

VANCE AFB, OK	Station ID = ICAO_KEND
Latitude = 36.34 N	Elevation = 1307 Feet
Longitude = 97.92 W	Average Pressure = 28.61 inches Hg
Period of Record = 1988 To 2017	

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	104	73	78	13.2	S
0.4% Occurrence	102	74	85	12.8	S
1.0% Occurrence	99	74	90	13.5	S
2.0% Occurrence	97	74	95	13.6	S
Mean Daily Range	22	-	-	-	N
97.5% Occurrence	21	19	12	10.2	N
99.0% Occurrence	16	14	9	10.8	N
99.6% Occurrence	10	9	7	10.9	N
Median of Extreme Lows	3	2	5	11.5	N

	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	81	93	144	15	S
0.4% Occurrence	78	91	127	14.1	S
1.0% Occurrence	77	90	122	13.8	S
2.0% Occurrence	76	89	117	13.4	S

	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	148	86	0.94	14.3	S
0.4% Occurrence	139	85	0.88	12.5	S
1.0% Occurrence	131	83	0.83	12.8	S
2.0% Occurrence	124	82	0.79	13.8	S

Air Conditioning/ Humid Area Criteria	Threshold	T ≥ 93 °F	T ≥ 80 °F	Twb ≥ 73 °F	Twb ≥ 67 °F
	# of Hours	337	1440	812	2249

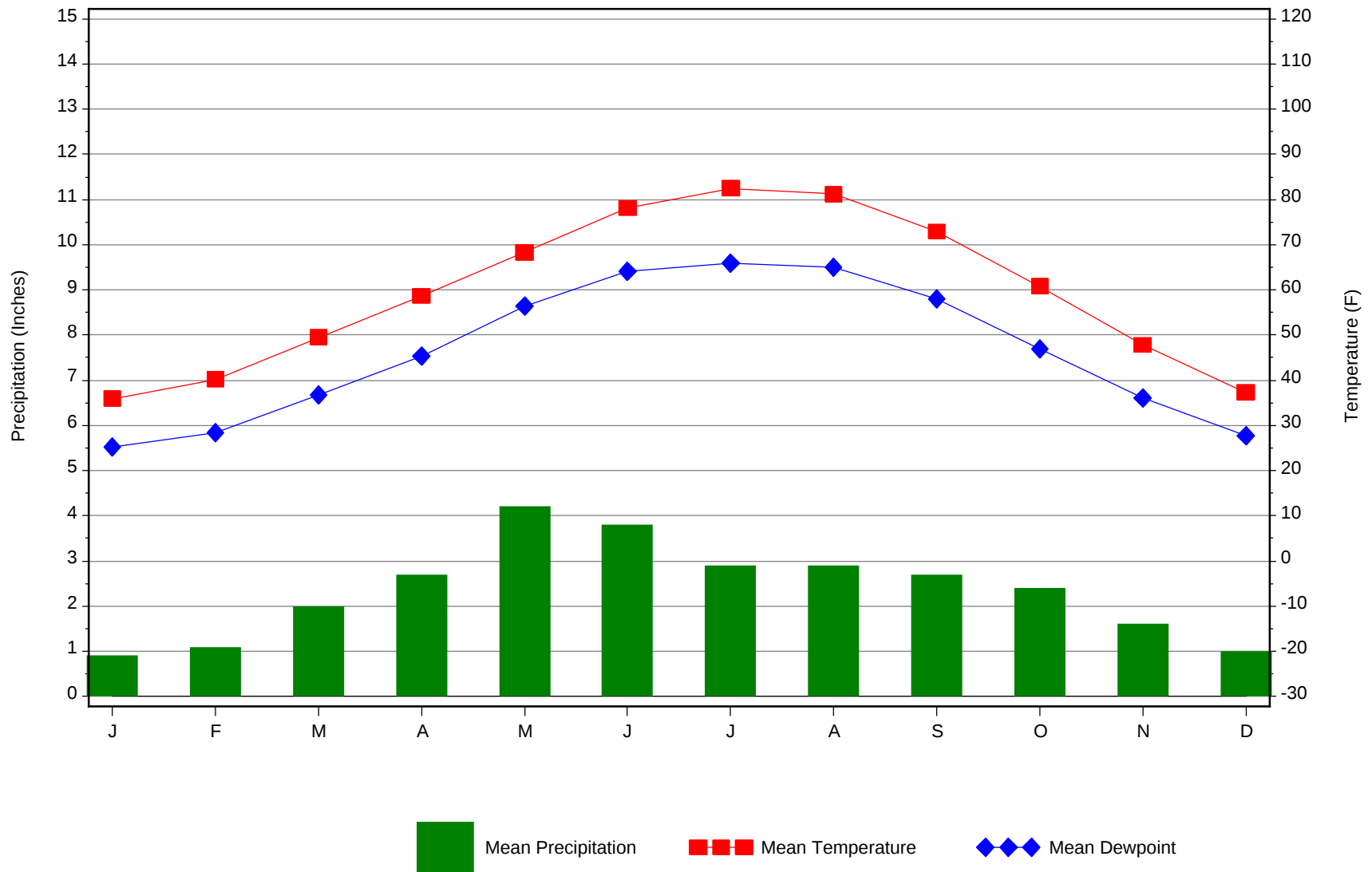
Other Site Data

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
11	3.8	90	3.2 + 1.9
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 (#)
62.2	22	10	55

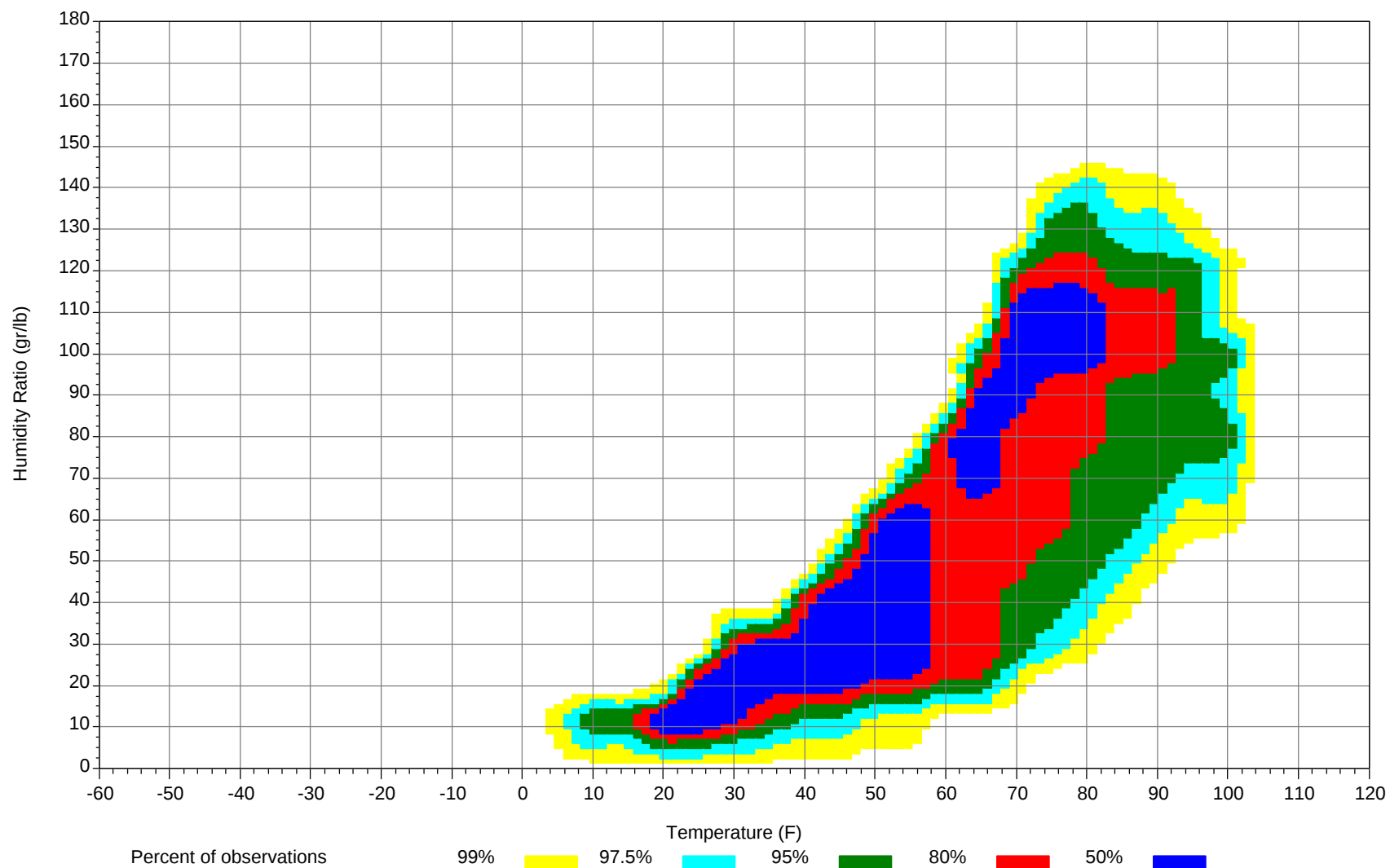
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.



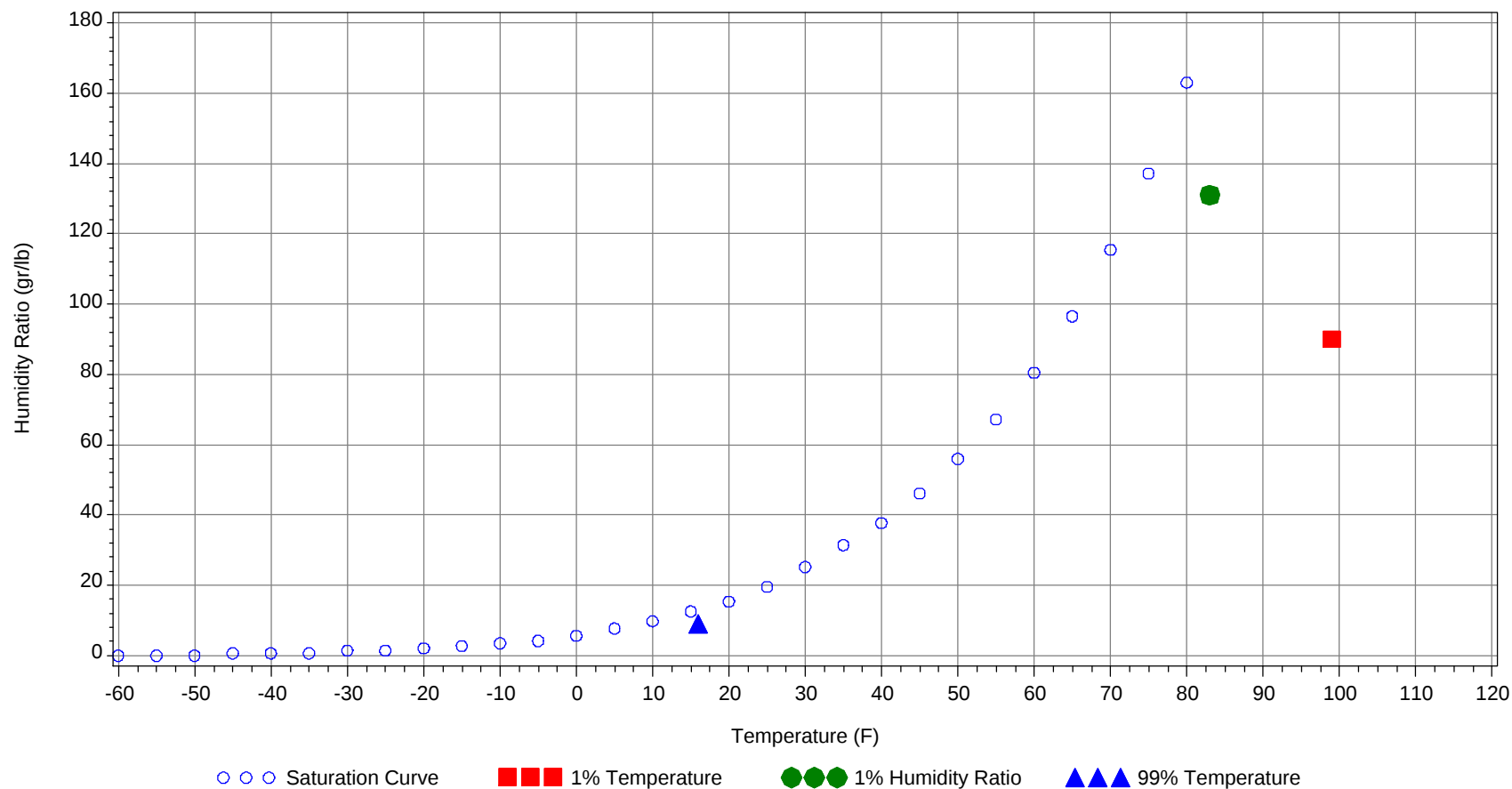
Average Annual Climate



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	99.0		74		90.0	38.2
99.0% Dry Bulb	16.0				9.0	5.3
1.0% Humidity Ratio	131.0	83.0	76	73.4		40.5

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)
110/114															
105/109															
100/104															
95/ 99															
90/ 94												0	0	0	58.5
85/ 89							0	0	0	57.9		1	0	1	61.7
80/ 84							0	0	0	59		5	1	6	60.8
75/ 79		1	0	1	54.4		3	1	4	57.5	0	14	5	19	61.3
70/ 74		3	1	4	53.8		8	2	10	54.6	0	23	12	35	58.3
65/ 69		5	1	6	52.2	0	10	5	15	53.1	3	23	17	43	56.2
60/ 64	0	13	5	18	49.3	2	19	10	31	50.9	15	33	27	75	53.8
55/ 59	2	20	10	32	46.9	7	22	17	46	47.9	19	33	33	85	49.8
50/ 54	6	27	17	50	43.9	10	28	26	64	44.6	33	34	38	105	46.1
45/ 49	9	33	27	69	40.5	18	29	29	76	40.8	36	31	38	105	42.1
40/ 44	20	26	33	79	37.4	25	22	30	77	37.6	38	18	28	84	38.3
35/ 39	37	36	42	115	33.7	37	27	35	99	34	45	17	23	85	34.4
30/ 34	54	34	44	132	29.6	52	25	30	107	29.9	28	11	14	53	30
25/ 29	50	22	34	106	24.9	34	14	18	66	24.9	18	4	6	28	24.9
20/ 24	30	13	16	59	20.4	16	6	9	31	20.1	7	2	2	11	20.3
15/ 19	21	9	11	41	16	12	5	5	22	16.2	3	1	1	5	15.7
10/ 14	11	4	6	21	11.1	5	3	3	11	10.9	3	0	0	3	11.1
5/ 9	4	1	1	6	6.4	3	2	2	7	6.4	1	0	0	1	6.9
0/ 4	1	0	0	1	2	1	0	0	1	1.2	0			0	2
-5/ -1	0		0	0	-3.7	1	0	0	1	-3.3					
-10/ -6	0			0	-7.3	0		0	0	-5.9					

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)
110/114															
105/109												0	0	0	71.3
100/104		0	0	0	62		1	0	1	70.1		6	1	7	74.8
95/ 99		0	0	0	68.3		3	1	4	72		23	8	31	74.3
90/ 94		1	0	1	68.7		12	4	16	71.7		52	25	77	73.3
85/ 89	0	5	1	6	67	0	21	10	31	70.6	1	43	30	74	72
80/ 84	0	17	6	23	64.9	1	42	22	65	68.8	15	49	49	113	70.6
75/ 79	0	30	15	45	62.8	10	49	39	98	66.7	49	34	53	136	69.4
70/ 74	5	37	28	70	60.6	31	47	48	126	64.5	75	21	41	137	67.3
65/ 69	14	31	31	76	58.2	43	27	40	110	61.7	55	9	22	86	64
60/ 64	29	40	41	110	55.2	61	25	40	126	58.2	34	3	9	46	60.1
55/ 59	42	32	41	115	51.4	46	15	26	87	53.6	9	1	1	11	54.9
50/ 54	49	24	34	107	47.7	33	6	12	51	49.2	2		0	2	51.5
45/ 49	43	13	23	79	43.2	17	1	4	22	44.5	0			0	45.7
40/ 44	27	5	11	43	38.8	5	0	1	6	40.6					
35/ 39	19	3	6	28	35.1	2	0	0	2	36.6					
30/ 34	8	1	2	11	30.2	0			0	32.3					
25/ 29	3		0	3	25.6										
20/ 24	0			0	20										
15/ 19	0			0	18										
10/ 14															
5/ 9															
0/ 4															
-5/ -1															
-10/ -6															

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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)
110/114		0		0	72.7		0	0	0	71					
105/109		4	1	5	72.9		2	1	3	72.5		0		0	69.5
100/104		23	9	32	74		21	6	27	73.7		3	1	4	71
95/ 99		46	21	67	74.6		40	18	58	73.9		12	3	15	72.4
90/ 94	0	56	37	93	74	0	54	30	84	73.2		30	11	41	71.6
85/ 89	6	45	42	93	72.8	2	40	38	80	72.2	0	30	16	46	70.2
80/ 84	34	38	60	132	71.6	26	45	58	129	71.2	4	50	34	88	68.2
75/ 79	88	22	46	156	70.6	78	27	51	156	70	23	44	47	114	66.7
70/ 74	80	10	24	114	68.5	86	14	33	133	67.9	58	34	49	141	65.1
65/ 69	28	3	6	37	64.4	37	5	11	53	64.1	48	16	36	100	61.7
60/ 64	10	1	2	13	60.7	15	1	3	19	59.8	48	12	23	83	57.6
55/ 59	1	0	0	1	55.6	3		0	3	55.1	34	6	13	53	53.1
50/ 54						0			0	53	17	2	5	24	48.9
45/ 49											7	0	1	8	43.8
40/ 44											2	0	0	2	39.1
35/ 39											0			0	35.7
30/ 34															
25/ 29															
20/ 24															
15/ 19															
10/ 14															
5/ 9															
0/ 4															
-5/ -1															
-10/ -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

	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)
110/114															
105/109															
100/104															
95/ 99		0	0	0	69.2										
90/ 94		4	0	4	68.3		0		0	63					
85/ 89		9	2	11	67.9		0		0	62.8					
80/ 84	1	27	8	36	65.6		2	0	2	63.4					
75/ 79	1	35	17	53	63.5		8	1	9	61.5		0		0	56.8
70/ 74	12	40	30	82	61.6	0	17	5	22	59.1		3	0	3	58.2
65/ 69	17	33	33	83	58.6	3	19	9	31	56.7	0	6	1	7	55.4
60/ 64	37	38	46	121	55.6	11	35	21	67	54.3	2	14	4	20	52.3
55/ 59	49	28	44	121	51.7	20	37	31	88	50.4	4	22	10	36	48.5
50/ 54	52	18	34	104	47.3	26	36	39	101	46.2	8	29	19	56	44.8
45/ 49	39	10	19	68	42.7	38	33	41	112	42.1	13	37	31	81	41.4
40/ 44	19	3	8	30	38.6	35	19	31	85	38.2	24	31	39	94	38.1
35/ 39	14	1	5	20	34.7	42	18	31	91	34.1	45	38	46	129	34.1
30/ 34	5	1	1	7	30	32	9	19	60	29.6	57	30	42	129	29.7
25/ 29	1	0	0	1	24.9	22	4	9	35	24.9	43	18	29	90	25
20/ 24	0		0	0	20.1	8	2	3	13	20.3	23	9	12	44	20.4
15/ 19	0		0	0	15.6	2	1	0	3	16.7	16	6	8	30	16.2
10/ 14	0			0	13	1		0	1	11.6	7	3	4	14	11
5/ 9											4	1	2	7	6.4
0/ 4											2	1	1	4	1.7
-5/ -1											0	0	0	0	-3.9
-10/ -6											0	0		0	-6.5

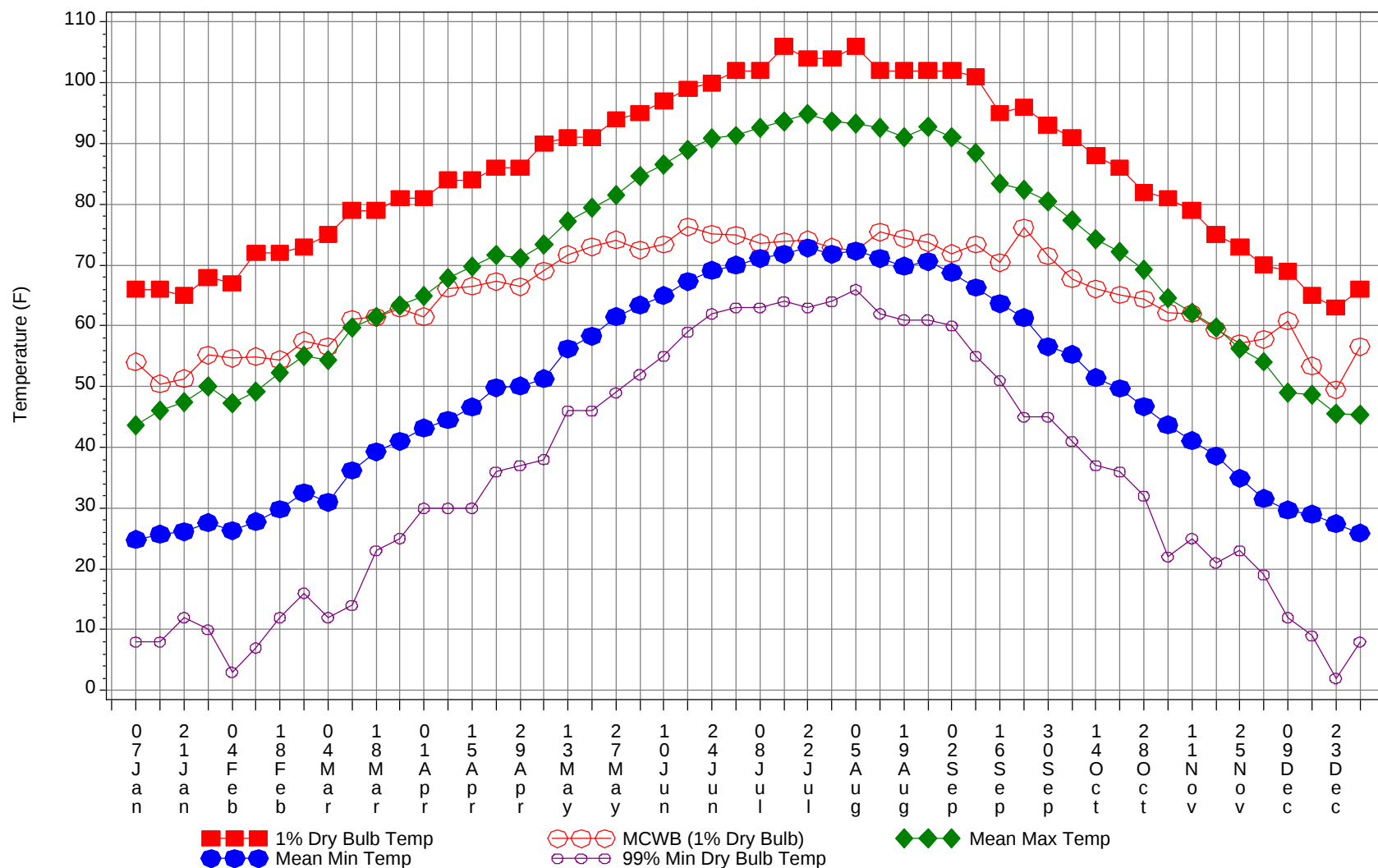
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Dry-Bulb Temperature Hours For An Average Year

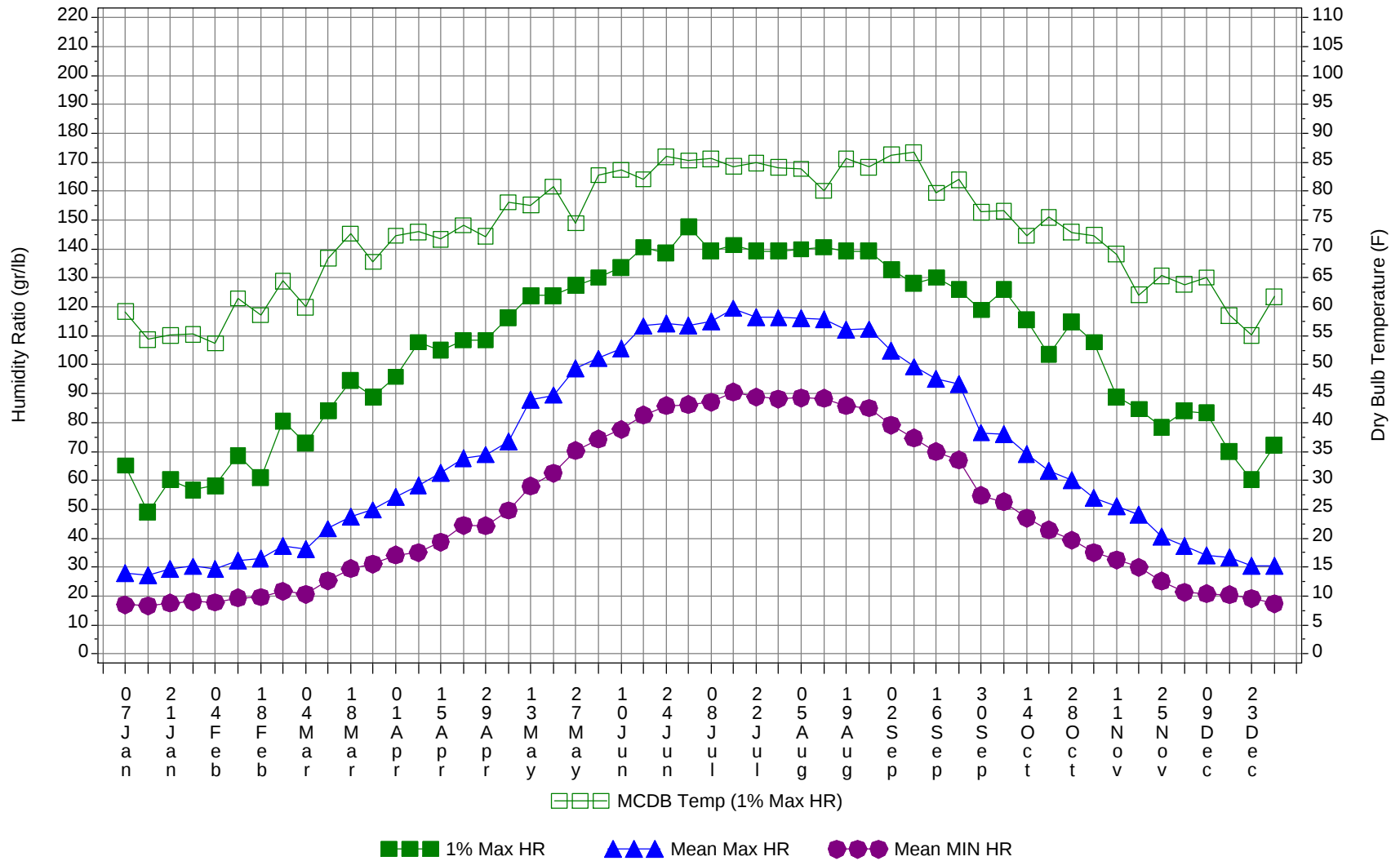
	Annual				
Temperature Range (°F)	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (°F)
110/114		0	0	0	71.7
105/109		6	2	8	72.5
100/104		54	17	71	73.8
95/ 99		126	51	177	74.1
90/ 94	1	210	108	319	73.1
85/ 89	9	197	140	346	71.6
80/ 84	82	278	241	601	69.7
75/ 79	252	269	276	797	67.9
70/ 74	353	257	277	887	64.9
65/ 69	252	188	214	654	60.6
60/ 64	264	232	231	727	55.9
55/ 59	236	215	226	677	51
50/ 54	236	203	225	664	46.5
45/ 49	220	185	214	619	42
40/ 44	194	123	181	498	38.1
35/ 39	238	139	186	563	34.1
30/ 34	235	109	149	493	29.8
25/ 29	167	61	94	322	24.9
20/ 24	82	31	42	155	20.3
15/ 19	55	21	27	103	16.1
10/ 14	27	10	12	49	11.1
5/ 9	11	4	5	20	6.5
0/ 4	5	1	2	8	1.7
-5/ -1	1	0	0	1	-3.6
-10/ -6	1	0	0	1	-6.3

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



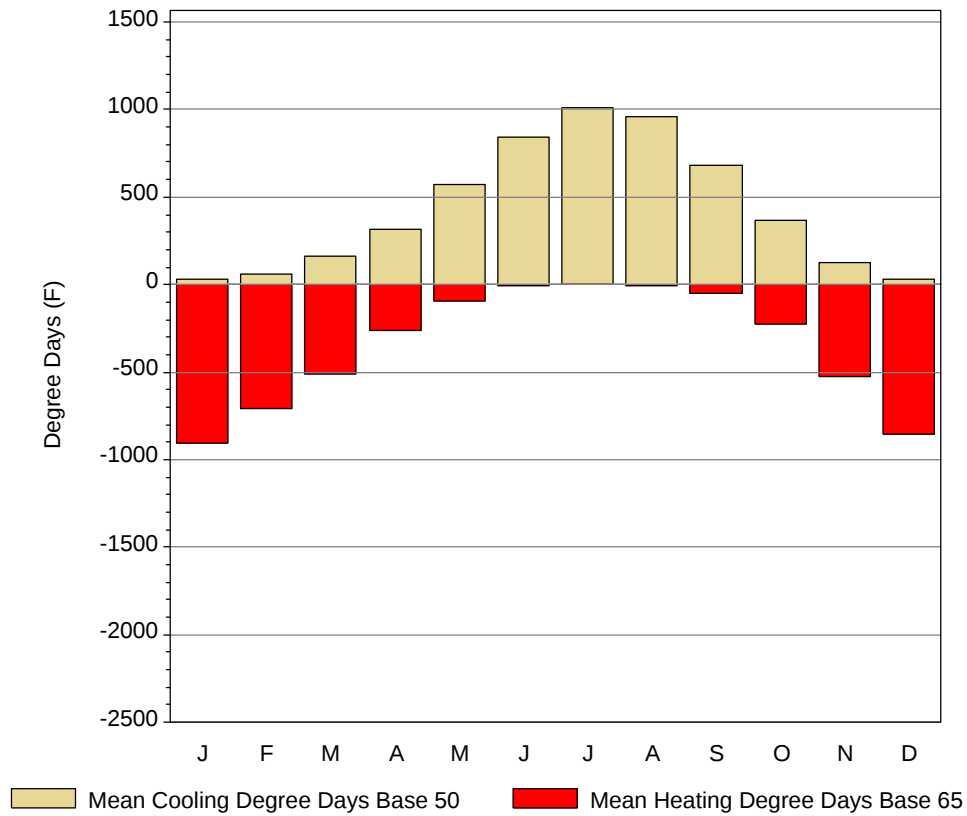
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

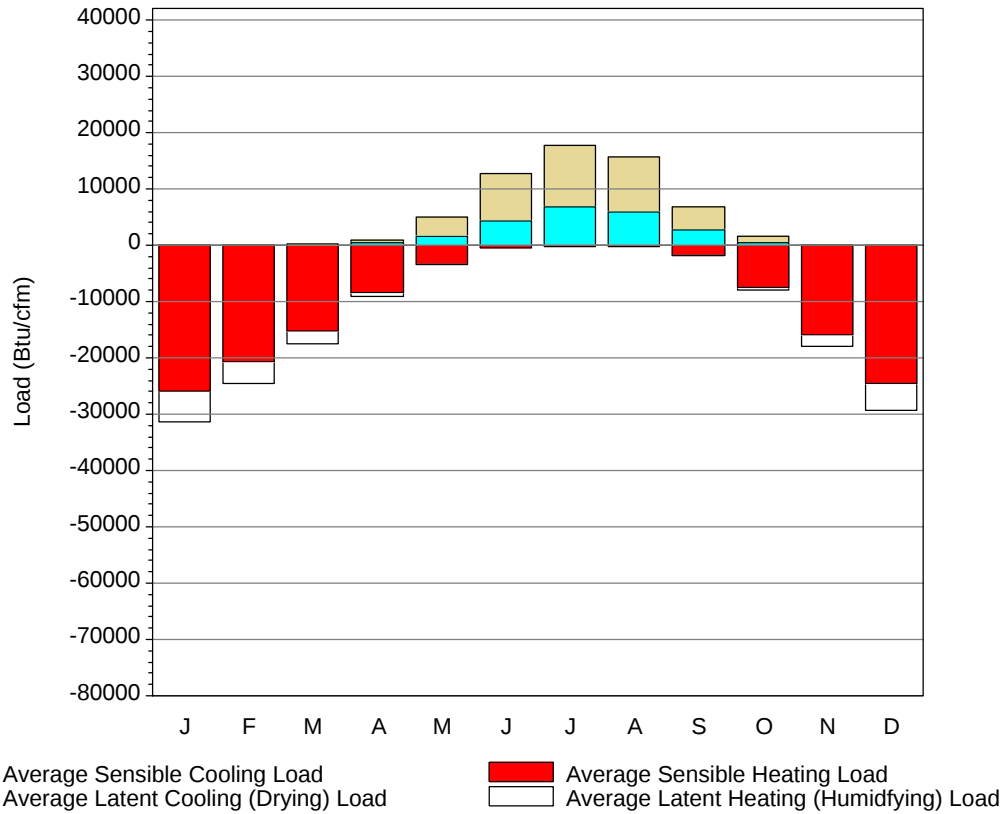
Week Ending	1.0% Temp (° F)	MCWB@ 1% Temp (° F)	Mean Max Temp (° F)	Mean Min Temp (° F)	99% Temp (° F)	1.0% HR (gr/lb)	MCDB@ 1% HR (° F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	66	54.1	43.7	24.8	8	65.1	59.2	28	16.9
14-Jan	66	50.4	46	25.7	8	49	54.4	27.3	16.6
21-Jan	65	51.3	47.5	26.1	12	60.2	55.1	29.3	17.6
28-Jan	68	55.2	50.1	27.6	10	56.7	55.3	30.3	18
4-Feb	67	54.7	47.3	26.3	3	58.1	53.7	29.4	17.8
11-Feb	72	54.9	49.2	27.8	7	68.6	61.5	32.2	19.4
18-Feb	72	54.4	52.3	29.8	12	60.9	58.6	33	19.6
25-Feb	73	57.5	55	32.5	16	80.5	64.5	37.2	21.6
4-Mar	75	56.6	54.4	31	12	72.8	60	36.2	20.6
11-Mar	79	61.1	59.8	36.2	14	84	68.4	43.3	25.3
18-Mar	79	61.4	61.5	39.3	23	94.5	72.7	47.4	29.4
25-Mar	81	62.9	63.4	41	25	88.9	67.8	49.8	31.1
1-Apr	81	61.5	64.9	43.2	30	95.9	72.3	54.4	34.1
8-Apr	84	66.2	67.8	44.5	30	107.8	73	58.3	35.1
15-Apr	84	66.5	69.7	46.6	30	105	71.7	62.5	38.7
22-Apr	86	67.3	71.7	49.8	36	108.5	74.1	67.6	44.5
29-Apr	86	66.4	71.2	50.1	37	108.5	72.2	68.9	44.3
6-May	90	69	73.4	51.3	38	116.2	78.1	73.5	49.6
13-May	91	71.7	77.2	56.2	46	123.9	77.6	87.9	58
20-May	91	73	79.4	58.3	46	123.9	80.8	89.5	62.5
27-May	94	74.1	81.6	61.5	49	127.4	74.5	98.7	70.3
4-Jun	95	72.5	84.6	63.4	52	130.2	82.8	102.2	74.3
10-Jun	97	73.4	86.5	65	55	133.7	83.7	105.5	77.6
17-Jun	99	76.3	88.9	67.3	59	140.7	82.1	113.4	82.6
24-Jun	100	75.1	90.9	69.1	62	138.6	86	114.3	85.8
1-Jul	102	74.9	91.3	70	63	147.7	85.3	113.7	86.2
8-Jul	102	73.6	92.6	71.1	63	139.3	85.6	115.1	87.1
15-Jul	106	73.9	93.7	71.8	64	141.4	84.3	119.5	90.5
22-Jul	104	74.1	94.8	72.8	63	139.3	84.9	116.4	88.8
29-Jul	104	72.9	93.7	71.8	64	139.3	84.1	116.3	88.1
5-Aug	106	72.3	93.3	72.3	66	140	83.9	116.1	88.5
12-Aug	102	75.4	92.6	71.1	62	140.7	80.1	115.8	88.3
19-Aug	102	74.4	91.1	69.8	61	139.3	85.6	112	85.9
26-Aug	102	73.7	92.7	70.6	61	139.3	84.2	112.3	85
2-Sep	102	71.9	91.1	68.8	60	133	86.3	104.8	79.1
9-Sep	101	73.4	88.4	66.3	55	128.1	86.7	99.3	74.6
16-Sep	95	70.4	83.5	63.7	51	130.2	79.7	95.1	69.9
23-Sep	96	76.1	82.4	61.3	45	126	82	93.3	67
30-Sep	93	71.5	80.5	56.6	45	119	76.4	76.5	54.7
7-Oct	91	67.7	77.3	55.3	41	126	76.6	76.1	52.6
14-Oct	88	66.1	74.2	51.5	37	115.5	72.3	69	47
21-Oct	86	65.1	72.1	49.7	36	103.6	75.5	63.3	42.9
28-Oct	82	64.4	69.3	46.7	32	114.8	72.9	60.1	39.3
4-Nov	81	62.2	64.6	43.7	22	107.8	72.4	54	35.1
11-Nov	79	62	62.2	41.1	25	88.9	69.1	51	32.6
18-Nov	75	59.3	59.8	38.6	21	84.7	62.1	48.2	29.9
25-Nov	73	57.1	56.2	34.9	23	78.4	65.4	40.7	25.1
2-Dec	70	57.8	54.1	31.6	19	84	63.9	37.3	21.4
9-Dec	69	60.8	49	29.7	12	83.3	65.1	34	20.8
16-Dec	65	53.4	48.7	29	9	70	58.5	33.3	20.4
23-Dec	63	49.5	45.5	27.4	2	60.2	55.1	30.4	19.2
31-Dec	66	56.6	45.4	25.9	8	72.1	61.8	30.4	17.4

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	30.7	1.8	904.8
FEB	57.7	5.9	711.3
MAR	163.8	27.2	508.7
APR	312.7	72.3	258.5
MAY	573.5	194.6	92
JUN	839.9	398.7	8.8
JUL	1007.6	544.2	1.5
AUG	962.8	500.6	2.8
SEP	685	279.6	46.3
OCT	370.3	94.1	224.7
NOV	122.9	14.5	526.7
DEC	33.6	1.3	857.6
ANN	5160.5	2134.8	4143.7

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	-25837	2	-5436
FEB	11	-20561	6	-4002
MAR	94	-15312	107	-2229
APR	368	-8397	605	-642
MAY	1521	-3449	3449	-47
JUN	4381	-509	8272	0
JUL	6881	-117	10800	0
AUG	6043	-193	9677	0
SEP	2656	-1863	4222	-29
OCT	569	-7468	972	-573
NOV	35	-15817	66	-2226
DEC	0	-24617	12	-4624
ANN	22560	-124140	38190	-19808

Station Information		Shading Geometry in Dimensionless Units	
City, State, WBAN	OKLAHOMACITY, OK 13967	Window:	1.000
Lat, Lon, Elev	35.40N 97.60W 1303ft	Overhang:	0.404
Press, Stn_Type	14.1psia Secondary	Vert Gap:	0.289

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	870	1100	1450	1790	1960	2150	2200	1980	1600	1280	920	770	1510
	Std.Dev.	72	83	127	101	120	107	132	105	115	115	77	57	33
	Minimum	690	940	1150	1600	1770	1940	1850	1760	1310	1030	750	640	1450
	Maximum	1010	1260	1680	2030	2190	2340	2490	2170	1810	1460	1100	890	1560
	Diffuse	340	450	570	670	770	780	720	660	590	440	360	300	550
Clear Day	Global	1110	1450	1900	2320	2570	2650	2590	2360	2000	1550	1160	1000	1890
NORTH	Global	230	300	370	450	560	650	620	490	390	310	250	210	400
	Diffuse	230	300	370	440	500	530	510	450	390	310	250	210	370
Clear Day	Global	210	270	340	430	580	690	630	480	360	290	220	190	390
EAST	Global	570	690	850	1000	1050	1130	1190	1110	920	790	590	510	870
	Diffuse	280	360	450	540	590	620	610	560	490	380	300	250	460
Clear Day	Global	800	980	1200	1360	1430	1450	1420	1350	1210	1020	820	720	1150
SOUTH	Global	1340	1280	1200	1000	790	710	760	940	1130	1330	1290	1260	1090
	Diffuse	400	450	510	540	540	540	530	540	520	460	400	360	480
Clear Day	Global	2020	1990	1730	1270	910	770	830	1090	1510	1860	1970	1970	1490
WEST	Global	590	720	890	1050	1110	1200	1230	1130	970	820	620	520	900
	Diffuse	290	370	460	550	610	640	620	570	500	390	300	260	460
Clear Day	Global	800	980	1200	1360	1430	1450	1420	1350	1210	1020	820	720	1150

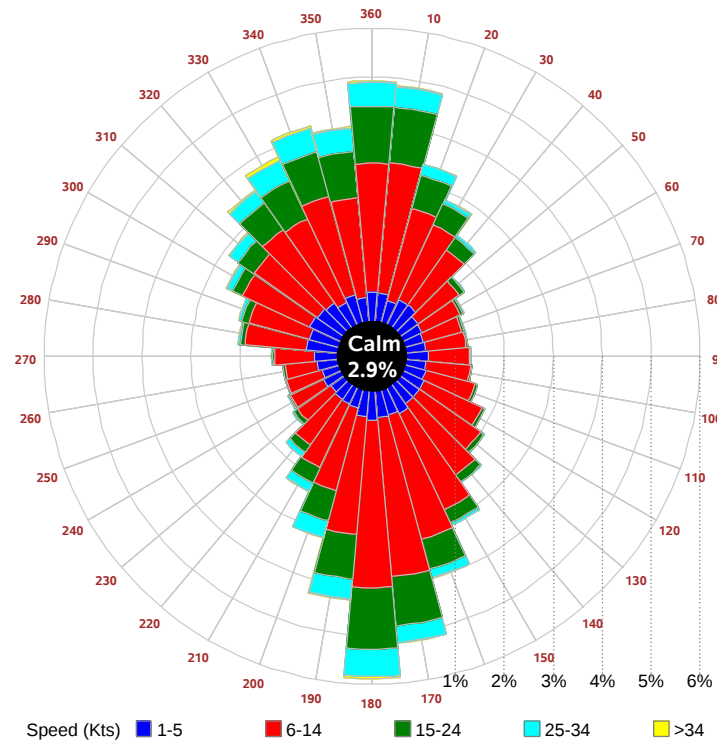
Average Annual Solar Radiation - Nearest Available Site Source: National Renewable Energy Laboratory, Golden CO, 1995

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	580	760	1030	1300	1430	1570	1610	1440	1150	900	620	500	1080
NORTH	Unshaded	160	210	260	310	360	410	390	320	270	220	170	150	270
	Shaded	150	190	240	290	340	380	360	300	250	200	160	130	250
EAST	Unshaded	400	480	610	710	740	800	850	790	660	560	410	360	610
	Shaded	370	440	550	640	670	720	760	710	590	510	380	330	560
SOUTH	Unshaded	1000	930	820	630	470	420	440	570	740	940	960	950	740
	Shaded	980	880	680	450	350	350	350	390	570	850	930	940	640
WEST	Unshaded	410	500	630	750	800	860	880	810	690	580	430	360	640
	Shaded	380	460	570	680	710	770	790	730	630	540	400	340	580

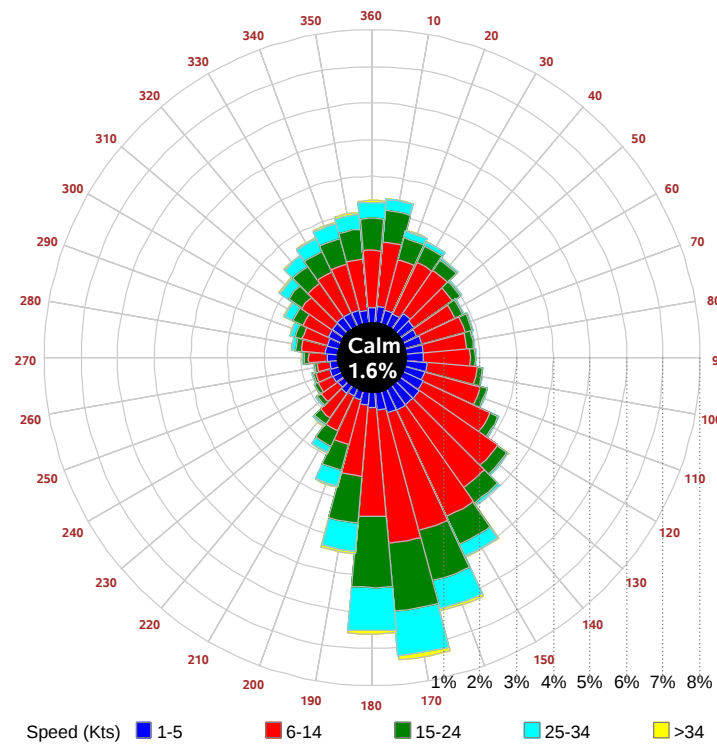
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS Percentage Uncertainty = 9												
		March					June					
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm	
HORIZ.	M.Clear	33	72	88	77	40	37	78	103	101	77	
	M.Cloudy	19	45	59	50	26	25	56	75	79	60	
NORTH	M.Clear	9	14	15	14	10	23	16	17	17	16	
	M.Cloudy	8	16	18	16	10	15	17	19	19	17	
EAST	M.Clear	75	67	20	14	10	71	79	43	17	16	
	M.Cloudy	24	35	20	16	10	34	50	35	19	17	
SOUTH	M.Clear	31	65	80	70	37	10	21	38	38	21	
	M.Cloudy	13	35	47	39	20	10	20	32	33	21	
WEST	M.Clear	9	14	15	62	77	10	16	17	42	77	
	M.Cloudy	8	16	18	36	34	10	17	19	36	55	
M.Clear	(% hrs)	39	40	40	39	42	42	43	42	43	49	

		Sept					Dec					
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm	
HORIZ.	M.Clear	20	64	89	87	59	12	44	57	43	10	
	M.Cloudy	12	40	59	62	42	8	28	36	26	7	
NORTH	M.Clear	7	14	16	16	13	5	10	11	10	4	
	M.Cloudy	6	14	18	18	14	4	10	13	10	3	
EAST	M.Clear	56	77	41	16	13	42	50	12	10	4	
	M.Cloudy	18	37	30	18	14	11	23	13	10	3	
SOUTH	M.Clear	13	48	70	68	45	33	80	94	79	28	
	M.Cloudy	7	27	42	46	29	9	33	42	31	9	
WEST	M.Clear	7	14	16	44	76	5	10	13	52	37	
	M.Cloudy	6	14	18	33	44	4	10	13	23	11	
M.Clear	(% hrs)	47	48	46	45	50	43	43	42	43	44	

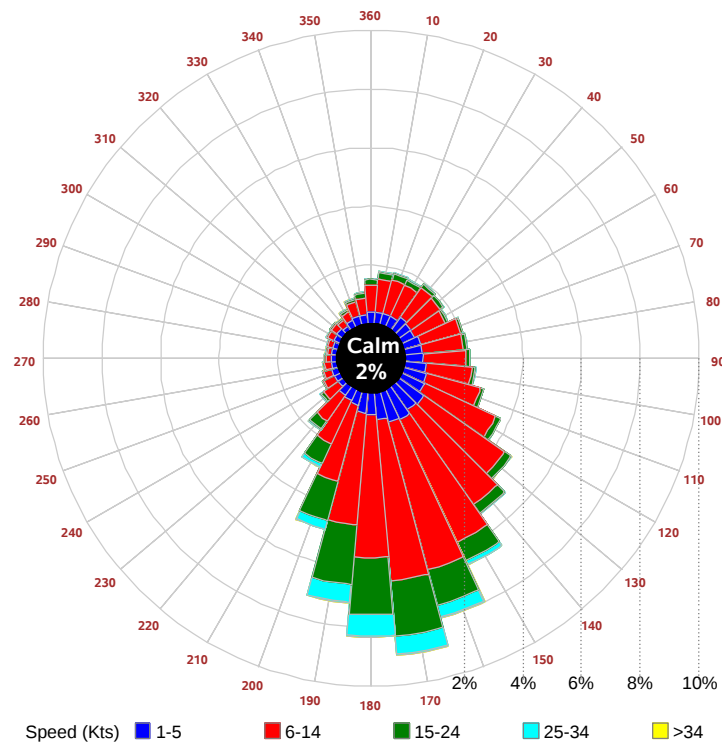
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November

