

DU BOIS PA

Latitude = 41.18 N

Longitude = 78.90 W

Period of Record = 1973 to 1996

WMO No. 725125

Elevation = 1818 feet

Average Pressure = 28.08 inches Hg

Design Criteria Data

	Design Value	Mean Coincident (Average) Values			
		Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Dry Bulb Temperature (T)	(°F)				
Median of Extreme Highs	89	71	91	9.8	W
0.4% Occurrence	85	70	91	9.6	W
1.0% Occurrence	83	68	88	9.4	W
2.0% Occurrence	80	67	83	9.1	W
Mean Daily Range	17	-	-	-	-
97.5% Occurrence	9	8	7	10.2	W
99.0% Occurrence	4	3	5	9.9	W
99.6% Occurrence	-2	-2	4	9.5	W
Median of Extreme Lows	-9	-9	3	12.9	W
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Wet Bulb Temperature (T_{wb})	(°F)				
Median of Extreme Highs	77	86	131	9.2	W
0.4% Occurrence	73	82	114	9.4	W
1.0% Occurrence	71	78	108	9.0	W
2.0% Occurrence	70	77	105	8.8	W
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Humidity Ratio (HR)	(gr/lb)				
Median of Extreme Highs	135	81	0.85	10.1	W
0.4% Occurrence	118	76	0.74	8.5	W
1.0% Occurrence	113	76	0.72	7.8	W
2.0% Occurrence	106	72	0.67	8.6	W
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		1	225	37	542

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	2.6	90	0.8 + 0.2
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 (#)
49.6	N/A	N/A	61

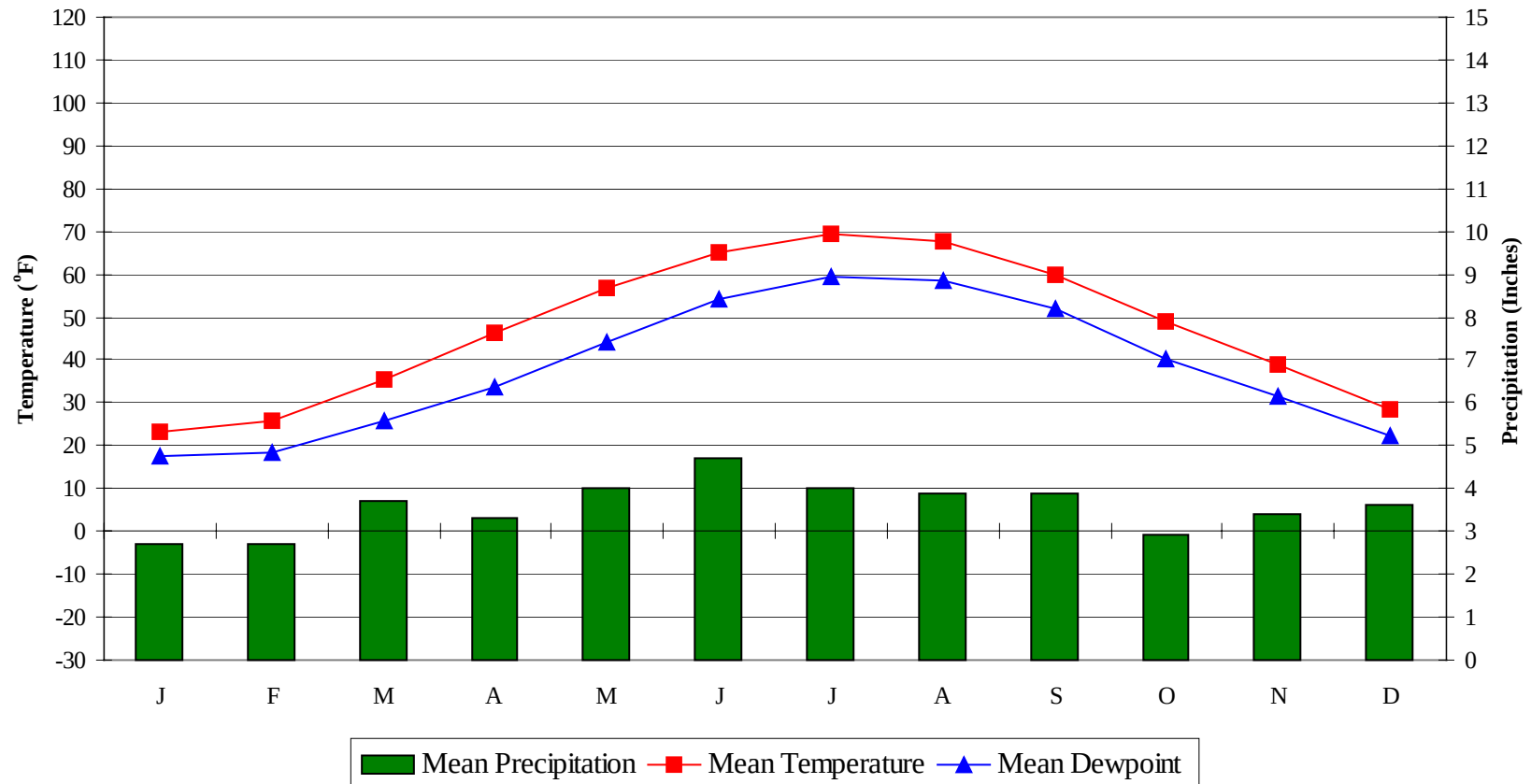
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

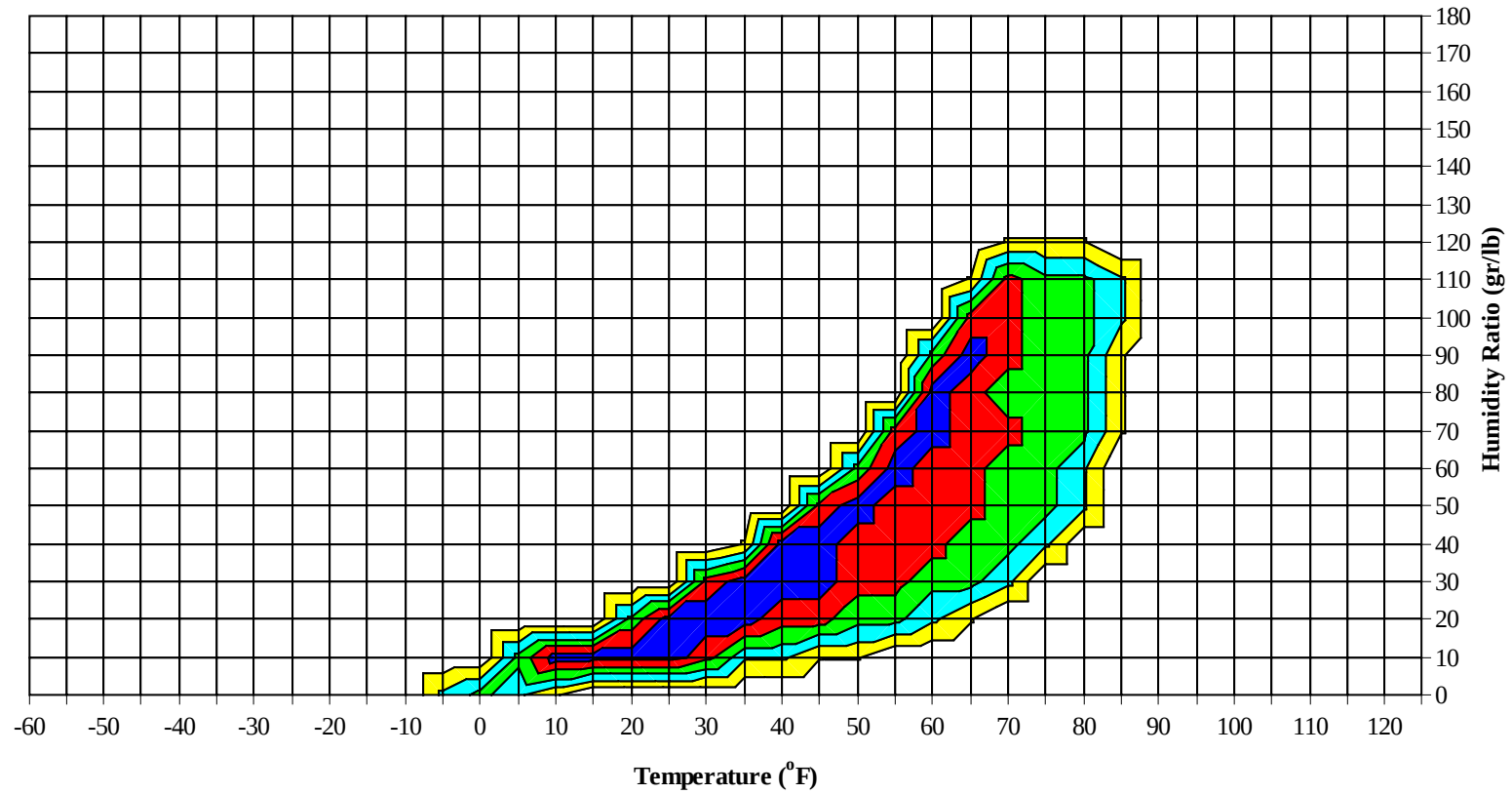


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Long Term Psychrometric Summary



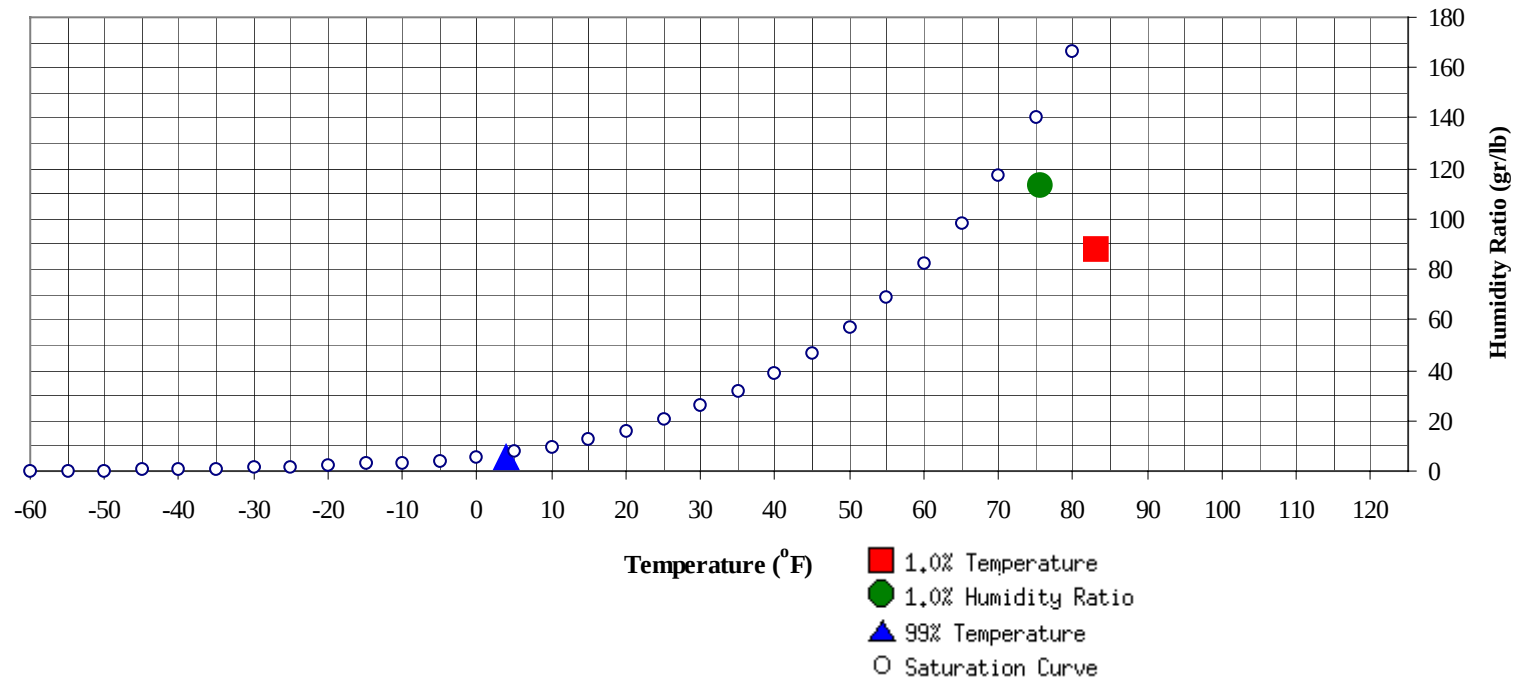
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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Psychrometric Summary of Peak Design Values



99% Dry Bulb	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)	1.0% Humidity Ratio	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
	4	5.2	1.7		113.4	75.7	70.9	69.1	35.9

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	83	88	68.5	33.7

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Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	January					February					March				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79												1	0	1	58.7
70 / 74												2	1	3	57.3
65 / 69							0		0	52.0		6	3	9	54.1
60 / 64		1	0	1	53.4		1	0	1	50.8	2	9	6	17	51.3
55 / 59	1	2	1	4	50.9	1	4	2	7	48.7	4	12	10	26	49.3
50 / 54	2	3	2	7	47.1	2	6	4	12	45.4	9	18	17	44	45.5
45 / 49	3	7	4	14	42.5	7	12	11	30	42.4	15	27	24	66	41.8
40 / 44	9	13	10	32	38.3	11	18	15	44	38.3	24	33	31	88	37.7
35 / 39	15	19	18	52	34.4	19	23	23	65	34.2	33	40	37	110	33.6
30 / 34	32	47	44	123	30.1	30	40	34	103	29.7	48	41	47	136	29.8
25 / 29	43	45	46	134	25.4	30	38	38	105	25.1	38	29	34	101	24.9
20 / 24	39	35	37	111	20.6	31	32	33	96	20.2	33	19	20	72	20.3
15 / 19	31	32	30	93	15.9	31	23	29	83	15.5	21	7	11	39	15.6
10 / 14	30	22	27	79	10.9	27	16	18	61	10.9	10	3	5	18	10.8
5 / 9	21	12	14	47	6.4	17	8	11	36	6.3	6	1	2	9	6.3
0 / 4	11	5	9	25	1.5	9	4	5	18	1.5	3	0	1	4	1.6
-5 / -1	6	2	2	10	-2.7	6	1	2	9	-2.8	1		0	1	-3.2
-10 / -6	3	2	2	7	-7.0	3	0	0	3	-6.8	0			0	-6.0
-15 / -11	2	1	2	5	-11.6	0			0	-10.4					
-20 / -16	1	0	0	1	-16.7										
-25 / -21	1	0		1	-20.7										
-30 / -26	0			0											

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.

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Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	April					May					June				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
95 / 99															
90 / 94															
85 / 89		0	0	0	61.6		1	0	1	64.6		0	0	0	69.0
80 / 84		3	1	4	61.7		13	4	17	63.5		6	2	8	68.6
75 / 79		8	3	11	59.5		24	12	36	61.8		26	11	37	67.3
70 / 74	0	12	6	18	56.8		24	12	36	61.8	1	51	24	76	64.5
65 / 69	3	16	12	31	53.9	2	31	20	53	59.4	9	58	42	109	62.4
60 / 64	10	22	18	50	51.6	11	37	33	81	57.4	44	50	60	154	61.2
55 / 59	17	30	28	75	49.2	29	41	39	109	55.0	65	30	51	146	57.8
50 / 54	22	33	31	86	45.2	48	38	43	129	51.5	51	14	30	95	53.6
45 / 49	31	36	38	105	41.8	46	31	39	116	47.4	39	5	13	57	49.2
40 / 44	40	31	35	106	37.8	42	22	30	94	43.1	21	2	6	29	44.9
35 / 39	41	26	30	97	33.8	37	10	17	64	39.2	7	0	1	8	40.4
30 / 34	39	18	25	82	29.8	21	2	8	31	34.6	2		0	2	35.4
25 / 29	24	5	10	39	25.4	9	0	1	10	30.5	0			0	31.7
20 / 24	9	2	3	14	20.9	1			1	25.8					
15 / 19	2	0	1	3	16.7	0			0	23.0					
10 / 14	1	0	0	1	11.3										
5 / 9	0			0	8.0										
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															

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Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	July					August					September				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
95 / 99		0	0	0	70.1										
90 / 94		2	1	3	69.3		1	0	1	72.2					
85 / 89		16	5	21	71.1		10	3	13	70.7		1	0	1	73.3
80 / 84	0	44	20	64	68.6		34	12	46	68.4		9	2	11	69.3
75 / 79	2	65	40	108	66.4	1	61	34	96	66.2	0	24	8	32	66.1
70 / 74	26	63	63	153	65.1	17	63	57	137	65.1	5	42	24	71	63.8
65 / 69	76	39	67	182	63.3	67	49	69	185	63.0	26	49	41	116	61.5
60 / 64	78	15	35	128	59.1	74	22	47	142	59.1	43	49	51	143	57.9
55 / 59	45	4	13	62	54.9	54	6	20	80	54.7	47	39	47	133	53.6
50 / 54	16	0	3	19	50.2	25	1	6	32	50.2	48	20	36	104	49.4
45 / 49	5		0	5	46.0	8	0	1	9	45.7	35	7	19	61	44.9
40 / 44	0			0	41.2	2		0	2	41.5	23	2	8	33	40.7
35 / 39						0			0	37.0	11	0	2	13	36.3
30 / 34						0			0	33.0	2		0	2	31.7
25 / 29											0			0	27.5
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															

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Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	October					November					December				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79		3	0	3	62.4		0		0	63.0					
70 / 74		14	2	16	59.4		1	0	1	60.5		0		0	61.0
65 / 69	2	25	11	38	57.6		5	1	6	57.0		0		0	59.0
60 / 64	11	34	26	71	55.4	3	13	8	24	54.7	0	1	1	2	55.4
55 / 59	25	40	33	98	51.6	12	19	17	48	52.0	2	4	3	9	52.5
50 / 54	32	41	41	114	47.3	15	20	19	54	47.3	6	7	6	19	48.0
45 / 49	45	39	49	133	43.2	25	31	27	83	43.0	8	12	9	29	43.3
40 / 44	48	31	42	121	39.2	28	35	33	96	38.3	9	17	15	41	38.5
35 / 39	45	17	29	91	35.0	37	40	40	117	34.1	21	36	28	85	34.4
30 / 34	30	5	11	46	30.7	51	45	49	146	30.0	51	58	58	167	30.1
25 / 29	8	0	2	10	26.3	39	23	32	94	25.4	49	44	50	143	25.3
20 / 24	1		0	1	21.0	19	6	11	36	20.9	38	28	32	98	20.6
15 / 19	0			0	18.0	7	1	3	11	16.3	25	18	20	63	16.0
10 / 14						2	0	0	2	11.5	16	13	16	45	11.0
5 / 9						0	0	0	0	6.4	11	6	8	25	6.1
0 / 4						0			0	1.8	6	2	3	11	1.6
-5 / -1											3	1	0	4	-2.6
-10 / -6											1	1	0	2	-7.1
-15 / -11											0	0	0	0	-11.9
-20 / -16															
-25 / -21															
-30 / -26															

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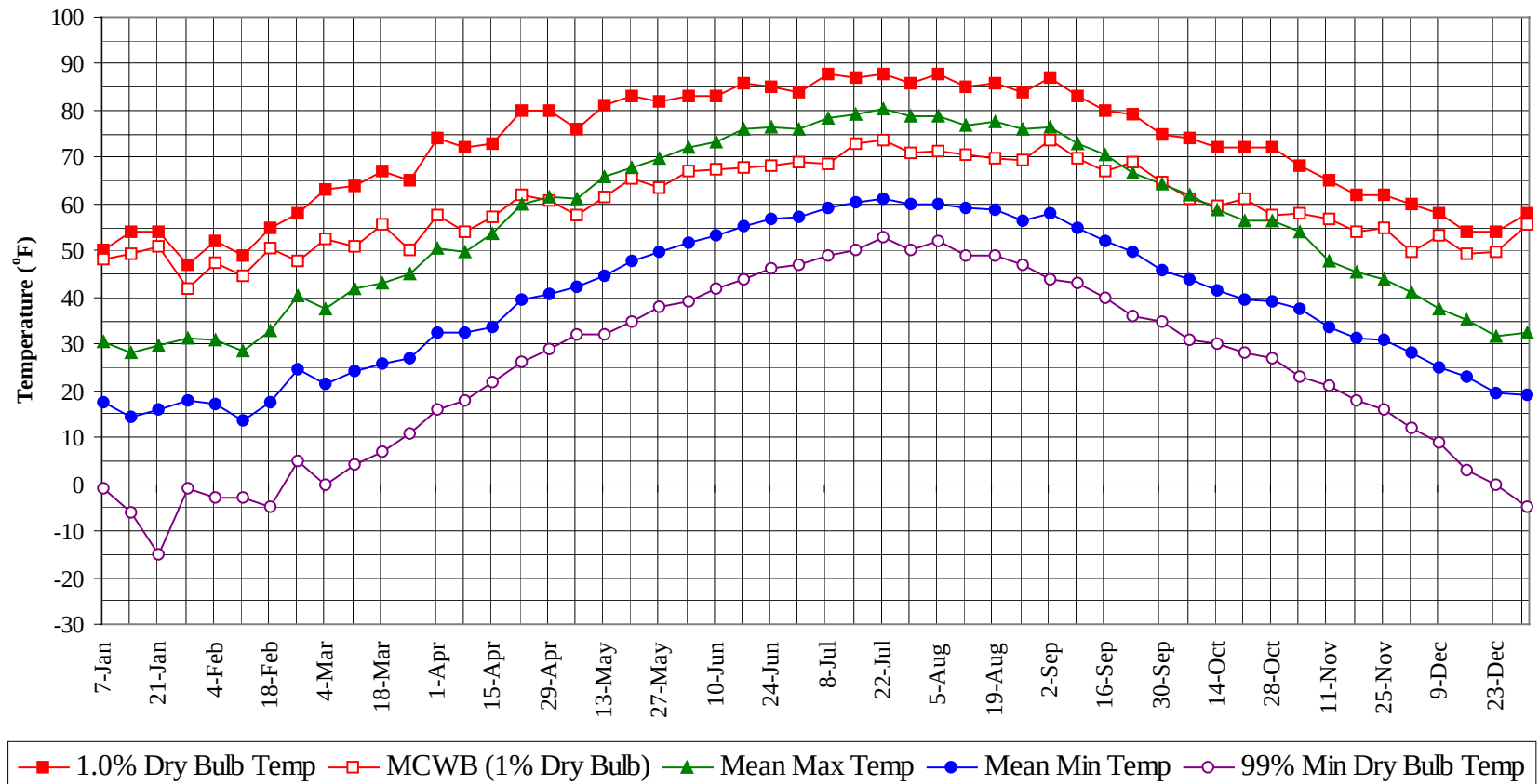
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

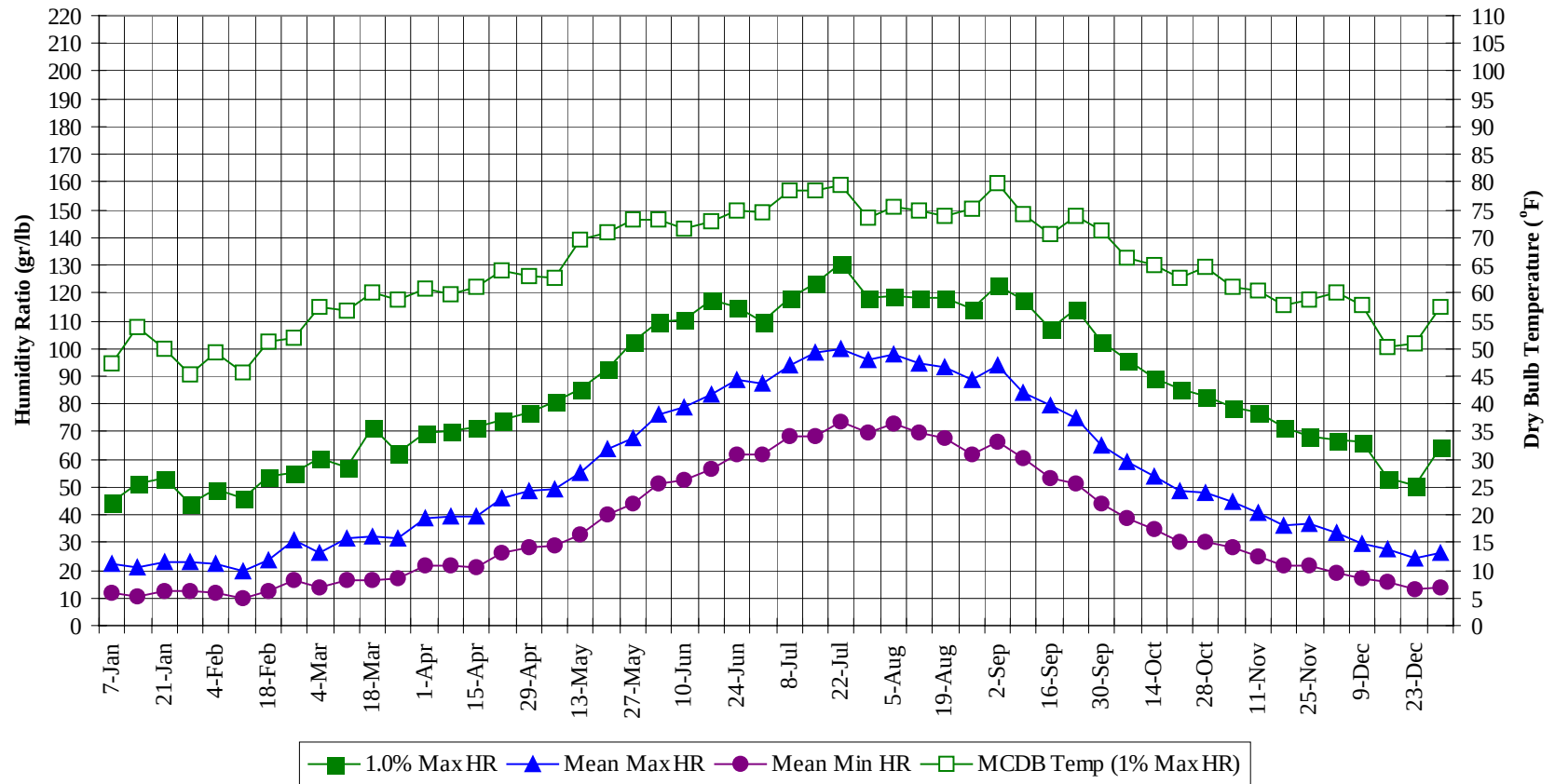
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
95 / 99		0	0	0	70.1
90 / 94		3	1	4	70.3
85 / 89		35	10	45	70.2
80 / 84	0	126	50	176	67.7
75 / 79	4	233	120	357	65.2
70 / 74	57	284	215	556	63.4
65 / 69	225	272	297	794	61.2
60 / 64	313	237	281	830	57.0
55 / 59	304	211	247	761	52.4
50 / 54	263	184	216	662	47.6
45 / 49	247	195	219	660	43.0
40 / 44	239	192	210	640	38.6
35 / 39	247	204	215	665	34.2
30 / 34	297	255	270	821	30.0
25 / 29	237	183	212	631	25.2
20 / 24	172	123	137	432	20.5
15 / 19	118	84	95	296	15.8
10 / 14	86	56	67	208	10.9
5 / 9	55	26	35	116	6.3
0 / 4	30	11	18	59	1.6
-5 / -1	16	4	5	25	-2.7
-10 / -6	7	3	2	12	-7.0
-15 / -11	2	1	2	5	-11.5
-20 / -16	1	0	0	1	-16.7
-25 / -21	1	0		1	-20.7
-30 / -26	0			0	

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



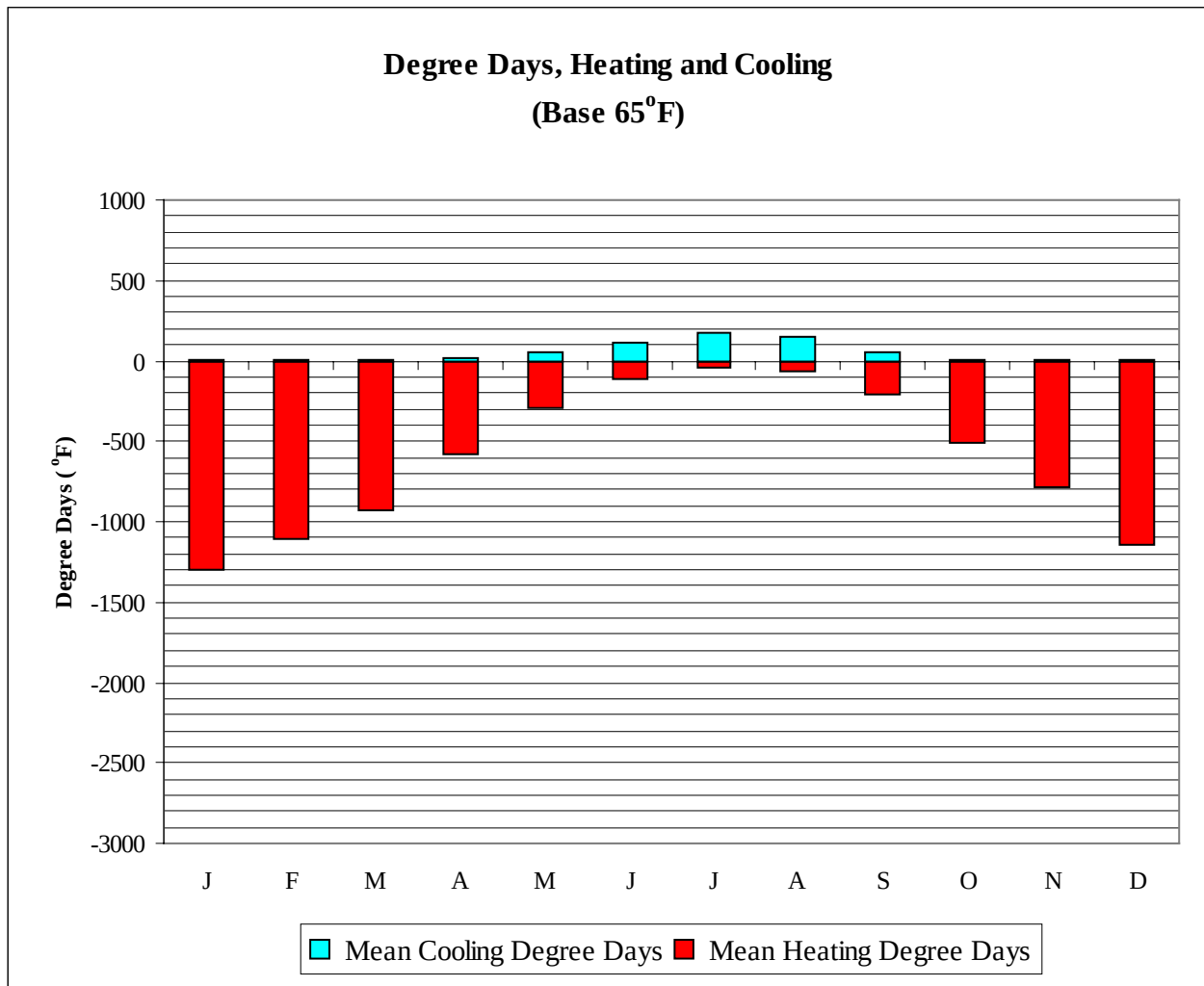
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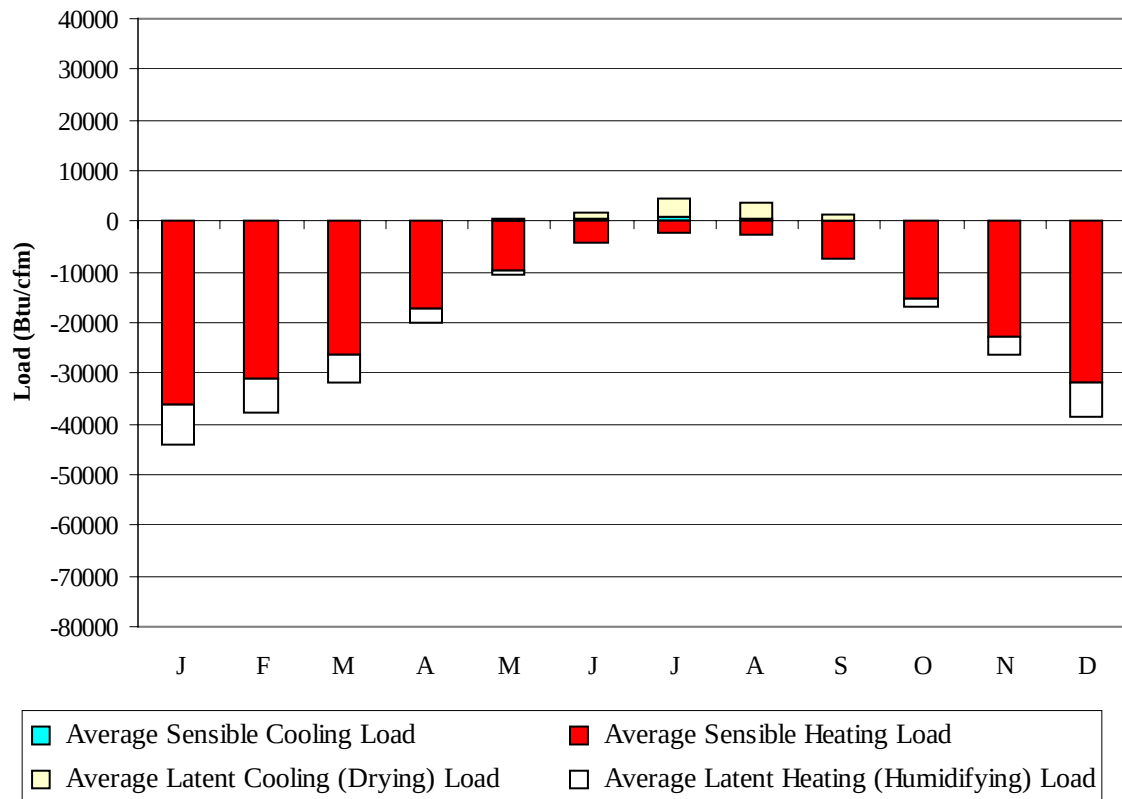
Long Term Dry Bulb Temperature and Humidity Summary

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	50.0	48.2	30.3	17.6	-1.0	44.8	47.1	22.6	11.9
14-Jan	54.0	49.3	28.3	14.4	-6.0	51.1	54.0	21.2	10.6
21-Jan	54.0	51.0	29.6	15.8	-15.0	53.2	50.0	22.8	12.3
28-Jan	47.0	41.8	31.3	18.0	-1.0	44.1	45.3	23.1	12.4
4-Feb	52.0	47.2	31.0	17.0	-3.0	49.0	49.4	22.6	11.8
11-Feb	49.0	44.5	28.6	13.7	-3.0	46.2	45.7	19.7	9.7
18-Feb	55.0	50.7	32.9	17.6	-5.0	53.9	51.2	23.8	12.4
25-Feb	58.0	47.7	40.5	24.4	5.0	55.3	52.0	30.7	16.5
4-Mar	63.0	52.4	37.6	21.3	0.0	60.2	57.3	26.5	13.6
11-Mar	64.0	50.7	41.8	24.2	4.0	57.4	56.7	31.5	16.4
18-Mar	67.0	55.6	43.1	25.7	7.0	71.4	60.2	32.0	16.5
25-Mar	65.0	50.1	45.0	27.1	11.0	62.3	58.6	31.5	16.9
1-Apr	74.0	57.5	50.6	32.6	16.0	69.3	60.6	38.6	21.7
8-Apr	72.0	54.1	49.9	32.4	18.0	70.0	59.7	39.4	21.8
15-Apr	73.0	57.3	53.6	33.7	22.0	71.4	61.2	39.3	21.2
22-Apr	80.0	61.7	59.9	39.6	26.0	74.2	64.2	46.2	26.6
29-Apr	80.0	60.8	61.6	40.5	29.0	77.0	63.0	48.5	28.0
6-May	76.0	57.7	61.0	42.2	32.0	80.5	62.6	49.5	28.9
13-May	81.0	61.6	65.7	44.5	32.0	85.4	69.5	55.4	32.5
20-May	83.0	65.6	68.0	47.9	35.0	92.4	71.1	63.8	40.2
27-May	82.0	63.3	69.9	49.8	38.0	102.2	73.2	67.9	44.1
3-Jun	83.0	66.9	71.9	51.8	39.0	109.9	73.3	76.3	50.9
10-Jun	83.0	67.3	73.2	53.3	42.0	110.6	71.5	78.6	52.4
17-Jun	86.0	67.8	76.0	55.2	44.0	117.6	73.0	83.5	56.5
24-Jun	85.0	68.3	76.4	56.8	46.0	114.8	74.8	88.4	61.5
1-Jul	84.0	68.9	76.0	57.1	47.0	109.9	74.7	87.4	61.9
8-Jul	88.0	68.5	78.3	59.2	49.0	118.3	78.5	93.9	68.1
15-Jul	87.0	73.0	79.3	60.1	50.0	123.2	78.4	98.3	68.1
22-Jul	88.0	73.9	80.2	61.3	53.0	130.9	79.4	99.9	73.4
29-Jul	86.0	70.8	78.7	59.8	50.0	118.3	73.4	95.8	69.6
5-Aug	88.0	71.4	78.7	60.0	52.0	119.0	75.6	97.6	72.8
12-Aug	85.0	70.7	76.9	59.3	49.0	118.3	75.0	94.6	69.5
19-Aug	86.0	69.9	77.7	58.6	49.0	118.3	74.0	93.3	67.6
26-Aug	84.0	69.3	76.2	56.4	47.0	114.1	75.3	88.4	61.8
2-Sep	87.0	73.9	76.5	57.8	44.0	122.9	79.8	93.7	66.4
9-Sep	83.0	69.6	72.9	54.8	43.0	117.6	74.3	84.1	60.6
16-Sep	80.0	66.9	70.6	51.9	40.0	106.8	70.6	79.7	53.3
23-Sep	79.0	68.9	66.8	49.8	36.0	114.1	73.9	75.2	51.2
30-Sep	75.0	64.8	64.4	45.9	35.0	102.2	71.2	64.8	44.2
7-Oct	74.0	61.0	61.8	43.8	31.0	95.9	66.2	59.4	38.9
14-Oct	72.0	59.7	58.9	41.5	30.0	89.6	65.1	53.9	35.1
21-Oct	72.0	61.3	56.2	39.4	28.0	85.4	62.7	48.7	30.5
28-Oct	72.0	57.7	56.5	39.1	27.0	82.6	64.7	48.0	30.2
4-Nov	68.0	57.8	54.1	37.4	23.0	79.1	61.0	45.0	28.0
11-Nov	65.0	56.9	47.9	33.7	21.0	77.0	60.5	40.7	24.8
18-Nov	62.0	53.9	45.4	31.4	18.0	71.4	57.7	36.1	21.4
25-Nov	62.0	54.8	43.8	30.8	16.0	68.6	58.6	37.0	21.9
2-Dec	60.0	49.8	41.1	28.0	12.0	67.2	60.1	33.3	18.8
9-Dec	58.0	53.1	37.7	24.9	9.0	66.5	57.8	29.7	16.8
16-Dec	54.0	49.2	35.1	23.1	3.0	53.2	50.3	27.7	15.9
23-Dec	54.0	49.6	31.9	19.5	0.0	50.4	50.8	24.2	13.3
31-Dec	58.0	55.7	32.6	19.0	-5.0	64.4	57.6	26.2	13.8



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1296
FEB	0	1106
MAR	2	923
APR	15	576
MAY	51	299
JUN	111	109
JUL	178	46
AUG	146	66
SEP	53	210
OCT	8	508
NOV	1	784
DEC	0	1140
ANN	565	7063

Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



	Average Sensible Cooling Load	Average Sensible Heating Load	Average Latent Cooling Load	Average Latent Heating Load
	(Btu/cfm)	(Btu/cfm)	(Btu/cfm)	(Btu/cfm)
JAN	0	-36005	0	-8144
FEB	0	-30861	0	-7036
MAR	2	-26313	0	-5389
APR	52	-17116	1	-2901
MAY	204	-9677	271	-803
JUN	465	-4139	1414	-32
JUL	948	-2110	3337	0
AUG	674	-2782	2873	-3
SEP	144	-7187	1176	-73
OCT	2	-15457	58	-1194
NOV	0	-22644	2	-3514
DEC	0	-31953	0	-6629
ANN	2491	-206244	9132	-35718

Average Annual Solar Radiation – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

City: BRADFORD
 State: PA
 WBAN No: 4751
 Lat(N): 41.8
 Long(W): 78.63
 Elev(ft): 1969

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.585
 Vert Gap: 0.327

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	550	830	1140	1450	1710	1880	1850	1600	1250	890	540	440	1180
	Std Dev	38	68	73	130	160	135	108	75	104	81	49	36	36
	Minimum	480	700	1020	1120	1390	1580	1660	1480	1020	750	440	390	1100
	Maximum	620	950	1260	1730	2040	2140	2070	1800	1420	1170	620	520	1250
	Diffuse	390	530	650	740	860	900	890	790	640	460	360	330	630
Clear Day	Global	840	1210	1690	2180	2520	2640	2550	2250	1800	1280	880	720	1710
NORTH	Global	210	290	360	440	540	620	590	480	370	280	200	180	380
	Diffuse	210	290	360	430	500	540	530	460	370	280	200	180	360
Clear Day	Global	180	250	330	430	580	690	630	470	350	260	190	160	380
EAST	Global	350	510	680	850	970	1040	1040	900	740	540	330	270	690
	Diffuse	250	350	450	520	600	640	630	560	460	340	240	210	440
Clear Day	Global	650	870	1120	1340	1460	1490	1450	1340	1150	890	670	570	1080
SOUTH	Global	760	960	1000	930	840	810	840	920	980	970	680	590	860
	Diffuse	380	480	520	550	580	590	600	580	520	430	330	320	490
Clear Day	Global	1870	1980	1850	1490	1160	1010	1060	1310	1650	1840	1820	1760	1560
WEST	Global	360	530	690	850	960	1060	1050	950	770	560	350	280	700
	Diffuse	260	360	450	530	610	650	650	580	470	340	240	210	440
Clear Day	Global	650	870	1120	1340	1460	1490	1450	1340	1150	890	670	570	1080

Average Annual Solar Heat and Illumination – Nearest Available Site

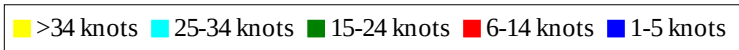
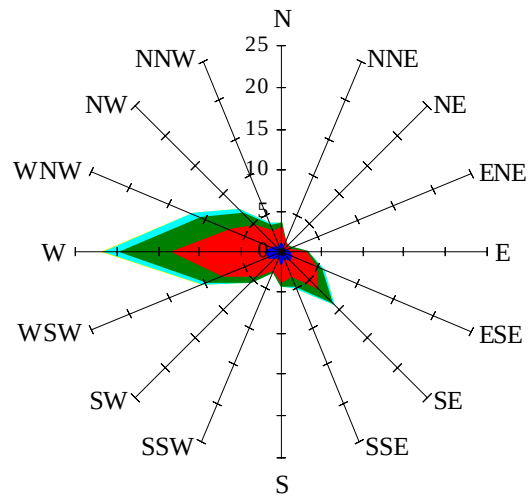
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	370	570	800	1040	1230	1360	1340	1150	880	610	360	290	830
NORTH	Unshaded	140	200	250	300	360	410	390	320	260	190	140	120	260
	Shaded	120	170	220	260	310	350	340	280	220	170	120	100	220
EAST	Unshaded	240	360	480	610	690	740	740	640	520	380	230	190	480
	Shaded	210	300	410	510	570	610	610	540	450	330	200	160	410
SOUTH	Unshaded	570	700	700	610	530	500	530	600	670	700	500	440	590
	Shaded	540	630	550	400	350	360	360	380	480	610	470	410	460
WEST	Unshaded	250	370	490	600	680	750	740	680	550	400	240	190	490
	Shaded	210	320	410	500	570	630	620	570	460	340	210	170	420

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	68	80	65	29	43	80	97	94	70
	M.Cloudy	20	42	48	40	18	27	51	69	67	48
NORTH	M.Clear	9	14	15	13	8	18	16	17	17	15
	M.Cloudy	9	15	17	15	8	13	17	19	19	15
EAST	M.Clear	69	59	15	13	8	74	74	35	17	15
	M.Cloudy	23	30	17	15	8	31	41	29	19	15
SOUTH	M.Clear	35	72	86	69	31	11	32	49	46	25
	M.Cloudy	15	34	40	32	13	11	23	37	35	20
WEST	M.Clear	9	14	18	63	67	11	16	17	47	76
	M.Cloudy	9	15	18	30	22	11	17	19	36	45
M.Clear	(% hrs)	22	23	23	24	24	33	31	23	22	25
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	23	61	80	76	48	9	35	43	28	3
	M.Cloudy	13	35	51	51	30	6	21	24	17	2
NORTH	M.Clear	8	13	16	15	12	4	9	10	8	2
	M.Cloudy	6	13	17	17	11	3	9	11	8	1
EAST	M.Clear	57	70	32	15	12	28	39	10	8	2
	M.Cloudy	16	31	24	17	11	7	15	11	8	1
SOUTH	M.Clear	17	54	75	71	42	24	73	86	61	7
	M.Cloudy	8	26	41	41	22	6	22	25	18	2
WEST	M.Clear	8	13	16	48	71	4	9	17	44	9
	M.Cloudy	6	13	17	31	32	3	9	12	15	2
M.Clear	(% hrs)	30	29	24	21	27	10	11	13	11	11

Wind Summary - December, January, and February

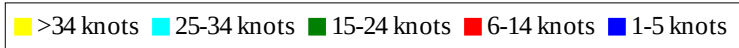
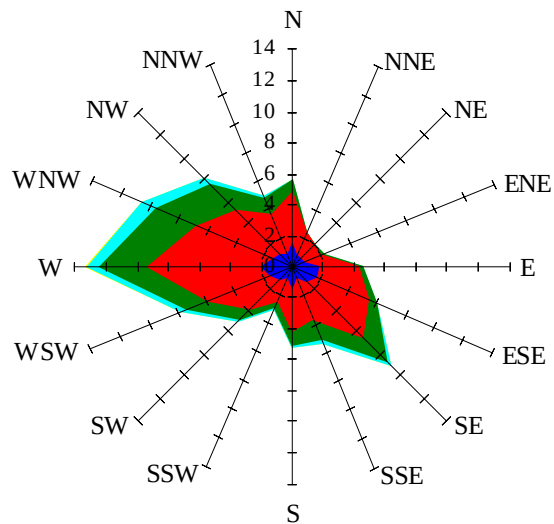
Labels of Percent Frequency on North Axis



Percent Calm = 4.47

Wind Summary - March, April, and May

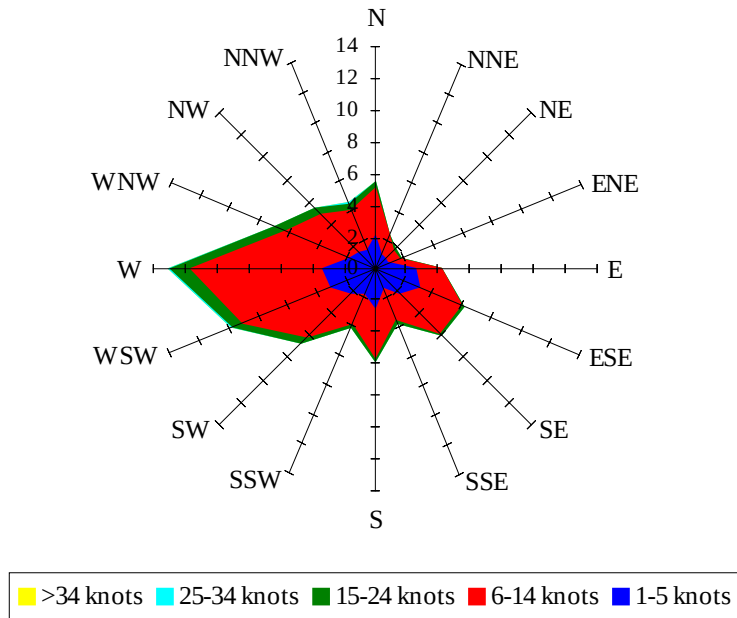
Labels of Percent Frequency on North Axis



Percent Calm = 5.82

Wind Summary - June, July, and August

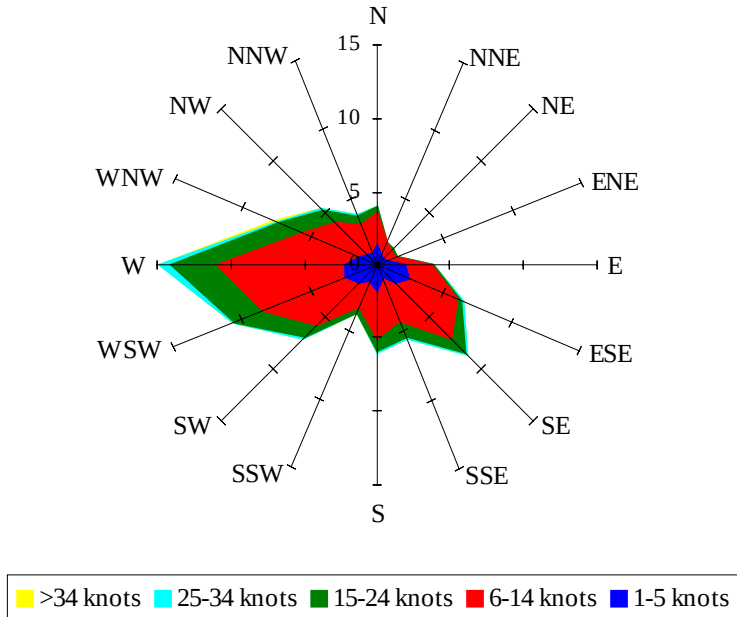
Labels of Percent Frequency on North Axis



Percent Calm = 13.02

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 8.29