

WILLIAMSPORT RGNL, PA

Latitude = 41.24 N

Longitude = 76.92 W

Period of Record = 1988 To 2017

Station ID = ICAO_KIPT

Elevation = 529 Feet

Average Pressure = 29.46 inches Hg

Design Criteria Data

Dry Bulb Temperature (T)	Mean Coincident (Average) Values				
	Design Value (°F)	Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	97	73	88	10	W
0.4% Occurrence	91	72	91	8.7	W
1.0% Occurrence	88	71	91	8.4	W
2.0% Occurrence	85	70	88	7.9	W
Mean Daily Range	19	-	-	-	W
97.5% Occurrence	16	14	8	7.4	W
99.0% Occurrence	10	8	6	6.8	W
99.6% Occurrence	6	5	5	6.6	W
Median of Extreme Lows	0	-1	4	5.6	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	89	125	7.8	W
0.4% Occurrence	76	86	119	7.1	W
1.0% Occurrence	74	83	113	6.7	W
2.0% Occurrence	73	81	110	6.4	W

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	4.7	W
0.4% Occurrence	124	81	0.82	5.2	W
1.0% Occurrence	120	79	0.79	5.1	W
2.0% Occurrence	113	77	0.74	4.9	W

Air Conditioning/ Humid Area Criteria	Threshold	$T \geq 93^{\circ}\text{F}$	$T \geq 80^{\circ}\text{F}$	$T_{wb} \geq 73^{\circ}\text{F}$	$T_{wb} \geq 67^{\circ}\text{F}$
	# of Hours	25	523	199	1066

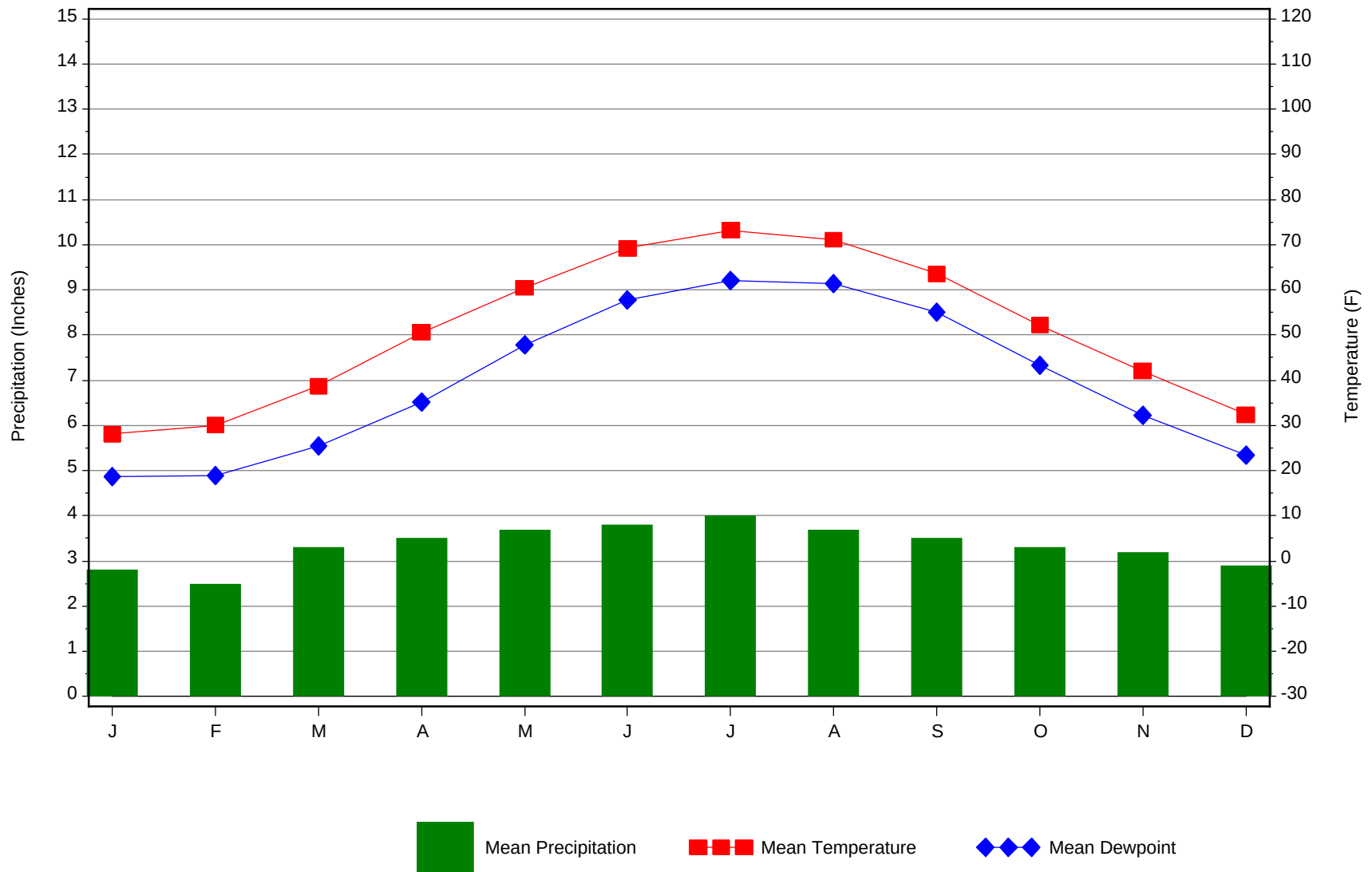
Other Site Data

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	2.8	90	1.5 + 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 (#)
53.6	N/A	21	70

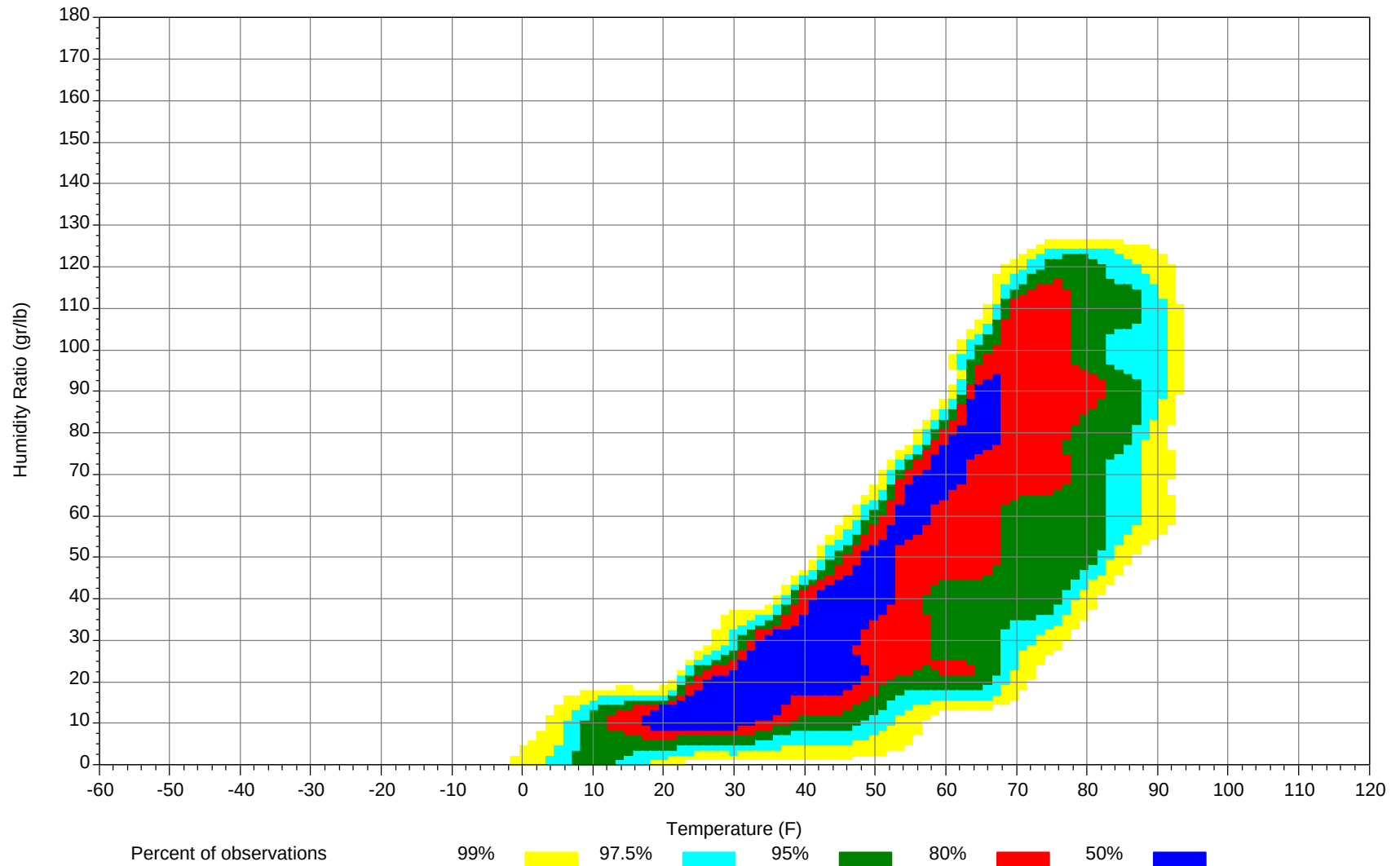
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.



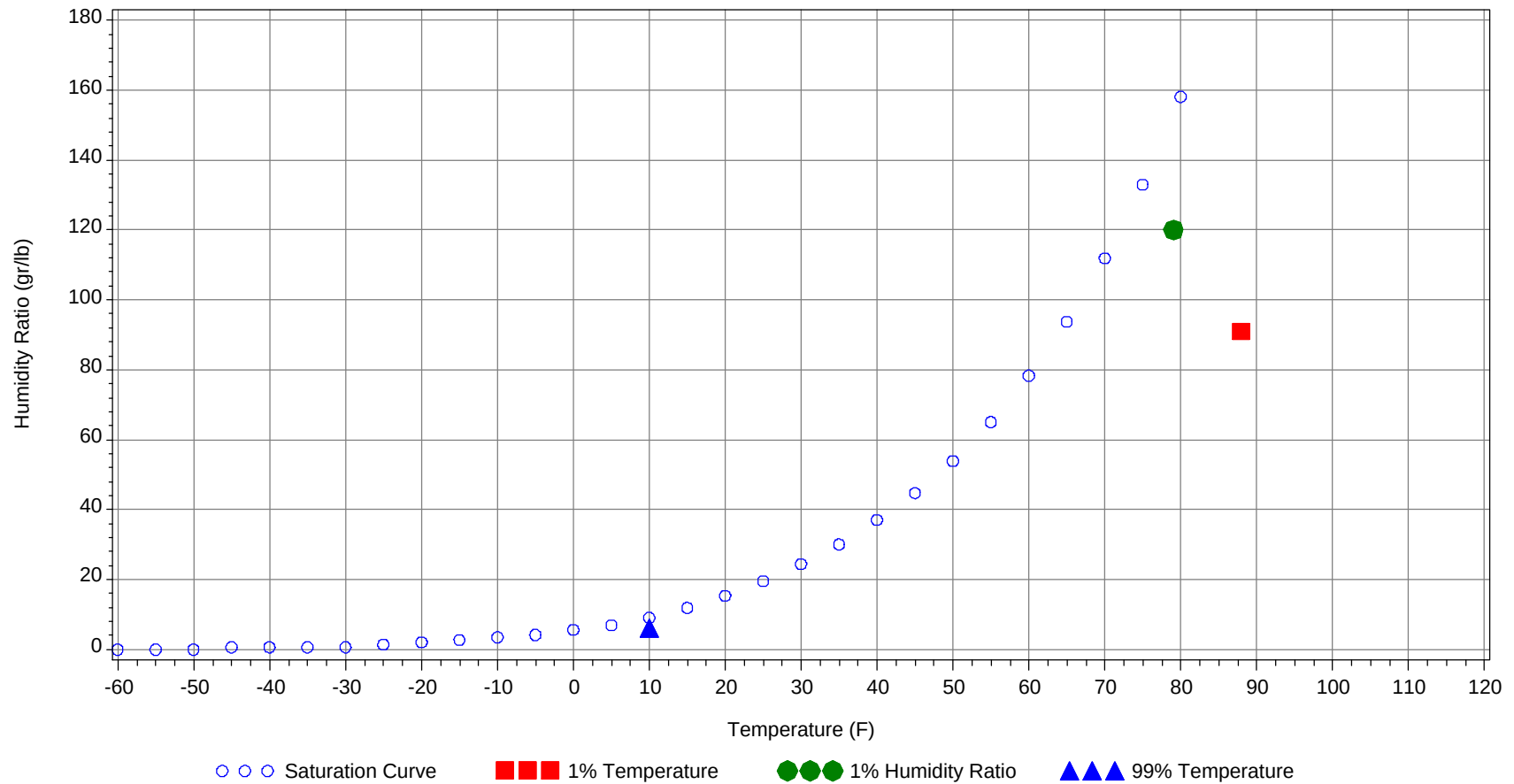
Average Annual Climate



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		91.0	35.3
99.0% Dry Bulb	10.0				6.0	3.3
1.0% Humidity Ratio	120.0	79.0	73.8	72.0		37.8

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)
100/104															
95/ 99															
90/ 94															
85/ 89												0		0	63.5
80/ 84												1	0	1	63.2
75/ 79							0	0	0	60.3		1	1	2	61.1
70/ 74							0	0	0	58	0	4	2	6	56.9
65/ 69							1	0	1	52.7	0	4	3	7	54.5
60/ 64	0	1	1	2	57.2	0	1	1	2	52.1	1	12	7	20	51.3
55/ 59	2	2	1	5	51.9	0	2	1	3	47.2	4	17	13	34	48
50/ 54	1	6	2	9	46.6	1	7	4	12	43	10	23	19	52	44.9
45/ 49	5	12	8	25	41.9	3	17	12	32	40.1	18	40	31	89	40.5
40/ 44	8	21	13	42	37.8	9	22	16	47	37.2	24	38	36	98	36.9
35/ 39	35	47	44	126	33.5	30	51	46	127	33.1	50	50	52	152	33.2
30/ 34	43	50	53	146	29	43	46	51	140	28.7	51	31	45	127	28.5
25/ 29	44	46	50	140	23.9	47	36	44	127	23.7	47	16	23	86	23.8
20/ 24	31	22	25	78	19.5	28	18	20	66	19.2	19	6	9	34	19.3
15/ 19	34	22	27	83	15.3	30	14	17	61	15.2	13	3	4	20	15
10/ 14	18	11	13	42	10.2	16	6	8	30	10.2	6	1	1	8	10.3
5/ 9	15	5	7	27	5.9	8	2	3	13	5.8	2	0	0	2	6
0/ 4	7	1	2	10	1.1	5	1	1	7	1.1	1			1	2
-5/ -1	1	0	0	1	-3.4	1	0	0	1	-3.2	0			0	-2
-10/ -6	1	0	0	1	-7.5	0			0	-7.1					
-15/-11	0	0	0	0	-12.5										
-20/-16	0			0	-17.4										

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)
100/104															
95/ 99							0		0	73		1	0	1	72.5
90/ 94		1	0	1	65.4		3	1	4	70		10	3	13	72
85/ 89		1	0	1	65.4		9	3	12	68.3		17	7	24	70.8
80/ 84		5	3	8	62.1	0	19	9	28	66.3	1	50	25	76	68.3
75/ 79		8	5	13	59.3	1	25	15	41	63.4	4	56	37	97	66
70/ 74	0	16	11	27	56.5	6	41	30	77	60.3	34	54	59	147	64.8
65/ 69	2	19	11	32	53.4	12	32	30	74	58.3	51	25	42	118	62.4
60/ 64	8	34	29	71	51.4	39	55	53	147	56	68	20	40	128	58.8
55/ 59	18	37	35	90	48.4	49	36	45	130	52.1	45	6	20	71	54.2
50/ 54	30	45	40	115	45.5	58	22	38	118	48.3	27	1	6	34	49.9
45/ 49	53	44	49	146	41.8	46	6	19	71	43.5	10		1	11	45.7
40/ 44	40	18	29	87	37.9	22	0	4	26	39.7	1		0	1	40.4
35/ 39	50	9	21	80	33.6	12	0	1	13	36	0			0	37.8
30/ 34	28	3	7	38	29.2	3		0	3	31.6					
25/ 29	9	0	1	10	24.6	0			0	28					
20/ 24	1		0	1	20.1										
15/ 19															
10/ 14															
5/ 9															
0/ 4															
-5/ -1															
-10/ -6															
-15/-11															
-20/-16															

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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)
100/104		1	0	1	74.3										
95/ 99		5	1	6	74.2		2	0	2	73.7		0		0	67.5
90/ 94		19	6	25	72.8		10	3	13	73.3		2	0	2	71.3
85/ 89	0	32	13	45	71.3		22	7	29	71.6		6	2	8	70.8
80/ 84	2	66	37	105	69.5	0	60	27	87	69.3	0	21	7	28	68.9
75/ 79	13	63	52	128	67.9	8	68	47	123	67.6	1	37	17	55	66.5
70/ 74	68	45	76	189	66.9	49	55	73	177	66.6	18	58	42	118	64.6
65/ 69	63	12	33	108	63.9	65	19	44	128	63.9	29	41	38	108	61.9
60/ 64	62	5	24	91	60	69	10	35	114	60	54	45	58	157	58.5
55/ 59	30	0	4	34	55.1	38	1	10	49	55.3	52	20	40	112	54.1
50/ 54	9		0	9	50.8	16	0	1	17	51.5	43	7	24	74	50.2
45/ 49	1			1	46.5	2		0	2	47.1	30	2	9	41	45.8
40/ 44											8	0	2	10	41.2
35/ 39											4	0	0	4	37.3
30/ 34											0		0	0	33.3
25/ 29															
20/ 24															
15/ 19															
10/ 14															
5/ 9															
0/ 4															
-5/ -1															
-10/ -6															
-15/-11															
-20/-16															

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)
100/104															
95/ 99															
90/ 94		0		0	71										
85/ 89		0		0	71.3										
80/ 84		3	0	3	68.2										
75/ 79	0	8	2	10	65.3		0		0	60					
70/ 74	2	20	9	31	62	0	2	0	2	59.3					
65/ 69	5	25	13	43	59.4	1	4	2	7	58.1	0	1	0	1	59.7
60/ 64	17	47	32	96	56	3	15	8	26	54.9	1	2	1	4	57.2
55/ 59	27	46	41	114	51.8	8	24	16	48	50.9	2	3	2	7	51.7
50/ 54	40	49	51	140	47.6	18	35	28	81	46.9	4	10	7	21	47.3
45/ 49	54	32	50	136	43.5	32	54	43	129	41.7	12	23	15	50	42.4
40/ 44	37	12	26	75	39.6	29	38	39	106	37.7	17	31	22	70	37.9
35/ 39	43	6	19	68	35.9	55	41	52	148	33.7	42	60	55	157	33.6
30/ 34	19	1	4	24	31.6	51	19	34	104	29.5	53	53	58	164	29
25/ 29	3	0	0	3	27.1	29	5	14	48	25.2	52	36	50	138	24.3
20/ 24	0			0	22.1	9	1	3	13	20.4	25	15	18	58	19.6
15/ 19						4	0	1	5	16.9	24	10	14	48	15.6
10/ 14						0			0	13	12	3	6	21	10.8
5/ 9											3	1	1	5	6.5
0/ 4											2	0	0	2	1.4
-5/ -1											0	0	0	0	-2.3
-10/ -6											0	0		0	-6.7
-15/-11															
-20/-16															

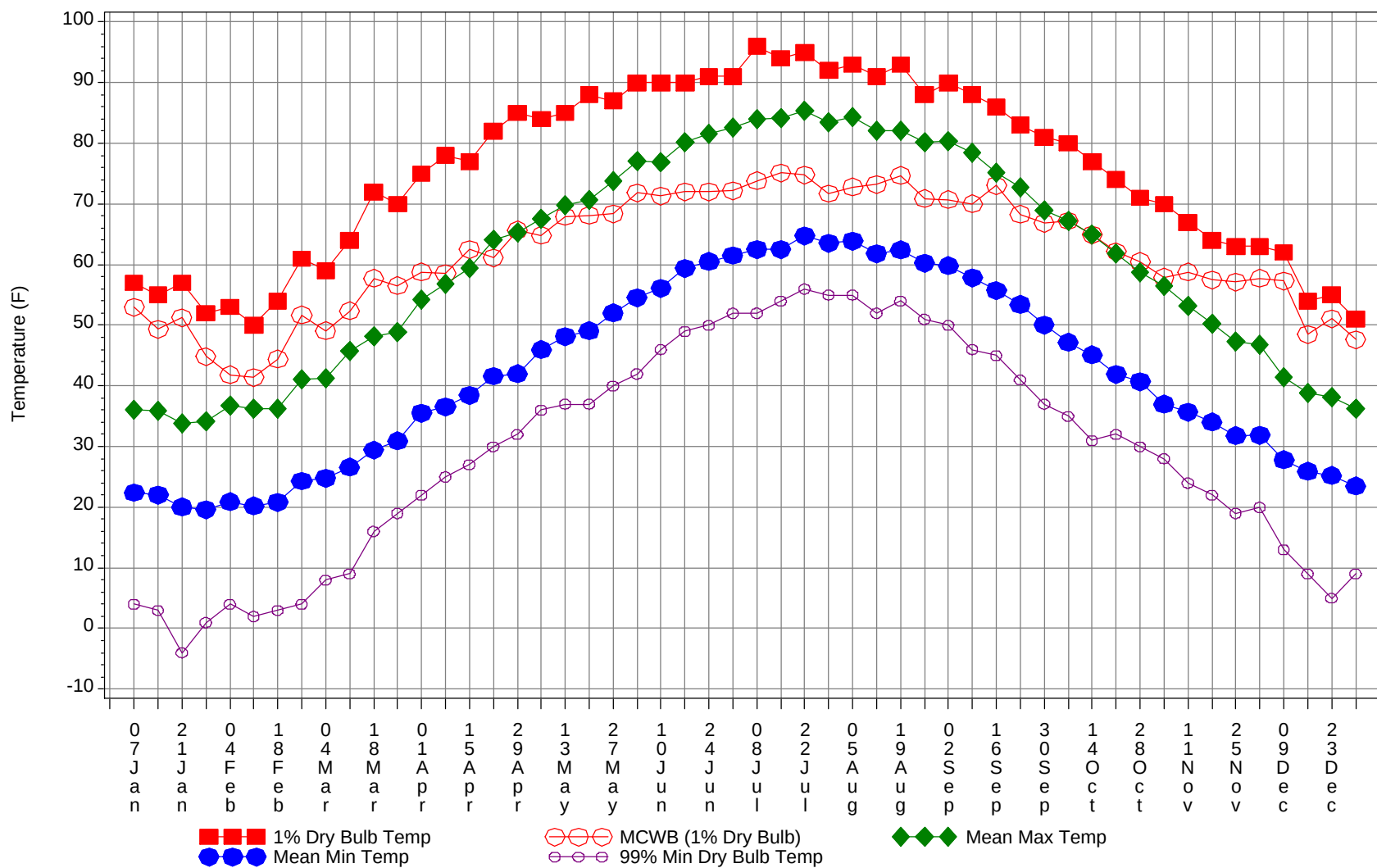
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

Dry-Bulb Temperature Hours For An Average Year

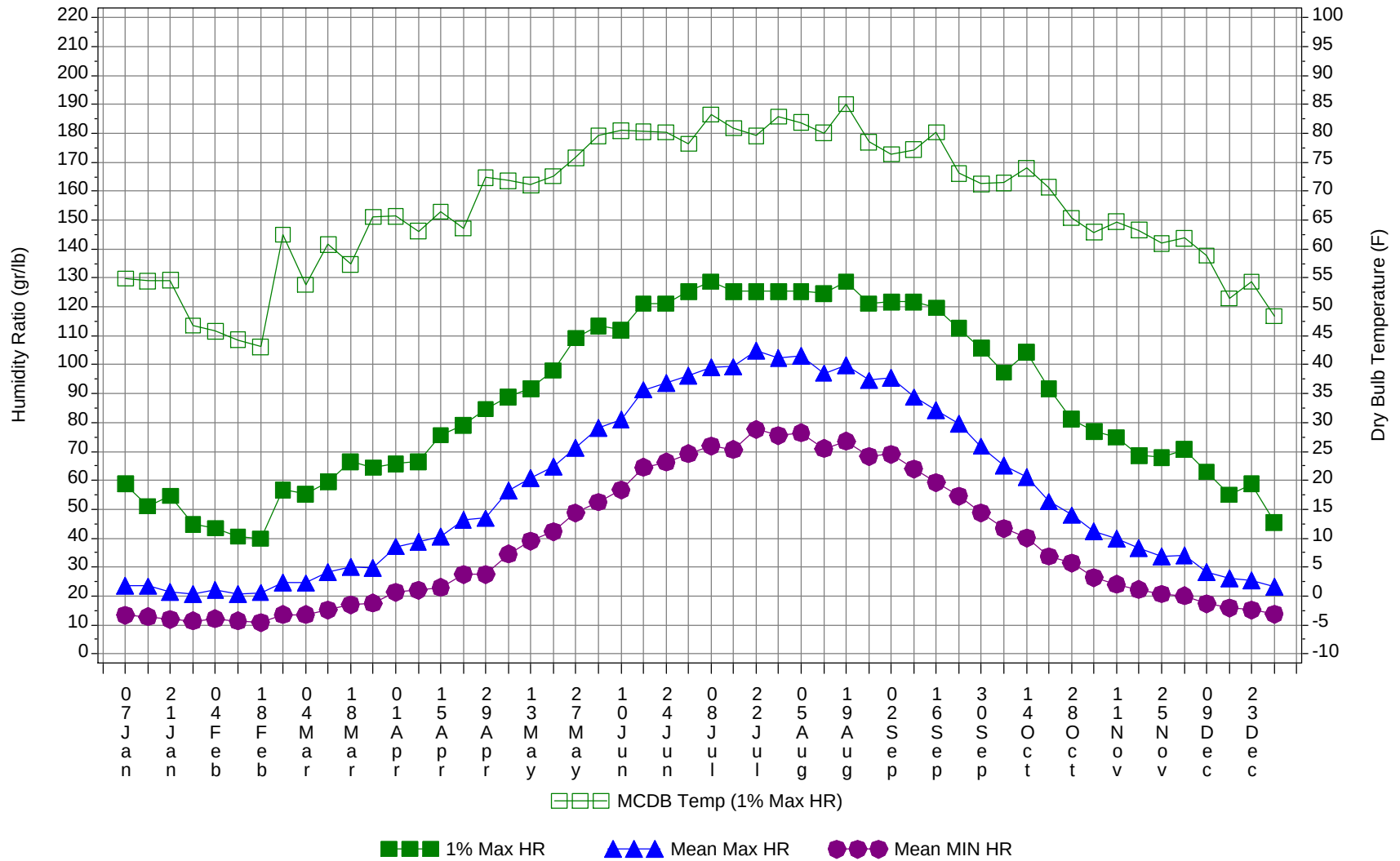
Temperature Range (° F)	Annual				
	01 To 08 LST	09 To 16 LST	17 to 00 LST	Total Obs	M C W B (° F)
100/104		1	0	1	74.3
95/ 99		7	2	9	73.9
90/ 94		46	13	59	72.4
85/ 89	0	88	32	120	70.9
80/ 84	3	224	109	336	68.7
75/ 79	28	266	176	470	66.6
70/ 74	177	296	303	776	64.8
65/ 69	228	183	218	629	61.6
60/ 64	323	246	289	858	57.3
55/ 59	275	197	229	701	52.2
50/ 54	256	206	219	681	47.5
45/ 49	267	230	238	735	42.4
40/ 44	195	181	188	564	38
35/ 39	321	265	291	877	33.7
30/ 34	292	203	252	747	29
25/ 29	232	139	181	552	24.1
20/ 24	114	63	75	252	19.5
15/ 19	106	49	62	217	15.4
10/ 14	52	20	28	100	10.4
5/ 9	29	8	11	48	5.9
0/ 4	16	3	3	22	1.2
-5/ -1	3	0	1	4	-3.2
-10/ -6	1	0	0	1	-7.3
-15/-11	0	0	0	0	-12.5
-20/-16	0			0	-17.4

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Annual Summary of Temperatures



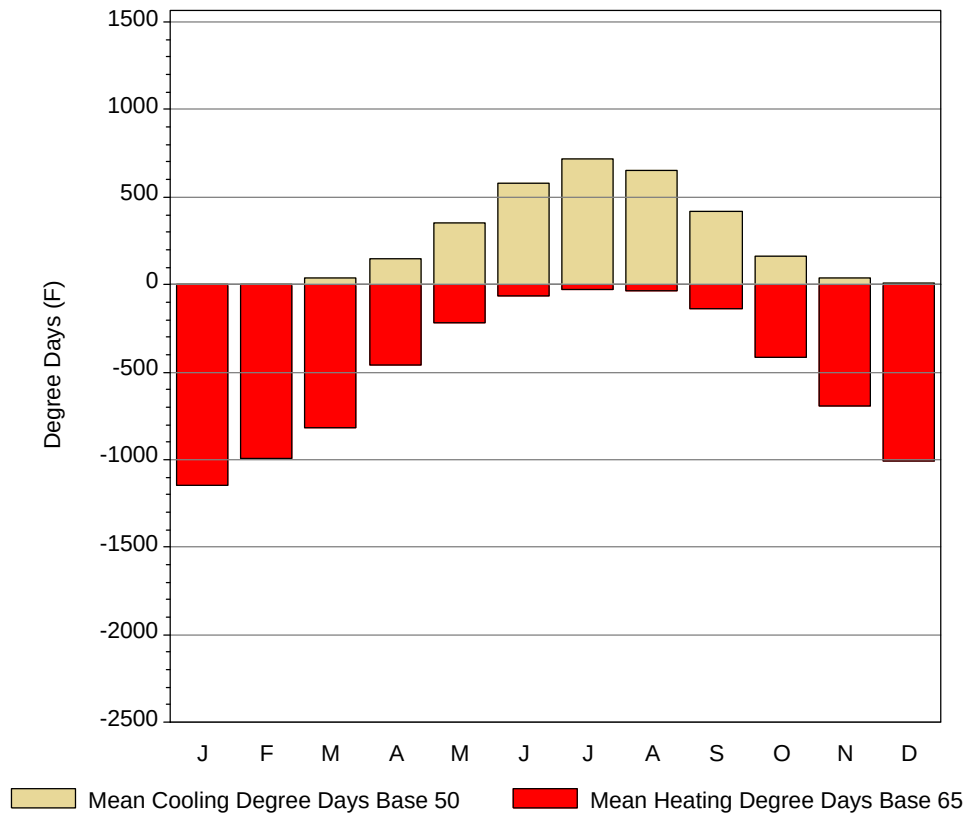
Long Term Humidity and Dry Bulb Temperature Summary



Long Term Humidity and Dry Bulb Temperature Summary

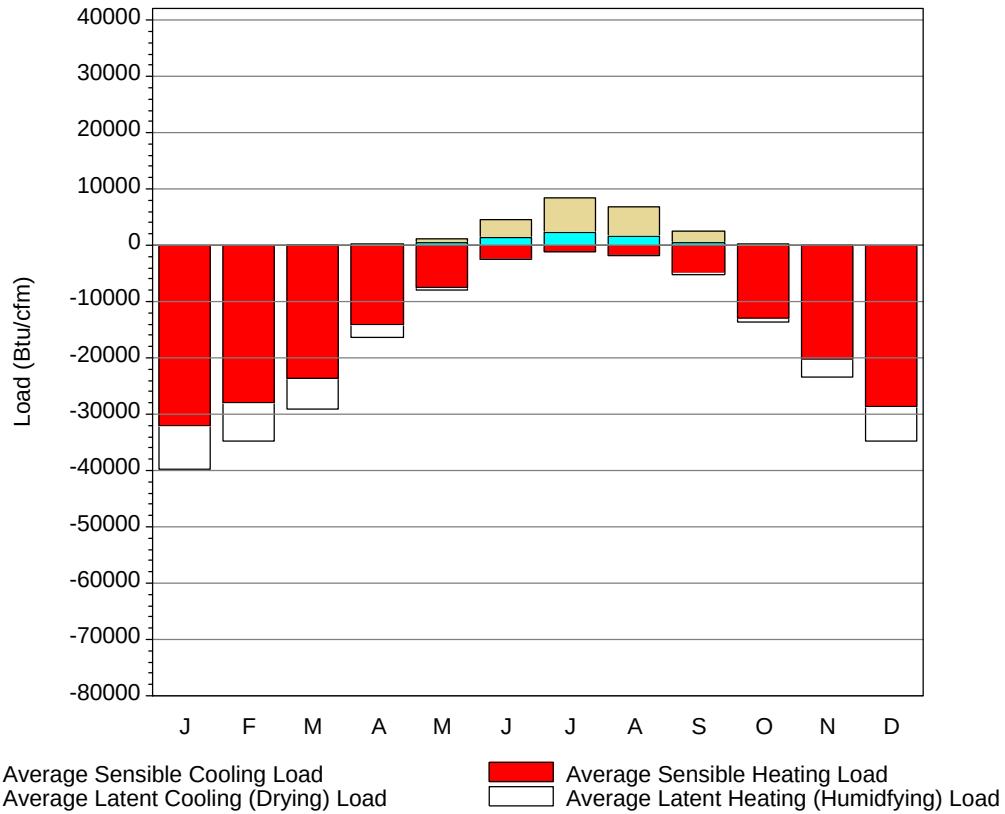
Week Ending	1.0% Temp (° F)	MCWB@ 1% Temp (° F)	Mean Max Temp (° F)	Mean Min Temp (° F)	99% Temp (° F)	1.0% HR (gr/lb)	MCDB@ 1% HR (° F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	57	53	36.1	22.4	4	58.8	54.9	23.5	13.4
14-Jan	55	49.3	35.9	22	3	51.1	54.5	23.4	12.8
21-Jan	57	51.2	33.8	20	-4	54.6	54.6	21.5	12
28-Jan	52	44.8	34.2	19.6	1	44.8	46.8	20.6	11.4
4-Feb	53	41.8	36.8	20.9	4	43.4	45.8	22	12.1
11-Feb	50	41.4	36.3	20.2	2	40.6	44.3	20.7	11.4
18-Feb	54	44.4	36.2	20.8	3	39.9	43.1	21.2	10.9
25-Feb	61	51.7	41.1	24.3	4	56.7	62.5	24.8	13.5
4-Mar	59	49.1	41.2	24.8	8	55.3	53.8	24.5	13.5
11-Mar	64	52.4	45.8	26.6	9	59.5	60.8	28.2	15.1
18-Mar	72	57.7	48.2	29.4	16	66.5	57.4	30	17
25-Mar	70	56.5	48.8	30.9	19	64.4	65.6	29.8	17.5
1-Apr	75	58.8	54.3	35.5	22	65.8	65.7	37.1	21.3
8-Apr	78	58.5	56.8	36.5	25	66.5	63.1	38.7	22
15-Apr	77	62.5	59.4	38.4	27	75.6	66.5	40.7	23
22-Apr	82	61.1	64	41.6	30	79.1	63.6	46.4	27.4
29-Apr	85	65.7	65.3	42	32	84.7	72.4	46.9	27.5
6-May	84	64.8	67.6	46	36	88.9	71.8	56.4	34.5
13-May	85	67.9	69.8	48.1	37	91.7	71.1	60.9	39
20-May	88	68.1	70.6	49.1	37	98	72.6	64.9	42.3
27-May	87	68.4	73.8	52	40	109.2	75.8	71.2	48.7
4-Jun	90	71.8	77.1	54.5	42	113.4	79.6	78.2	52.5
10-Jun	90	71.3	76.9	56.1	46	112	80.5	81	56.8
17-Jun	90	72	80.1	59.4	49	121.1	80.3	91.3	64.5
24-Jun	91	72	81.6	60.5	50	121.1	80.2	93.8	66.3
1-Jul	91	72.2	82.6	61.5	52	125.3	78.2	96.3	69.2
8-Jul	96	73.8	83.9	62.5	52	128.8	83.3	99.1	71.9
15-Jul	94	75.1	84.2	62.5	54	125.3	80.9	99.3	70.7
22-Jul	95	74.8	85.4	64.7	56	125.3	79.6	104.8	77.6
29-Jul	92	71.7	83.4	63.5	55	125.3	82.9	102.5	75.5
5-Aug	93	72.8	84.4	63.9	55	125.3	81.9	103	76.5
12-Aug	91	73.2	82	61.8	52	124.6	80.1	97.1	71
19-Aug	93	74.7	82.1	62.4	54	128.8	85.1	99.9	73.6
26-Aug	88	70.9	80.2	60.2	51	121.1	78.5	94.6	68.3
2-Sep	90	70.7	80.3	59.8	50	121.8	76.4	95.5	69
9-Sep	88	70	78.4	57.8	46	121.8	77.2	88.8	63.9
16-Sep	86	73	75.2	55.7	45	119.7	80.2	84.3	59.2
23-Sep	83	68.3	72.8	53.4	41	112.7	73.1	79.6	54.6
30-Sep	81	66.8	69	50	37	105.7	71.3	71.8	48.8
7-Oct	80	67.2	67.2	47.2	35	97.3	71.5	65	43.4
14-Oct	77	64.9	65	45.1	31	104.3	74	61.1	40.1
21-Oct	74	62.1	61.9	41.9	32	91.7	70.7	52.7	33.7
28-Oct	71	60.5	58.7	40.7	30	81.2	65.4	48	31.4
4-Nov	70	57.9	56.4	37	28	77	62.9	42.5	26.3
11-Nov	67	58.8	53.1	35.7	24	74.9	64.7	39.9	24.1
18-Nov	64	57.5	50.3	34	22	68.6	63.3	36.7	22.3
25-Nov	63	57.1	47.3	31.8	19	67.9	61	33.8	20.7
2-Dec	63	57.7	46.7	31.9	20	70.7	61.9	34.2	20.1
9-Dec	62	57.3	41.4	27.8	13	63	58.9	28.4	17.3
16-Dec	54	48.5	38.9	25.9	9	55	51.5	26.2	15.9
23-Dec	55	51.1	38.2	25.2	5	58.8	54.4	25.3	15.2
31-Dec	51	47.6	36.3	23.5	9	45.5	48.4	23.1	13.8

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	3.7	0	1144.6
FEB	3.9	0.1	990.3
MAR	39.6	4.4	820.8
APR	146.8	24.1	457.9
MAY	351.7	81.1	220.8
JUN	577.6	189	62.9
JUL	718.4	278.2	24.9
AUG	653.8	226.2	37.5
SEP	417.5	97.2	140.8
OCT	165.5	18.7	417
NOV	40.1	1.1	690
DEC	5.7	0	1008.8
ANN	3124.3	920.1	6016.3

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	-32079	0	-7626
FEB	0	-27864	0	-6887
MAR	14	-23639	2	-5380
APR	122	-13982	21	-2403
MAY	506	-7476	692	-367
JUN	1309	-2567	3254	-9
JUL	2237	-1206	6130	-1
AUG	1555	-1725	5264	-1
SEP	453	-5088	2141	-14
OCT	39	-12997	262	-670
NOV	0	-20199	5	-3181
DEC	0	-28556	0	-6092
ANN	6235	-177378	17771	-32631

Station Information		Shading Geometry in Dimensionless Units	
City, State, WBAN	WILLIAMSPORT, PA 14778	Window:	1.000
Lat, Lon, Elev	41.27N 77.05W 797ft	Overhang:	0.570
Press, Stn Type	14.5psia Secondary	Vert Gap:	0.326

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	560	820	1140	1460	1720	1900	1870	1630	1270	910	560	450	1190
	Std.Dev.	46	64	69	134	142	134	107	84	101	74	51	31	27
	Minimum	480	700	1020	1160	1410	1580	1690	1490	1080	770	450	400	1140
	Maximum	650	960	1290	1750	1950	2150	2070	1820	1430	1150	670	520	1250
	Diffuse	340	460	600	740	860	900	870	780	640	470	350	290	610
Clear Day	Global	830	1180	1660	2160	2480	2590	2510	2220	1780	1280	870	710	1690
NORTH	Global	190	270	350	440	540	610	570	470	380	280	200	170	370
	Diffuse	190	270	350	430	500	540	520	460	380	280	200	170	360
Clear Day	Global	180	250	330	430	580	670	620	480	360	270	190	160	380
EAST	Global	360	510	680	850	960	1020	990	870	680	530	350	290	680
	Diffuse	230	330	420	520	600	630	620	560	450	340	240	200	430
Clear Day	Global	620	830	1080	1300	1420	1440	1410	1310	1130	880	650	550	1050
SOUTH	Global	830	990	1010	930	840	810	840	940	990	1000	740	680	880
	Diffuse	350	430	500	540	580	590	590	570	520	430	330	290	480
Clear Day	Global	1790	1900	1790	1450	1130	990	1040	1280	1610	1790	1750	1690	1520
WEST	Global	380	520	700	850	940	1040	1030	940	780	590	370	300	700
	Diffuse	240	330	430	530	610	650	630	580	470	350	240	200	440
Clear Day	Global	620	830	1080	1300	1420	1440	1410	1310	1130	880	650	550	1050

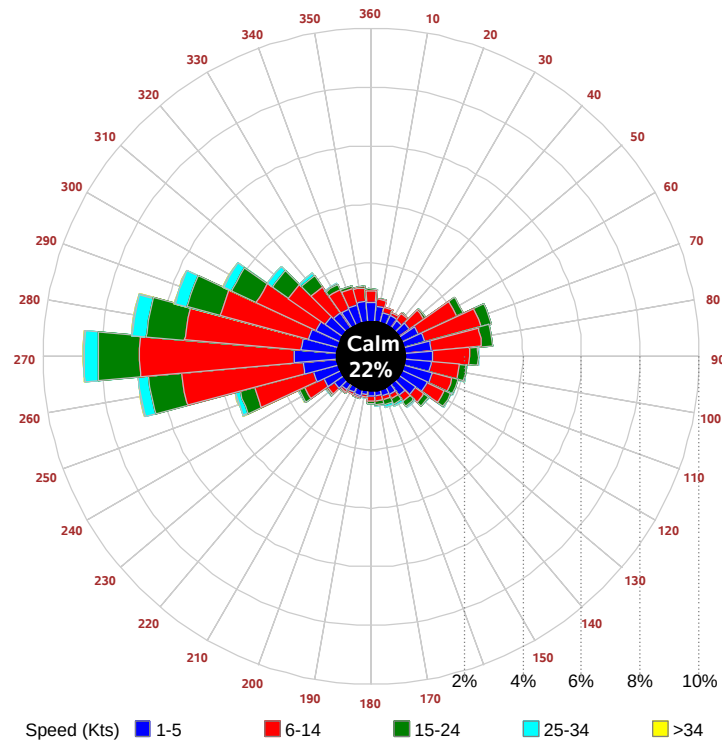
Average Annual Solar Radiation - Nearest Available Site Source: National Renewable Energy Laboratory, Golden CO, 1995

AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING Percentage Uncertainty = 11														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ.	Unshaded	360	560	800	1050	1240	1380	1360	1180	910	630	370	290	850
NORTH	Unshaded	130	190	240	300	360	400	380	320	260	190	140	120	250
	Shaded	110	160	210	260	310	350	330	280	230	170	120	97	220
EAST	Unshaded	250	360	480	600	680	720	700	610	480	370	240	200	470
	Shaded	210	310	410	510	560	590	580	510	400	310	210	170	400
SOUTH	Unshaded	620	720	710	610	530	500	520	610	680	720	550	510	610
	Shaded	600	660	550	400	350	360	360	380	480	630	520	490	480
WEST	Unshaded	260	360	490	600	670	740	730	670	550	410	250	200	500
	Shaded	230	320	420	510	560	620	610	560	470	360	220	180	420

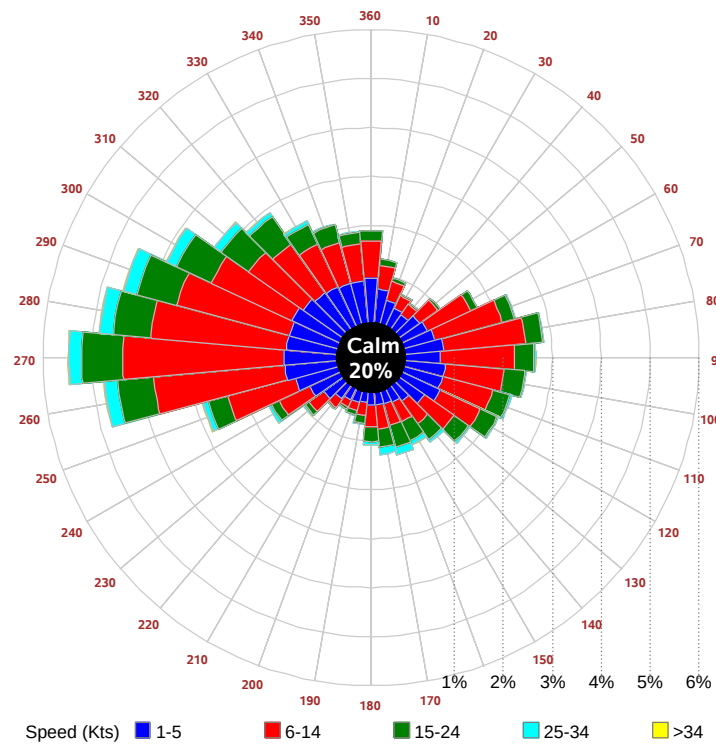
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS Percentage Uncertainty = 11												
		March					June					
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm	
HORIZ.	M.Clear	35	68	79	63	27	45	81	98	93	68	
	M.Cloudy	20	41	47	39	16	27	51	69	66	44	
NORTH	M.Clear	9	14	15	13	8	18	16	17	17	16	
	M.Cloudy	8	15	16	14	7	13	17	20	19	15	
EAST	M.Clear	68	56	15	13	8	74	73	33	17	16	
	M.Cloudy	23	29	16	14	7	29	39	28	19	15	
SOUTH	M.Clear	36	71	83	66	28	12	33	49	45	23	
	M.Cloudy	15	34	39	31	12	11	24	36	34	19	
WEST	M.Clear	9	14	21	64	63	12	16	17	50	76	
	M.Cloudy	8	15	18	31	21	11	17	20	36	41	
M.Clear	(% hrs)	28	26	27	27	28	32	39	33	32	35	

		Sept					Dec					
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm	
HORIZ.	M.Clear	24	62	81	75	46	11	35	42	26	2	
	M.Cloudy	13	36	52	48	29	7	20	24	15	2	
NORTH	M.Clear	8	14	16	16	12	4	9	10	8	1	
	M.Cloudy	6	14	17	16	11	3	9	10	7	1	
EAST	M.Clear	56	67	30	16	12	30	37	10	8	1	
	M.Cloudy	15	29	23	16	11	8	15	10	7	1	
SOUTH	M.Clear	18	54	75	69	39	27	73	83	57	5	
	M.Cloudy	8	26	41	37	21	7	22	25	17	2	
WEST	M.Clear	8	14	16	50	70	4	9	19	42	6	
	M.Cloudy	6	14	17	30	32	3	9	12	14	2	
M.Clear	(% hrs)	18	31	33	34	35	19	20	20	20	22	

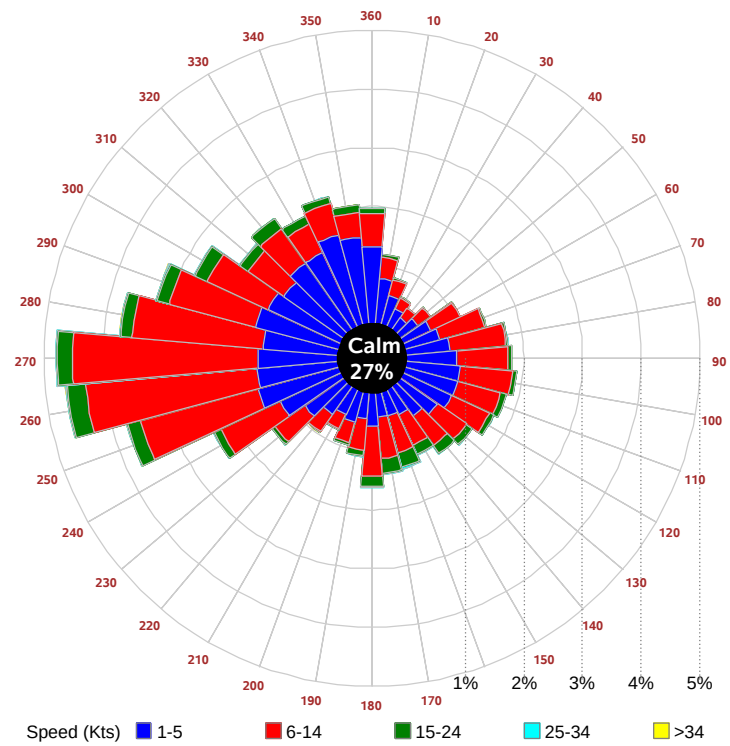
Wind Summary - December, January, and February



Wind Summary - March, April, and May



Wind Summary - June, July, and August



Wind Summary - September, October, and November

