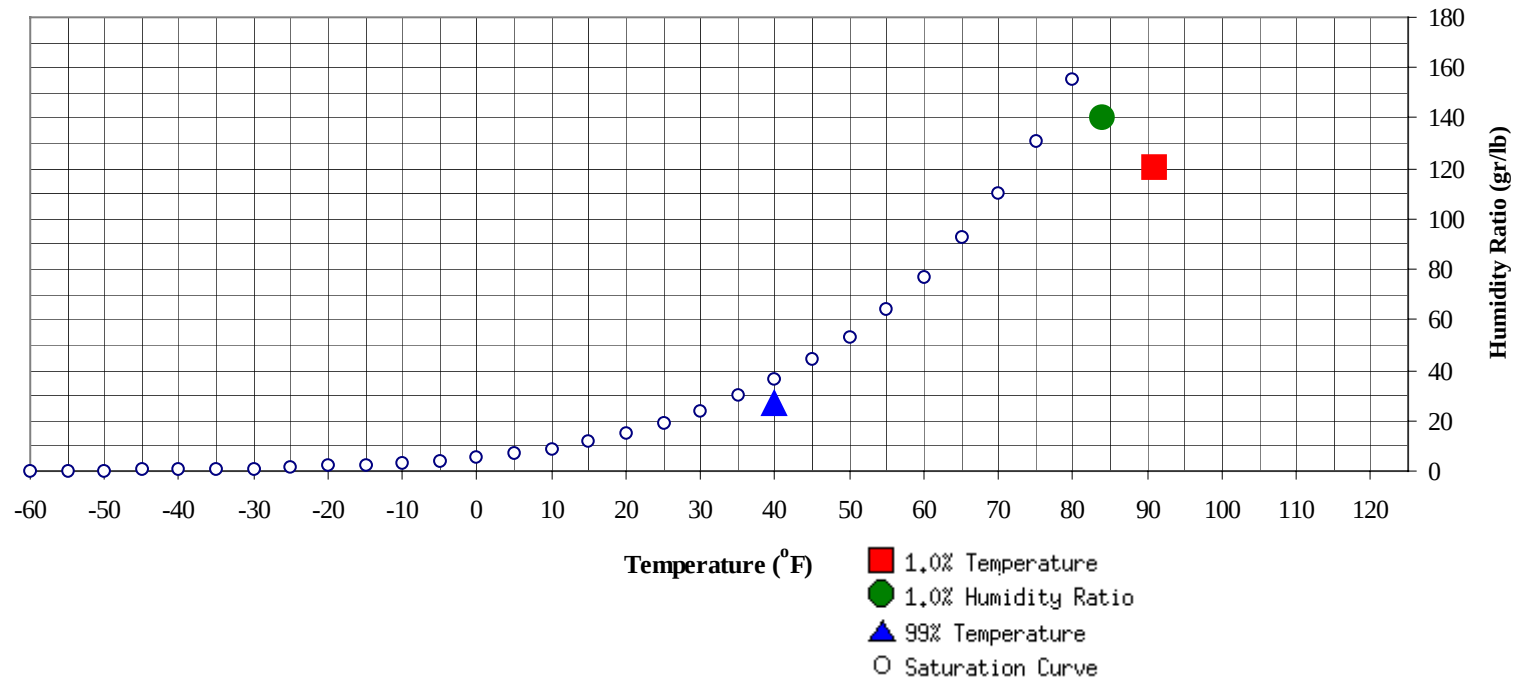


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

TAMPA FL

WMO No. 722110

Psychrometric Summary of Peak Design Values



	(°F)	MCHR	Enthalpy	1.0% Humidity Ratio	(gr/lb)	MCDB	MCWB	MC Dewpt	Enthalpy
		(gr/lb)	(btu/lb)			(°F)	(°F)	(°F)	(btu/lb)
99% Dry Bulb	40	27.1	13.8	Ratio	140.7	84	78.9	77	42.2

1.0% Dry Bulb	(°F)	MCHR	MCWB	Enthalpy
		(gr/lb)	(°F)	(btu/lb)
91	120.5	77.7	40.8	

TAMPA FL

WMO No. 722110

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

Period of Record = 1973 to 1996

Temperature Range (°F)	January					February					March				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
95 / 99															
90 / 94															
85 / 89		0		0	70.0		0	0	0	69.4		4	0	4	70.8
80 / 84		10	1	11	69.4		15	2	17	68.6		46	10	56	69.4
75 / 79	0	36	9	45	67.7	0	36	12	48	67.2	3	61	32	97	67.3
70 / 74	8	44	34	86	65.7	9	47	34	90	64.8	31	57	62	150	65.6
65 / 69	43	48	48	139	62.6	39	44	49	132	62.1	63	39	58	161	62.3
60 / 64	43	37	42	122	57.8	45	33	45	123	57.7	54	22	40	116	58.0
55 / 59	40	31	39	110	52.8	37	23	33	93	52.6	41	10	24	75	53.3
50 / 54	36	23	31	90	48.0	36	14	25	75	48.1	31	5	14	50	48.4
45 / 49	28	10	22	60	43.6	26	6	14	46	43.5	16	2	5	23	43.6
40 / 44	27	6	14	47	39.2	19	3	8	30	39.0	7	0	2	9	39.0
35 / 39	15	2	4	21	34.5	11	1	3	15	34.0	2	0	0	2	34.0
30 / 34	7	1	2	10	29.7	3	0	0	3	29.2	1	0		1	30.1
25 / 29	2	0	0	2	24.9	0			0	22.7	0			0	27.0
20 / 24	0			0	20.2										
15 / 19															

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.

TAMPA FL

WMO No. 722110

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

Period of Record = 1973 to 1996

Temperature Range (°F)	April					May					June				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
95 / 99						1			1	75.0		1	0	1	77.1
90 / 94		1		1	73.9	19	3		22	74.5		43	6	49	76.9
85 / 89		26	4	30	71.0	0	87	23	110	73.1	1	122	44	167	76.3
80 / 84	0	77	26	103	69.3	7	93	59	159	71.6	41	57	82	180	75.3
75 / 79	9	70	51	130	67.6	59	35	85	179	70.8	120	14	84	218	73.5
70 / 74	55	42	71	168	66.0	103	10	59	172	68.4	71	3	22	96	70.6
65 / 69	75	19	50	144	62.5	54	2	16	72	64.0	7	0	1	8	65.6
60 / 64	50	4	23	77	58.1	21		3	24	59.4	0		0	0	57.0
55 / 59	33	1	11	45	53.5	5		0	5	55.1	0			0	56.0
50 / 54	15	0	2	17	49.3	0			0	51.7	0			0	52.0
45 / 49	3		1	4	44.3										
40 / 44	1		0	1	39.9										
35 / 39															
30 / 34															
25 / 29															
20 / 24															
15 / 19															

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.

TAMPA FL

WMO No. 722110

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

Period of Record = 1973 to 1996

Temperature Range (°F)	July					August					September				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
95 / 99		1	0	1	78.3		1	0	1	77.1		0		0	76.0
90 / 94		63	9	72	78.3		67	10	77	78.3	0	39	3	42	77.4
85 / 89	4	121	46	171	77.6	2	109	40	151	77.8	0	111	30	141	76.8
80 / 84	57	47	93	197	76.3	39	52	91	182	76.5	16	66	79	161	75.6
75 / 79	144	13	84	241	74.2	166	16	94	276	74.4	134	20	99	254	73.9
70 / 74	43	2	16	61	71.5	41	3	14	58	71.9	81	4	27	112	71.0
65 / 69	0		0	0	65.9	0		0	0	66.7	8	0	1	9	65.3
60 / 64											1	0	0	1	60.6
55 / 59											0		0	0	55.6
50 / 54															
45 / 49															
40 / 44															
35 / 39															
30 / 34															
25 / 29															
20 / 24															
15 / 19															

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.

TAMPA FL

WMO No. 722110

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

Period of Record = 1973 to 1996

Temperature Range (°F)	October					November					December				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
95 / 99															
90 / 94		4	0	4	76.4										
85 / 89		53	6	59	74.5		7	0	7	73.1		1	0	1	73.5
80 / 84	3	95	38	136	72.2		62	10	72	71.2		15	2	17	70.4
75 / 79	34	58	81	173	70.9	7	64	42	113	69.4	1	47	13	61	68.1
70 / 74	88	26	70	184	68.5	49	48	65	162	67.3	15	48	42	106	66.1
65 / 69	63	8	33	104	63.6	58	29	51	138	63.2	42	50	54	147	62.7
60 / 64	38	2	13	53	58.6	47	18	32	97	58.1	51	33	42	126	58.3
55 / 59	15	1	6	22	53.8	33	7	20	60	53.1	41	25	35	101	53.0
50 / 54	6	0	1	7	49.2	24	4	12	40	48.2	33	16	29	78	48.2
45 / 49	2			2	45.8	15	1	6	22	43.4	30	6	16	52	43.7
40 / 44	0			0	40.0	6	0	2	8	38.8	19	3	9	31	39.1
35 / 39						1	0	0	1	35.3	11	2	3	16	33.9
30 / 34											4	1	1	6	28.9
25 / 29											1	0	0	1	24.1
20 / 24											0	0		0	18.4
15 / 19											0			0	16.0

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.

TAMPA FL

WMO No. 722110

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

Period of Record = 1973 to 1996

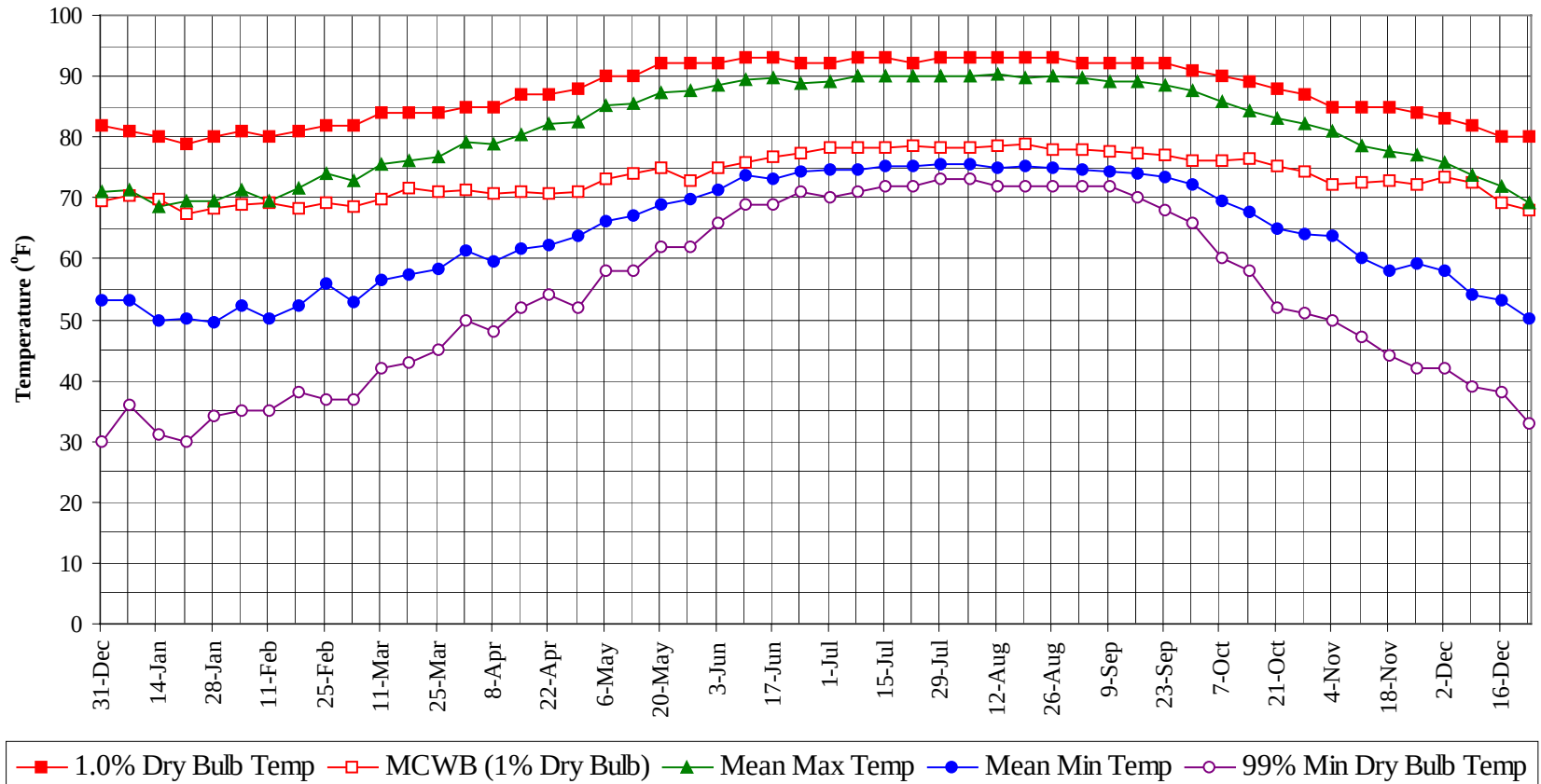
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
95 / 99		5	0	5	76.9
90 / 94	0	237	31	268	77.5
85 / 89	8	642	194	844	76.1
80 / 84	163	632	491	1287	73.7
75 / 79	675	471	687	1833	71.8
70 / 74	592	334	515	1441	67.8
65 / 69	450	242	362	1054	62.8
60 / 64	349	151	242	741	58.1
55 / 59	244	99	169	513	53.1
50 / 54	180	63	116	360	48.2
45 / 49	121	25	63	209	43.6
40 / 44	80	12	35	127	39.1
35 / 39	40	4	10	54	34.2
30 / 34	14	2	3	19	29.4
25 / 29	3	0	1	4	24.5
20 / 24	1	0		1	19.2
15 / 19	0			0	16.0

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.

TAMPA FL

WMO No. 722110

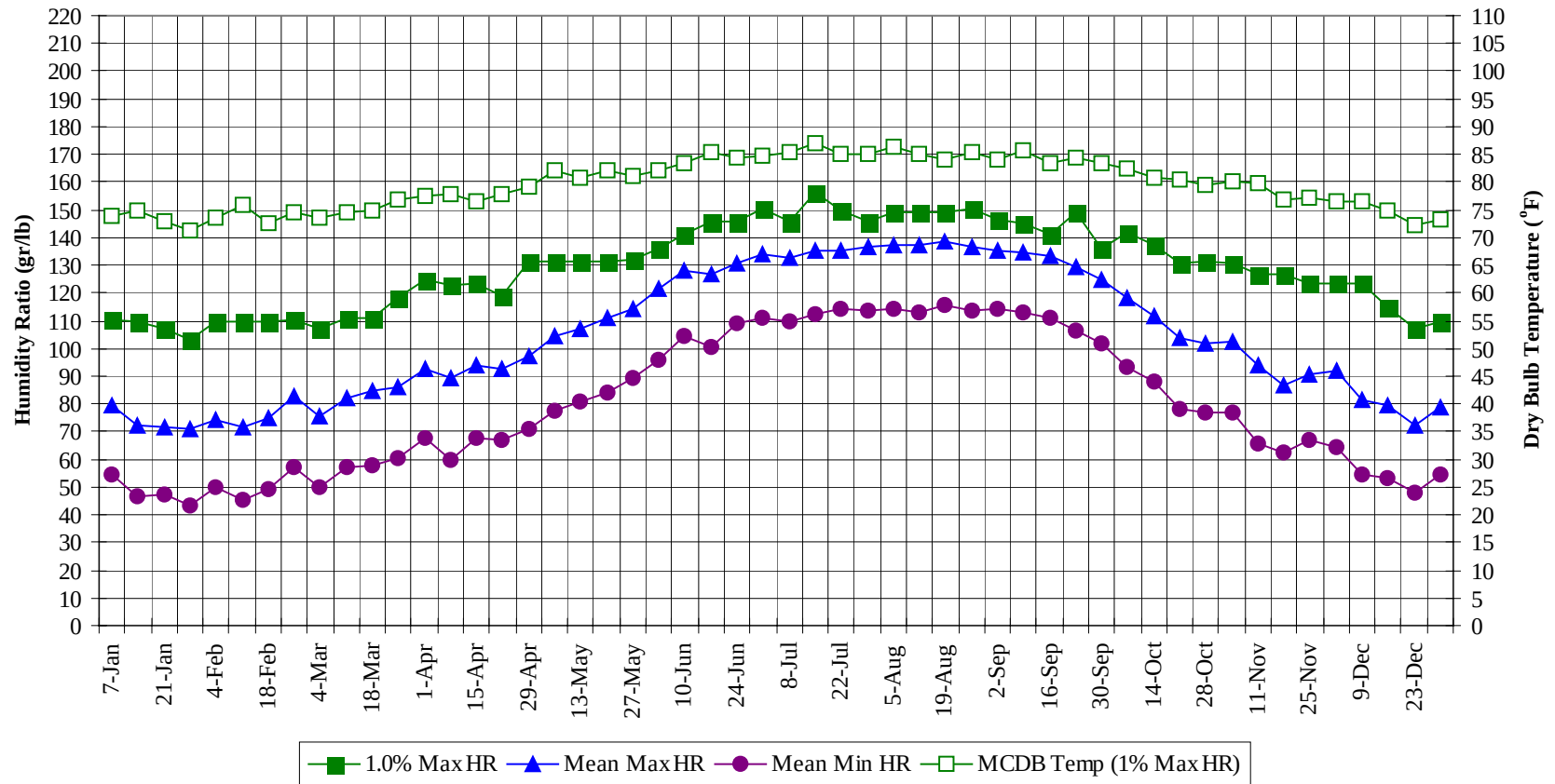
Annual Summary of Temperatures



TAMPA FL

WMO No. 722110

Long Term Humidity and Dry Bulb Temperature Summary

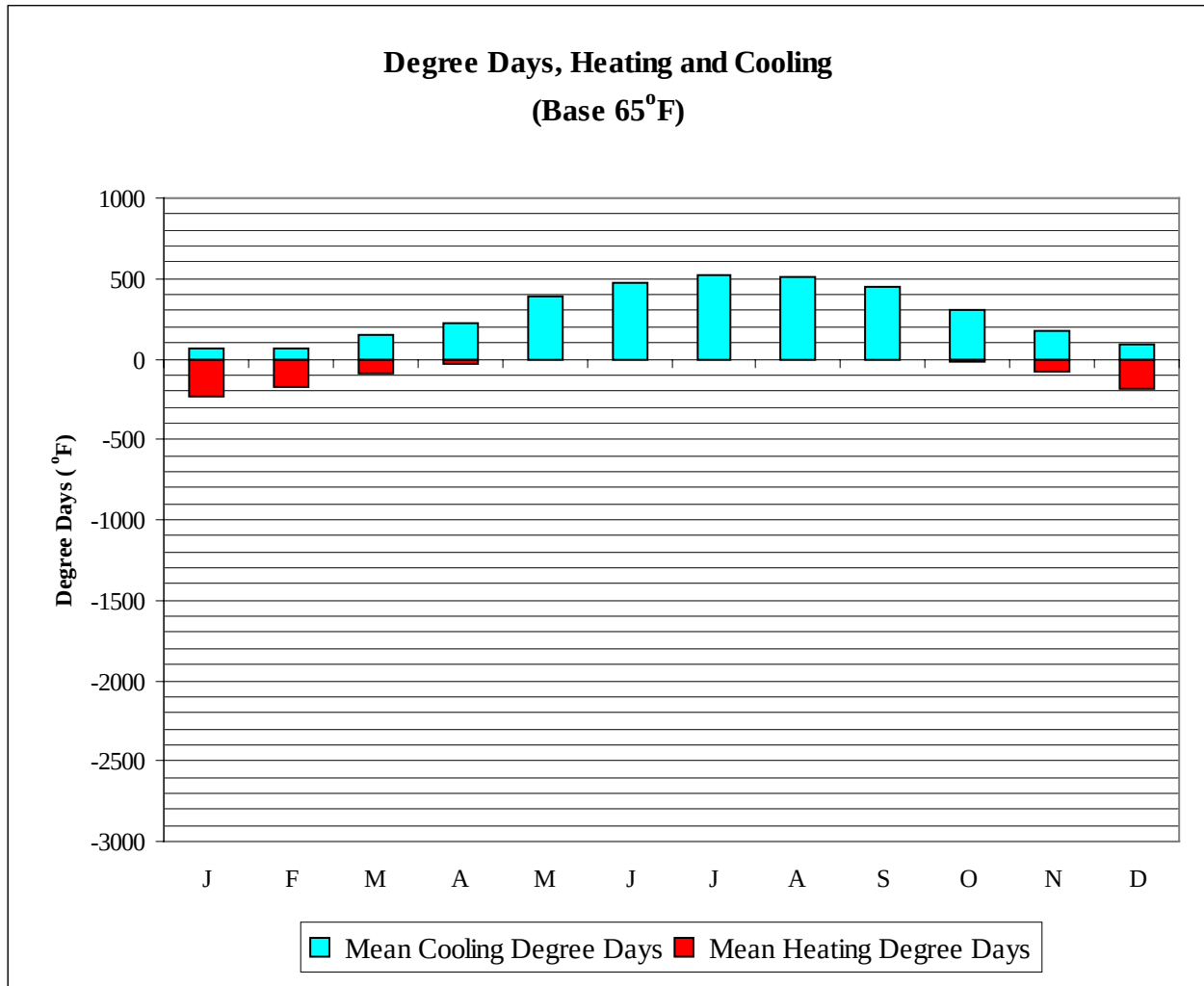


TAMPA FL**WMO No. 722110****Long Term Dry Bulb Temperature and Humidity Summary**

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	81.0	70.4	71.2	53.3	36.0	110.6	73.8	79.7	54.2
14-Jan	80.0	69.7	68.6	49.8	31.0	109.9	75.0	72.5	46.7
21-Jan	79.0	67.5	69.6	50.1	30.0	107.1	73.0	71.4	47.3
28-Jan	80.0	68.3	69.4	49.6	34.0	102.9	71.3	71.2	43.6
4-Feb	81.0	68.8	71.3	52.1	35.0	109.9	73.5	74.0	50.1
11-Feb	80.0	69.1	69.5	50.1	35.0	109.9	75.8	71.4	45.6
18-Feb	81.0	68.4	71.7	52.2	38.0	109.9	72.6	75.1	49.4
25-Feb	82.0	69.2	73.9	55.9	37.0	110.6	74.6	82.7	57.3
4-Mar	82.0	68.4	73.0	53.0	37.0	107.1	73.5	75.3	50.0
11-Mar	84.0	69.8	75.5	56.4	42.0	111.3	74.7	82.2	57.0
18-Mar	84.0	71.6	76.2	57.4	43.0	111.3	74.9	84.9	58.0
25-Mar	84.0	70.9	76.9	58.2	45.0	118.3	76.8	86.0	60.3
1-Apr	85.0	71.3	79.2	61.4	50.0	124.6	77.4	92.5	67.6
8-Apr	85.0	70.8	78.8	59.5	48.0	122.5	77.8	89.0	60.0
15-Apr	87.0	71.0	80.5	61.8	52.0	123.2	76.6	93.7	67.4
22-Apr	87.0	70.7	82.1	62.2	54.0	119.0	77.9	92.4	67.0
29-Apr	88.0	71.1	82.4	63.7	52.0	131.6	79.1	97.5	71.0
6-May	90.0	73.2	85.3	66.2	58.0	131.6	82.1	104.2	77.2
13-May	90.0	74.0	85.5	67.2	58.0	131.6	80.7	106.9	80.6
20-May	92.0	75.0	87.3	68.8	62.0	131.6	81.9	111.1	84.0
27-May	92.0	72.8	87.5	69.9	62.0	132.3	81.1	114.5	89.2
3-Jun	92.0	74.9	88.6	71.4	66.0	135.8	82.1	121.7	95.9
10-Jun	93.0	75.9	89.5	73.8	69.0	141.4	83.5	127.9	104.3
17-Jun	93.0	76.8	89.7	73.2	69.0	145.6	85.2	126.8	100.6
24-Jun	92.0	77.4	88.8	74.3	71.0	145.6	84.5	130.7	109.3
1-Jul	92.0	78.3	89.0	74.6	70.0	150.5	84.7	133.7	110.8
8-Jul	93.0	78.3	90.0	74.7	71.0	145.6	85.3	132.9	109.7
15-Jul	93.0	78.1	90.1	75.2	72.0	156.1	87.2	135.3	112.2
22-Jul	92.0	78.5	90.0	75.2	72.0	149.8	85.0	135.3	114.0
29-Jul	93.0	78.4	90.1	75.5	73.0	145.6	85.1	136.5	113.9
5-Aug	93.0	78.1	89.9	75.4	73.0	149.1	86.3	137.3	114.6
12-Aug	93.0	78.5	90.3	75.0	72.0	149.1	85.0	137.0	113.0
19-Aug	93.0	79.0	89.7	75.1	72.0	149.1	84.2	138.6	115.4
26-Aug	93.0	78.0	90.1	74.9	72.0	150.5	85.3	136.5	113.7
2-Sep	92.0	77.8	89.6	74.7	72.0	146.3	84.0	135.1	114.0
9-Sep	92.0	77.6	89.0	74.4	72.0	144.9	85.8	134.9	112.9
16-Sep	92.0	77.5	89.2	74.1	70.0	141.4	83.3	133.4	110.8
23-Sep	92.0	77.1	88.6	73.4	68.0	149.1	84.4	129.5	106.3
30-Sep	91.0	76.1	87.5	72.2	66.0	135.8	83.3	124.5	102.1
7-Oct	90.0	76.1	85.8	69.6	60.0	142.1	82.6	118.2	93.2
14-Oct	89.0	76.5	84.4	67.7	58.0	137.2	80.8	111.8	87.9
21-Oct	88.0	75.1	83.1	65.0	52.0	130.9	80.4	103.7	78.3
28-Oct	87.0	74.2	82.2	64.0	51.0	131.6	79.6	101.5	76.8
4-Nov	85.0	72.3	80.9	63.7	50.0	130.9	80.3	102.6	77.1
11-Nov	85.0	72.5	78.6	60.2	47.0	126.7	79.7	94.1	65.7
18-Nov	85.0	72.9	77.7	58.0	44.0	126.7	76.7	87.0	62.5
25-Nov	84.0	72.3	77.1	59.2	42.0	123.2	77.2	90.8	66.8
2-Dec	83.0	73.4	75.9	58.1	42.0	123.2	76.6	91.6	64.3
9-Dec	82.0	72.5	73.7	54.2	39.0	123.2	76.5	81.3	54.6
16-Dec	80.0	69.1	71.9	53.3	38.0	114.8	74.8	79.3	53.5
23-Dec	80.0	67.9	69.2	50.2	33.0	107.1	72.2	72.1	47.7
31-Dec	82.0	69.4	71.1	53.1	30.0	109.9	73.2	78.9	54.4

TAMPA FL

WMO No. 722110

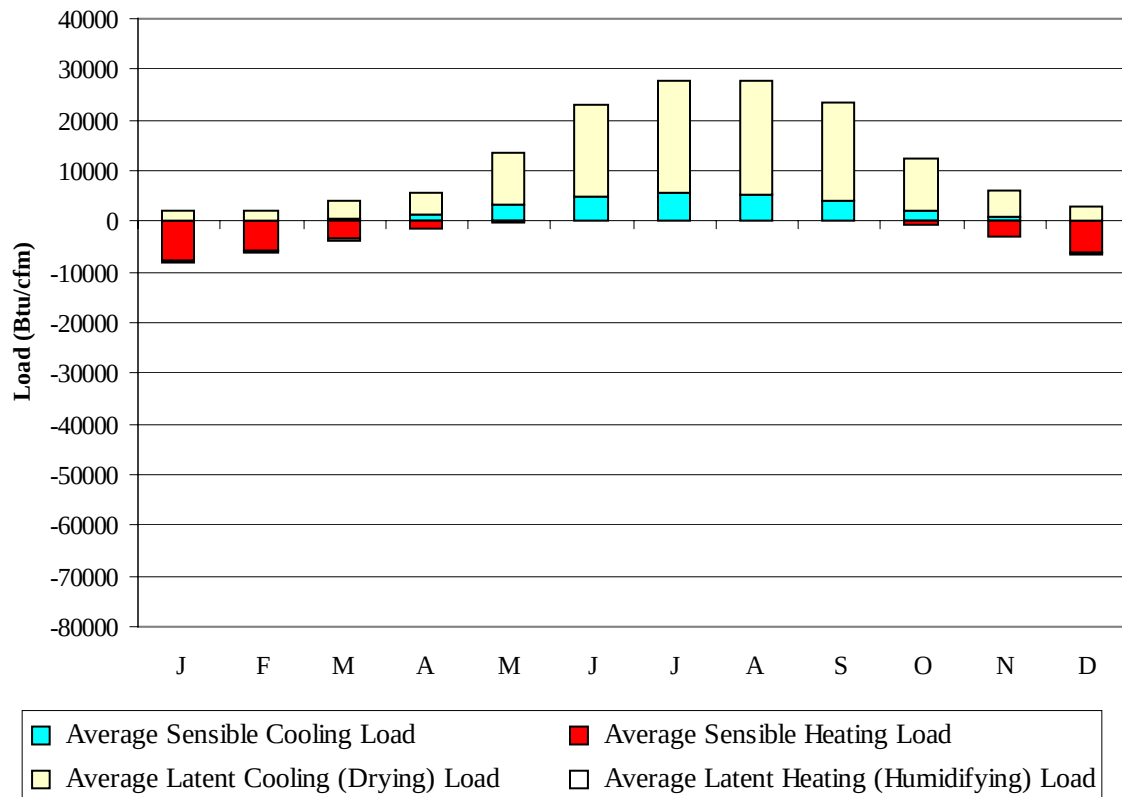


	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	64	229
FEB	71	170
MAR	144	94
APR	221	35
MAY	385	4
JUN	475	0
JUL	517	0
AUG	508	0
SEP	451	0
OCT	302	17
NOV	169	78
DEC	84	187
ANN	3393	814

TAMPA FL

WMO No. 722110

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	152	-7627	1864	-497
FEB	199	-5837	1772	-370
MAR	609	-3515	3274	-140
APR	1323	-1545	4455	-20
MAY	3345	-267	10261	0
JUN	4831	-9	18306	0
JUL	5492	0	22157	0
AUG	5247	0	22663	0
SEP	4240	-18	19375	0
OCT	2131	-827	10100	-2
NOV	800	-2916	5300	-98
DEC	233	-6357	2496	-373
ANN	28602	-28918	122023	-1500

Average Annual Solar Radiation – Nearest Available Site

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

City: TAMPA
 State: FL
 WBAN No: 12842
 Lat(N): 27.97
 Long(W): 82.53
 Elev(ft): 10

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.796
 Vert Gap: 0.634

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	1020	1270	1600	1960	2030	1930	1840	1730	1550	1410	1130	970	1540
	Std Dev	83	85	120	87	113	134	104	118	103	84	81	70	55
	Minimum	820	1080	1380	1830	1820	1630	1620	1470	1360	1150	950	840	1410
	Maximum	1160	1430	1760	2170	2230	2180	2030	1980	1720	1550	1260	1090	1640
	Diffuse	400	460	570	650	770	870	870	820	720	550	420	370	620
Clear Day	Global	1370	1680	2050	2360	2500	2520	2470	2330	2060	1720	1400	1260	1980
NORTH	Global	270	320	380	460	570	620	580	490	420	360	290	260	420
	Diffuse	270	320	380	440	490	520	510	470	420	360	290	260	390
Clear Day	Global	250	300	360	440	600	710	640	490	400	340	270	240	420
EAST	Global	620	740	910	1080	1090	1040	1030	1010	920	850	690	600	880
	Diffuse	330	390	470	550	600	620	620	590	540	450	360	310	490
Clear Day	Global	890	1050	1200	1310	1330	1300	1280	1240	1160	1030	880	820	1130
SOUTH	Global	1280	1250	1120	870	630	540	570	700	910	1220	1320	1300	980
	Diffuse	430	470	510	520	510	500	510	530	550	530	470	430	500
Clear Day	Global	1990	1860	1500	1010	670	560	600	850	1260	1660	1880	1960	1310
WEST	Global	640	770	920	1070	1060	950	860	830	800	810	680	610	830
	Diffuse	340	390	480	560	600	610	600	570	520	450	360	320	480
Clear Day	Global	890	1050	1200	1310	1330	1300	1280	1240	1160	1030	880	820	1130

Average Annual Solar Heat and Illumination – Nearest Available Site

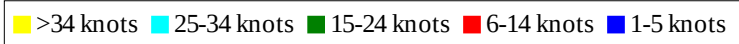
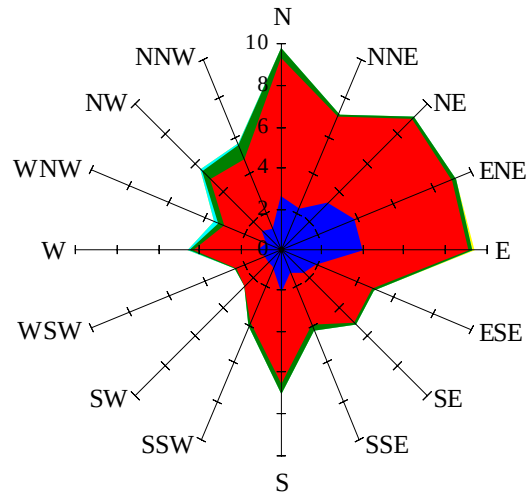
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	710	900	1160	1430	1490	1400	1340	1260	1120	1010	790	660	1110
NORTH	Unshaded	190	220	260	310	360	400	370	330	290	250	200	180	280
	Shaded	170	200	240	280	320	340	330	290	260	220	180	160	250
EAST	Unshaded	430	520	650	770	780	740	740	720	660	600	480	420	620
	Shaded	380	450	560	650	660	620	620	610	560	520	430	370	540
SOUTH	Unshaded	940	890	730	510	380	350	360	420	580	840	960	970	660
	Shaded	890	730	420	320	320	310	310	320	350	620	890	940	540
WEST	Unshaded	450	540	660	770	750	670	610	580	570	570	480	420	590
	Shaded	400	470	560	650	630	560	500	490	480	490	410	370	500

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	78	94	81	43	32	75	100	100	74
	M.Cloudy	23	54	66	57	29	23	57	78	77	53
NORTH	M.Clear	10	15	16	15	11	23	21	18	18	21
	M.Cloudy	9	16	18	17	11	15	20	19	19	19
EAST	M.Clear	75	68	21	15	11	59	75	43	18	17
	M.Cloudy	31	44	20	17	11	32	52	36	19	17
SOUTH	M.Clear	28	57	69	60	33	11	17	25	26	17
	M.Cloudy	15	38	47	40	20	9	17	24	24	17
WEST	M.Clear	10	15	16	62	77	11	17	18	43	74
	M.Cloudy	9	16	18	41	38	9	17	19	36	48
M.Clear	(% hrs)	43	43	44	44	45	43	36	30	28	26
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	19	64	90	88	59	19	55	66	51	16
	M.Cloudy	14	47	69	66	41	12	35	45	35	11
NORTH	M.Clear	8	16	18	18	16	6	12	13	12	6
	M.Cloudy	6	16	19	19	14	5	12	15	12	5
EAST	M.Clear	47	74	42	18	16	50	52	14	12	6
	M.Cloudy	22	46	34	19	14	16	29	15	12	5
SOUTH	M.Clear	11	40	58	57	37	38	78	87	74	32
	M.Cloudy	7	28	44	42	25	13	39	49	39	14
WEST	M.Clear	8	16	18	45	71	6	12	15	53	44
	M.Cloudy	6	16	19	35	42	5	12	15	30	18
M.Clear	(% hrs)	49	43	28	23	25	43	45	41	42	44

Wind Summary - December, January, and February

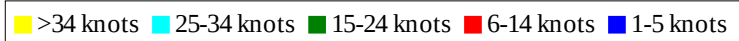
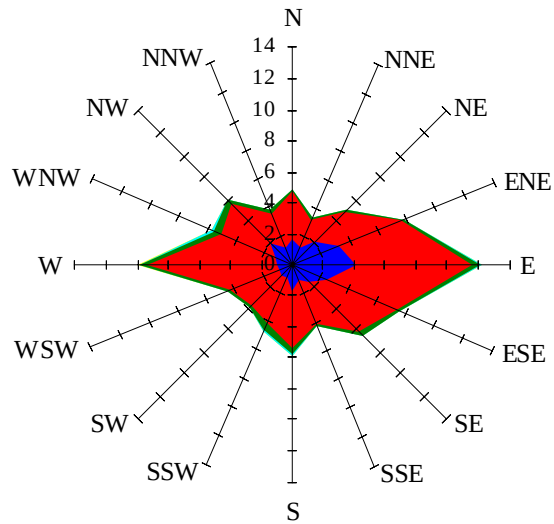
Labels of Percent Frequency on North Axis



Percent Calm = 6.88

Wind Summary - March, April, and May

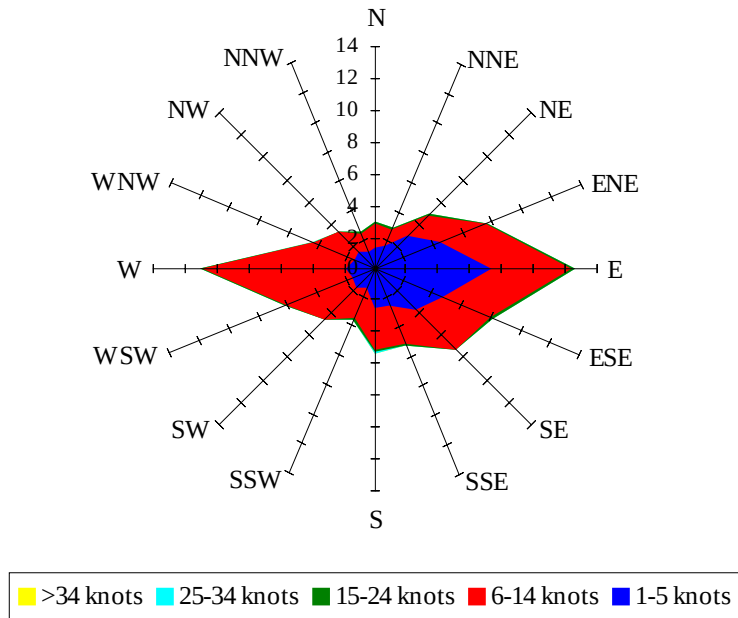
Labels of Percent Frequency on North Axis



Percent Calm = 6.04

Wind Summary - June, July, and August

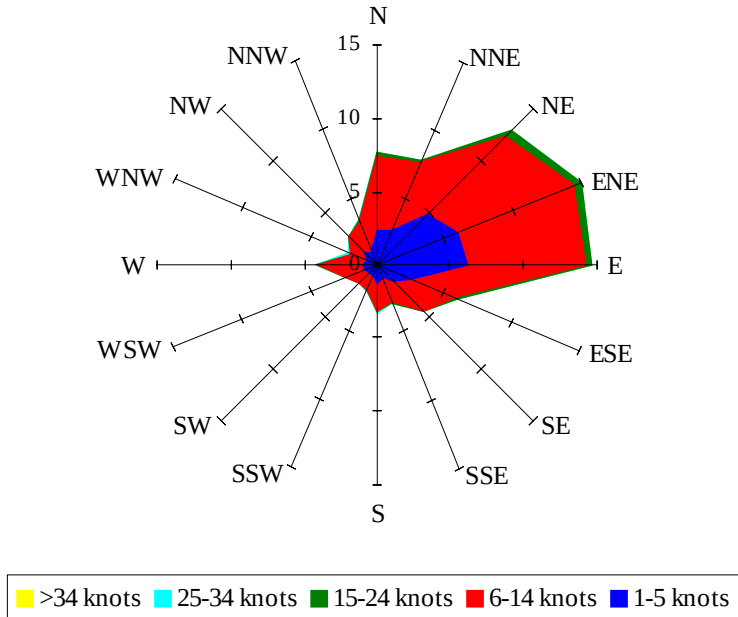
Labels of Percent Frequency on North Axis



Percent Calm = 9.17

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 7.57