VALENCIA, SP	
Latitude = 39.49 N	Station ID = ICAO_LEVC
Longitude = 0.48 W	Elevation = 225 Feet
Period of Record = 1988 To 2017	Average Pressure = 29.82 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	99	67	51	15.6	W
0.4% Occurrence	92	69	73	10.9	ESE
1.0% Occurrence	89	71	85	10.1	E
2.0% Occurrence	87	71	90	9.9	E
Mean Daily Range	18	-	-	-	W
97.5% Occurrence	39	37	28	5	W
99.0% Occurrence	36	34	25	4.9	W
99.6% Occurrence	34	32	22	5	W
Median of Extreme Lows	29	27	16	5.2	W

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	78	85	128	8.6	E
0.4% Occurrence	76	84	121	8.1	E
1.0% Occurrence	75	83	117	7.7	E
2.0% Occurrence	74	82	113	7.3	E

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	133	82	0.88	6.9	E
0.4% Occurrence	127	81	0.85	6.5	E
1.0% Occurrence	123	81	0.82	6.5	E
2.0% Occurrence	119	80	0.79	6.1	E

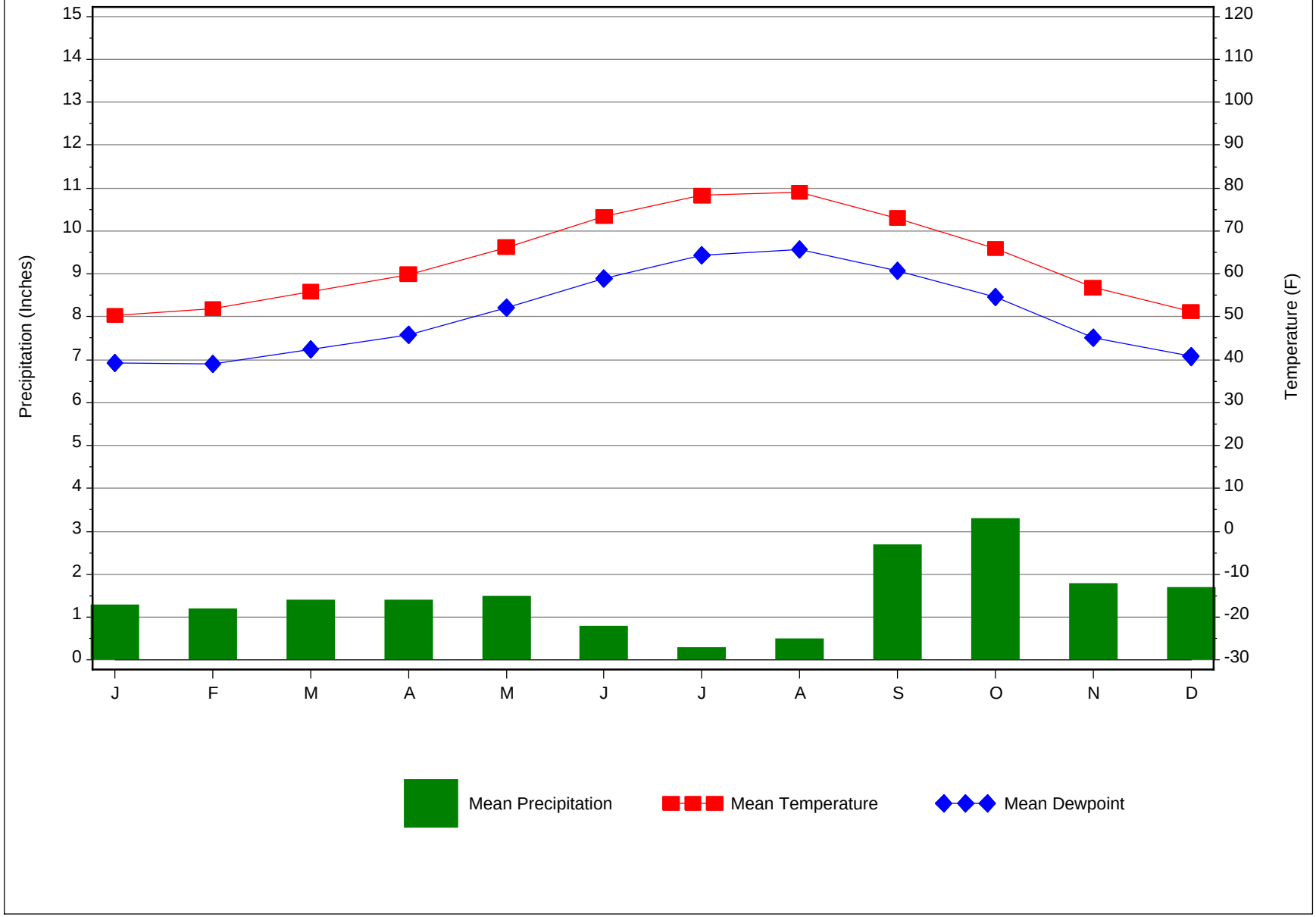
Air Conditioning/ Humid Area Criteria	**Threshold**	**T ≥ 93°F**	**T ≥ 80°F**	**Twb ≥ 73°F**	**Twb ≥ 67°F**
	# of Hours	28	1001	453	1792

Other Site Data

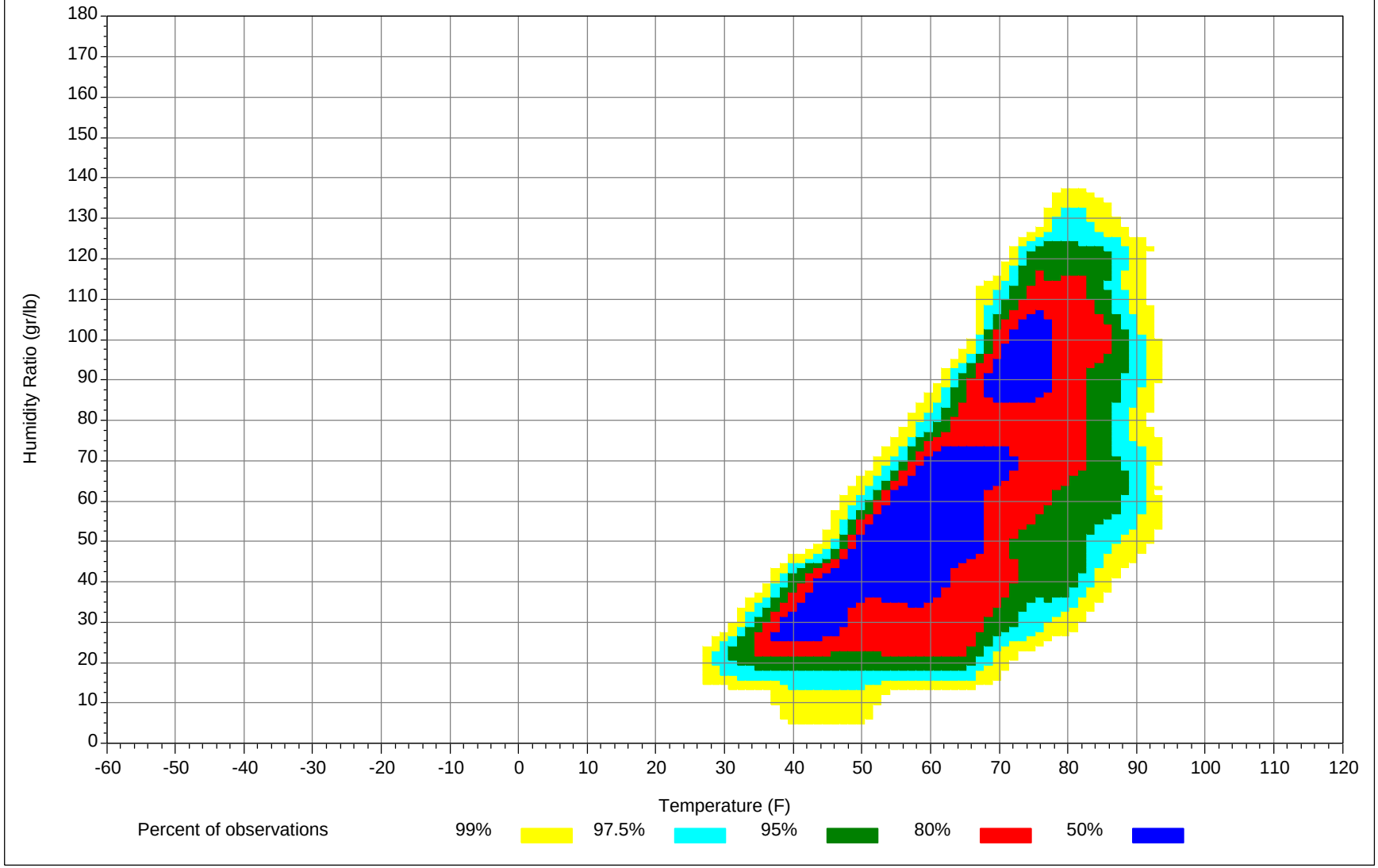
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
8	N/A	N/A	2.3 + 1.0
Ground Water Temperature (°F) 50 Foot Depth*	Frost Depth 50 Year Recurrence (in)	Ground Snow Load 50 Year Recurrence (lb/ft^2)	Average Annual Freeze-Thaw Cycles (#)
66	N/A	N/A	4

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

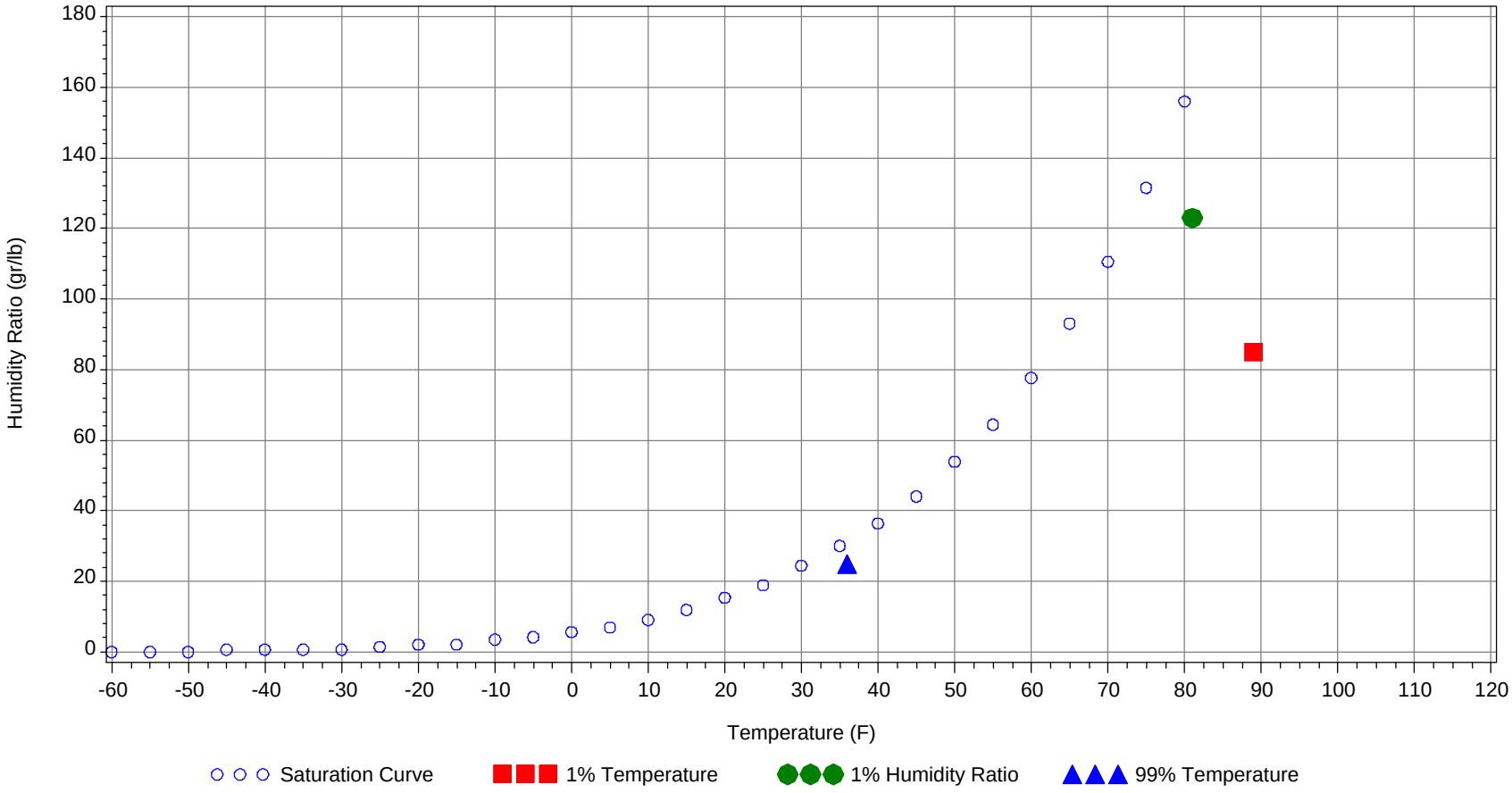
Average Annual Climate



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		71		85.0	34.5
99.0% Dry Bulb	36.0				25.0	12.4
1.0% Humidity Ratio	123.0	81.0	75.2	73.0		38.7

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)**
105/109															
100/104															
95/ 99															
90/ 94												0		0	61
85/ 89												0	0	0	61.1
80/ 84							0	0	0	59.6		2	1	3	59.8
75/ 79		1	0	1	55.7		2	1	3	57.5		9	3	12	58.1
70/ 74		6	1	7	55.6		7	3	10	55.3		23	10	33	55.6
65/ 69	1	16	6	23	53.8	1	22	10	33	53.4	1	42	21	64	54
60/ 64	7	44	22	73	51.5	5	44	25	74	51.1	9	64	46	119	52.6
55/ 59	19	65	51	135	49.4	18	58	53	129	49.2	35	57	82	174	50.9
50/ 54	39	51	76	166	47	47	46	72	165	47	75	36	58	169	47.9
45/ 49	63	35	56	154	43.5	63	28	41	132	43.1	79	13	22	114	43.7
40/ 44	58	18	25	101	39.5	50	12	15	77	39.1	38	2	4	44	39.3
35/ 39	48	10	10	68	35.3	30	4	4	38	34.8	10	0	1	11	34.5
30/ 34	12	3	2	17	30.5	9	1	0	10	29.8	2		0	2	29.5
25/ 29	1	0	0	1	24.6	1			1	24.4	0			0	27
20/ 24	0			0	20										

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)**
105/109							0	0	0	65.8					
100/104							0	0	0	65		0	0	0	66.4
95/ 99							0	0	0	64.5		1	1	2	67.2
90/ 94		0		0	61.5		1	0	1	65.2		8	2	10	67.4
85/ 89		0	0	0	63.1	0	5	2	7	63.7	0	28	8	36	67.7
80/ 84		3	1	4	60.3	0	19	5	24	62.8	1	75	32	108	67.4
75/ 79		17	5	22	58.3	0	61	22	83	61.7	12	78	71	161	66.1
70/ 74	0	45	16	61	57	5	76	54	135	60.8	60	38	82	180	64.6
65/ 69	3	65	38	106	55.4	33	53	76	162	59.5	91	10	33	134	62
60/ 64	20	61	76	157	53.9	86	24	64	174	57.3	60	3	10	73	58.5
55/ 59	73	36	73	182	52	86	6	19	111	53.6	16	0	1	17	54.5
50/ 54	93	10	26	129	48.5	32	2	4	38	49.2	1			1	49.3
45/ 49	42	2	4	48	44.3	6	0	0	6	44.2					
40/ 44	8	0	0	8	39.7	0			0	39.7					
35/ 39	0			0	36.9	0			0	38					
30/ 34															
25/ 29															
20/ 24															

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)**
105/109		0		0	66.5		0	0	0	67.5					
100/104		0	0	0	67.4		1	0	1	67		0		0	70
95/ 99		3	1	4	68		4	1	5	68.6		1	0	1	66.1
90/ 94	0	17	4	21	70.3	0	21	6	27	71.2		4	1	5	67.4
85/ 89	0	80	24	104	71.5	0	91	26	117	72.6		23	5	28	69
80/ 84	3	101	78	182	70.8	4	89	88	181	71.8	0	71	27	98	69
75/ 79	68	40	111	219	69.7	87	35	107	229	70.5	14	77	85	176	67.7
70/ 74	121	7	27	155	66.9	118	6	17	141	67.1	68	39	76	183	65.8
65/ 69	47	0	3	50	63	34	1	3	38	62.7	86	18	32	136	62.6
60/ 64	9	0	0	9	59.6	5	0	0	5	58.6	55	6	11	72	58.4
55/ 59	0			0	53	0			0	51.2	15	0	1	16	53.8
50/ 54											1		0	1	48.3
45/ 49											0			0	44
40/ 44															
35/ 39															
30/ 34															
25/ 29															
20/ 24															

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)**
105/109															
100/104															
95/ 99		0	0	0	63.7										
90/ 94		1	0	1	66.4										
85/ 89		4	1	5	65.3		0	0	0	64.8					
80/ 84	0	18	4	22	64.9		1	0	1	61.9					
75/ 79	1	53	19	73	64.3		7	1	8	60.1		0	0	0	60
70/ 74	7	70	60	137	62.8	1	25	6	32	58.5		5	1	6	57.5
65/ 69	38	52	74	164	60.7	4	50	23	77	56.9	2	21	6	29	55.1
60/ 64	93	34	62	189	58	23	65	62	150	54.8	7	53	25	85	52.5
55/ 59	79	13	25	117	53.6	57	51	72	180	51.8	23	68	61	152	50.2
50/ 54	24	2	4	30	49	67	27	46	140	48.1	54	50	73	177	47.5
45/ 49	5	0	1	6	43.4	53	10	22	85	43.5	63	28	49	140	43.7
40/ 44	2			2	38.1	24	3	6	33	39.2	50	14	24	88	39.3
35/ 39						10	1	1	12	34.7	36	7	8	51	35.2
30/ 34						2	0	0	2	30.2	12	2	1	15	30.4
25/ 29						0			0	25.2	2	0	0	2	25.1
20/ 24															

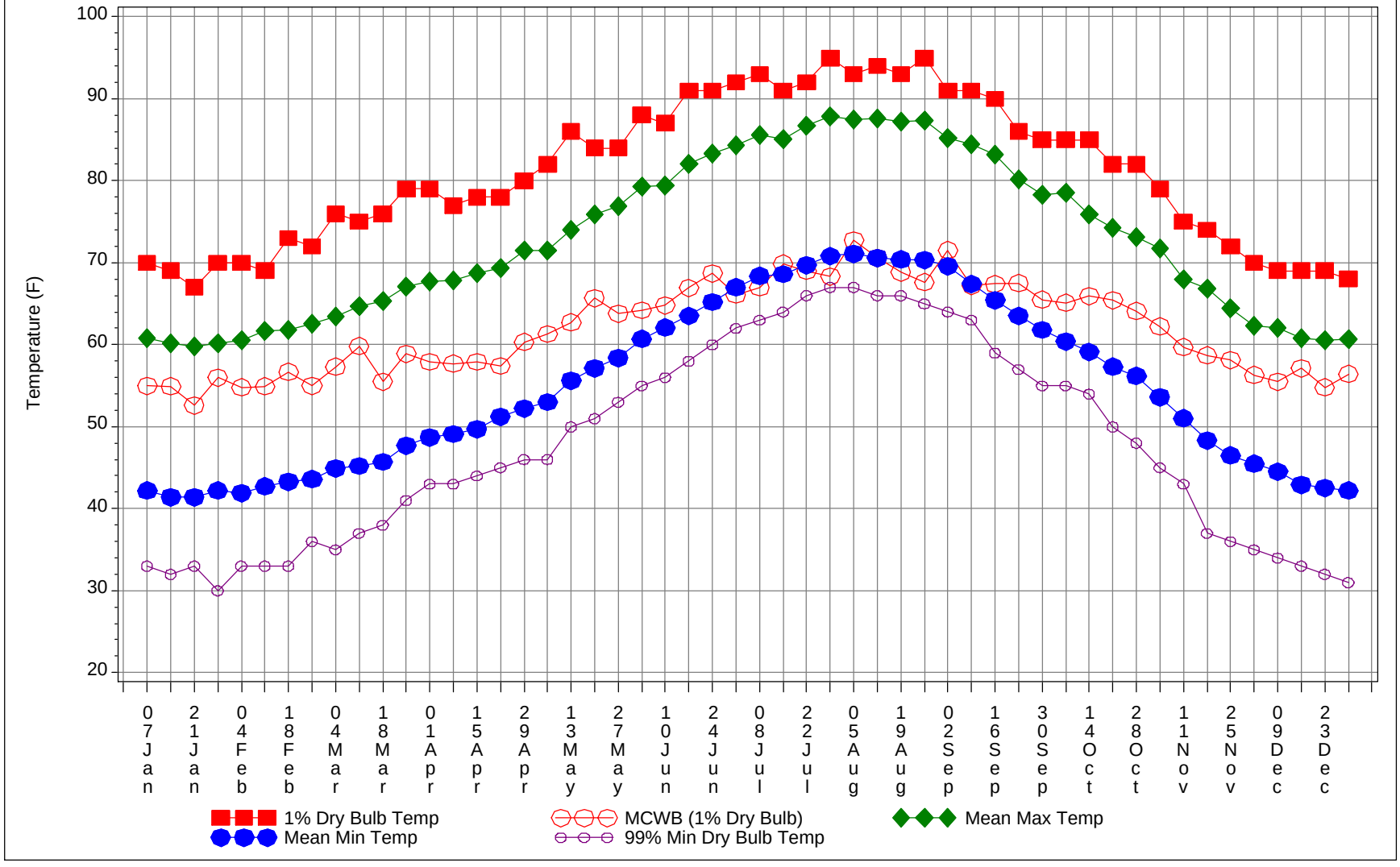
Caution: This summary reflects the typical distribtion of temperature in a typical year. It does not reflect the typical mositure distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

Dry-Bulb Temperature Hours For An Average Year

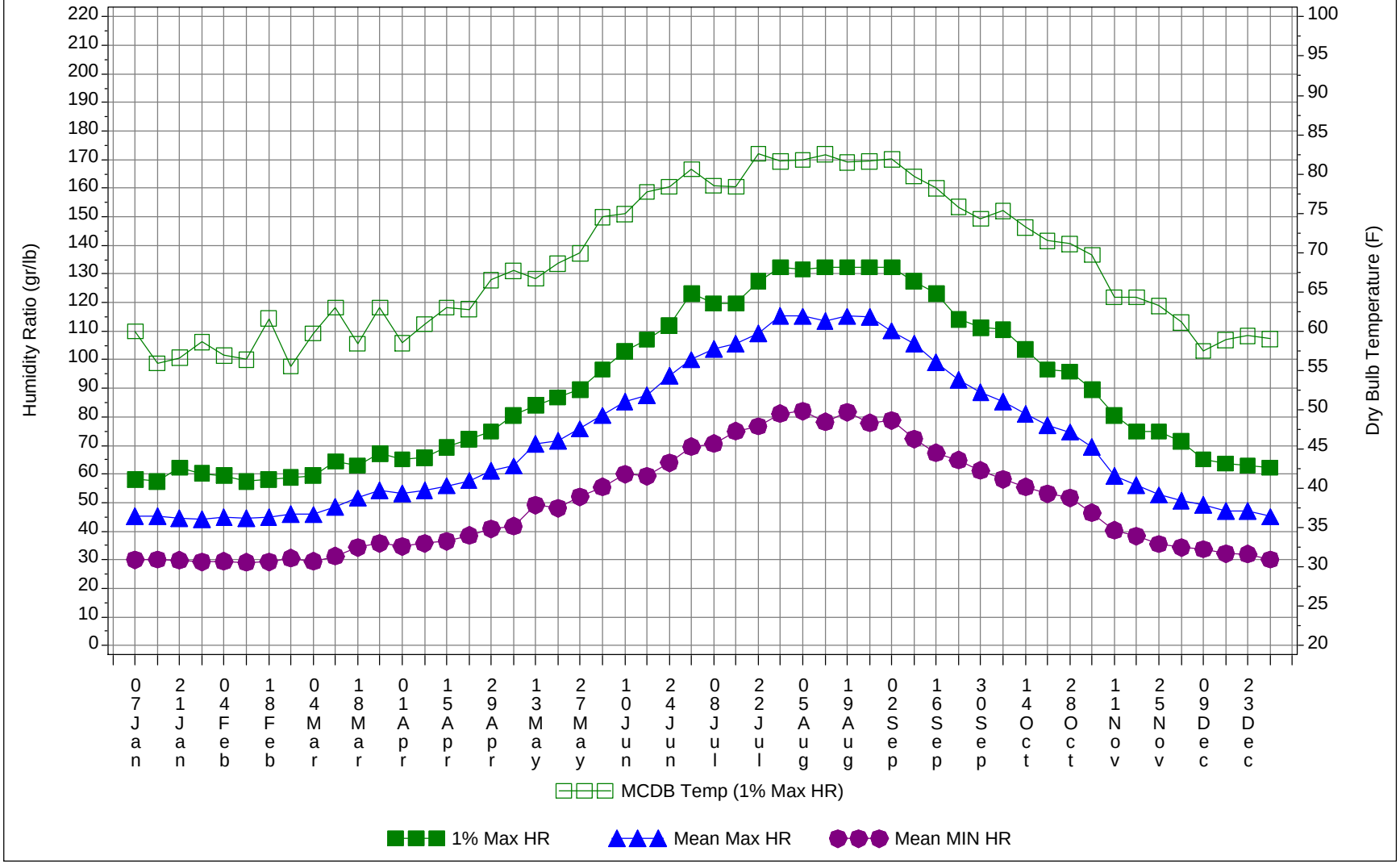
	Annual				
Temperature Range (°F)	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**
105/109		1	0	1	67
100/104		1	1	2	67
95/ 99		9	4	13	67.8
90/ 94	0	52	13	65	69.8
85/ 89	0	232	66	298	70.9
80/ 84	8	379	235	622	69.5
75/ 79	181	379	425	985	67.3
70/ 74	380	347	353	1080	63.7
65/ 69	339	351	324	1014	59.3
60/ 64	378	397	404	1179	55.2
55/ 59	420	354	439	1213	51.4
50/ 54	433	225	359	1017	47.7
45/ 49	374	116	195	685	43.6
40/ 44	230	50	74	354	39.3
35/ 39	135	22	24	181	35.1
30/ 34	36	5	4	45	30.3
25/ 29	4	0	0	4	24.8
20/ 24	0			0	20

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



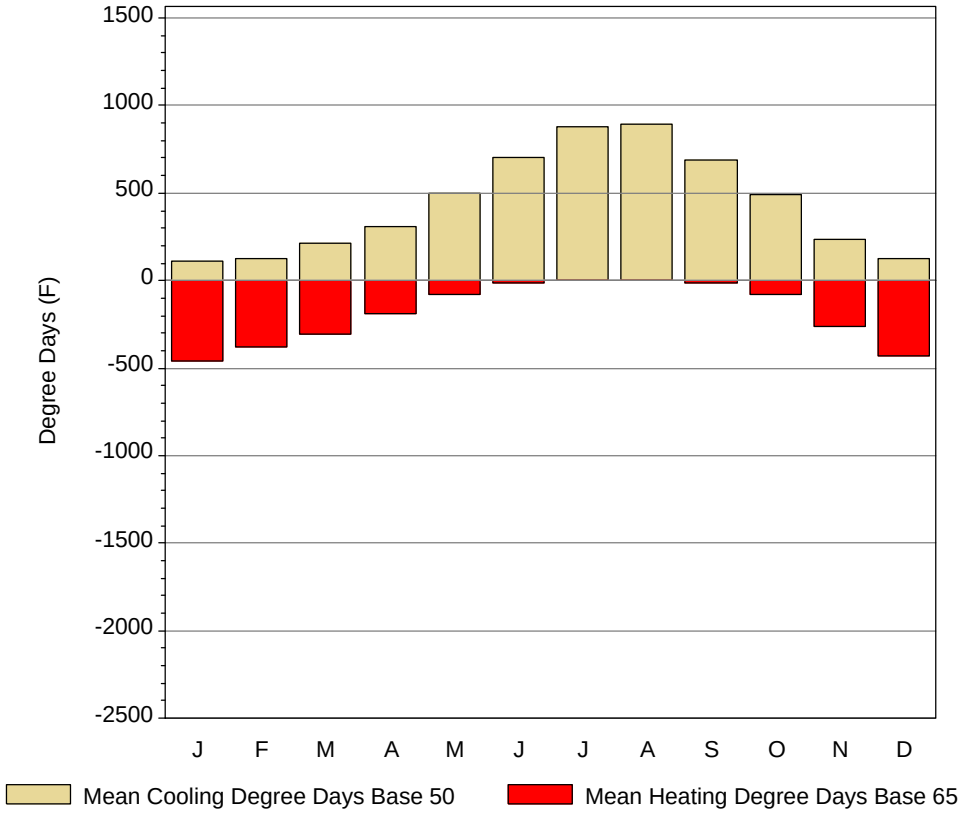
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

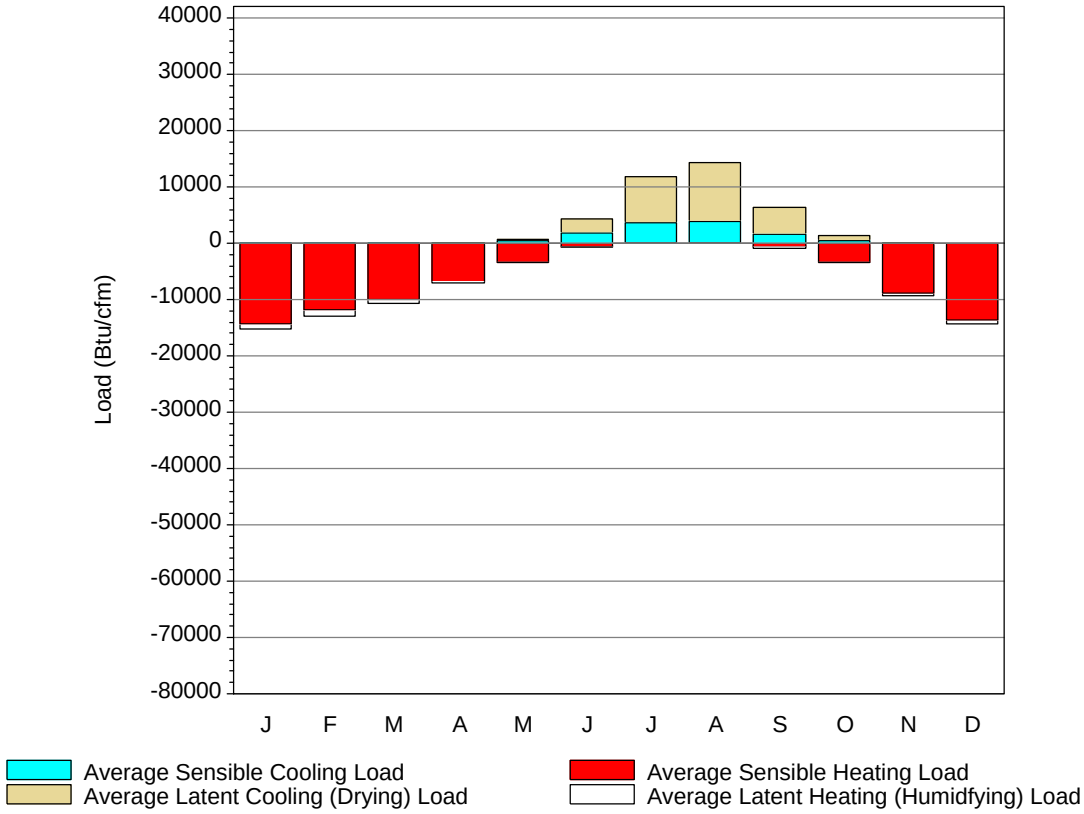
Week Ending	1.0% Temp (°F)	MCWB@ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB@ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	70	55	60.8	42.2	33	58.1	60	45.2	30
14-Jan	69	54.9	60.2	41.4	32	57.4	55.9	45.2	30.1
21-Jan	67	52.6	59.8	41.4	33	62.3	56.6	44.6	29.8
28-Jan	70	56	60.2	42.2	30	60.2	58.6	44.3	29.3
4-Feb	70	54.8	60.6	41.9	33	59.5	56.9	44.8	29.4
11-Feb	69	54.9	61.7	42.7	33	57.4	56.4	44.6	29.1
18-Feb	73	56.7	61.8	43.3	33	58.1	61.6	45	29.3
25-Feb	72	55	62.5	43.6	36	58.8	55.5	46.1	30.6
4-Mar	76	57.3	63.4	44.9	35	59.5	59.7	45.8	29.5
11-Mar	75	59.8	64.7	45.2	37	64.4	63	48.4	31.2
18-Mar	76	55.5	65.3	45.7	38	63	58.4	51.6	34.4
25-Mar	79	58.9	67.1	47.7	41	67.2	63	54.2	35.7
1-Apr	79	57.9	67.7	48.7	43	65.1	58.5	53.2	34.7
8-Apr	77	57.7	67.9	49.1	43	65.8	60.9	54.4	35.8
15-Apr	78	57.9	68.7	49.7	44	69.3	63	55.9	36.5
22-Apr	78	57.4	69.3	51.2	45	72.1	62.8	57.7	38.5
29-Apr	80	60.3	71.5	52.2	46	74.9	66.5	61.1	40.8
6-May	82	61.3	71.5	53	46	80.5	67.7	62.8	41.7
13-May	86	62.7	74	55.6	50	84	66.7	70.5	49.1
20-May	84	65.7	75.9	57.1	51	86.8	68.6	71.6	48.1
27-May	84	63.8	76.9	58.4	53	89.6	69.9	75.8	52.1
4-Jun	88	64.2	79.3	60.7	55	96.6	74.5	80.5	55.4
10-Jun	87	64.8	79.4	62.1	56	102.9	74.9	85.3	60
17-Jun	91	66.9	82.1	63.5	58	107.1	77.7	87.5	59.2
24-Jun	91	68.7	83.3	65.2	60	112	78.4	94.4	63.9
1-Jul	92	66.1	84.3	67	62	123.2	80.6	100	69.5
8-Jul	93	67	85.6	68.4	63	119.7	78.5	103.9	70.6
15-Jul	91	69.9	85.1	68.6	64	119.7	78.4	105.7	75
22-Jul	92	69	86.7	69.7	66	127.4	82.6	109.1	76.7
29-Jul	95	68.3	87.8	70.8	67	132.3	81.6	115.5	81.2
5-Aug	93	72.7	87.5	71.1	67	131.6	81.8	115.2	82
12-Aug	94	70.6	87.6	70.6	66	132.3	82.5	113.5	78.2
19-Aug	93	68.8	87.2	70.4	66	132.3	81.5	115.2	81.7
26-Aug	95	67.6	87.3	70.3	65	132.3	81.6	115	77.9
2-Sep	91	71.5	85.2	69.6	64	132.3	81.9	110.1	78.7
9-Sep	91	67.2	84.4	67.4	63	127.4	79.7	105.6	72.2
16-Sep	90	67.4	83.2	65.4	59	123.2	78.2	99.2	67.4
23-Sep	86	67.5	80.2	63.5	57	114.1	75.8	93	64.9
30-Sep	85	65.5	78.3	61.8	55	111.3	74.3	88.5	61.2
7-Oct	85	65.1	78.5	60.4	55	110.6	75.3	85.4	58.1
14-Oct	85	65.9	75.9	59.1	54	103.6	73.2	80.9	55.4
21-Oct	82	65.4	74.3	57.3	50	96.6	71.5	77.1	53.2
28-Oct	82	64.1	73.1	56.2	48	95.9	71.1	74.7	51.7
4-Nov	79	62.2	71.8	53.6	45	89.6	69.7	69.6	46.4
11-Nov	75	59.7	68	51	43	80.5	64.3	59.3	40.3
18-Nov	74	58.7	66.8	48.3	37	74.9	64.3	56	38.3
25-Nov	72	58.1	64.4	46.5	36	74.9	63.2	52.7	35.5
2-Dec	70	56.3	62.3	45.5	35	71.4	61.1	50.6	34.3
9-Dec	69	55.5	62	44.5	34	65.1	57.5	49.2	33.7
16-Dec	69	57.1	60.8	42.9	33	63.7	58.9	47.1	32.2
23-Dec	69	54.8	60.6	42.5	32	63	59.4	47.1	32
31-Dec	68	56.4	60.7	42.2	31	62.3	59	45.1	30.1

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	109.5	3.6	461.3
FEB	123.7	6.7	377.9
MAR	216.8	22.3	305.1
APR	305.5	39.2	191.8
MAY	501.9	116.2	80.2
JUN	701.3	263.9	12.6
JUL	875.9	411.5	0.7
AUG	897.1	432.5	0.4
SEP	690.2	253.2	13.1
OCT	494	107.7	79.9
NOV	233.7	19.3	264.8
DEC	124.1	3.3	430.8
ANN	5273.7	1679.4	2218.6

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	1	-14305	0	-912
FEB	6	-11894	0	-1036
MAR	50	-10043	0	-656
APR	74	-6816	1	-248
MAY	433	-3354	249	-54
JUN	1783	-761	2621	-4
JUL	3610	-83	8223	-1
AUG	3962	-56	10426	-3
SEP	1537	-773	4834	-7
OCT	364	-3390	950	-46
NOV	22	-8922	25	-446
DEC	0	-13513	0	-785
ANN	11842	-73910	27329	-4198

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

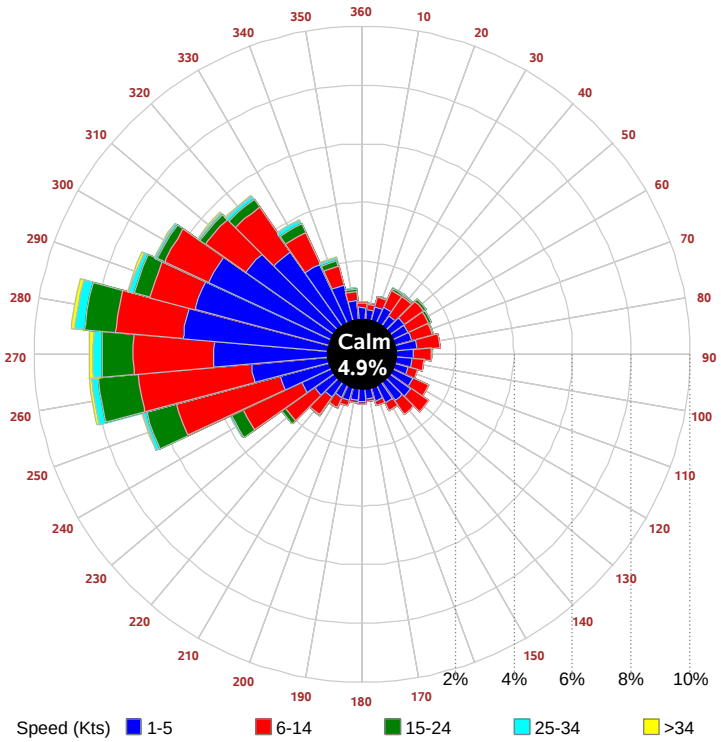
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ.	Global													
	Std.Dev.													
	Minimum													
	Maximum													
	Diffuse													
Clear Day	Global													
NORTH	Global													
	Diffuse													
Clear Day	Global													
EAST	Global													
	Diffuse													
Clear Day	Global													
SOUTH	Global													
	Diffuse													
Clear Day	Global													
WEST	Global													
	Diffuse													
Clear Day	Global													

AVERAGE 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													

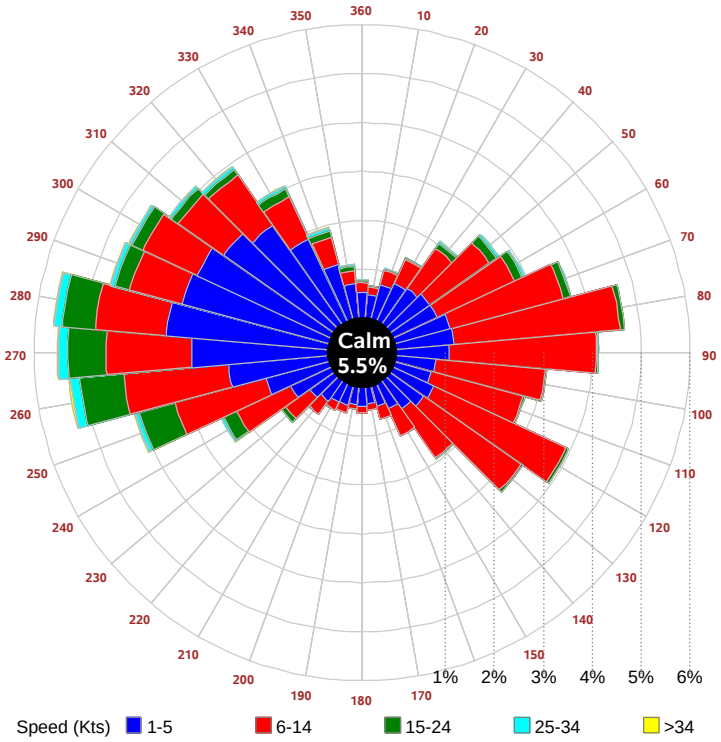
AVERAGE INCIDENT ILLUMINENCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9											
				March					June		
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear										
	M.Cloudy										
NORTH	M.Clear										
	M.Cloudy										
EAST	M.Clear										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

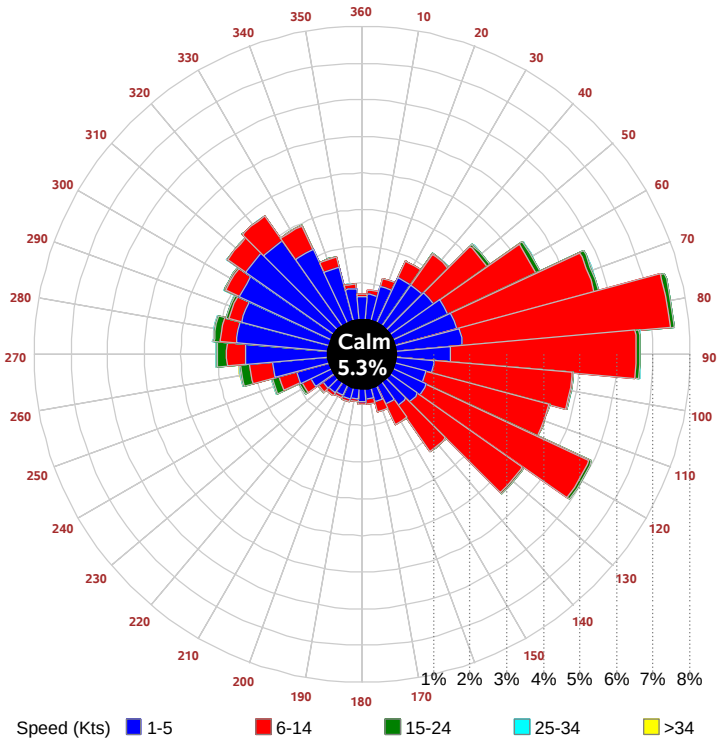
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November