BARNES MUNI, MA	
Latitude = 42.16 N	Station ID = ICAO_KBAF
Longitude = 72.72 W	Elevation = 271 Feet
Period of Record = 1988 To 2017	Average Pressure = 29.71 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	95	74	94	10.4	W
0.4% Occurrence	91	72	89	10	W
1.0% Occurrence	88	71	87	9.4	W
2.0% Occurrence	85	69	84	8.8	S
Mean Daily Range	20	-	-	-	N
97.5% Occurrence	12	10	6	7.3	N
99.0% Occurrence	6	5	5	6	N
99.6% Occurrence	0	-1	4	4.4	N
Median of Extreme Lows	-9	-9	2	2.7	NNW

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	89	124	8.7	S
0.4% Occurrence	75	84	115	7.6	S
1.0% Occurrence	74	82	112	7.3	S
2.0% Occurrence	73	81	109	6.9	S

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	134	83	0.88	6.8	S
0.4% Occurrence	123	80	0.82	5.3	S
1.0% Occurrence	118	78	0.78	5.3	VRB
2.0% Occurrence	111	77	0.74	5.7	S

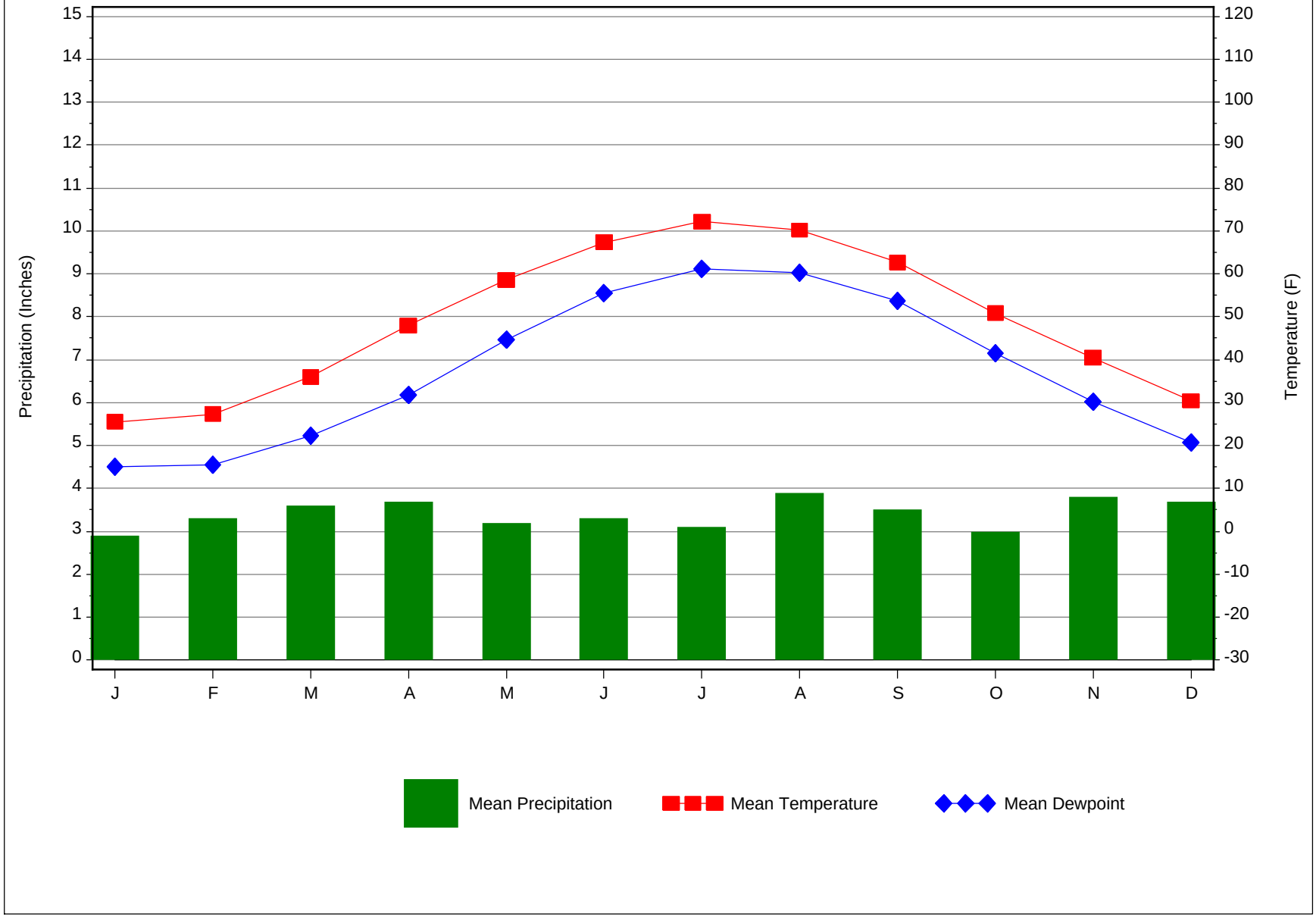
Air Conditioning/ Humid Area Criteria	**Threshold**	**T ≥ 93°F**	**T ≥ 80°F**	**Twb ≥ 73°F**	**Twb ≥ 67°F**
	# of Hours	22	473	172	844

Other Site Data

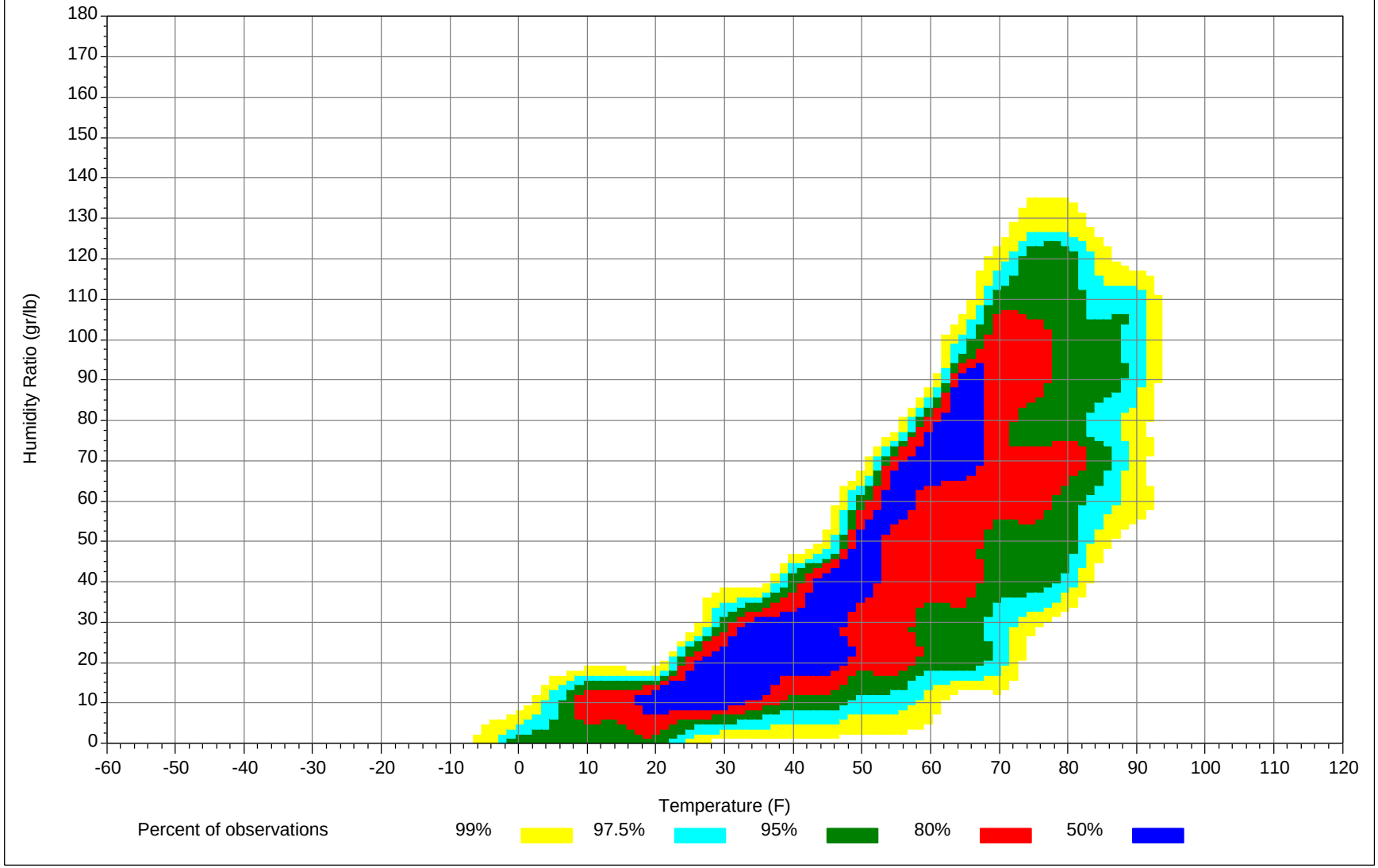
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
6	2.7	110	1.2 + 0.5
Ground Water Temperature (°F) 50 Foot Depth*	Frost Depth 50 Year Recurrence (in)	Ground Snow Load 50 Year Recurrence (lb/ft^2)	Average Annual Freeze-Thaw Cycles (#)
51.9	64	35	81

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

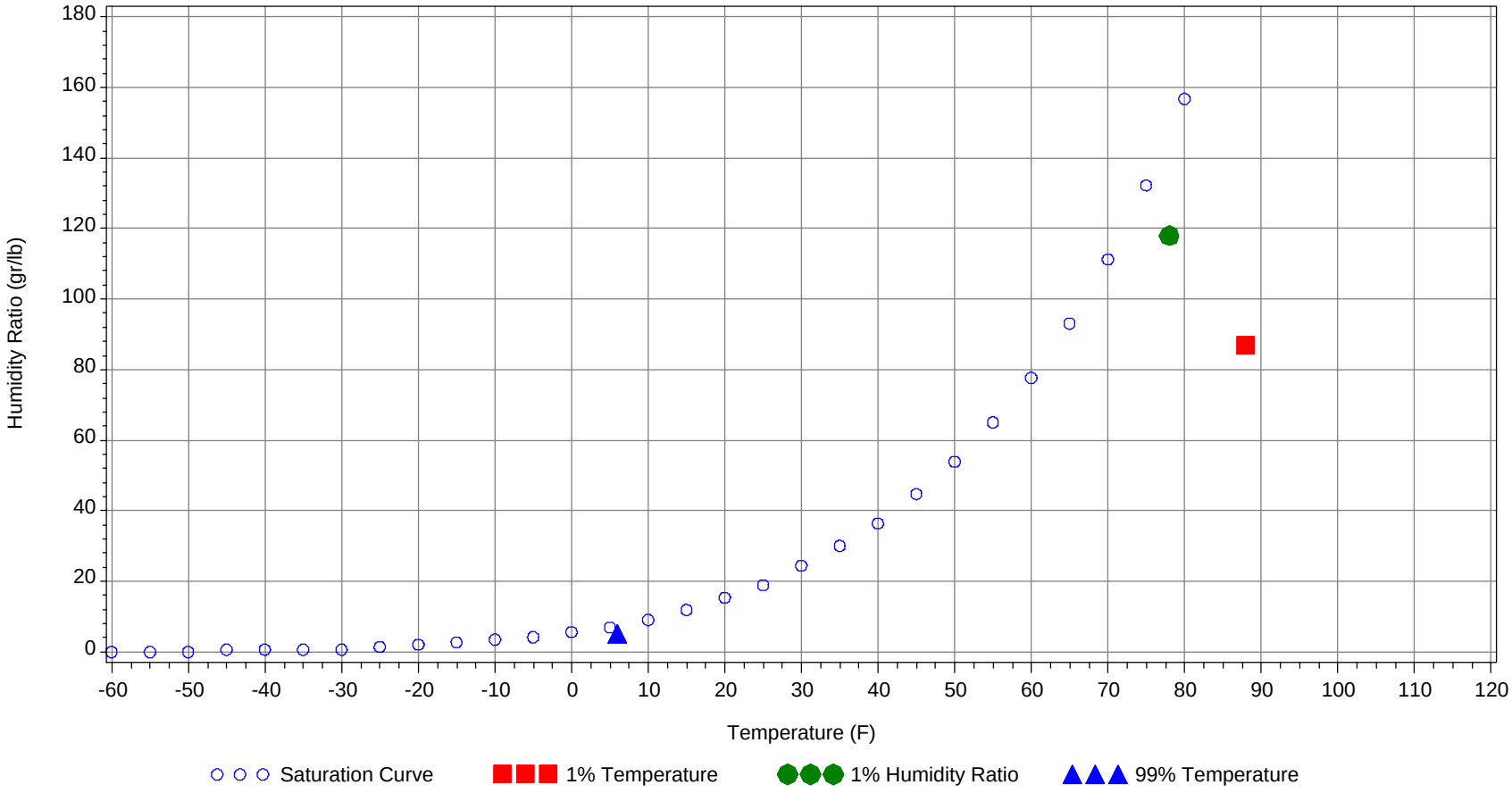
Average Annual Climate



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	88.0		71		87.0	34.8
99.0% Dry Bulb	6.0				5.0	2.1
1.0% Humidity Ratio	118.0	78.0	73.4	71.6		37.0

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)**
100/104															
95/ 99															
90/ 94												0		0	64
85/ 89												0		0	64.5
80/ 84												0	0	0	61.1
75/ 79												1	0	1	59.8
70/ 74		0		0	57.5		0		0	59		2	1	3	56.2
65/ 69		0	0	0	58		0	0	0	59.1	0	3	1	4	54.4
60/ 64	0	0	0	0	54.5	0	1	0	1	52.3	0	9	4	13	49.9
55/ 59	1	2	1	4	52.7	1	2	1	4	49	2	12	7	21	46.6
50/ 54	1	5	2	8	46.7	1	7	3	11	43.8	4	21	12	37	43.6
45/ 49	2	10	5	17	41.4	2	14	8	24	39.3	12	39	29	80	40
40/ 44	5	16	9	30	37.1	4	17	10	31	36.4	18	36	31	85	36.5
35/ 39	22	43	33	98	33.2	19	42	34	95	32.6	45	54	56	155	32.8
30/ 34	42	50	48	140	29.2	41	48	49	138	28.9	54	38	49	141	28.5
25/ 29	43	45	52	140	24	41	40	47	128	23.5	53	19	34	106	23.8
20/ 24	29	26	27	82	19.2	29	21	26	76	19.2	25	8	12	45	19.2
15/ 19	36	25	33	94	15.2	35	19	24	78	15.1	18	4	7	29	15.2
10/ 14	25	15	17	57	10.1	21	7	12	40	10.1	9	1	3	13	10
5/ 9	18	7	11	36	5.6	13	4	5	22	5.7	5	1	1	7	5.6
0/ 4	15	4	6	25	0.7	10	1	3	14	1	2	0	0	2	1.1
-5/ -1	5	1	1	7	-3.6	3	0	1	4	-3.3	0			0	-2.6
-10/ -6	4	0	1	5	-7.7	3	0	0	3	-7.4	0			0	-8
-15/-11	1	0	0	1	-11.5	1			1	-11.8	0			0	-12
-20/-16	0			0	-16.6	0			0	-17					
-25/-21	0			0	-21	0			0	-21					

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)**
100/104															
95/ 99							0	0	0	70.6		1	0	1	74.1
90/ 94		1	0	1	64.6		3	1	4	67.7		10	2	12	71.6
85/ 89		1	0	1	64.3		7	2	9	66.8		16	4	20	69.7
80/ 84		3	1	4	61.6	0	16	6	22	64	1	43	15	59	67.5
75/ 79	0	6	2	8	57.8	1	23	10	34	61.5	5	49	29	83	65.1
70/ 74	0	13	5	18	55.3	3	38	21	62	58.6	23	50	50	123	63.7
65/ 69	1	15	8	24	52.6	8	36	26	70	56.4	36	30	41	107	61.6
60/ 64	4	32	21	57	49.9	24	48	47	119	54.6	68	27	51	146	58.4
55/ 59	10	37	28	75	47.1	43	38	47	128	51.2	56	12	31	99	53.9
50/ 54	22	43	39	104	44.2	64	28	49	141	48.1	34	3	13	50	50.2
45/ 49	44	45	51	140	41.1	59	10	28	97	43.8	15		3	18	45.8
40/ 44	41	25	37	103	37.6	28	1	9	38	39.7	2		0	2	41.3
35/ 39	61	13	33	107	34	13	0	2	15	35.9	0			0	37.4
30/ 34	36	4	12	52	29.4	4	0	0	4	31.7					
25/ 29	18	1	3	22	24.8	1		0	1	27.3					
20/ 24	3	0	0	3	20.6										
15/ 19	1			1	15.3										
10/ 14	0			0	12										
5/ 9															
0/ 4															
-5/ -1															
-10/ -6															
-15/-11															
-20/-16															
-25/-21															

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)**
100/104		0		0	72.5		0		0	78					
95/ 99		4	1	5	74.9		1	0	1	74.9		0		0	72.4
90/ 94	0	20	4	24	72.9		11	2	13	73.5		2	0	2	72.8
85/ 89	0	31	10	41	70.9	0	24	5	29	71.3		6	1	7	71
80/ 84	3	70	29	102	68.9	1	65	22	88	69		22	4	26	68.2
75/ 79	13	59	45	117	67.5	7	65	39	111	67.1	1	43	14	58	66.1
70/ 74	55	41	69	165	66.4	43	50	65	158	66.1	16	57	37	110	64.1
65/ 69	58	15	45	118	63.6	54	19	47	120	63.6	26	41	35	102	61.1
60/ 64	74	8	34	116	60.2	73	10	44	127	60.2	44	42	54	140	58
55/ 59	33	1	10	44	55.5	42	2	18	62	55.4	47	19	44	110	54
50/ 54	11		1	12	52	20	0	5	25	51.3	48	6	27	81	50.2
45/ 49	2		0	2	46.6	7		1	8	46.6	30	1	16	47	45.5
40/ 44						1		0	1	40.9	17	0	5	22	41.2
35/ 39						0			0	36.5	8		2	10	36.8
30/ 34											2		0	2	31.6
25/ 29											0			0	28.3
20/ 24															
15/ 19															
10/ 14															
5/ 9															
0/ 4															
-5/ -1															
-10/ -6															
-15/-11															
-20/-16															
-25/-21															

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)**
100/104															
95/ 99															
90/ 94															
85/ 89		0		0	65.7										
80/ 84		2	0	2	65.2										
75/ 79	0	8	1	9	64		0		0	60.9					
70/ 74	2	21	5	28	61.6		2	0	2	59.8		0		0	50.7
65/ 69	4	23	10	37	58.9	0	5	2	7	58		0		0	56
60/ 64	10	44	24	78	55.6	3	15	6	24	55.2	0	2	1	3	55.1
55/ 59	25	52	42	119	51.7	8	22	11	41	50.8	1	4	2	7	51.4
50/ 54	39	50	48	137	47.7	13	33	20	66	46.4	3	10	6	19	46.6
45/ 49	49	32	49	130	43	28	54	39	121	41.7	8	21	10	39	41.3
40/ 44	35	10	29	74	39.2	28	39	36	103	37.6	10	25	16	51	37.6
35/ 39	42	5	26	73	35.5	45	39	50	134	33.7	35	56	41	132	33.5
30/ 34	28	1	10	39	31.1	45	22	40	107	29.3	45	51	59	155	29.1
25/ 29	13		3	16	26.6	41	8	26	75	25	53	37	50	140	24.2
20/ 24	2		0	2	21.7	17	2	7	26	20.4	28	19	26	73	19.5
15/ 19	0		0	0	18.2	8	0	2	10	16.5	34	14	21	69	15.6
10/ 14						1	0	0	1	11.6	14	5	9	28	10.5
5/ 9						1		0	1	7.3	9	2	4	15	5.9
0/ 4						0		0	0	2.5	4	1	2	7	1
-5/ -1						0			0	-2.4	2	0	1	3	-3.1
-10/ -6											1	0	0	1	-6.3
-15/-11															
-20/-16															
-25/-21															

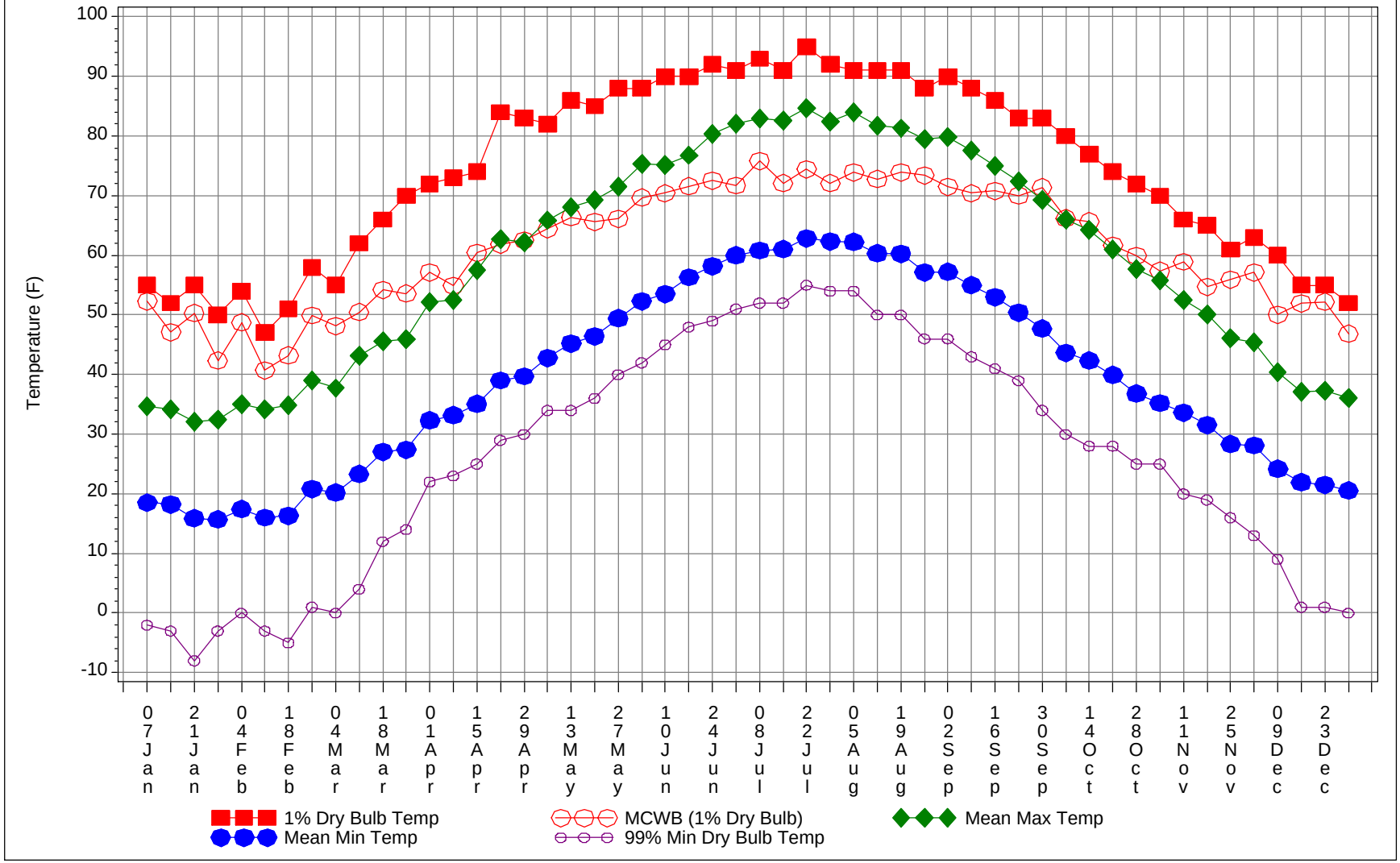
Caution: This summary reflects the typical distribtion of temperature in a typical year. It does not reflect the typical mositure distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

Dry-Bulb Temperature Hours For An Average Year

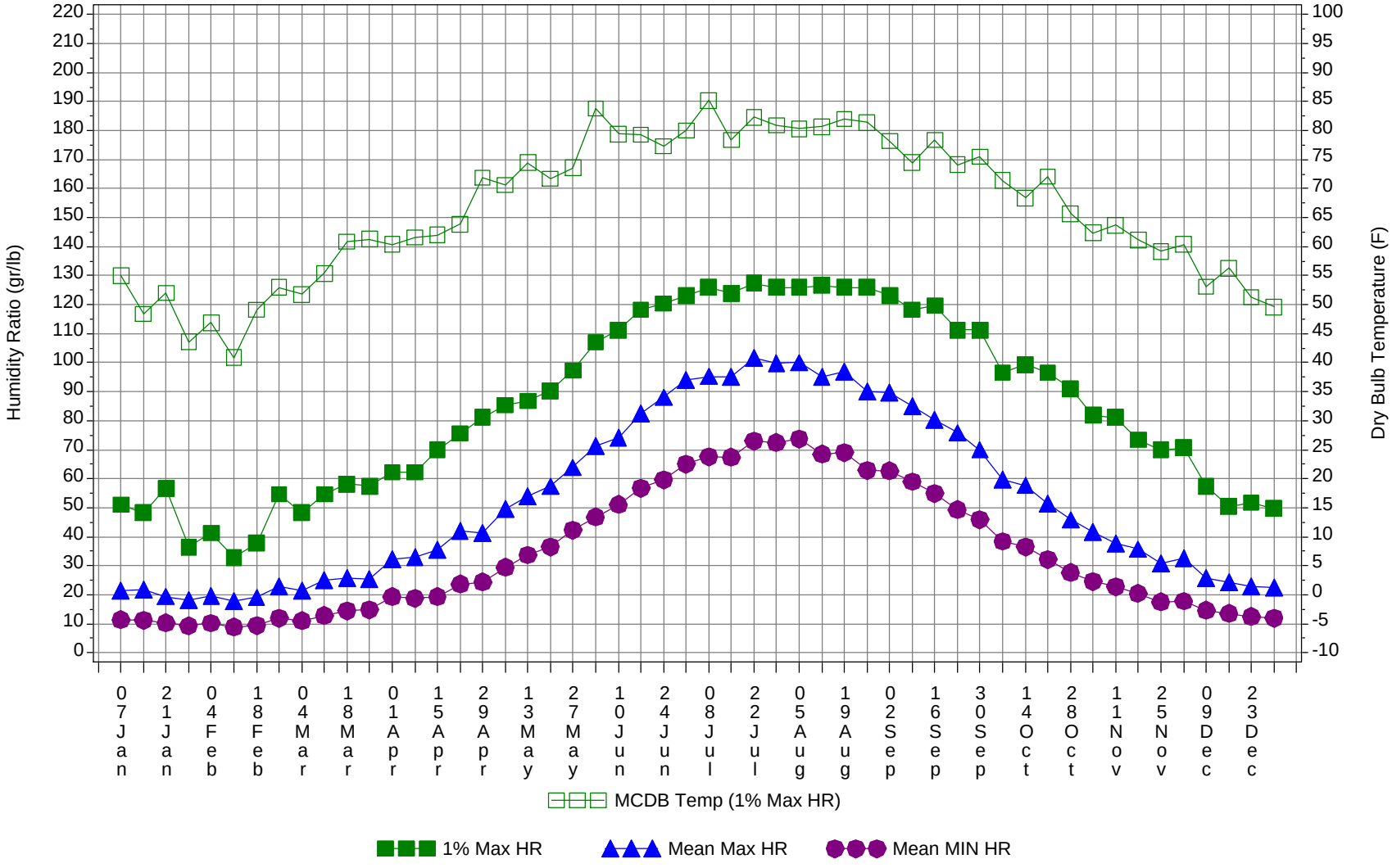
	Annual				
Temperature Range (°F)	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**
100/104		0		0	73
95/ 99		7	1	8	74.5
90/ 94	0	49	9	58	72.2
85/ 89	0	87	22	109	70.4
80/ 84	4	225	79	308	68.1
75/ 79	27	258	144	429	66
70/ 74	145	278	257	680	64.2
65/ 69	190	188	218	596	61.1
60/ 64	306	238	290	834	57.2
55/ 59	271	203	244	718	52.2
50/ 54	262	204	226	692	47.5
45/ 49	259	224	238	721	42.2
40/ 44	188	166	181	535	37.9
35/ 39	288	249	273	810	33.6
30/ 34	293	210	264	767	29.2
25/ 29	258	148	212	618	24.1
20/ 24	132	75	98	305	19.4
15/ 19	129	62	87	278	15.3
10/ 14	69	27	42	138	10.2
5/ 9	45	14	21	80	5.7
0/ 4	30	6	11	47	0.9
-5/ -1	10	1	3	14	-3.4
-10/ -6	9	0	1	10	-7.5
-15/-11	2	0	0	2	-11.6
-20/-16	0			0	-16.8
-25/-21	0			0	-21

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



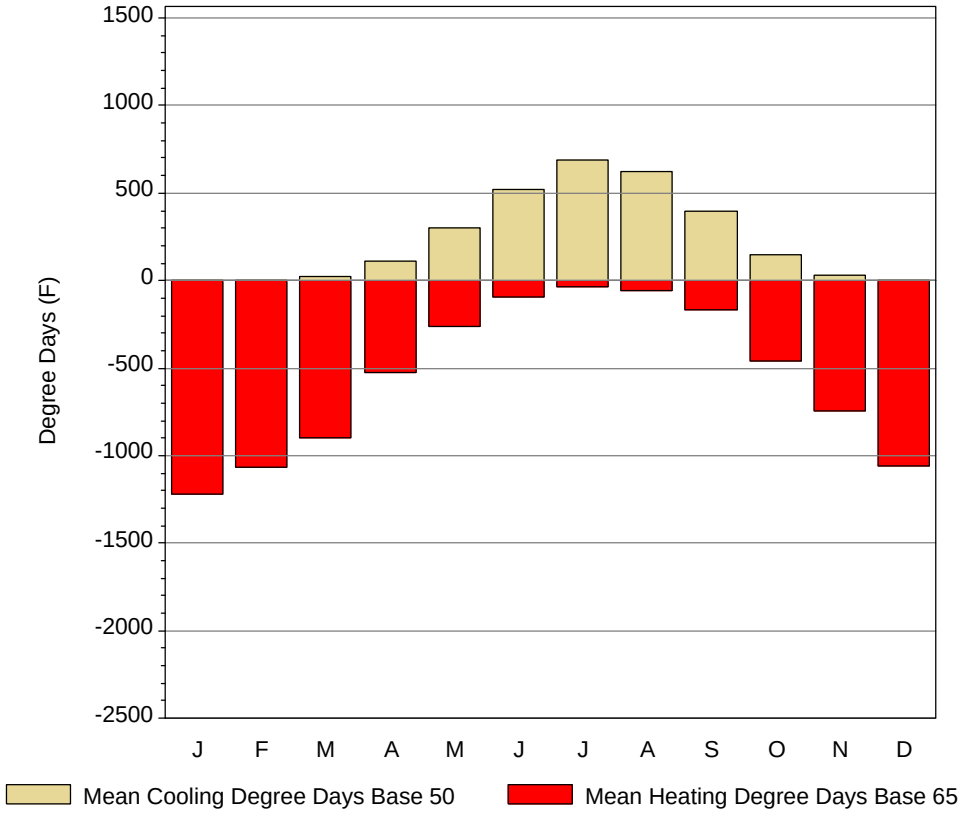
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

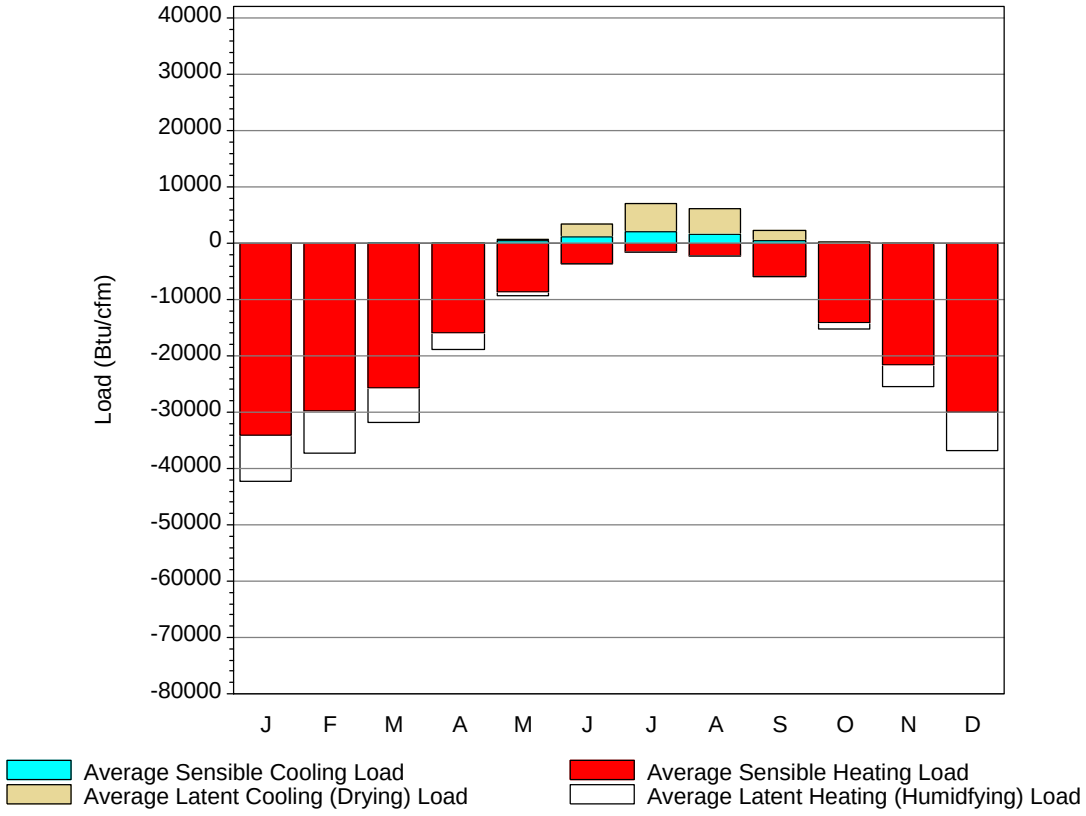
Week Ending	1.0% Temp (°F)	MCWB@ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB@ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	55	52.3	34.7	18.5	-2	51.1	55	21.4	11.4
14-Jan	52	47.1	34.2	18.2	-3	48.3	48.4	21.7	11.2
21-Jan	55	50.3	32.1	15.9	-8	56.7	52	19.4	10.3
28-Jan	50	42.3	32.5	15.7	-3	36.4	43.6	18.2	9.3
4-Feb	54	48.7	35.1	17.4	0	41.3	46.9	19.7	10.2
11-Feb	47	40.7	34.2	16	-3	32.9	40.9	17.8	8.9
18-Feb	51	43.2	34.9	16.3	-5	37.8	49.1	19.1	9.4
25-Feb	58	49.9	39	20.8	1	54.6	53	22.9	11.9
4-Mar	55	48.1	37.7	20.2	0	48.3	51.8	21.4	11.1
11-Mar	62	50.5	43.2	23.3	4	54.6	55.4	24.9	12.9
18-Mar	66	54.2	45.5	27	12	58.1	60.9	25.8	14.4
25-Mar	70	53.6	46	27.4	14	57.4	61.3	25.4	14.8
1-Apr	72	57.1	52.1	32.3	22	62.3	60.4	32.3	19.3
8-Apr	73	54.9	52.5	33.2	23	62.3	61.6	32.9	18.8
15-Apr	74	60.4	57.5	35.1	25	70	62	35.4	19.4
22-Apr	84	61.8	62.7	39	29	75.6	63.9	41.9	23.7
29-Apr	83	62.5	62.1	39.7	30	81.2	71.9	41.3	24.4
6-May	82	64.4	65.9	42.8	34	85.4	70.6	49.7	29.4
13-May	86	66.4	68.1	45.2	34	86.8	74.5	53.8	33.7
20-May	85	65.6	69.2	46.4	36	90.3	71.7	57.4	36.5
27-May	88	66.1	71.5	49.4	40	97.3	73.6	63.9	42.3
4-Jun	88	69.7	75.3	52.3	42	107.1	83.8	71.4	46.8
10-Jun	90	70.4	75.1	53.5	45	111.3	79.4	74.1	51.1
17-Jun	90	71.6	76.8	56.3	48	118.3	79.3	82.6	56.7
24-Jun	92	72.5	80.3	58.2	49	120.4	77.3	88.1	59.6
1-Jul	91	71.7	82	60	51	123.2	80	94	65
8-Jul	93	75.8	83	60.8	52	126	85.2	95.3	67.6
15-Jul	91	72.1	82.6	61	52	123.9	78.4	95.1	67.4
22-Jul	95	74.4	84.6	62.8	55	127.4	82.3	101.6	73
29-Jul	92	72.1	82.5	62.3	54	126	80.9	99.7	72.5
5-Aug	91	73.9	83.9	62.2	54	126	80.3	100	73.7
12-Aug	91	72.8	81.7	60.3	50	126.7	80.7	95.1	68.5
19-Aug	91	73.9	81.3	60.2	50	126	82	96.9	69.1
26-Aug	88	73.4	79.4	57.1	46	126	81.4	90.1	62.9
2-Sep	90	71.5	79.8	57.2	46	123.2	78.2	89.7	62.7
9-Sep	88	70.4	77.6	55	43	118.3	74.5	85	59
16-Sep	86	70.8	74.9	53	41	119.7	78.4	80.2	55
23-Sep	83	70	72.4	50.4	39	111.3	74.1	75.8	49.4
30-Sep	83	71.4	69.3	47.7	34	111.3	75.5	70	45.9
7-Oct	80	66.2	66	43.6	30	96.6	71.4	59.8	38.4
14-Oct	77	65.7	64.3	42.3	28	99.4	68.4	57.7	36.5
21-Oct	74	61.6	61	39.9	28	96.6	72.1	51.3	32.1
28-Oct	72	59.9	57.7	36.8	25	91	65.7	45.8	27.6
4-Nov	70	57.4	55.8	35.2	25	81.9	62.4	41.6	24.5
11-Nov	66	58.9	52.5	33.6	20	81.2	63.7	37.8	22.7
18-Nov	65	54.7	50	31.5	19	73.5	61.2	35.7	20.5
25-Nov	61	55.9	46.1	28.3	16	70	59.2	30.7	17.5
2-Dec	63	57.1	45.4	28.1	13	70.7	60.4	32.6	17.8
9-Dec	60	50	40.4	24.2	9	57.4	53.1	25.7	14.7
16-Dec	55	51.9	37.1	21.9	1	50.4	56.3	24.3	13.6
23-Dec	55	52.2	37.3	21.5	1	51.8	51.3	22.9	12.5
31-Dec	52	46.8	36	20.5	0	49.7	49.6	22.6	11.9

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	2.5	0	1217.4
FEB	2.7	0	1063.4
MAR	23.7	2.4	901.6
APR	111.4	16.4	525.4
MAY	302.7	66.2	264.5
JUN	518	157	91.7
JUL	685.4	254.2	34.1
AUG	626.3	213.5	53.3
SEP	397.2	94.1	166.9
OCT	147	16.1	461.2
NOV	34	1.2	747.2
DEC	5.1	0.1	1062.2
ANN	2856	821.2	6588.9

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	-33966	0	-8325
FEB	0	-29761	0	-7607
MAR	9	-25756	0	-6011
APR	86	-15799	10	-3065
MAY	410	-8715	314	-623
JUN	1091	-3548	2268	-32
JUL	2052	-1598	4997	-1
AUG	1515	-2260	4557	-2
SEP	449	-5806	1877	-47
OCT	35	-14173	221	-1068
NOV	0	-21683	12	-3831
DEC	0	-29943	0	-6885
ANN	5647	-193008	14256	-37497

Station Information		Shading Geometry in Dimensionless Units	
City, State, WBAN	HARTFORD, CT 14740	Window:	1.000
Lat, Lon, Elev	41.93N 72.68W 180ft	Overhang:	0.589
Press, Stn_Type	14.6psia Secondary	Vert Gap:	0.327

AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day) Percentage Uncertainty = 11

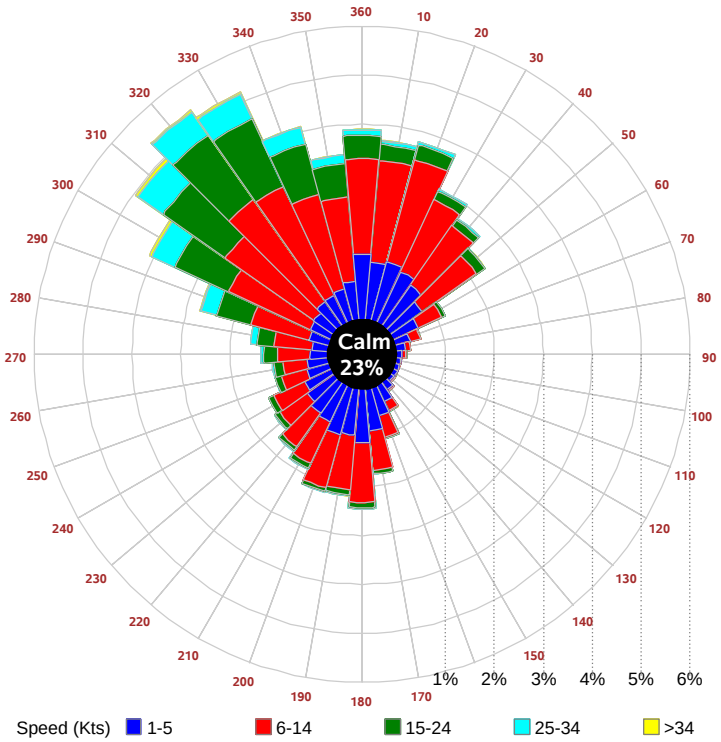
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ.	Global	590	850	1160	1470	1720	1870	1860	1630	1300	940	580	480	1210
	Std.Dev.	44	74	74	109	128	146	110	81	93	66	48	35	30
	Minimum	530	690	980	1260	1460	1500	1620	1480	1150	820	490	400	1140
	Maximum	690	1010	1290	1710	1980	2160	2060	1760	1500	1130	670	540	1270
	Diffuse	320	430	580	720	860	920	900	790	620	440	320	270	600
Clear Day	Global	800	1150	1640	2140	2470	2590	2510	2210	1760	1250	840	690	1670
NORTH	Global	190	260	350	440	540	610	580	480	380	280	190	160	370
	Diffuse	190	260	350	430	500	540	530	470	380	280	190	160	360
Clear Day	Global	180	240	330	430	580	670	620	480	360	260	190	160	380
EAST	Global	400	550	710	860	960	1030	1020	940	780	590	380	330	710
	Diffuse	240	330	430	520	600	640	640	570	460	340	240	200	430
Clear Day	Global	620	820	1090	1300	1420	1450	1410	1310	1120	860	630	540	1050
SOUTH	Global	980	1090	1060	960	850	810	850	940	1050	1080	850	820	940
	Diffuse	360	440	500	550	590	600	600	580	520	440	340	300	480
Clear Day	Global	1780	1890	1800	1470	1160	1020	1060	1300	1620	1790	1730	1680	1520
WEST	Global	400	550	710	850	950	1020	1020	930	780	600	380	320	710
	Diffuse	240	330	430	520	610	650	650	580	470	340	240	200	440
Clear Day	Global	620	820	1090	1300	1420	1450	1410	1310	1120	860	630	540	1050

AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING Percentage Uncertainty = 11														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ.	Unshaded	380	570	810	1050	1240	1350	1340	1170	930	650	390	300	850
NORTH	Unshaded	130	180	240	300	360	400	390	330	260	190	140	110	250
	Shaded	110	160	210	260	310	350	340	280	230	170	120	96	220
EAST	Unshaded	280	390	500	610	680	730	720	660	550	420	260	220	500
	Shaded	240	340	430	510	560	600	590	550	470	360	230	190	420
SOUTH	Unshaded	730	810	740	630	540	510	530	610	720	780	640	620	650
	Shaded	710	740	570	400	350	360	360	380	510	680	610	600	520
WEST	Unshaded	270	380	500	600	670	720	720	660	550	420	260	220	500
	Shaded	240	330	430	500	550	600	600	550	470	360	230	190	420

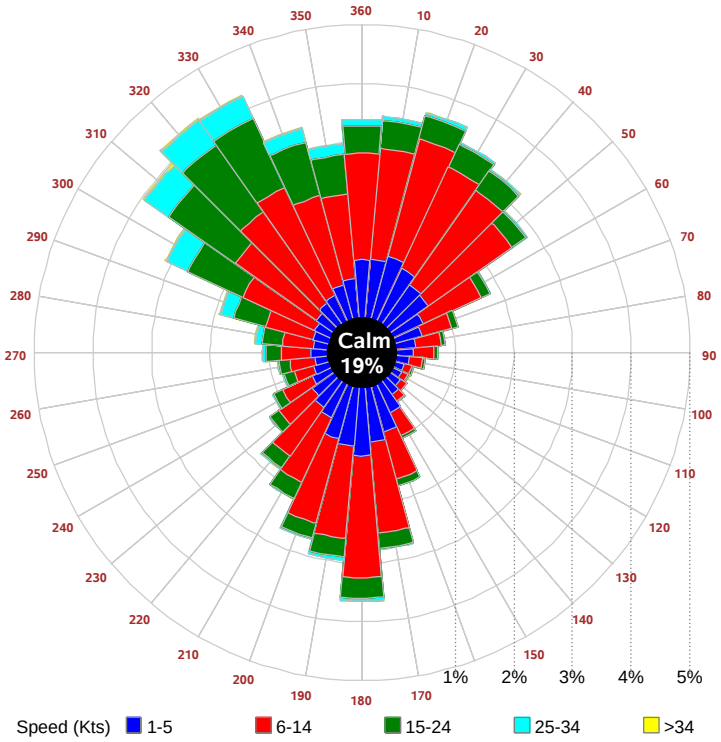
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS Percentage Uncertainty = 11											
				March					June		
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	40	70	77	58	20	51	84	99	90	62
	M.Cloudy	24	43	47	36	13	32	55	70	65	42
NORTH	M.Clear	10	14	15	13	7	15	17	17	17	15
	M.Cloudy	10	15	16	13	6	13	18	19	19	15
EAST	M.Clear	70	51	15	13	7	77	68	26	17	15
	M.Cloudy	25	28	16	13	6	34	40	24	19	15
SOUTH	M.Clear	42	75	83	62	21	13	37	51	44	20
	M.Cloudy	18	36	41	30	9	12	27	37	33	17
WEST	M.Clear	10	14	28	67	53	13	17	17	55	76
	M.Cloudy	10	15	21	32	18	12	18	19	39	41
M.Clear	(% hrs)	34	31	27	29	32	33	32	24	25	26

				Sept					Dec		
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	30	65	80	71	39	14	37	40	21	0
	M.Cloudy	18	39	53	48	25	9	22	24	13	0
NORTH	M.Clear	9	14	16	15	11	5	9	10	7	0
	M.Cloudy	8	14	17	16	10	4	9	10	6	0
EAST	M.Clear	63	64	23	15	11	34	32	10	7	0
	M.Cloudy	21	31	20	16	10	10	15	10	6	0
SOUTH	M.Clear	24	60	76	66	33	34	76	81	49	0
	M.Cloudy	11	29	44	38	17	10	27	29	16	0
WEST	M.Clear	9	14	16	55	67	5	9	24	41	0
	M.Cloudy	8	14	17	33	29	4	9	13	14	0
M.Clear	(% hrs)	40	41	34	33	37	31	29	28	30	31

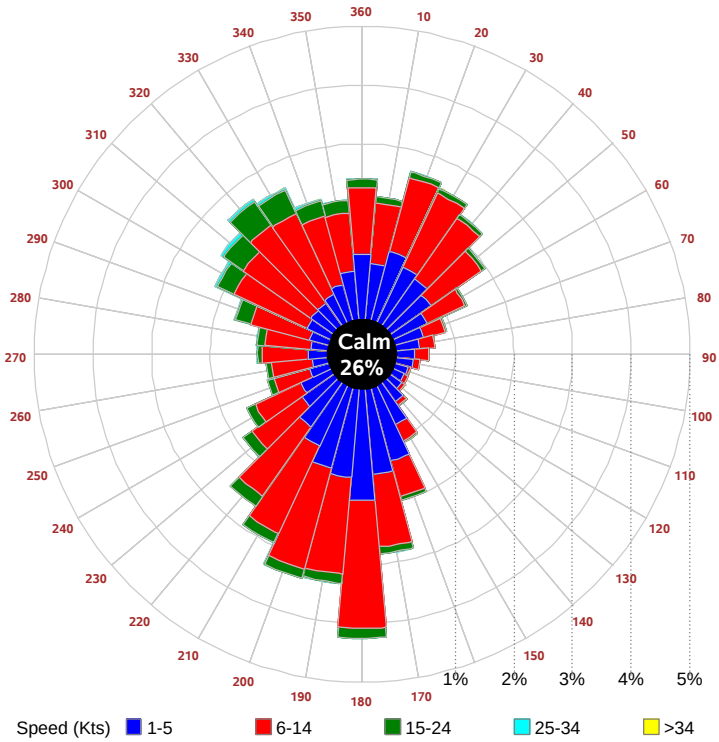
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November