

WATERTOWN INTL, NY

Latitude = 43.98 N

Longitude = 76.02 W

Period of Record = 1988 To 2017

Station ID = ICAO_KART

Elevation = 325 Feet

Average Pressure = 29.65 inches Hg

Design Criteria Data

Dry Bulb Temperature (T)	Mean Coincident (Average) Values				
	Design Value (°F)	Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	90	74	103	11.8	WSW
0.4% Occurrence	86	72	96	10.3	WSW
1.0% Occurrence	83	70	93	9.9	WSW
2.0% Occurrence	81	70	90	9.6	WSW
Mean Daily Range	19	-	-	-	NE
97.5% Occurrence	3	2	4	7.2	NE
99.0% Occurrence	-6	-7	3	5.8	E
99.6% Occurrence	-13	-13	2	4.7	E
Median of Extreme Lows	-27	-27	1	3.3	E

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	77	85	125	10.8	WSW
0.4% Occurrence	74	81	114	9.5	WSW
1.0% Occurrence	73	80	111	9.1	WSW
2.0% Occurrence	71	78	103	8.5	WSW

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	129	82	0.85	10.5	SW
0.4% Occurrence	120	79	0.79	8.6	SW
1.0% Occurrence	112	77	0.74	8	SW
2.0% Occurrence	107	77	0.71	7.9	WSW

Air Conditioning/ Humid Area Criteria	Threshold	T ≥ 93 °F	T ≥ 80 °F	Twb ≥ 73 °F	Twb ≥ 67 °F
	# of Hours	3	242	107	701

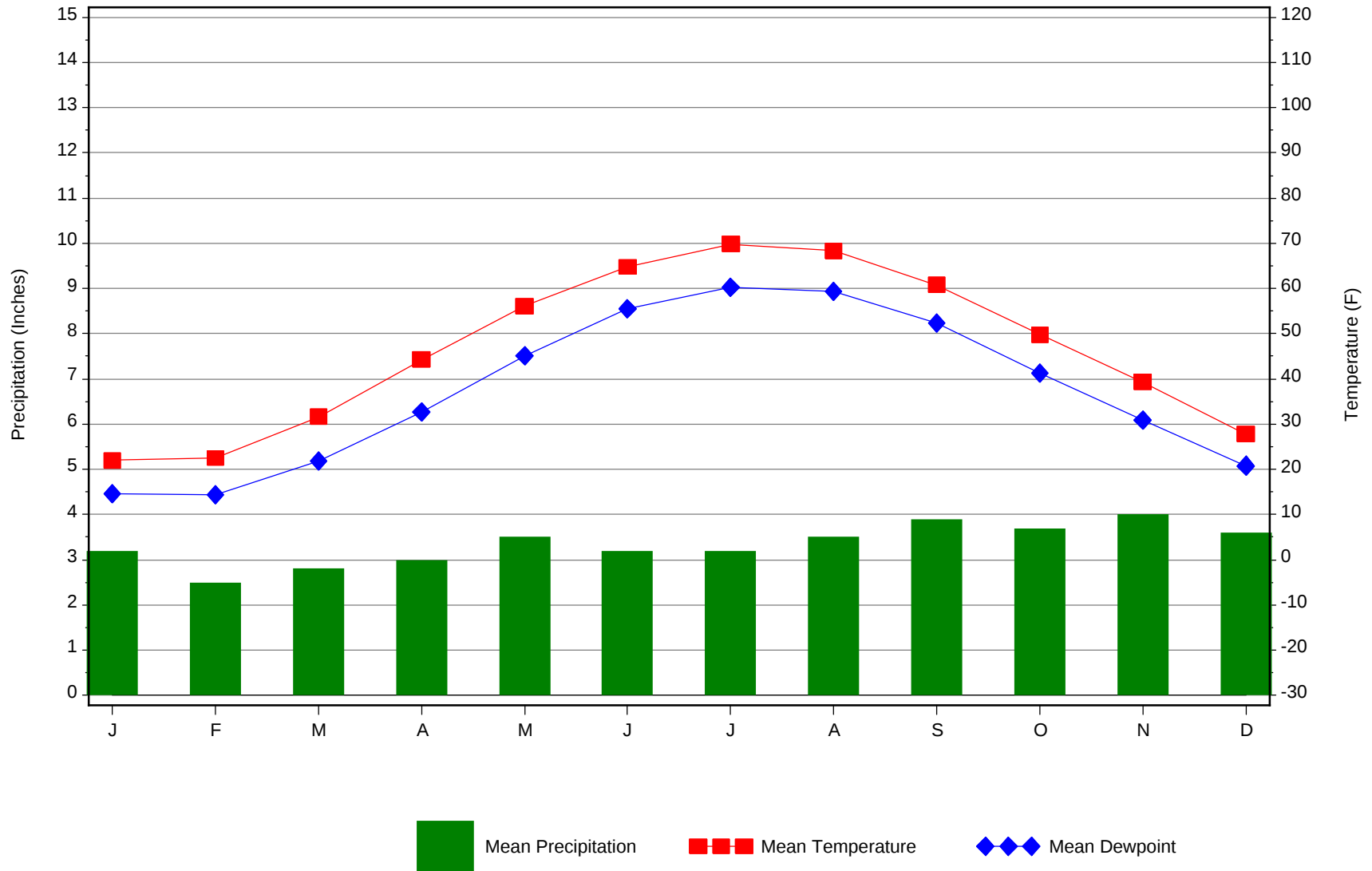
Other Site Data

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
5	2.3	90	1.0 + 0.2
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 (#)
48.9	N/A	N/A	72

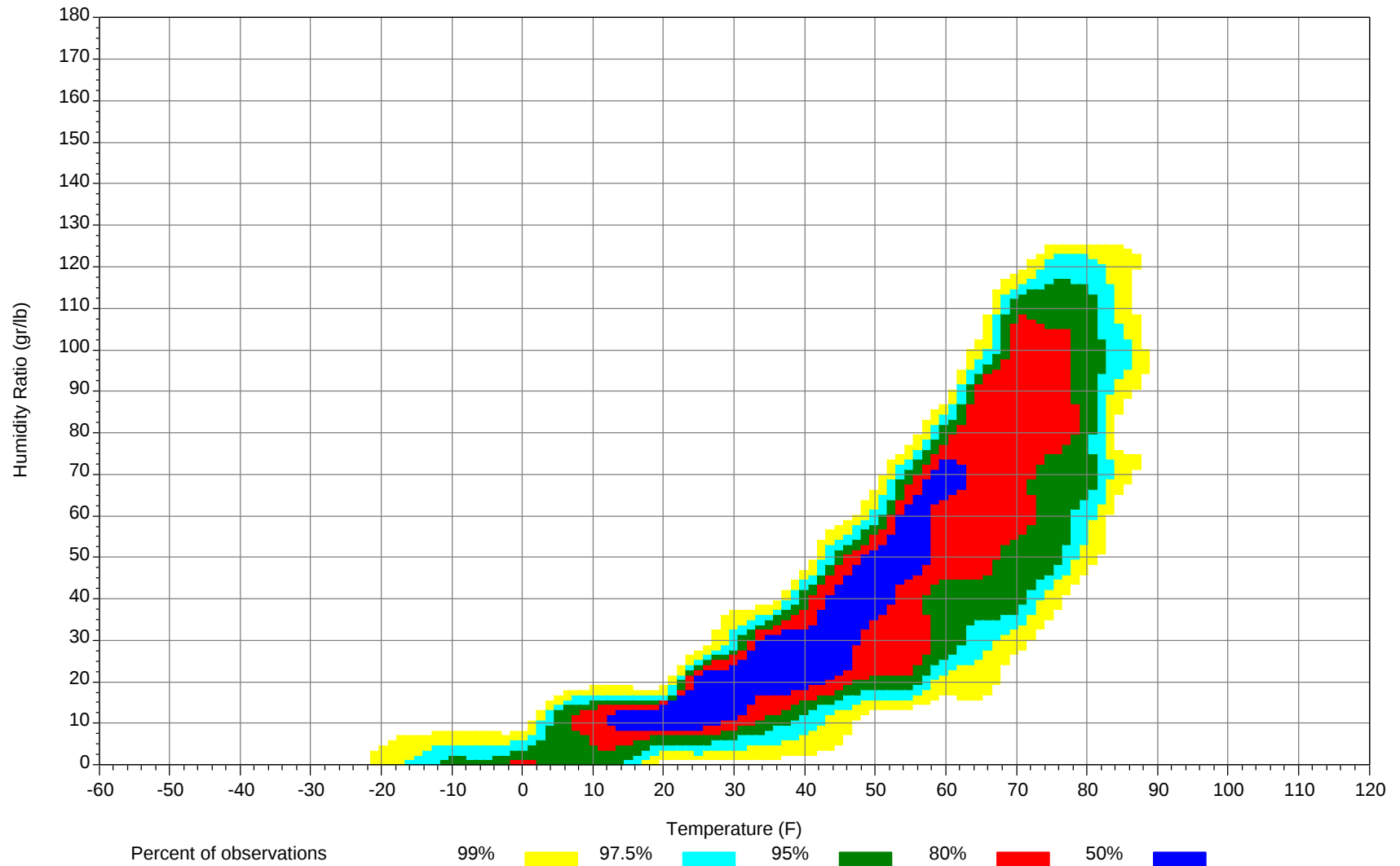
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.



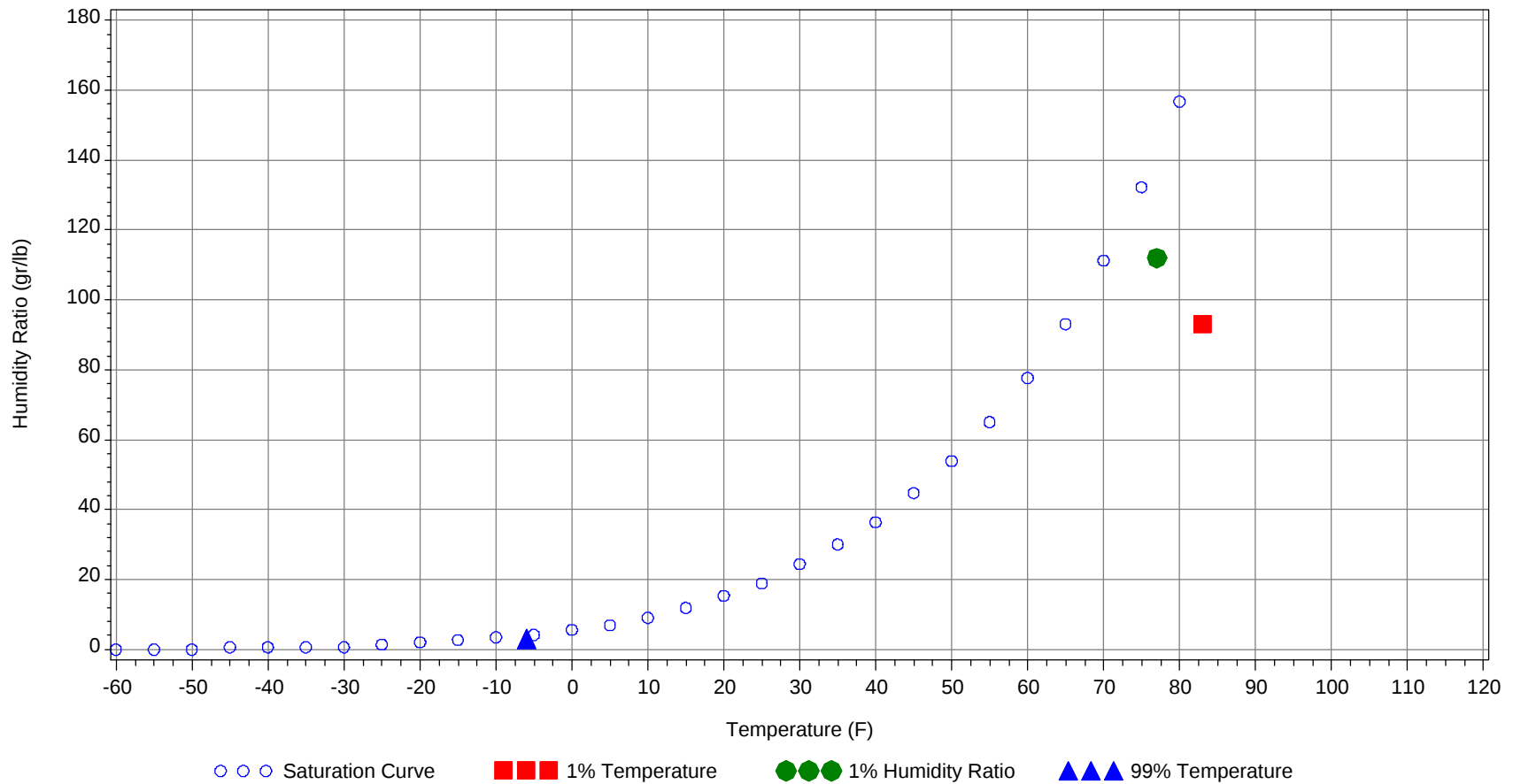
Average Annual Climate



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	83.0		70		93.0	34.6
99.0% Dry Bulb	-6.0				3.0	-1.0
1.0% Humidity Ratio	112.0	77.0	72	70.0		36.1

Dry-Bulb Temperature Hours For An Average Year

Temperature Range (°F)	January					February					March				
	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															
80/ 84												0	0	0	63
75/ 79												1	0	1	61.2
70/ 74											0	2	0	2	60.4
65/ 69		0		0	60.3						0	1	1	2	55.7
60/ 64	1	1	1	3	56.7	0	0		0	54.5	1	4	2	7	52.5
55/ 59	1	2	2	5	51	0	1	0	1	47.9	4	9	6	19	48.2
50/ 54	4	4	3	11	48.3	2	3	2	7	44.1	6	14	10	30	45.4
45/ 49	6	8	5	19	42.2	4	9	6	19	41	10	24	14	48	40.9
40/ 44	9	12	9	30	38	6	11	5	22	37.6	12	29	19	60	37.3
35/ 39	25	29	27	81	33.9	19	31	28	78	33.9	38	49	48	135	33.8
30/ 34	37	44	42	123	29.8	30	37	35	102	29.7	45	44	50	139	29.3
25/ 29	35	35	36	106	24.6	29	36	37	102	24.4	37	32	40	109	24.1
20/ 24	20	23	22	65	19.9	24	26	26	76	19.8	26	15	21	62	19.7
15/ 19	27	32	30	89	15.7	26	29	30	85	15.5	28	13	19	60	15.4
10/ 14	20	20	21	61	10.5	23	19	21	63	10.4	16	7	9	32	10.7
5/ 9	15	14	15	44	5.8	17	12	15	44	5.9	11	2	4	17	6.2
0/ 4	17	12	15	44	0.8	14	6	10	30	0.9	8	1	3	12	1.2
-5/ -1	7	5	6	18	-3.5	8	2	4	14	-3.4	3	0	1	4	-3.3
-10/ -6	10	4	7	21	-8	8	2	3	13	-7.6	2	0	1	3	-7.8
-15/-11	5	2	3	10	-12.3	4	1	1	6	-12.4	1		0	1	-12.3
-20/-16	5	1	3	9	-17	3	0	1	4	-17	1			1	-16.9
-25/-21	3	0	1	4	-22.1	2		0	2	-21.7	0			0	-21.3
-30/-26	2	0	0	2	-27	1		0	1	-26.6					
-35/-31	0	0	0	0	-31.6	0			0	-32					
-40/-36	0			0	-37	0			0	-35.2					
-45/-41	0			0	-41.7										

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															
90/ 94												1	0	1	72.4
85/ 89		0	0	0	64.8		1	0	1	69.4	0	6	2	8	71.7
80/ 84		2	0	2	63	0	8	2	10	67.3	0	28	8	36	69.1
75/ 79	0	4	1	5	60.7	1	20	7	28	64	7	45	20	72	66.5
70/ 74	1	9	3	13	57.6	6	36	16	58	60.6	25	61	43	129	64
65/ 69	2	8	5	15	55.1	11	33	20	64	58.2	33	43	40	116	61.4
60/ 64	7	20	12	39	52	28	48	38	114	55.3	53	36	55	144	58.3
55/ 59	11	30	18	59	48.3	37	45	45	127	51.5	53	15	38	106	54
50/ 54	16	38	26	80	44.9	47	33	47	127	47.9	37	5	23	65	50
45/ 49	30	49	45	124	41.5	52	19	46	117	43.7	20	0	7	27	45.6
40/ 44	34	33	38	105	38.2	32	4	18	54	39.8	7		1	8	41.3
35/ 39	54	31	49	134	34.2	22	1	8	31	35.9	4		1	5	36.8
30/ 34	47	12	30	89	29.9	10	0	1	11	31.7	0			0	32.5
25/ 29	26	4	10	40	25.1	2		0	2	27.3					
20/ 24	8	1	2	11	20.8	0			0	22					
15/ 19	3	0	1	4	16.4										
10/ 14	1		0	1	11.9										
5/ 9															
0/ 4															
-5/ -1															
-10/ -6															
-15/-11															
-20/-16															
-25/-21															
-30/-26															
-35/-31															
-40/-36															
-45/-41															

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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							0		0	78					
90/ 94		2	0	2	75.5		2	0	2	74.7		0		0	70.6
85/ 89		12	3	15	72.9		9	2	11	72.1		3	0	3	71.9
80/ 84	2	56	18	76	70.5	2	45	11	58	70.4	0	15	4	19	69.8
75/ 79	16	78	42	136	67.9	9	75	31	115	67.8	4	32	10	46	67.1
70/ 74	52	67	65	184	65.5	43	74	64	181	65.3	16	53	28	97	64
65/ 69	51	23	46	120	62.9	49	28	51	128	62.8	22	42	31	95	61.1
60/ 64	63	10	50	123	59.6	64	13	51	128	59.5	42	51	52	145	57.6
55/ 59	37	1	16	54	55.1	40	1	22	63	55.2	48	28	47	123	53.5
50/ 54	18		6	24	51	24		11	35	51.2	41	12	33	86	49.5
45/ 49	8		1	9	46.7	14		4	18	46.3	31	3	19	53	45.1
40/ 44	1			1	42.6	4		0	4	42	17	1	9	27	40.8
35/ 39	0			0	38	1			1	37.8	13		5	18	36.9
30/ 34						0			0	34	5		1	6	32
25/ 29											1		0	1	26.9
20/ 24											0			0	23.3
15/ 19															
10/ 14															
5/ 9															
0/ 4															
-5/ -1															
-10/ -6															
-15/-11															
-20/-16															
-25/-21															
-30/-26															
-35/-31															
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Dry-Bulb Temperature Hours For An Average Year

Temperature Range (°F)	October					November					December				
	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															
80/ 84		1		1	66.5										
75/ 79	0	6	1	7	64										
70/ 74	2	15	5	22	62	0	1		1	58					
65/ 69	6	20	8	34	58.9	1	4	1	6	57.4	1	0	0	1	57.3
60/ 64	17	36	24	77	55.8	4	12	7	23	53.7	0	1	1	2	55.9
55/ 59	27	45	31	103	51.7	10	16	11	37	50.9	2	2	2	6	51.6
50/ 54	40	50	49	139	47.6	16	27	17	60	46.7	5	8	5	18	47.1
45/ 49	49	45	53	147	43.1	31	42	34	107	42.4	10	15	12	37	42.5
40/ 44	30	20	30	80	39.1	27	36	32	95	38.2	15	22	13	50	38.2
35/ 39	39	10	28	77	35.3	46	49	49	144	34.2	37	47	45	129	34.2
30/ 34	22	1	14	37	30.9	41	32	45	118	29.9	44	44	46	134	29.9
25/ 29	12	0	5	17	26.1	30	14	27	71	25	37	40	41	118	24.6
20/ 24	4		1	5	21.5	16	4	9	29	20.7	23	22	24	69	20.1
15/ 19	1		0	1	18.1	12	2	5	19	16.4	26	22	23	71	16
10/ 14						4	0	1	5	11.6	18	12	14	44	10.8
5/ 9						1	0	0	1	6.8	12	7	8	27	6.1
0/ 4						1		0	1	1.4	6	4	6	16	1.3
-5/ -1											4	1	3	8	-3.4
-10/ -6											5	1	3	9	-7.6
-15/-11											3	0	2	5	-12.1
-20/-16											2	0	1	3	-16.6
-25/-21											1	0	0	1	-22.3
-30/-26											0			0	-26.9
-35/-31											0			0	-31.4
-40/-36											0			0	-36
-45/-41															

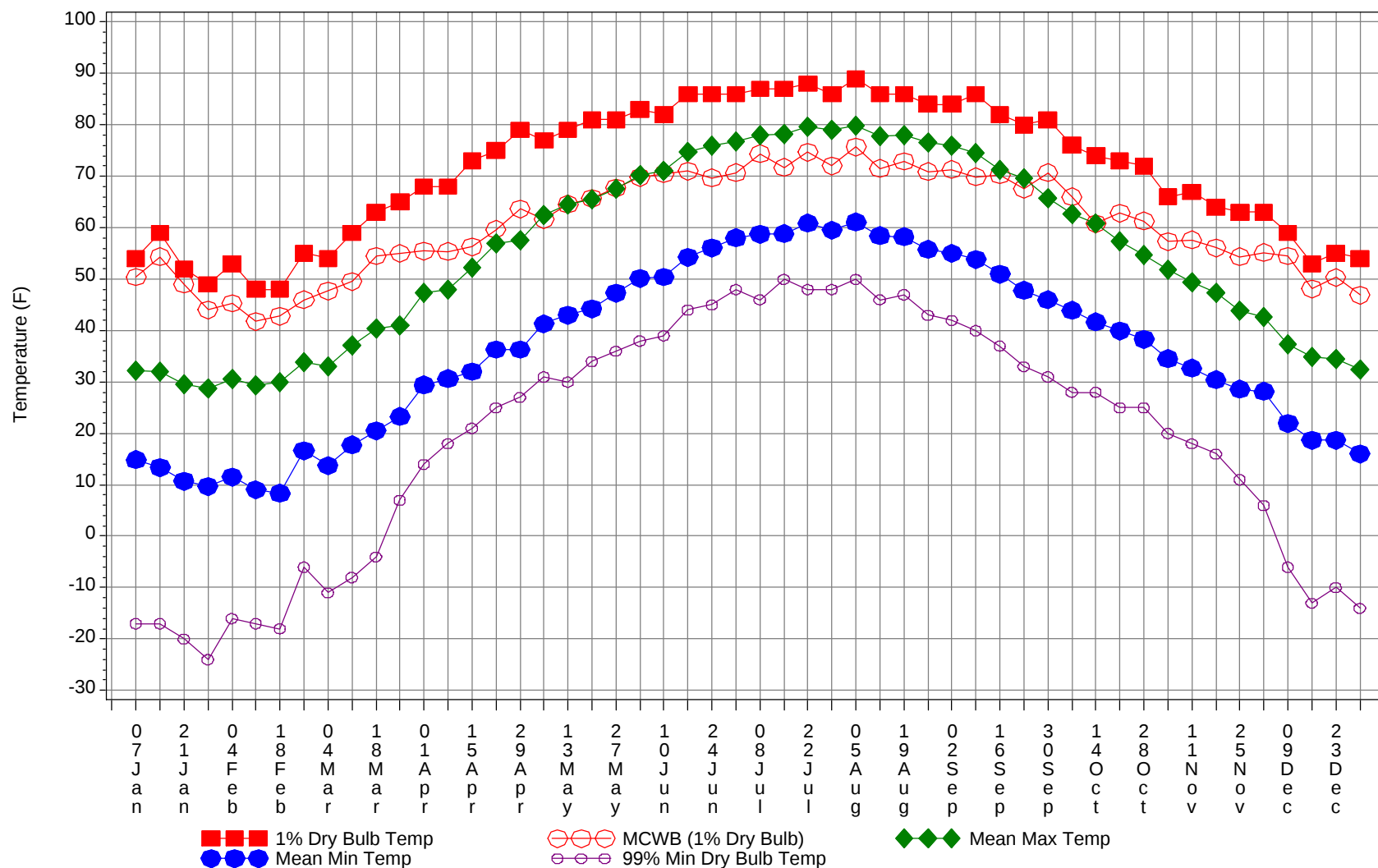
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

Dry-Bulb Temperature Hours For An Average Year

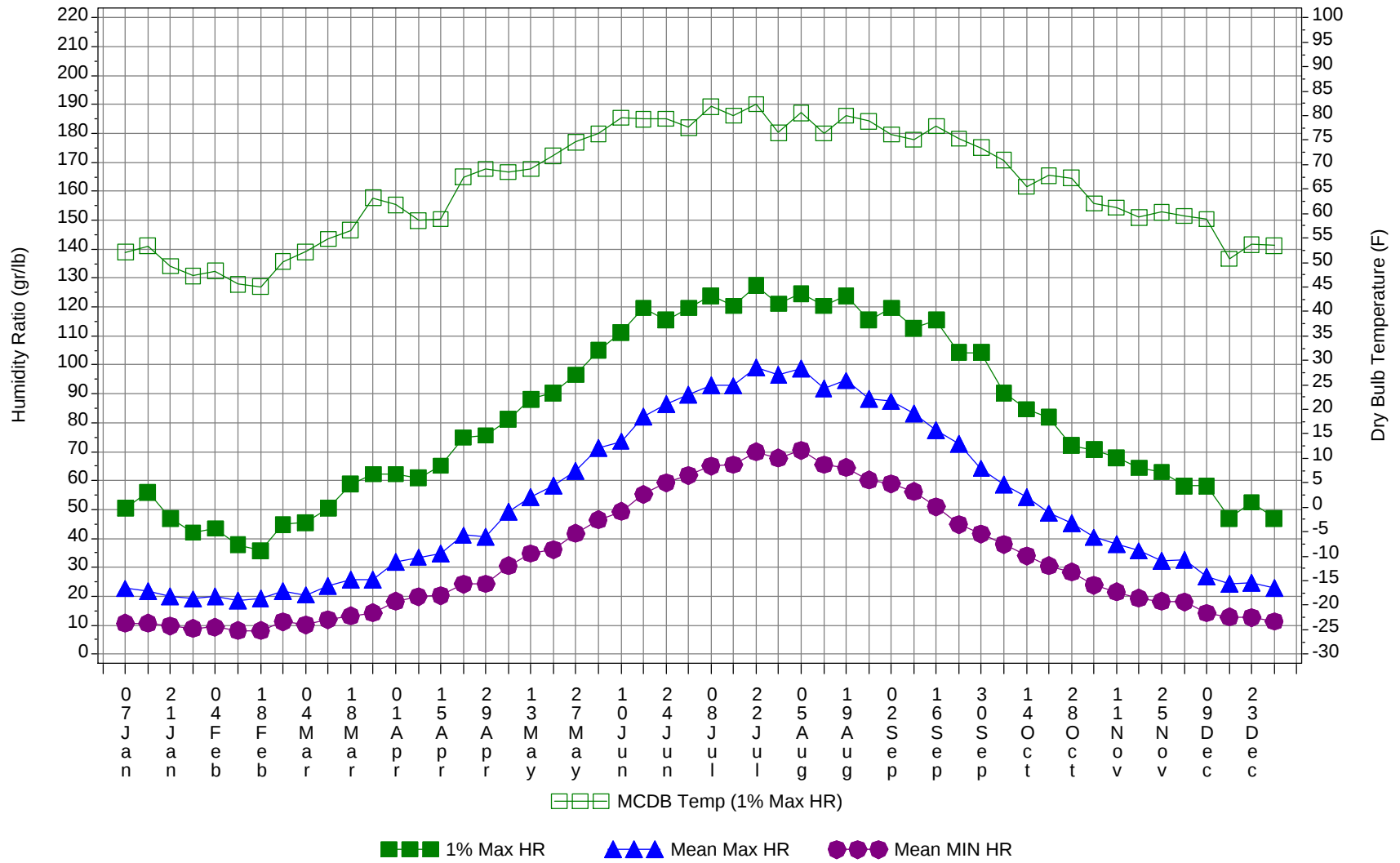
	Annual				
Temperature Range (° F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (° F)
95/ 99		0		0	78
90/ 94		5	1	6	74.3
85/ 89	0	31	7	38	72.2
80/ 84	4	153	43	200	69.9
75/ 79	37	258	111	406	67.1
70/ 74	145	316	223	684	64.2
65/ 69	175	202	201	578	61.2
60/ 64	279	231	292	802	57.4
55/ 59	267	196	238	701	52.5
50/ 54	255	192	233	680	47.9
45/ 49	264	216	247	727	42.9
40/ 44	193	167	176	536	38.6
35/ 39	298	249	288	835	34.3
30/ 34	282	215	265	762	29.8
25/ 29	210	162	197	569	24.6
20/ 24	122	92	106	320	20
15/ 19	124	99	110	333	15.7
10/ 14	83	60	67	210	10.6
5/ 9	56	35	42	133	6
0/ 4	46	22	34	102	0.9
-5/ -1	22	9	13	44	-3.4
-10/ -6	25	7	14	46	-7.8
-15/-11	13	3	6	22	-12.3
-20/-16	11	1	5	17	-16.9
-25/-21	6	0	2	8	-22
-30/-26	4	0	0	4	-26.9
-35/-31	1	0	0	1	-31.7
-40/-36	0			0	-36.1
-45/-41	0			0	-41.7

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Annual Summary of Temperatures



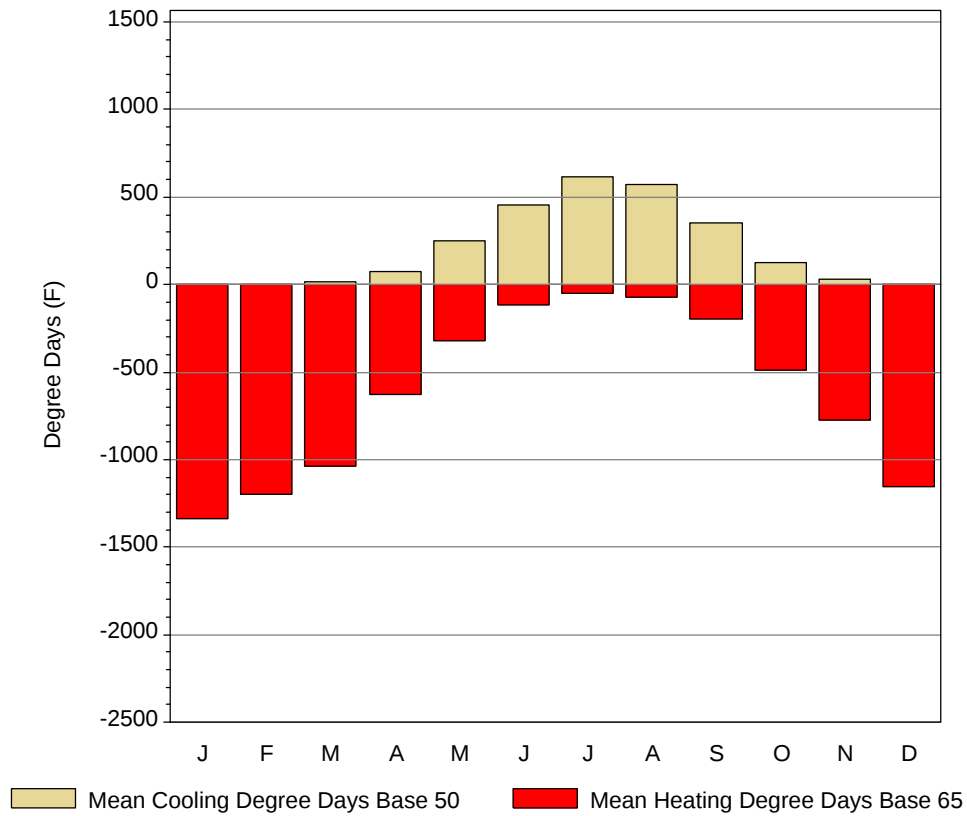
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

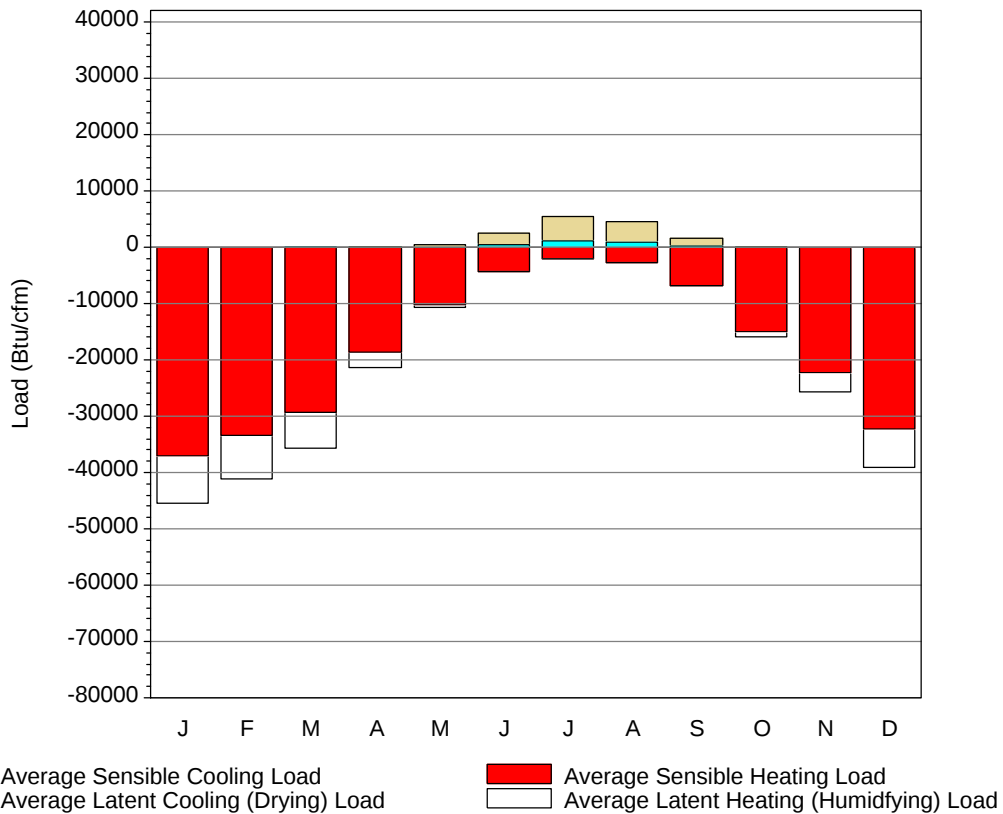
Week Ending	1.0% Temp (°F)	MCWB@ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB@ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	54	50.4	32.1	14.9	-17	50.4	52.1	22.7	10.7
14-Jan	59	54.3	31.9	13.3	-17	56	53.4	21.9	10.6
21-Jan	52	49	29.5	10.7	-20	46.9	49.3	20	9.7
28-Jan	49	44	28.7	9.7	-24	42	47.3	19.1	8.9
4-Feb	53	45.3	30.6	11.5	-16	43.4	48.3	19.9	9.3
11-Feb	48	41.8	29.4	9	-17	37.8	45.6	18.5	8.2
18-Feb	48	42.8	29.9	8.3	-18	35.7	45.1	19.2	8.1
25-Feb	55	46	33.8	16.6	-6	44.8	50.2	21.7	11.2
4-Mar	54	47.7	33.1	13.7	-11	45.5	52.2	20.5	10.1
11-Mar	59	49.5	37.2	17.7	-8	50.4	54.8	23.7	11.9
18-Mar	63	54.5	40.3	20.5	-4	58.8	56.6	25.8	13.2
25-Mar	65	55	41	23.3	7	62.3	63.2	25.8	14.3
1-Apr	68	55.5	47.4	29.4	14	62.3	61.8	32	18.2
8-Apr	68	55.4	47.9	30.6	18	60.9	58.6	33.5	19.9
15-Apr	73	56.3	52.3	32	21	65.1	58.9	34.9	20.3
22-Apr	75	59.7	57	36.3	25	74.9	67.5	41.1	24.2
29-Apr	79	63.6	57.6	36.3	27	75.6	69.1	40.6	24.3
6-May	77	61.6	62.5	41.3	31	81.2	68.5	49.2	30.5
13-May	79	64.6	64.5	43	30	88.2	69.1	54.4	34.8
20-May	81	65.7	65.5	44.2	34	90.3	71.8	58.2	36.2
27-May	81	67.7	67.5	47.3	36	96.6	74.6	63.4	41.8
4-Jun	83	69.8	70.3	50.1	38	105	76.3	71.4	46.4
10-Jun	82	70.5	71	50.4	39	111.3	79.6	73.6	49.3
17-Jun	86	71	74.8	54.2	44	119.7	79.3	82.2	55.2
24-Jun	86	69.7	75.9	56.1	45	115.5	79.4	86.5	59.2
1-Jul	86	70.7	76.8	58	48	119.7	77.6	89.7	61.8
8-Jul	87	74.4	78	58.7	46	123.9	81.9	93.1	65
15-Jul	87	71.7	78.2	58.8	50	120.4	80	92.8	65.5
22-Jul	88	74.7	79.7	60.9	48	127.4	82.4	99.2	70
29-Jul	86	72	79	59.5	48	121.1	76.5	96.7	67.8
5-Aug	89	75.7	79.8	61.1	50	124.6	80.6	98.7	70.4
12-Aug	86	71.5	77.7	58.4	46	120.4	76.4	92	65.5
19-Aug	86	72.9	78.1	58.2	47	123.9	80	94.6	64.5
26-Aug	84	70.9	76.5	55.8	43	115.5	78.9	88.3	60.1
2-Sep	84	71.3	75.9	55	42	119.7	76.2	87.4	58.9
9-Sep	86	69.9	74.6	53.8	40	112.7	75.1	83.2	56.2
16-Sep	82	70.3	71.2	51	37	115.5	77.9	77.5	51
23-Sep	80	67.5	69.6	47.8	33	104.3	75.3	72.6	44.8
30-Sep	81	70.7	65.8	46	31	104.3	73.5	64.2	41.6
7-Oct	76	66	62.7	43.9	28	90.3	70.9	58.6	38
14-Oct	74	60.8	60.8	41.7	28	84.7	65.5	54.4	34
21-Oct	73	62.8	57.3	39.9	25	81.9	67.8	48.7	30.6
28-Oct	72	61.3	54.7	38.3	25	72.1	67.3	45.3	28.4
4-Nov	66	57.3	51.9	34.5	20	70.7	62.1	40.4	23.9
11-Nov	67	57.6	49.4	32.7	18	67.9	61.2	38.1	21.5
18-Nov	64	56.1	47.3	30.4	16	64.4	59.2	35.7	19.4
25-Nov	63	54.3	43.9	28.6	11	63	60.3	32.2	18.2
2-Dec	63	55.2	42.6	28.2	6	58.1	59.5	32.5	18.1
9-Dec	59	54.5	37.4	21.9	-6	58.1	58.9	26.7	14.2
16-Dec	53	48.1	34.8	18.7	-13	46.9	50.8	24.3	12.8
23-Dec	55	50.3	34.5	18.7	-10	52.5	53.7	24.6	12.7
31-Dec	54	46.9	32.5	16	-14	46.9	53.5	23	11.3

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	3.3	0	1333.4
FEB	1.3	0	1200.4
MAR	16.5	1.4	1035.6
APR	73.6	8.8	630.7
MAY	248.5	42.1	317.8
JUN	454	114.3	118.6
JUL	613.6	197.6	50.4
AUG	573.9	173.2	68.1
SEP	355.4	73.4	197.7
OCT	128.8	11.6	486.8
NOV	32.5	0.7	770.4
DEC	4.1	0.1	1151.6
ANN	2505.5	623.2	7361.5

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	0	-36972	0	-8439
FEB	0	-33313	0	-7864
MAR	3	-29239	0	-6481
APR	29	-18589	5	-2861
MAY	133	-10215	306	-442
JUN	515	-4374	1894	-16
JUL	1047	-2136	4406	-1
AUG	846	-2711	3776	-1
SEP	269	-6734	1286	-77
OCT	13	-14878	68	-1018
NOV	0	-22287	0	-3477
DEC	0	-32259	0	-6726
ANN	2855	-213707	11741	-37403

Station Information		Shading Geometry in Dimensionless Units	
City, State, WBAN	SYRACUSE, NY 14771	Window:	1.000
Lat, Lon, Elev	43.12N 76.12W 407ft	Overhang:	0.623
Press, Stn_Type	14.5psia Secondary	Vert Gap:	0.330

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	520	780	1100	1460	1750	1920	1920	1640	1260	850	500	410	1180
	Std.Dev.	34	53	72	103	167	118	104	80	105	67	38	33	25
	Minimum	460	670	990	1230	1400	1700	1670	1480	970	730	420	350	1130
	Maximum	610	920	1260	1630	2090	2140	2060	1810	1430	1090	580	480	1220
	Diffuse	360	500	610	690	790	840	800	730	590	440	350	300	580
Clear Day	Global	780	1140	1650	2160	2520	2660	2570	2250	1770	1240	820	660	1690
NORTH	Global	190	270	350	430	540	620	590	480	360	270	190	160	370
	Diffuse	190	270	350	420	490	530	510	450	360	270	190	160	350
Clear Day	Global	170	230	310	410	580	690	630	460	330	240	170	140	370
EAST	Global	340	490	680	870	1000	1080	1100	960	770	550	320	260	700
	Diffuse	240	340	430	510	580	620	610	550	450	320	230	190	420
Clear Day	Global	620	850	1130	1370	1500	1540	1500	1380	1170	890	650	540	1100
SOUTH	Global	760	910	1000	950	870	830	880	970	1030	970	630	580	870
	Diffuse	360	460	500	530	560	580	580	560	500	410	310	290	470
Clear Day	Global	1840	1980	1880	1520	1190	1030	1080	1340	1680	1870	1810	1730	1580
WEST	Global	340	490	690	880	1010	1100	1100	980	790	560	320	260	710
	Diffuse	240	340	430	510	590	630	620	560	450	330	230	190	430
Clear Day	Global	620	850	1130	1370	1500	1540	1500	1380	1170	890	650	540	1100

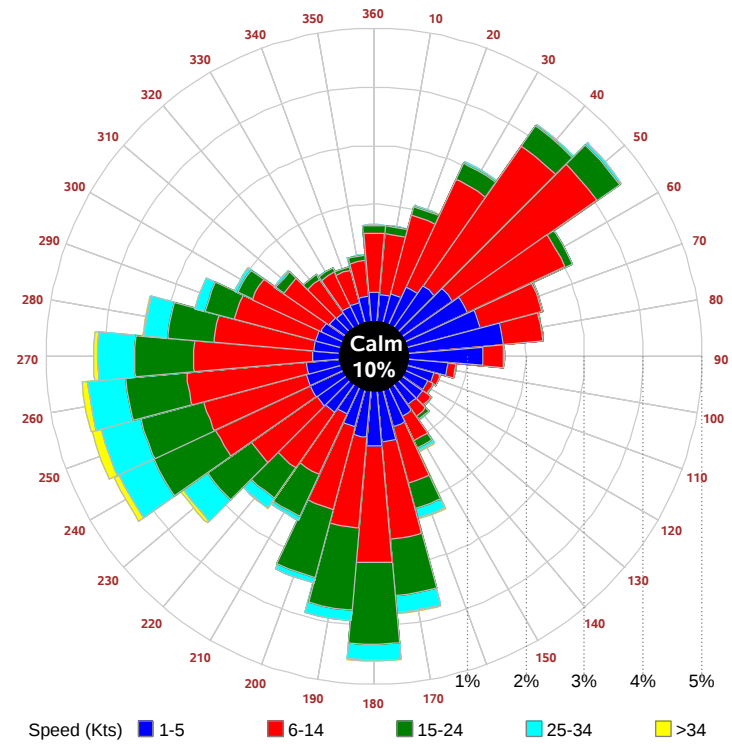
Average Annual Solar Radiation - Nearest Available Site Source: National Renewable Energy Laboratory, Golden CO, 1995

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	340	530	770	1040	1260	1390	1390	1180	890	580	330	270	830
NORTH	Unshaded	130	190	240	290	360	410	390	320	250	180	130	110	250
	Shaded	110	160	210	250	310	350	330	280	220	160	110	91	210
EAST	Unshaded	240	340	480	620	710	770	780	680	550	380	220	180	500
	Shaded	200	290	400	510	580	630	640	570	460	330	190	150	410
SOUTH	Unshaded	570	670	700	630	550	520	540	630	710	700	470	430	590
	Shaded	540	600	540	390	330	350	350	370	490	600	440	410	450
WEST	Unshaded	240	340	490	620	720	780	780	700	560	390	220	180	500
	Shaded	200	290	410	520	590	640	650	580	470	330	190	150	420

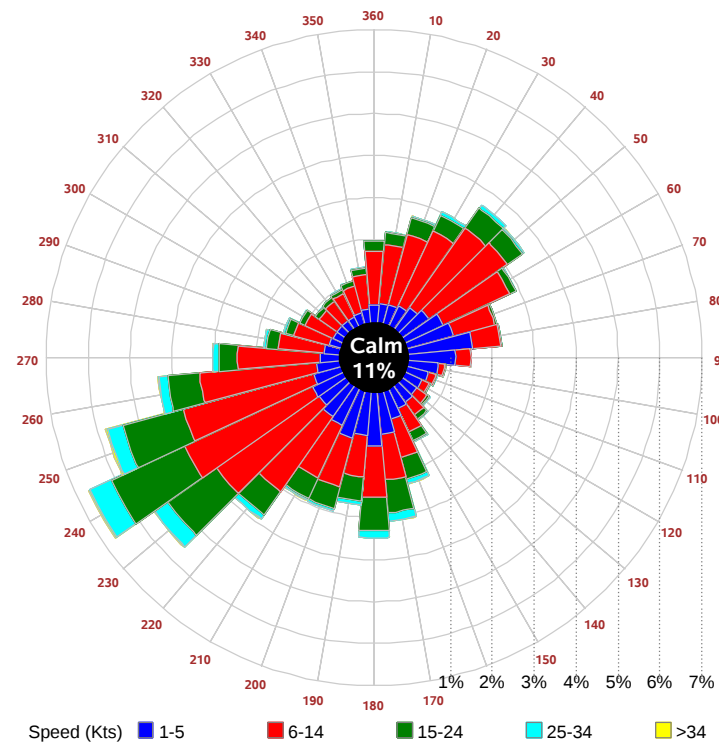
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS Percentage Uncertainty = 9												
		March					June					
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm	
HORIZ.	M.Clear	36	68	77	61	25	48	82	98	93	68	
	M.Cloudy	21	41	46	38	16	30	52	67	65	45	
NORTH	M.Clear	9	13	14	13	8	16	16	16	16	14	
	M.Cloudy	9	15	17	14	7	13	17	19	19	15	
EAST	M.Clear	71	56	14	13	8	80	72	31	16	14	
	M.Cloudy	23	28	17	14	7	34	40	26	19	15	
SOUTH	M.Clear	39	75	86	67	27	12	36	52	47	24	
	M.Cloudy	16	35	39	32	12	11	25	37	35	19	
WEST	M.Clear	9	13	22	65	63	12	16	16	51	79	
	M.Cloudy	9	15	19	31	21	11	17	19	37	43	
M.Clear	(% hrs)	25	23	22	22	24	36	35	30	31	32	

		Sept					Dec					
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm	
HORIZ.	M.Clear	26	63	79	74	45	10	33	39	23	0	
	M.Cloudy	16	37	51	48	28	7	20	23	14	0	
NORTH	M.Clear	8	13	15	15	11	4	9	10	7	0	
	M.Cloudy	7	14	17	16	11	3	9	10	7	0	
EAST	M.Clear	63	68	28	15	11	29	35	10	7	0	
	M.Cloudy	22	31	22	16	11	8	14	10	7	0	
SOUTH	M.Clear	21	58	77	70	39	27	73	82	53	0	
	M.Cloudy	10	28	43	40	21	7	22	25	16	0	
WEST	M.Clear	8	13	15	51	72	4	9	19	40	0	
	M.Cloudy	7	14	17	31	32	3	9	12	13	0	
M.Clear	(% hrs)	33	33	28	27	33	11	14	13	12	13	

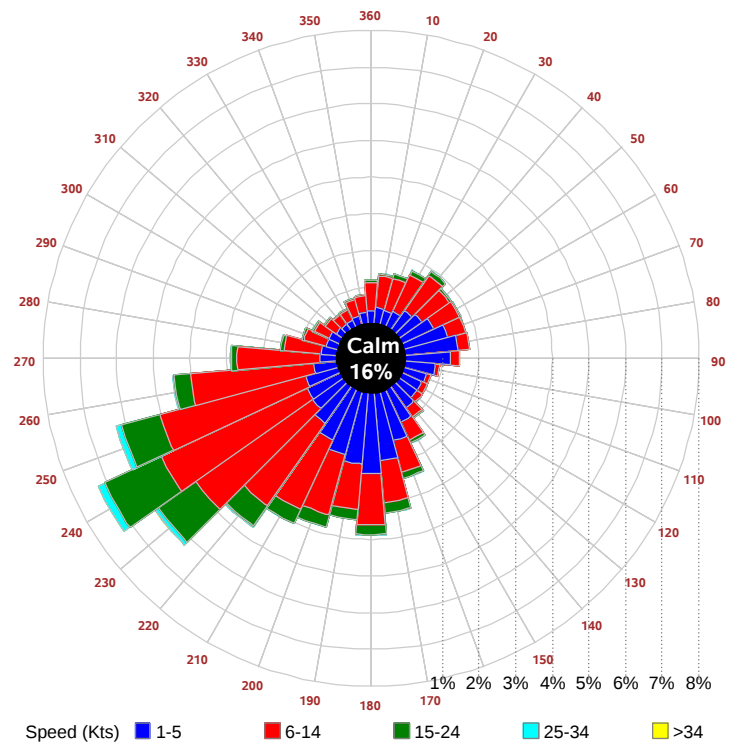
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November

