

SDE DOV, IS	
Latitude = 32.11 N	Station ID = ICAO_LLSD
Longitude = 34.78 E	Elevation = 43 Feet
Period of Record = 2004 To 2017	Average Pressure = 29.79 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	46	7.1	SE
0.4% Occurrence	93	71	79	6.2	W
1.0% Occurrence	90	73	99	6.8	W
2.0% Occurrence	88	75	110	7.9	W
Mean Daily Range	16	-	-	-	ESE
97.5% Occurrence	48	46	41	3.2	ESE
99.0% Occurrence	45	44	38	2.7	SE
99.6% Occurrence	43	41	35	2.3	SE
Median of Extreme Lows	39	37	29	2.2	VRB

	Design Value (°F)	Dry Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Wet Bulb Temperature (T_{wb})					
Median of Extreme Highs	84	88	162	8.6	NNW
0.4% Occurrence	80	87	140	8.9	W
1.0% Occurrence	79	86	136	8.5	W
2.0% Occurrence	78	86	131	8.1	W

	Design Value (gr/lb)	Dry Bulb Temperature (°F)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Humidity Ratio (HR)					
Median of Extreme Highs	151	87	0.99	8.3	W
0.4% Occurrence	142	85	0.94	7.9	W
1.0% Occurrence	134	84	0.88	7.4	W
2.0% Occurrence	133	84	0.88	7.6	W

Air Conditioning/ Humid Area Criteria	Threshold	T ≥ 93 °F	T ≥ 80 °F	Twb ≥ 73 °F	Twb ≥ 67 °F
	# of Hours	36	1787	1383	3049

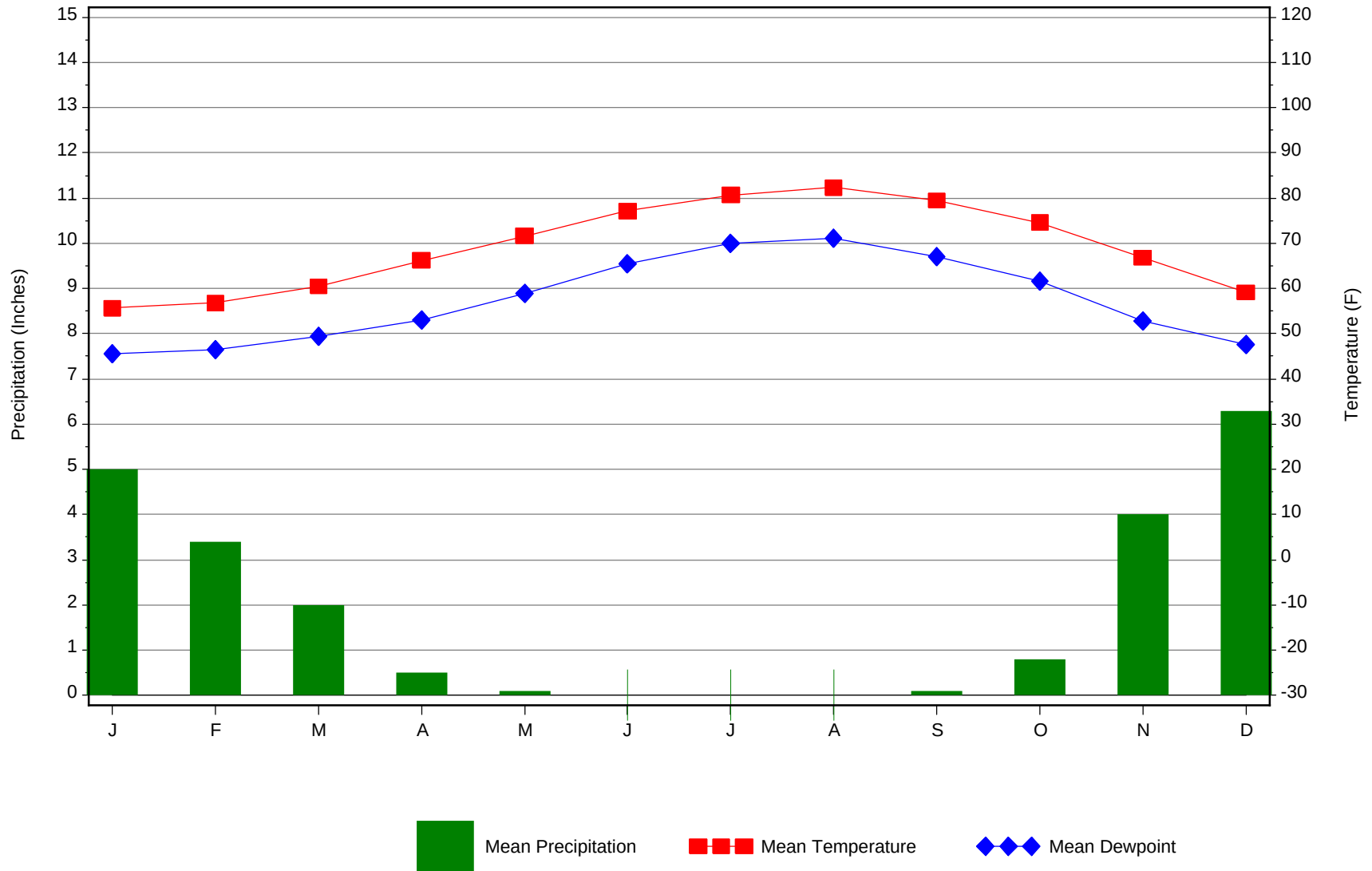
Other Site Data

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	N/A	N/A	5.9 + 1.8
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 (#)
71.8	N/A	N/A	0

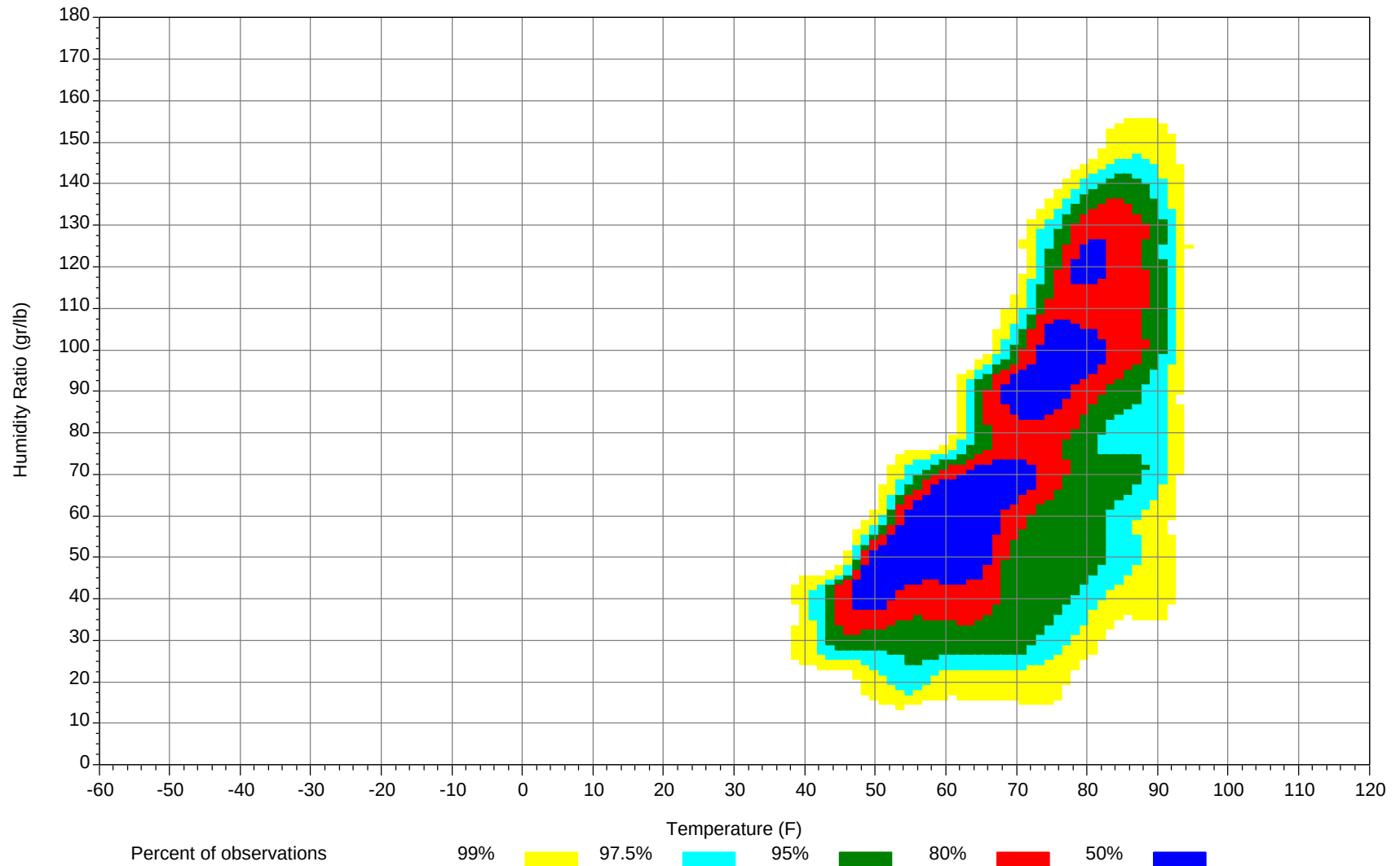
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.



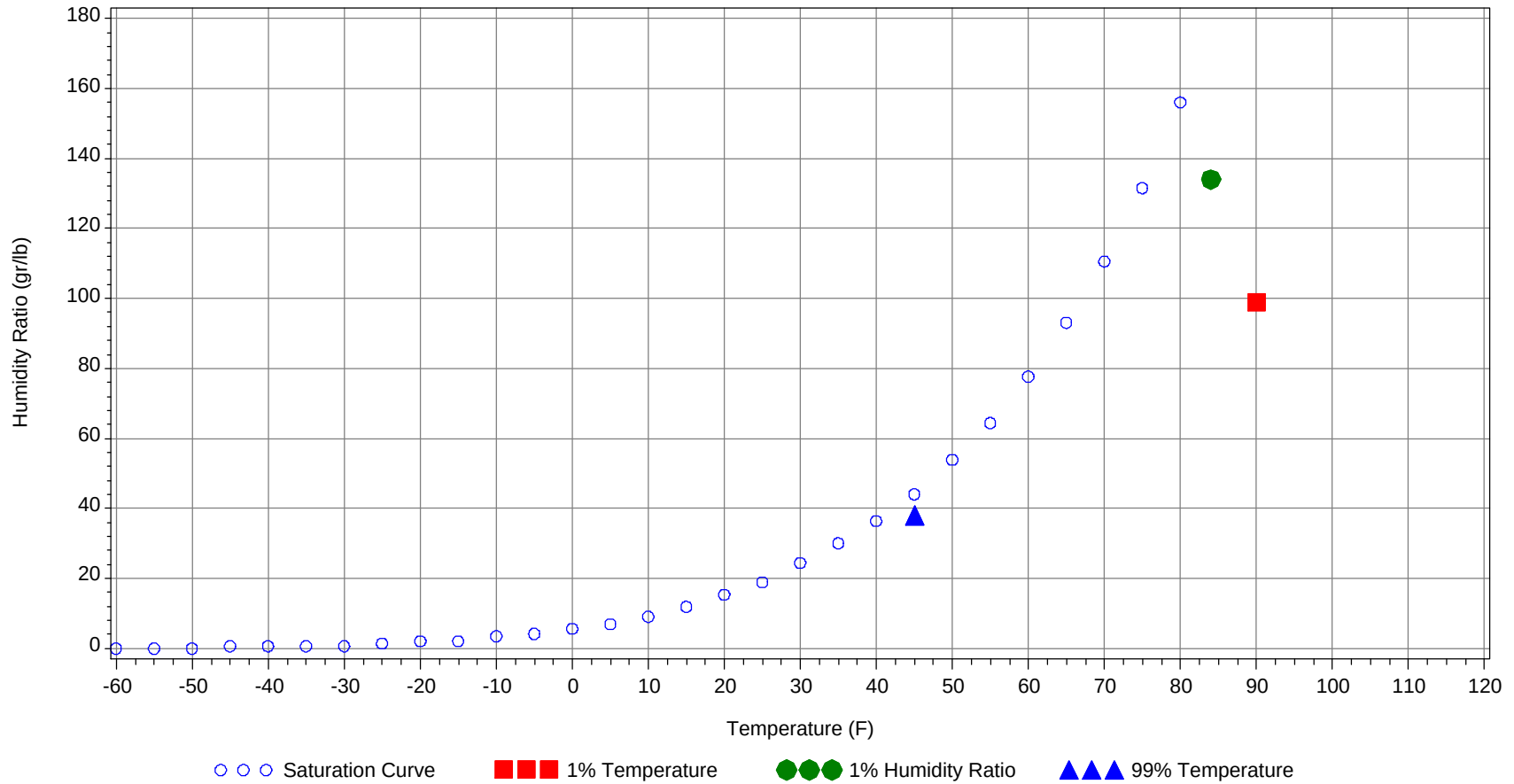
Average Annual Climate



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	90.0		73		99.0	37.7
99.0% Dry Bulb	45.0				38.0	16.5
1.0% Humidity Ratio	134.0	84.0	77.8	75.2		41.3

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	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)
105/109															
100/104															
95/ 99												1	0	1	63
90/ 94												2	0	2	63
85/ 89							0	0	0	60.4	0	3	1	4	61.3
80/ 84		1		1	58.7		2	0	2	59.2	1	8	3	12	60.2
75/ 79		2	0	2	57.7	0	5	1	6	58.3	1	14	6	21	59.9
70/ 74	0	13	2	15	56.5	1	15	4	20	57.1	6	29	11	46	59.1
65/ 69	2	35	7	44	56.3	3	35	11	49	56.7	7	63	23	93	58.7
60/ 64	7	93	52	152	54.6	13	87	57	157	55	35	93	91	219	56.2
55/ 59	42	68	86	196	51.7	39	52	72	163	51.9	72	27	69	168	52.9
50/ 54	107	30	72	209	48.7	94	20	59	173	48.8	88	8	39	135	49.5
45/ 49	69	6	24	99	44.5	61	5	18	84	44.8	34	1	5	40	45.5
40/ 44	15	1	3	19	40.3	12	1	2	15	40.6	3	0	0	3	41.7
35/ 39	5	0	1	6	36.6										

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)
105/109							1	0	1	66.7					
100/104		1	0	1	66.8	0	2	0	2	67.6					
95/ 99		5	1	6	66.3	0	4	1	5	67.5	0	2	0	2	68.9
90/ 94	0	7	1	8	64.8	1	8	3	12	67.5	0	10	1	11	71.1
85/ 89	1	7	3	11	63.8	1	12	4	17	66.9	1	33	6	40	72.3
80/ 84	3	14	7	24	62.8	3	36	12	51	66.8	7	122	44	173	72.1
75/ 79	7	28	14	49	62.6	11	93	38	142	66.9	67	71	117	255	69.8
70/ 74	13	76	31	120	61.8	56	84	102	242	64.7	118	3	64	185	66.6
65/ 69	23	73	56	152	60	71	7	59	137	62	47		8	55	63.4
60/ 64	75	25	87	187	57.4	77	1	27	105	58.8					
55/ 59	82	3	33	118	53.9	26		3	29	54.7					
50/ 54	34	1	7	42	50										
45/ 49															
40/ 44															
35/ 39															

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

	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)
105/109															
100/104															
95/ 99							1	0	1	78.7		1	0	1	72.3
90/ 94	0	23	2	25	74.8	0	37	1	38	77.2	0	13	1	14	74.2
85/ 89	1	115	21	137	75.6	2	158	31	191	76.2	1	89	8	98	74.5
80/ 84	42	107	126	275	74.4	67	52	152	271	74.9	28	128	105	261	72.8
75/ 79	136	3	89	228	71.5	151	0	59	210	71.8	101	9	100	210	70
70/ 74	70	0	11	81	67.9	28	0	4	32	69.2	95	0	24	119	66.6
65/ 69											16		2	18	64
60/ 64															
55/ 59															
50/ 54															
45/ 49															
40/ 44															
35/ 39															

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

	October					November					December				
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)
105/109															
100/104															
95/ 99		3	0	3	68.4										
90/ 94	0	10	1	11	69.4		2		2	64.7					
85/ 89	1	19	3	23	70.4		5	0	5	65		0		0	64.3
80/ 84	4	112	22	138	70.6	1	24	3	28	63.5		3	0	3	60
75/ 79	30	86	105	221	68.2	5	66	18	89	63.8		10	1	11	60.1
70/ 74	90	15	79	184	64.9	17	85	65	167	61.8	2	41	9	52	59.2
65/ 69	74	2	26	102	62.2	30	30	54	114	59.7	5	65	27	97	57.6
60/ 64	44	2	10	56	58.6	84	21	64	169	57.1	23	77	72	172	55.1
55/ 59	6	0	1	7	55.5	78	6	28	112	53.2	78	39	84	201	52.4
50/ 54						24	1	7	32	48.8	95	11	43	149	48.8
45/ 49						2		1	3	43.8	37	2	10	49	44.3
40/ 44											7	0	1	8	40.1
35/ 39											1			1	37.5

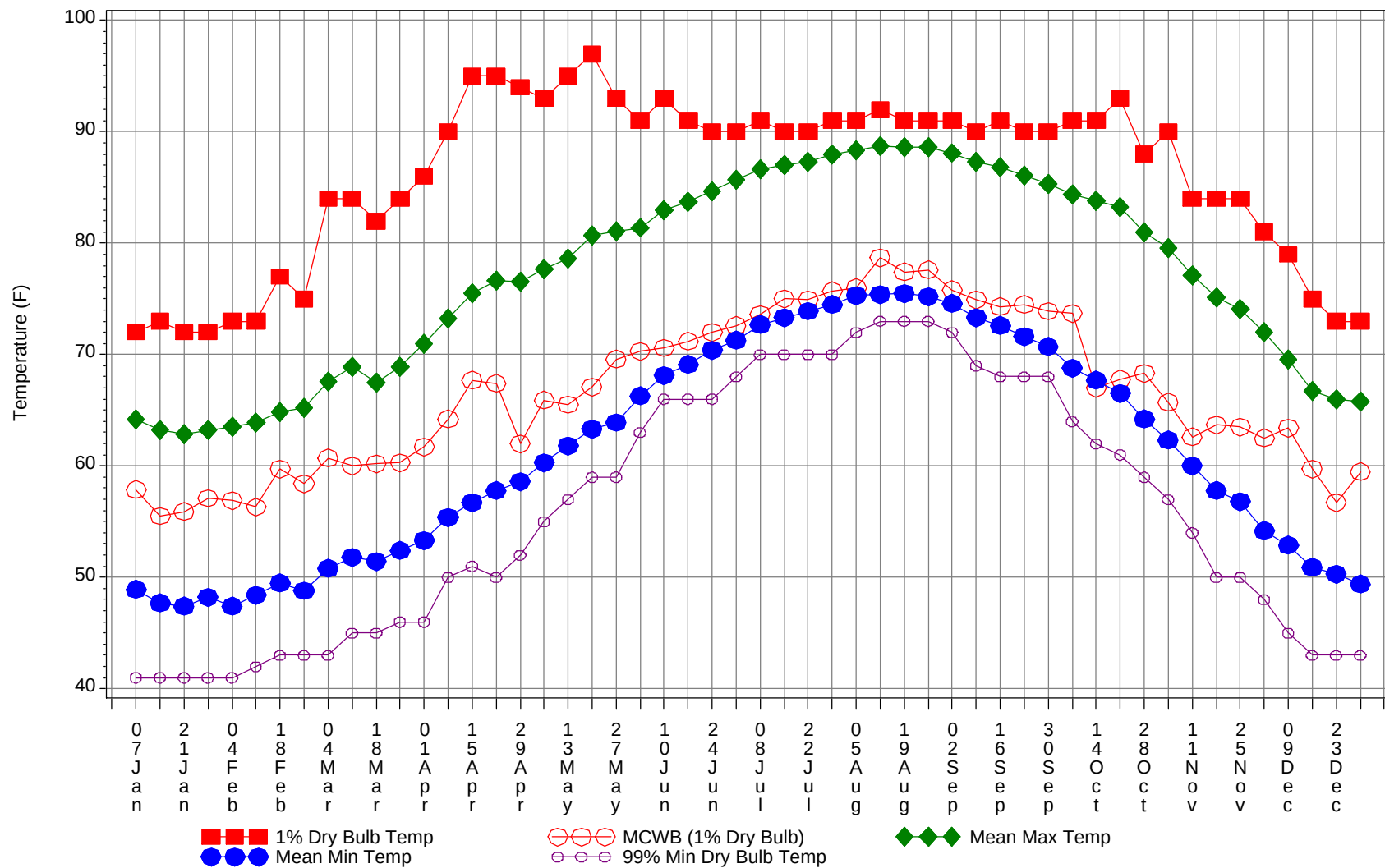
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

Dry-Bulb Temperature Hours For An Average Year

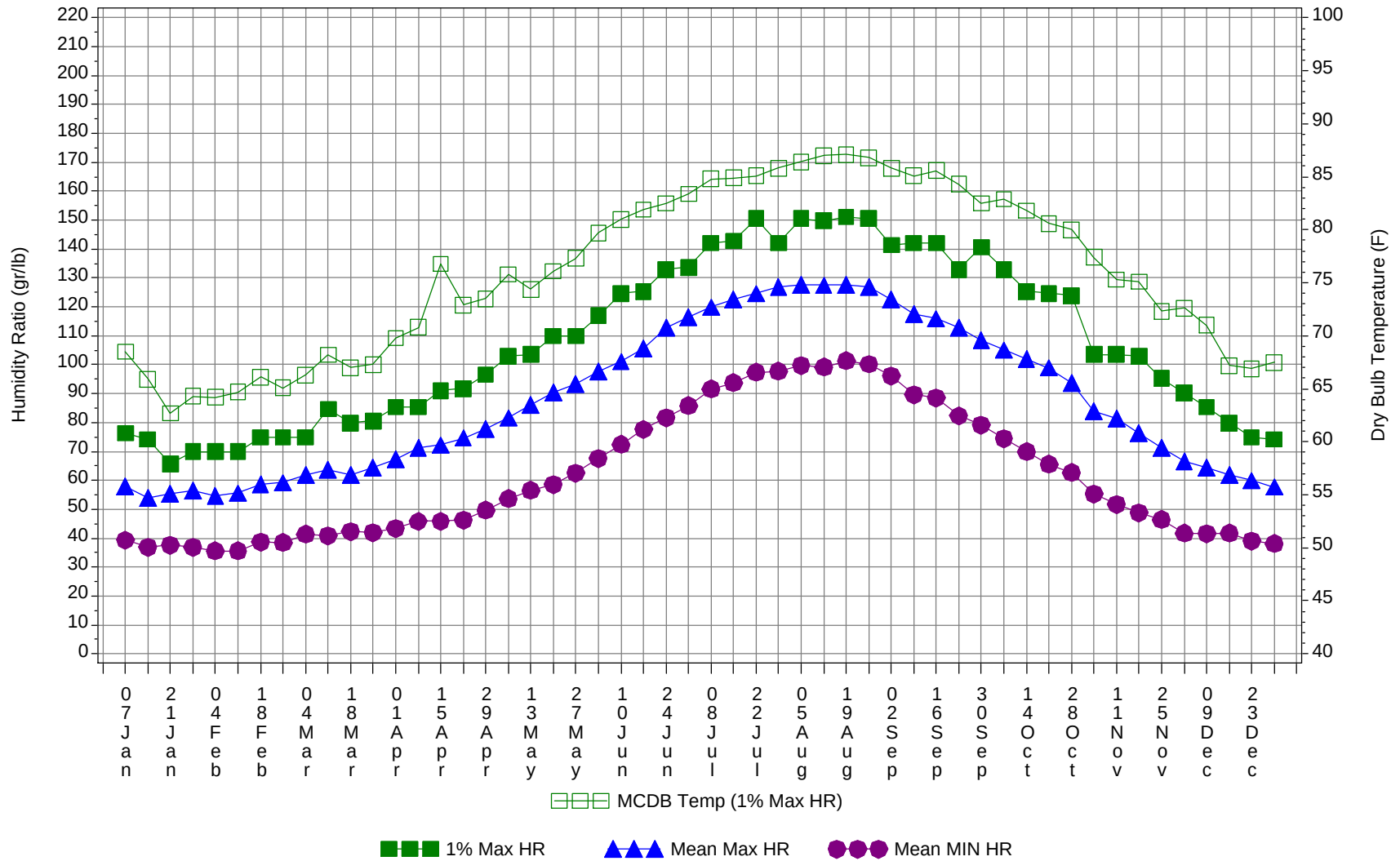
	Annual				
Temperature Range (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)
105/109		1	0	1	66.7
100/104	0	3	0	3	67.4
95/ 99	0	16	2	18	68.1
90/ 94	1	112	11	124	73
85/ 89	7	444	76	527	74.4
80/ 84	151	607	476	1234	72.4
75/ 79	496	388	550	1434	68.9
70/ 74	491	363	408	1262	64.2
65/ 69	279	310	273	862	60
60/ 64	365	397	460	1222	56.3
55/ 59	430	193	374	997	52.6
50/ 54	449	71	224	744	49
45/ 49	205	14	56	275	44.7
40/ 44	39	2	7	48	40.5
35/ 39	7	0	1	8	36.8

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.

Annual Summary of Temperatures



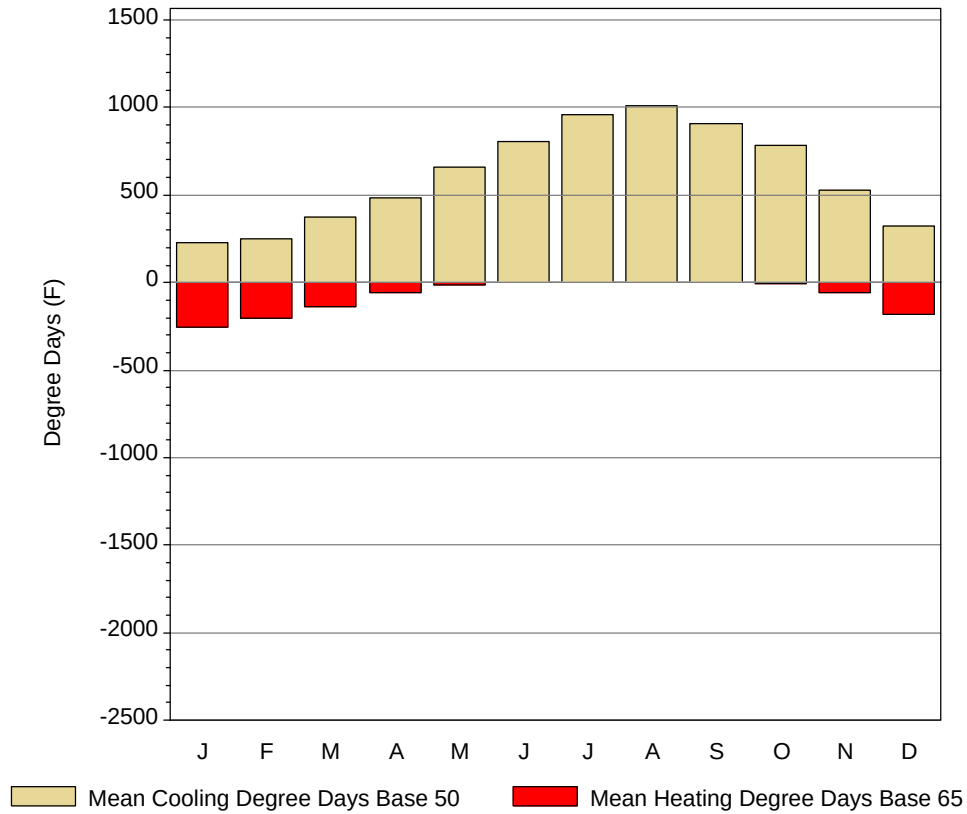
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

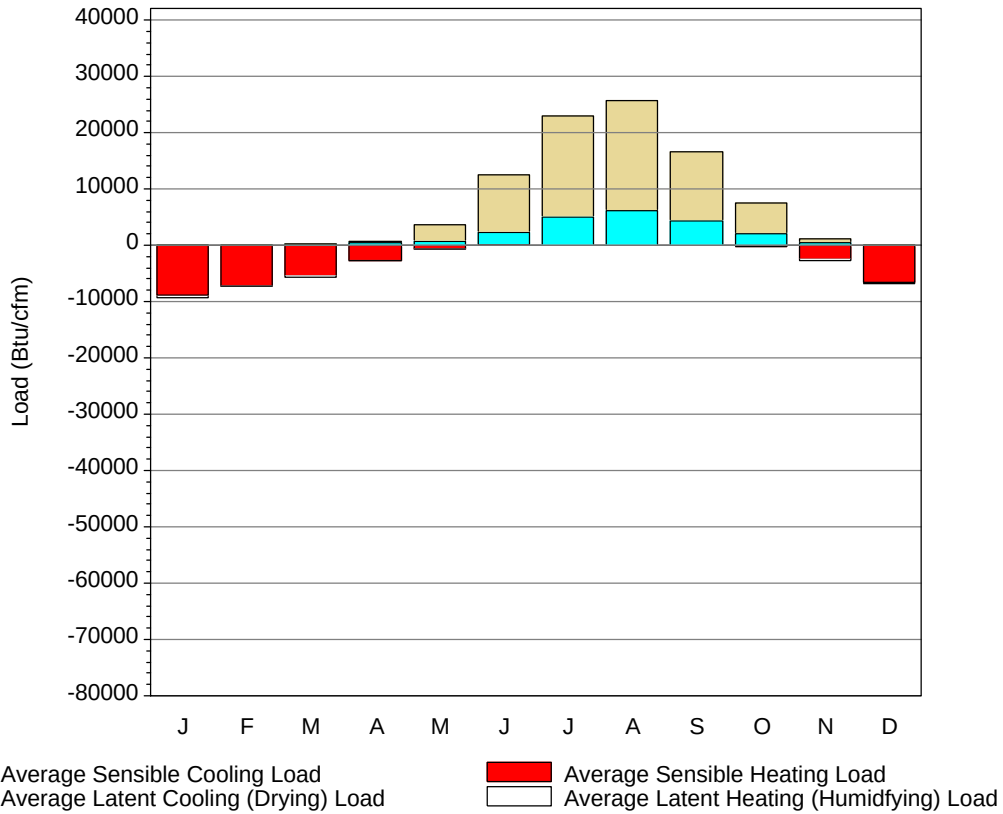
Week Ending	1.0% Temp (° F)	MCWB@ 1% Temp (° F)	Mean Max Temp (° F)	Mean Min Temp (° F)	99% Temp (° F)	1.0% HR (gr/lb)	MCDB@ 1% HR (° F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	72	57.9	64.2	48.9	41	76.3	68.5	57.8	39.3
14-Jan	73	55.5	63.2	47.7	41	74.2	65.9	53.8	36.8
21-Jan	72	55.9	62.9	47.4	41	65.8	62.7	55.3	37.5
28-Jan	72	57.1	63.2	48.2	41	70	64.3	56.5	36.9
4-Feb	73	56.9	63.5	47.4	41	70	64.2	54.8	35.6
11-Feb	73	56.3	63.9	48.4	42	70	64.7	55.6	35.6
18-Feb	77	59.7	64.8	49.5	43	74.9	66.1	58.7	38.6
25-Feb	75	58.4	65.2	48.8	43	74.9	65.1	59.2	38.5
4-Mar	84	60.7	67.6	50.8	43	74.9	66.3	62	41.4
11-Mar	84	60	68.9	51.8	45	84.7	68.2	63.7	40.9
18-Mar	82	60.2	67.5	51.4	45	79.8	67	61.9	42.3
25-Mar	84	60.3	68.9	52.4	46	80.5	67.3	64.4	41.9
1-Apr	86	61.7	71	53.3	46	85.4	69.8	67.3	43.3
8-Apr	90	64.2	73.2	55.4	50	85.4	70.8	71.4	45.8
15-Apr	95	67.7	75.5	56.7	51	91	76.8	72.2	45.8
22-Apr	95	67.4	76.6	57.8	50	91.7	72.9	74.7	46.3
29-Apr	94	62	76.5	58.6	52	96.6	73.5	77.8	49.7
6-May	93	65.9	77.7	60.3	55	102.9	75.8	81.6	53.7
13-May	95	65.5	78.6	61.8	57	103.6	74.4	86	56.6
20-May	97	67.1	80.7	63.3	59	109.9	76.1	90.3	58.5
27-May	93	69.6	81.1	63.9	59	109.9	77.3	93.2	62.5
4-Jun	91	70.3	81.4	66.3	63	116.9	79.7	97.6	67.5
10-Jun	93	70.6	83	68.1	66	124.6	81	101.1	72.4
17-Jun	91	71.2	83.7	69.1	66	125.3	81.9	105.7	77.6
24-Jun	90	72	84.7	70.4	66	133	82.5	112.8	81.7
1-Jul	90	72.6	85.7	71.3	68	133.7	83.4	116.4	85.9
8-Jul	91	73.6	86.6	72.7	70	142.1	84.8	119.9	91.6
15-Jul	90	75	87	73.3	70	142.8	84.9	122.6	93.8
22-Jul	90	74.9	87.3	73.9	70	150.5	85.1	124.6	97.4
29-Jul	91	75.7	88	74.5	70	142.1	85.8	126.9	97.8
5-Aug	91	76	88.3	75.3	72	150.5	86.4	127.7	99.7
12-Aug	92	78.7	88.7	75.4	73	149.8	87	127.5	99.2
19-Aug	91	77.4	88.6	75.5	73	151.2	87.1	127.6	101.3
26-Aug	91	77.6	88.6	75.2	73	150.5	86.8	127	100.2
2-Sep	91	75.8	88.1	74.6	72	141.4	85.8	122.5	96.1
9-Sep	90	74.9	87.3	73.3	69	142.1	85.1	117.4	89.6
16-Sep	91	74.3	86.8	72.6	68	142.1	85.6	115.9	88.5
23-Sep	90	74.5	86.1	71.6	68	133	84.3	112.8	82.3
30-Sep	90	73.9	85.3	70.7	68	140.7	82.5	108.4	79.1
7-Oct	91	73.7	84.4	68.8	64	133	82.9	105.1	74.4
14-Oct	91	67	83.8	67.7	62	125.3	81.8	102	70
21-Oct	93	67.8	83.2	66.5	61	124.6	80.6	98.9	65.6
28-Oct	88	68.3	81	64.2	59	123.9	80	93.6	62.7
4-Nov	90	65.7	79.6	62.3	57	103.6	77.4	83.9	55.3
11-Nov	84	62.6	77.1	60	54	103.6	75.3	81.5	51.7
18-Nov	84	63.7	75.1	57.8	50	102.9	75.1	76.3	48.8
25-Nov	84	63.5	74.1	56.8	50	95.2	72.3	71.2	46.4
2-Dec	81	62.5	72	54.2	48	90.3	72.6	66.7	41.8
9-Dec	79	63.4	69.6	52.9	45	85.4	71	64.4	41.5
16-Dec	75	59.7	66.7	50.9	43	79.8	67.2	61.9	41.8
23-Dec	73	56.7	66	50.3	43	74.9	66.9	59.9	39.1
31-Dec	73	59.5	65.8	49.4	43	74.2	67.5	57.7	38.2

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	228.4	8.4	256.9
FEB	247.2	16.8	201
MAR	377.3	48.6	137.8
APR	487.1	94.1	56.9
MAY	657.7	202.3	9.6
JUN	805.6	355.6	0
JUL	962.5	497.5	0
AUG	1009.3	544.3	0
SEP	909.5	459.5	0
OCT	780.7	318.4	2.7
NOV	527.9	132	54.2
DEC	326.9	33	177.9
ANN	7320.1	2710.5	897

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	8	-8920	3	-268
FEB	46	-7186	9	-121
MAR	270	-5469	57	-120
APR	399	-2715	395	-35
MAY	596	-674	3113	-6
JUN	2221	-15	10397	0
JUL	4947	0	18011	0
AUG	6088	0	19596	0
SEP	4362	0	12188	0
OCT	1979	-246	5532	-14
NOV	369	-2411	846	-217
DEC	38	-6515	81	-309
ANN	21323	-34151	70228	-1090

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													

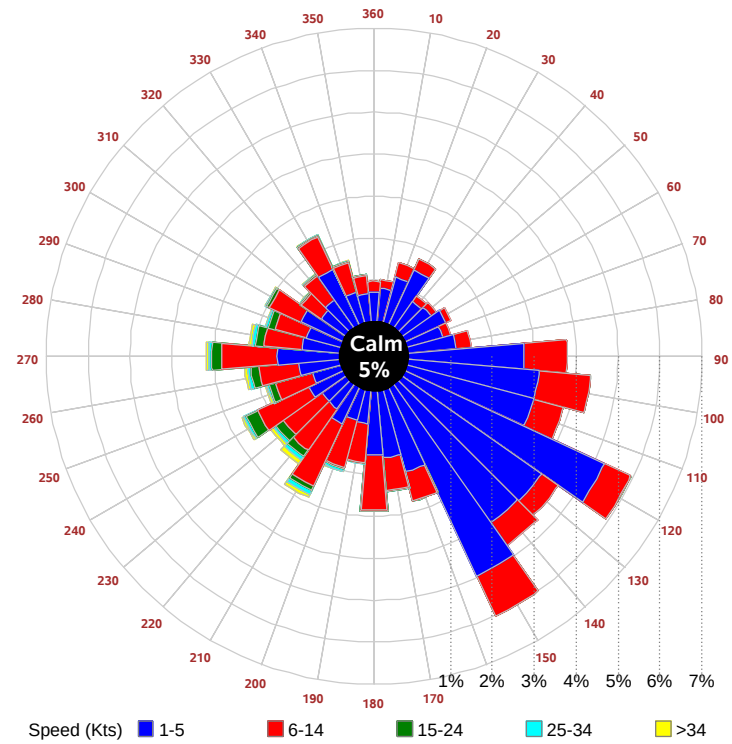
Average Annual Solar Radiation - Nearest Available Site Source: National Renewable Energy Laboratory, Golden CO, 1995

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													
NORTH	Unshaded													
	Shaded													
EAST	Unshaded													
	Shaded													
SOUTH	Unshaded													
	Shaded													
WEST	Unshaded													
	Shaded													

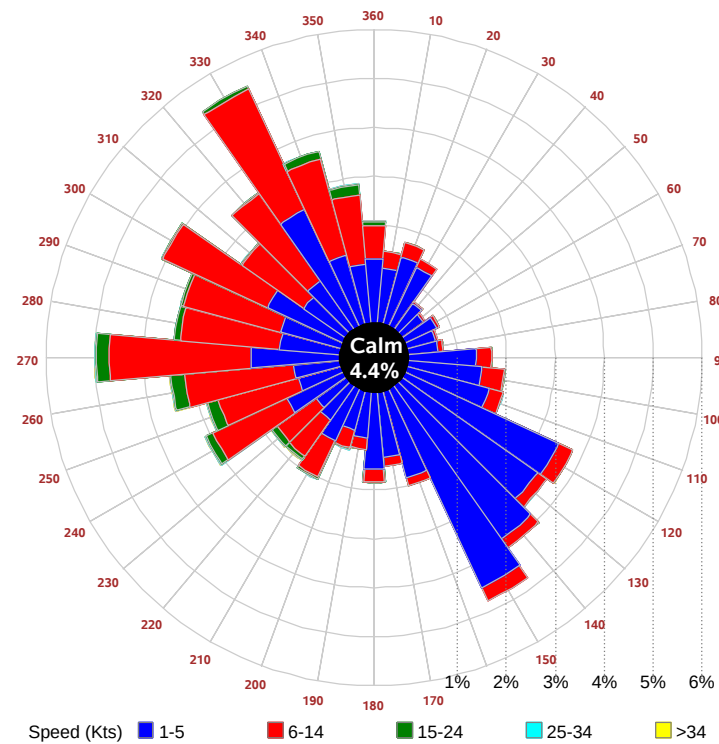
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9												
		March						June				
		9am	11am	1pm	3pm	5pm		9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear											
	M.Cloudy											
NORTH	M.Clear											
	M.Cloudy											
EAST	M.Clear			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

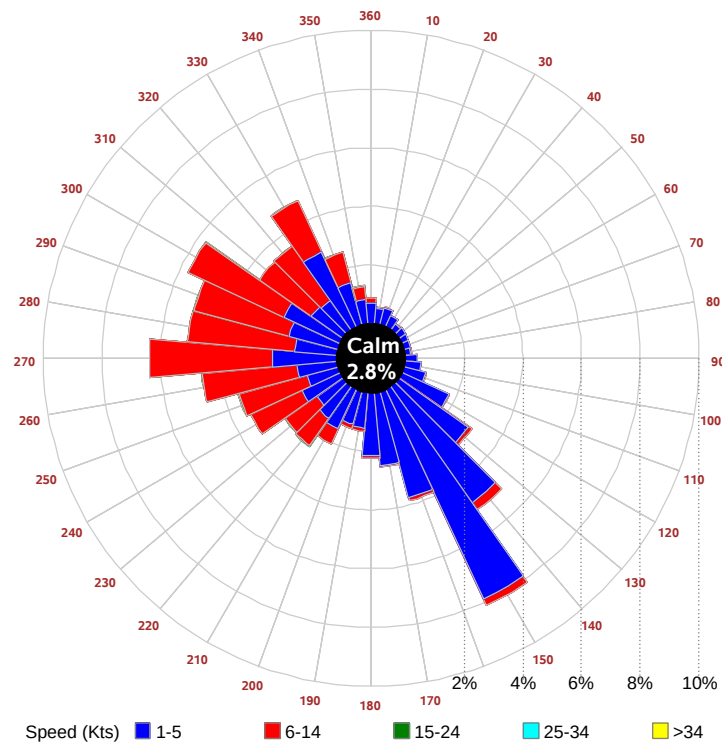
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November

