SITKA ROCKY GUTIERREZ, AK	
Latitude = 57.05 N	Station ID = ICAO_PASI
Longitude =135.36 W	Elevation = 21 Feet
Period of Record = 1988 To 2017	Average Pressure = 29.80 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	74	60	54	7.2	ESE
0.4% Occurrence	66	59	61	7.9	SW
1.0% Occurrence	64	57	60	8	WNW
2.0% Occurrence	62	57	60	7.9	SW
Mean Daily Range	8	-	-	-	E
97.5% Occurrence	27	25	14	5.5	E
99.0% Occurrence	21	18	9	6.5	E
99.6% Occurrence	18	16	7	6.5	E
Median of Extreme Lows	16	13	7	6.9	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	62	66	73	6.3	SW
0.4% Occurrence	60	64	69	7.2	SW
1.0% Occurrence	59	62	67	7.1	SW
2.0% Occurrence	58	61	65	7	SW

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	78	64	0.53	5.5	SW
0.4% Occurrence	71	61	0.48	6.9	SW
1.0% Occurrence	69	61	0.47	6.5	SW
2.0% Occurrence	67	59	0.45	6.7	SW

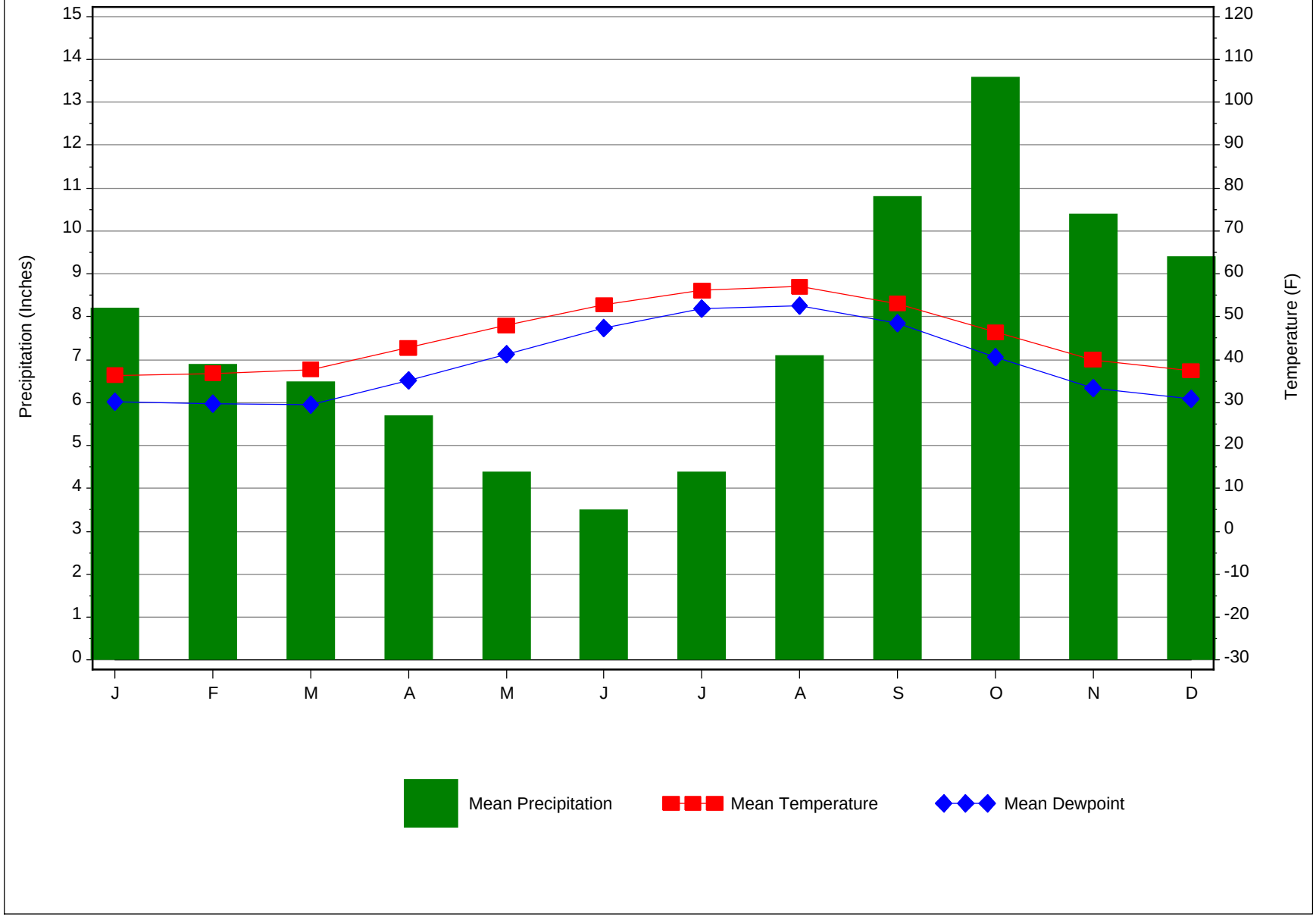
Air Conditioning/ Humid Area Criteria	**Threshold**	**T ≥ 93°F**	**T ≥ 80°F**	**Twb ≥ 73°F**	**Twb ≥ 67°F**
	# of Hours	0	4	3	4

Other Site Data

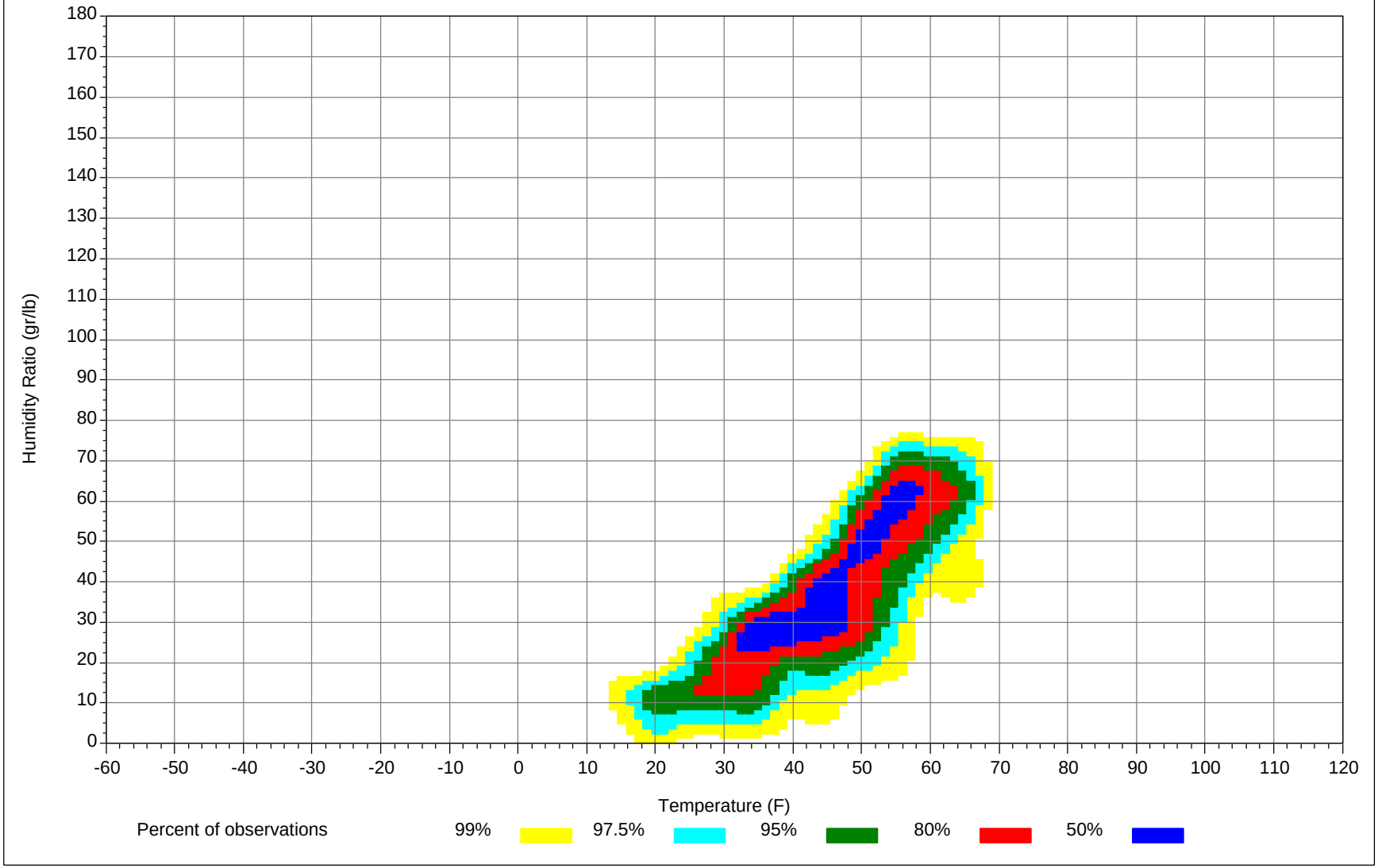
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
5	1.2	120	0.0 + 0.0
Ground Water Temperature (°F) 50 Foot Depth*	Frost Depth 50 Year Recurrence (in)	Ground Snow Load 50 Year Recurrence (lb/ft^2)	Average Annual Freeze-Thaw Cycles (#)
47.9	56	50	43

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

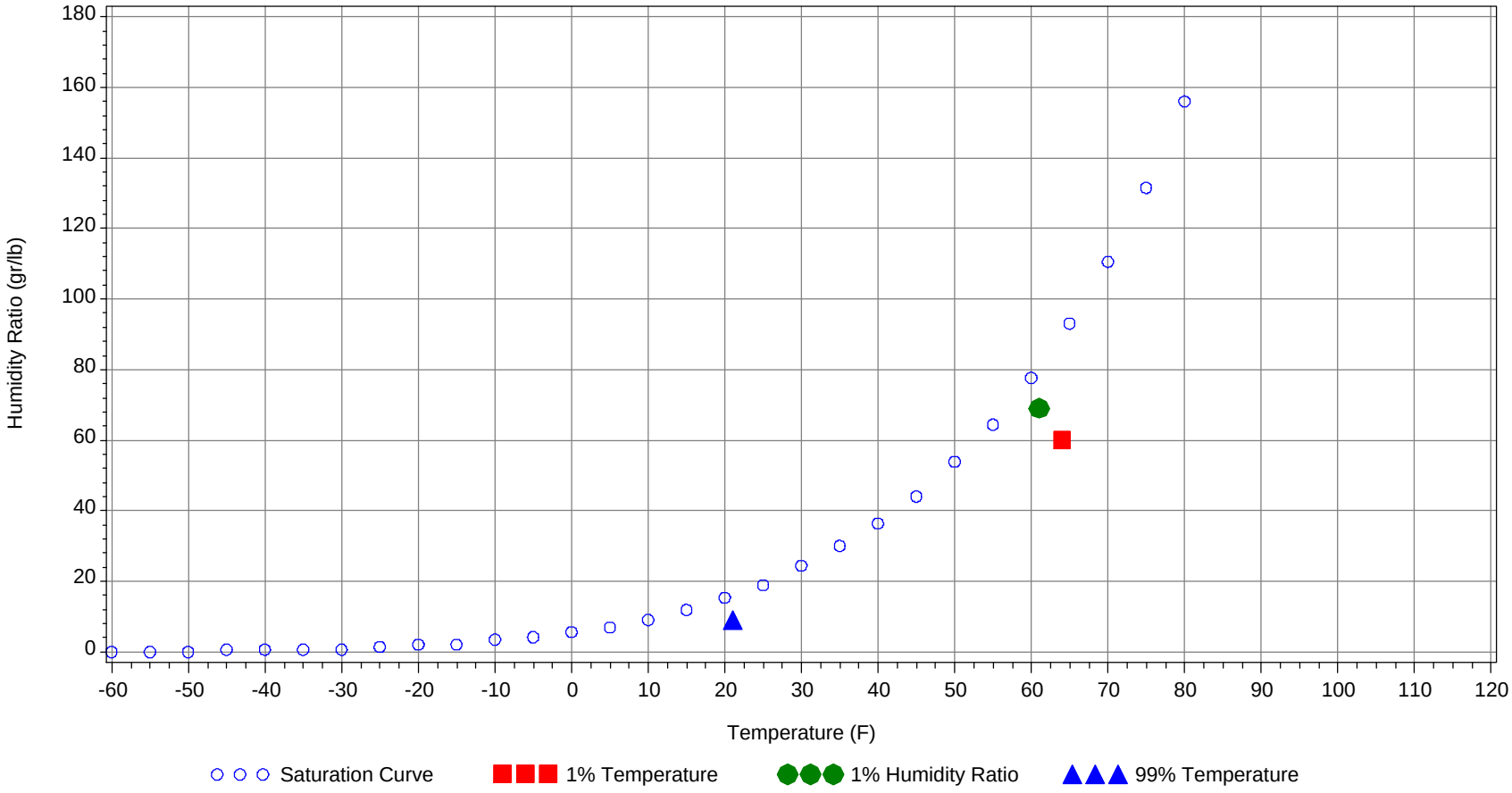
Average Annual Climate



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	64.0		57		60.0	24.7
99.0% Dry Bulb	21.0				9.0	6.4
1.0% Humidity Ratio	69.0	61.0	58.5	57.1		25.4

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)**
85/ 89															
80/ 84															
75/ 79															
70/ 74															
65/ 69															
60/ 64															
55/ 59	0	0	0	0	44.8	0	1	0	1	44.8	0	1	0	1	44.7
50/ 54	2	2	2	6	44.8	2	3	3	8	43.9	1	6	2	9	43.3
45/ 49	27	31	28	86	42	19	30	22	71	41.4	15	45	25	85	41.1
40/ 44	49	57	53	159	39.8	37	58	43	138	39.2	45	74	58	177	38.7
35/ 39	73	86	78	237	35.6	68	81	77	226	35.3	89	86	100	275	34.8
30/ 34	52	43	48	143	30.5	58	36	53	147	30.3	65	26	46	137	30.1
25/ 29	25	18	22	65	24.7	25	9	17	51	25	22	7	12	41	24
20/ 24	9	5	8	22	19.6	8	4	4	16	19.4	6	2	4	12	18.5
15/ 19	8	4	6	18	15.6	6	2	4	12	14.7	4	1	2	7	15.1
10/ 14	2	1	2	5	9.9	1	0	1	2	10.5	1	0	0	1	8.8
5/ 9	1	0	1	2	5.7	0			0	7.6	1	0	0	1	5.6
0/ 4	0		0	0	3.2										

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)**
85/ 89															
80/ 84												0	0	0	59.5
75/ 79							0		0	54.5		0	0	0	60.5
70/ 74		0	0	0	56.5		2	0	2	52		2	1	3	58.9
65/ 69		1	0	1	51.6	0	2	1	3	51.7	0	4	2	6	57.9
60/ 64	0	2	1	3	49.3	1	8	4	13	51.5	2	28	12	42	55.3
55/ 59	0	8	3	11	47.1	3	32	16	51	50	26	81	58	165	52.4
50/ 54	5	30	15	50	44.8	38	89	65	192	47.7	123	108	127	358	49.5
45/ 49	45	104	75	224	42.2	119	100	119	338	44.2	83	17	40	140	46.2
40/ 44	72	66	78	216	39.5	62	14	35	111	40.7	5	0	1	6	41.7
35/ 39	90	28	59	177	35.7	24	1	8	33	36.8	0		0	0	38.3
30/ 34	26	1	8	35	30.9	1		0	1	31.1					
25/ 29	2		0	2	24.3										
20/ 24															
15/ 19															
10/ 14															
5/ 9															
0/ 4															

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)**
85/ 89	0			0	66.5										
80/ 84	0	0		0	59.5		0	0	0	64					
75/ 79	0	0	0	0	65.5	0	1	0	1	59.1					
70/ 74	0	1	1	2	62.7	0	3	2	5	60.5		1	0	1	58.9
65/ 69	0	9	3	12	59.7	0	15	5	20	59.8	0	2	1	3	58.1
60/ 64	6	60	31	97	57	14	78	44	136	57.5	3	25	10	38	55.8
55/ 59	105	137	130	372	54.3	121	128	141	390	54.6	42	99	70	211	53.6
50/ 54	127	41	81	249	51.5	104	21	55	180	51.8	124	98	116	338	50.3
45/ 49	10	0	2	12	47	9	0	1	10	47.2	57	13	38	108	45.7
40/ 44	0			0	43.5	0			0	43.8	10	0	5	15	41.7
35/ 39											3		1	4	37.2
30/ 34											0		0	0	32.1
25/ 29															
20/ 24															
15/ 19															
10/ 14															
5/ 9															
0/ 4															

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)**
85/ 89															
80/ 84															
75/ 79															
70/ 74															
65/ 69															
60/ 64	0	1	0	1	54.2		0		0	55.3					
55/ 59	5	12	7	24	52.1	1	1	0	2	48.4	0	0	1	1	44.2
50/ 54	47	86	57	190	48.3	8	12	10	30	46.1	3	5	3	11	45.2
45/ 49	102	109	108	319	44.2	47	65	49	161	42.9	32	34	33	99	42.7
40/ 44	50	30	44	124	40.1	61	70	64	195	39.5	51	59	53	163	39.5
35/ 39	33	10	27	70	35.8	74	63	75	212	35.5	78	88	78	244	35.4
30/ 34	10	0	5	15	30.3	34	20	28	82	30.3	49	41	52	142	30.7
25/ 29	1		0	1	24.7	10	6	9	25	24.3	23	14	18	55	24.4
20/ 24						3	2	3	8	18.9	7	4	5	16	19.1
15/ 19						2	1	2	5	14.8	4	2	4	10	14.5
10/ 14						0	0	0	0	10.5	2	1	1	4	10.1
5/ 9												0	0	0	7.7
0/ 4															

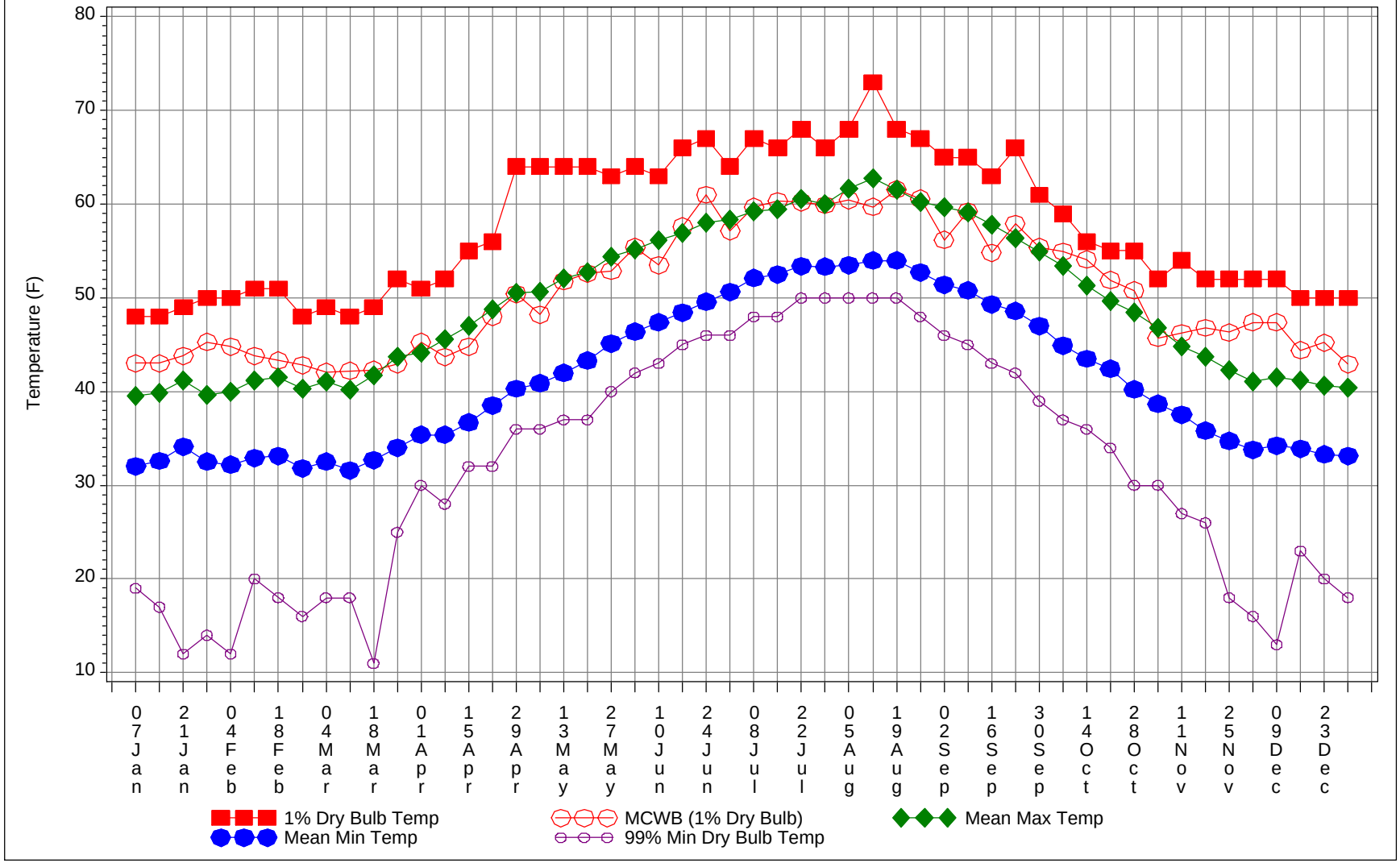
Caution: This summary reflects the typical distribtion of temperature in a typical year. It does not reflect the typical mositure distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

Dry-Bulb Temperature Hours For An Average Year

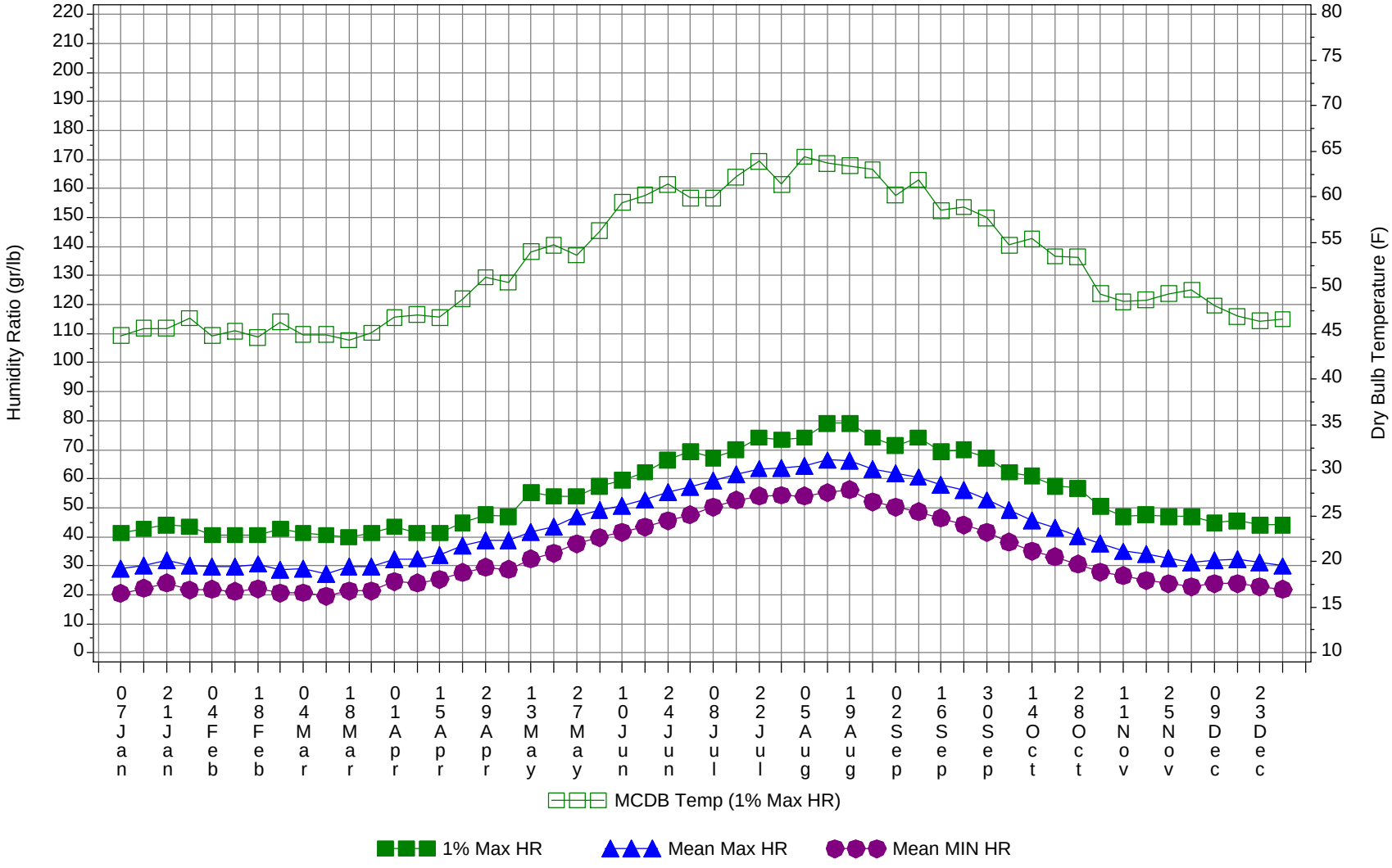
	Annual				
Temperature Range (°F)	**01 To 08 LST**	**09 To 16 LST**	**17 to 00 LST**	**Total Obs**	**MCWB (°F)**
85/ 89	0			0	66.5
80/ 84	0	0	0	0	61.6
75/ 79	0	2	1	3	60
70/ 74	0	10	4	14	59
65/ 69	1	34	12	47	58.6
60/ 64	26	202	102	330	56.6
55/ 59	304	499	425	1228	53.7
50/ 54	582	501	534	1617	49.6
45/ 49	565	548	539	1652	43.6
40/ 44	442	427	434	1303	39.6
35/ 39	532	443	504	1479	35.4
30/ 34	296	168	241	705	30.4
25/ 29	107	55	79	241	24.5
20/ 24	34	17	23	74	19.2
15/ 19	23	10	18	51	15.1
10/ 14	6	3	4	13	10
5/ 9	1	1	1	3	5.9
0/ 4	0		0	0	3.2

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



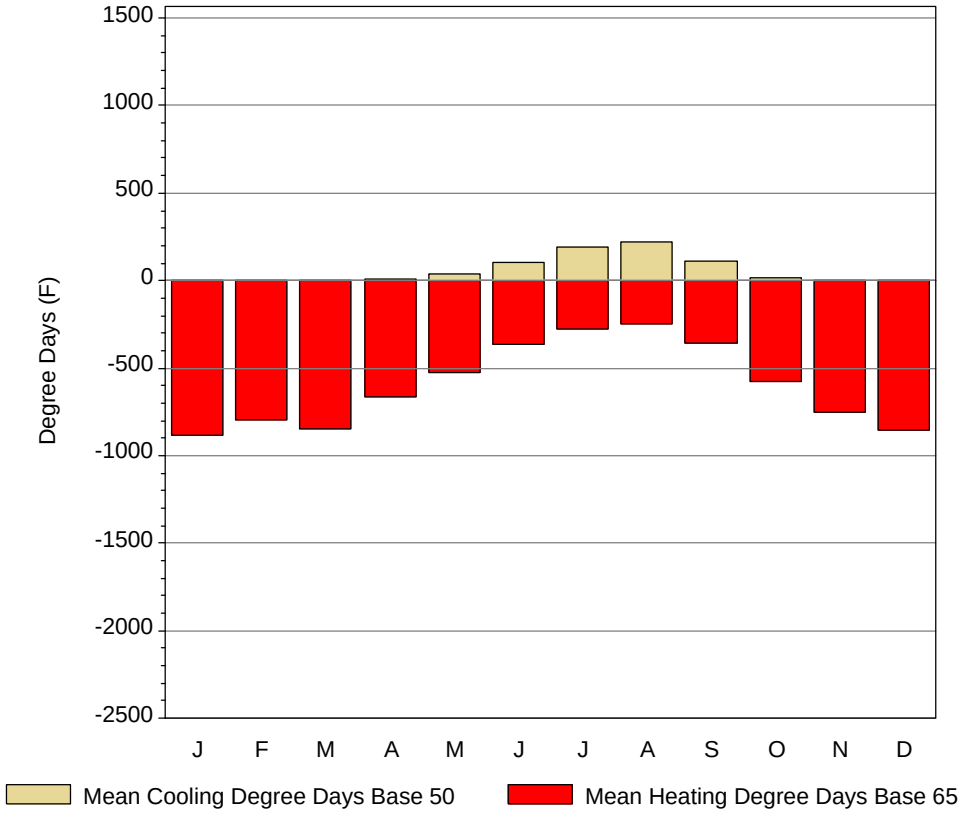
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

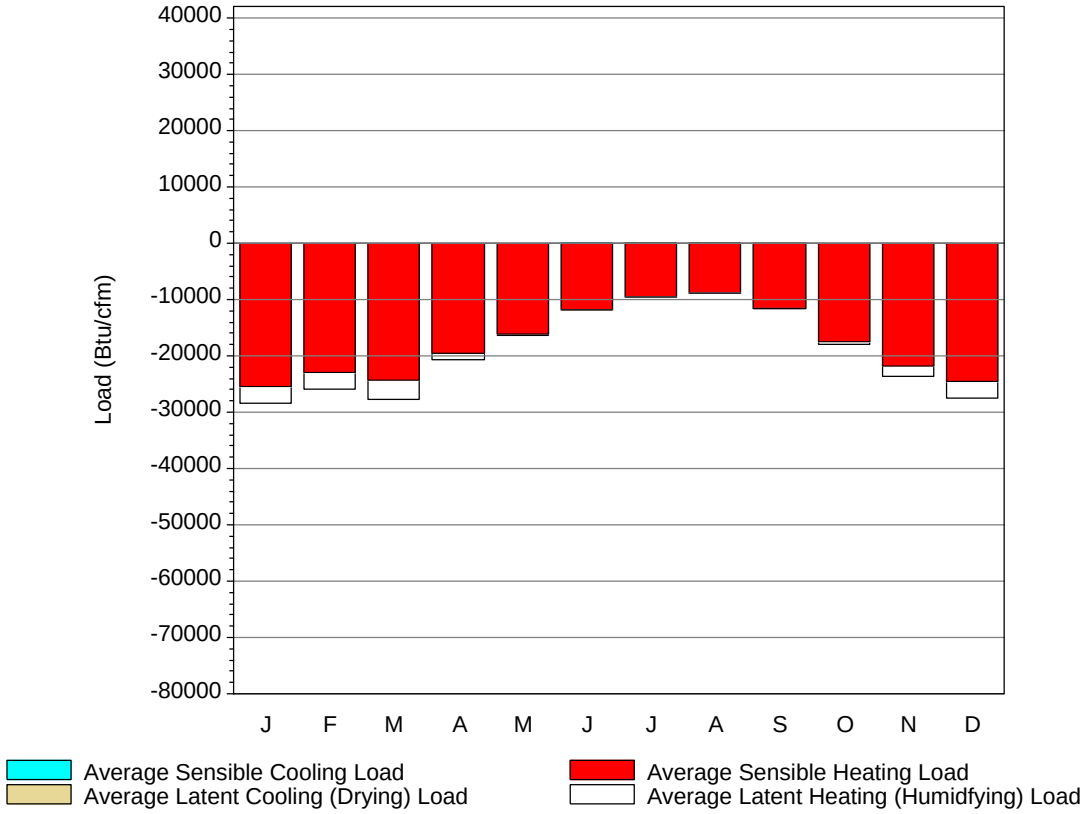
Week Ending	1.0% Temp (°F)	MCWB@ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB@ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	48	43	39.5	32	19	41.3	44.8	28.9	20.5
14-Jan	48	43	39.9	32.6	17	42.7	45.6	30.2	22.3
21-Jan	49	43.8	41.2	34.1	12	44.1	45.6	32	24.1
28-Jan	50	45.3	39.6	32.5	14	43.4	46.7	30.1	21.6
4-Feb	50	44.8	40	32.2	12	40.6	44.8	29.6	21.8
11-Feb	51	43.8	41.2	32.9	20	40.6	45.3	29.6	21.2
18-Feb	51	43.3	41.5	33.1	18	40.6	44.6	30.6	22.1
25-Feb	48	42.8	40.3	31.8	16	42.7	46.3	28.7	20.6
4-Mar	49	42.1	41.1	32.5	18	41.3	44.9	29	20.7
11-Mar	48	42.2	40.2	31.6	18	40.6	44.9	27.3	19.5
18-Mar	49	42.3	41.7	32.7	11	39.9	44.3	29.7	21.3
25-Mar	52	42.9	43.7	34	25	41.3	45.1	29.7	21.3
1-Apr	51	45.3	44.2	35.4	30	43.4	46.8	32.2	24.6
8-Apr	52	43.7	45.6	35.4	28	41.3	47.1	32.4	24.1
15-Apr	55	44.8	47	36.7	32	41.3	46.8	33.8	25.3
22-Apr	56	48	48.8	38.5	32	44.8	48.8	36.9	27.6
29-Apr	64	50.4	50.5	40.3	36	47.6	51.2	38.7	29.4
6-May	64	48.2	50.6	40.9	36	46.9	50.6	38.8	28.8
13-May	64	51.8	52.1	42	37	55.3	54	41.7	32.4
20-May	64	52.6	52.7	43.3	37	53.9	54.7	43.6	34.3
27-May	63	52.9	54.4	45.1	40	53.9	53.6	46.9	37.6
4-Jun	64	55.4	55.2	46.4	42	57.4	56.3	49.1	39.8
10-Jun	63	53.5	56.2	47.4	43	59.5	59.4	50.6	41.5
17-Jun	66	57.6	56.9	48.4	45	62.3	60.2	52.7	43.3
24-Jun	67	61	58	49.6	46	66.5	61.4	55.3	45.5
1-Jul	64	57.1	58.4	50.6	46	69.3	59.9	57.1	47.6
8-Jul	67	59.7	59.2	52.1	48	67.2	59.9	59.4	50.3
15-Jul	66	60.3	59.5	52.5	48	70	62.2	61.5	52.6
22-Jul	68	60.2	60.6	53.4	50	74.2	63.9	63.5	54
29-Jul	66	59.9	60	53.3	50	73.5	61.4	63.8	54.3
5-Aug	68	60.4	61.7	53.5	50	74.2	64.4	64.5	54
12-Aug	73	59.7	62.8	54	50	79.1	63.7	66.4	55.2
19-Aug	68	61.6	61.5	54	50	79.1	63.4	66.3	56.2
26-Aug	67	60.6	60.2	52.7	48	74.2	63	63.4	52.1
2-Sep	65	56.2	59.7	51.4	46	71.4	60.2	61.8	50.3
9-Sep	65	59.2	59.1	50.8	45	74.2	61.9	60.6	48.6
16-Sep	63	54.8	57.8	49.3	43	69.3	58.5	57.9	46.5
23-Sep	66	57.9	56.4	48.6	42	70	58.9	56	44
30-Sep	61	55.4	54.9	47	39	67.2	57.7	52.7	41.6
7-Oct	59	54.9	53.4	44.9	37	62.3	54.7	49.1	38.1
14-Oct	56	54.1	51.3	43.5	36	60.9	55.4	45.7	35
21-Oct	55	51.9	49.7	42.4	34	57.4	53.5	43	33
28-Oct	55	50.8	48.4	40.2	30	56.7	53.4	40.1	30.5
4-Nov	52	45.7	46.8	38.7	30	50.4	49.4	37.6	27.9
11-Nov	54	46.2	44.8	37.5	27	46.9	48.5	35	26.5
18-Nov	52	46.8	43.7	35.8	26	47.6	48.7	34	25
25-Nov	52	46.3	42.3	34.7	18	46.9	49.4	32.5	23.8
2-Dec	52	47.4	41.1	33.8	16	46.9	49.8	31.1	22.7
9-Dec	52	47.4	41.5	34.2	13	44.8	48.1	31.9	23.8
16-Dec	50	44.4	41.2	33.9	23	45.5	46.9	32.3	23.8
23-Dec	50	45.2	40.6	33.3	20	44.1	46.4	31.1	22.7
31-Dec	50	42.9	40.4	33.1	18	44.1	46.6	29.9	21.8

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	0.4	0	886.5
FEB	0.7	0	797.7
MAR	0.7	0	848.2
APR	8.4	0.2	665.3
MAY	36.2	0.8	528.1
JUN	100.9	1.2	366.7
JUL	188.4	1.6	279.3
AUG	218.8	3.2	250.4
SEP	110.9	0.6	358.8
OCT	19	0	578.3
NOV	2.1	0	749.9
DEC	0.7	0	857
ANN	687.2	7.6	7166.2

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	-25388	0	-3039
FEB	0	-22875	0	-2938
MAR	0	-24396	0	-3287
APR	0	-19574	0	-1172
MAY	0	-16086	0	-240
JUN	1	-11820	0	-2
JUL	3	-9625	7	-1
AUG	3	-8852	12	-1
SEP	0	-11622	1	-30
OCT	0	-17399	0	-515
NOV	0	-21770	0	-1914
DEC	0	-24624	0	-2772
ANN	7	-214031	20	-15911

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

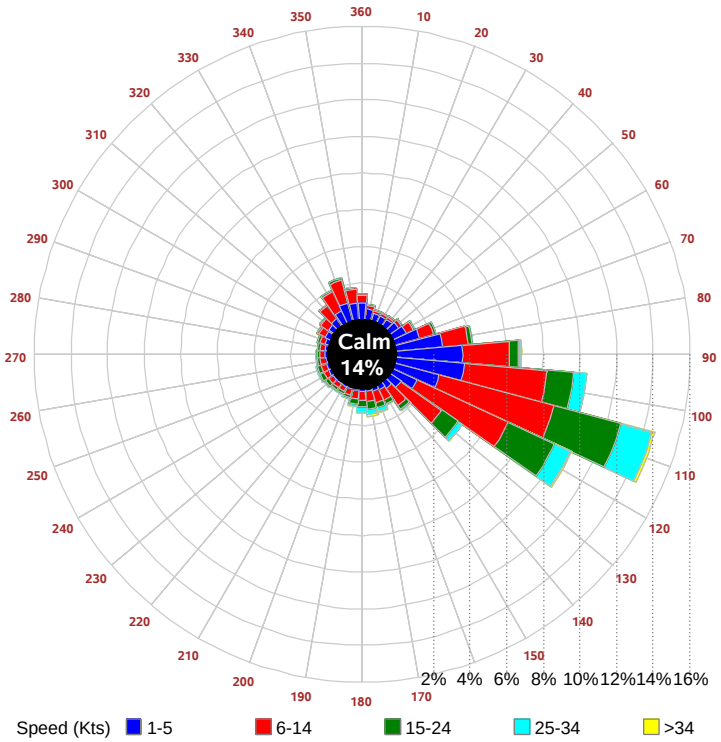
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ.	Global													
	Std.Dev.													
	Minimum													
	Maximum													
	Diffuse													
Clear Day	Global													
NORTH	Global													
	Diffuse													
Clear Day	Global													
EAST	Global												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

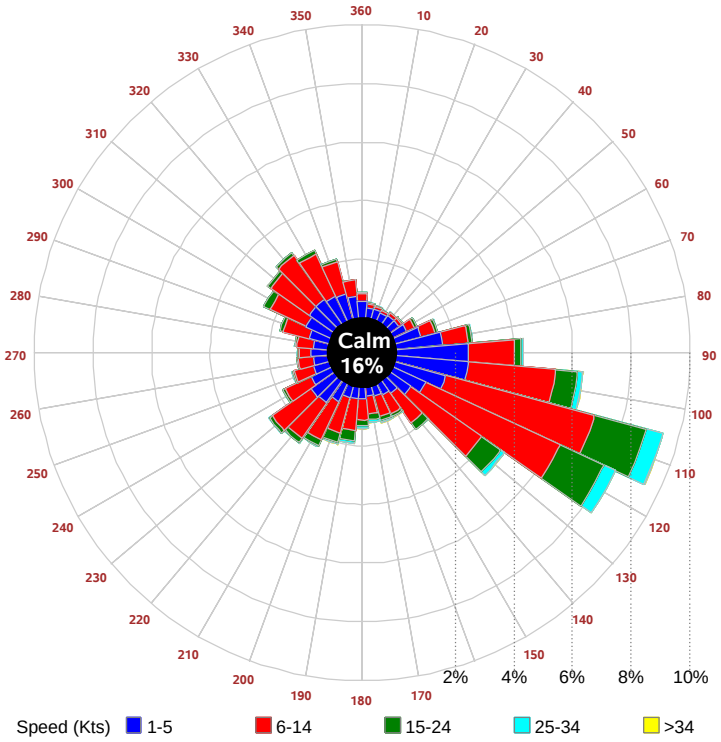
AVERAGE INCIDENT ILLUMINENCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9											
				March					June		
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear										
	M.Cloudy										
NORTH	M.Clear										
	M.Cloudy										
EAST	M.Clear										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

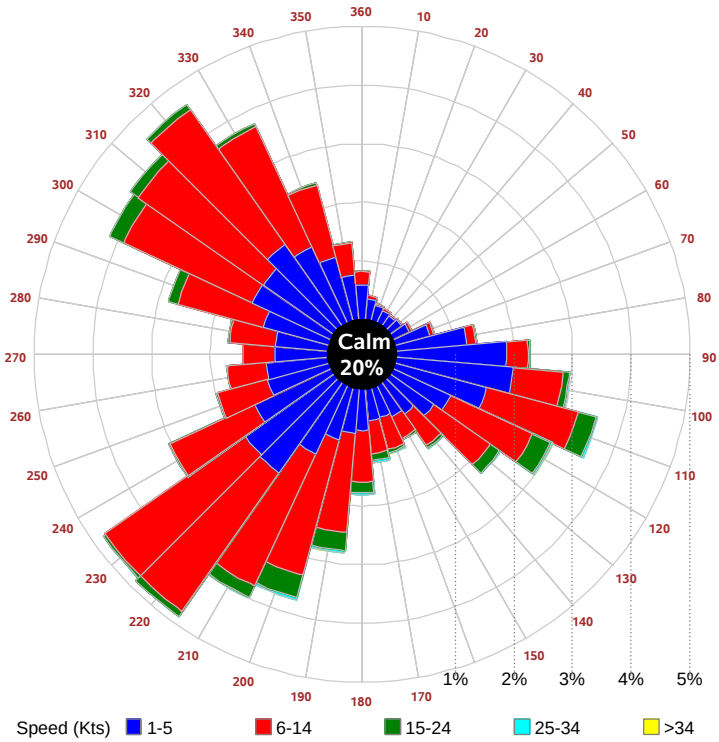
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November