

WILMINGTON DE

Latitude = 39.68 N

Longitude = 75.60 W

Period of Record = 1973 to 1996

WMO No. 724089

Elevation = 79 feet

Average Pressure = 29.93 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	97	78	112	11.3	WSW
0.4% Occurrence	92	75	106	10.2	W
1.0% Occurrence	89	74	103	10.1	WSW
2.0% Occurrence	87	73	102	9.9	WSW
Mean Daily Range	17	-	-	-	-
97.5% Occurrence	20	17	9	10.4	NW
99.0% Occurrence	14	12	7	10.3	WNW
99.6% Occurrence	10	8	5	10.8	WNW
Median of Extreme Lows	4	3	4	10.1	WNW
	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	80	90	134	9.9	S
0.4% Occurrence	78	87	127	9.5	S
1.0% Occurrence	77	86	124	9.3	S
2.0% Occurrence	75	83	117	8.6	S
	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	145	84	0.97	7.9	SSE
0.4% Occurrence	132	82	0.88	8.7	S
1.0% Occurrence	127	81	0.85	7.9	S
2.0% Occurrence	123	80	0.82	7.5	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		27	729	530	1646

Other Site Data

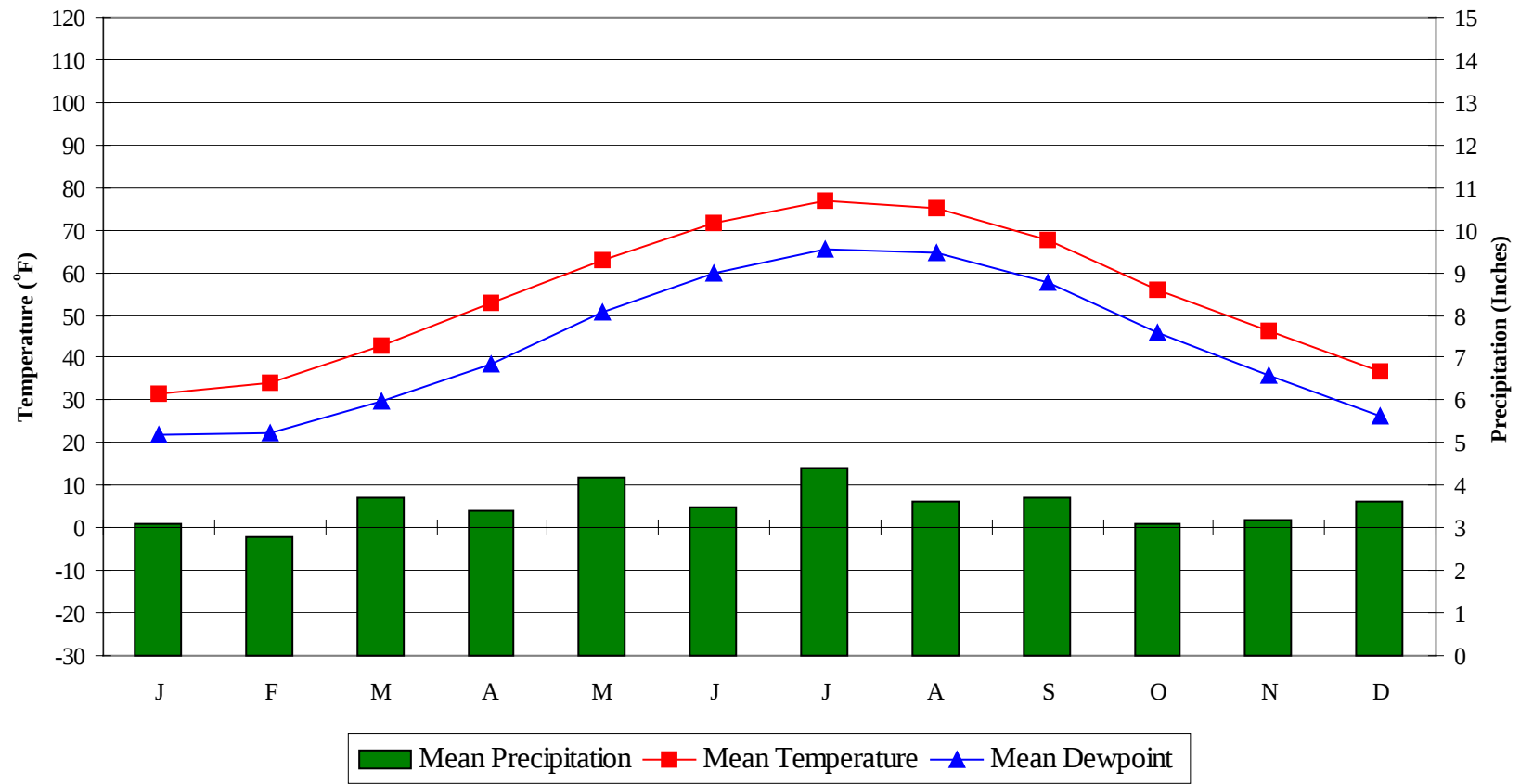
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
7	3.0	100	2.4 + 0.7
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
57.2	22	16	56

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

WILMINGTON DE

WMO No. 724089

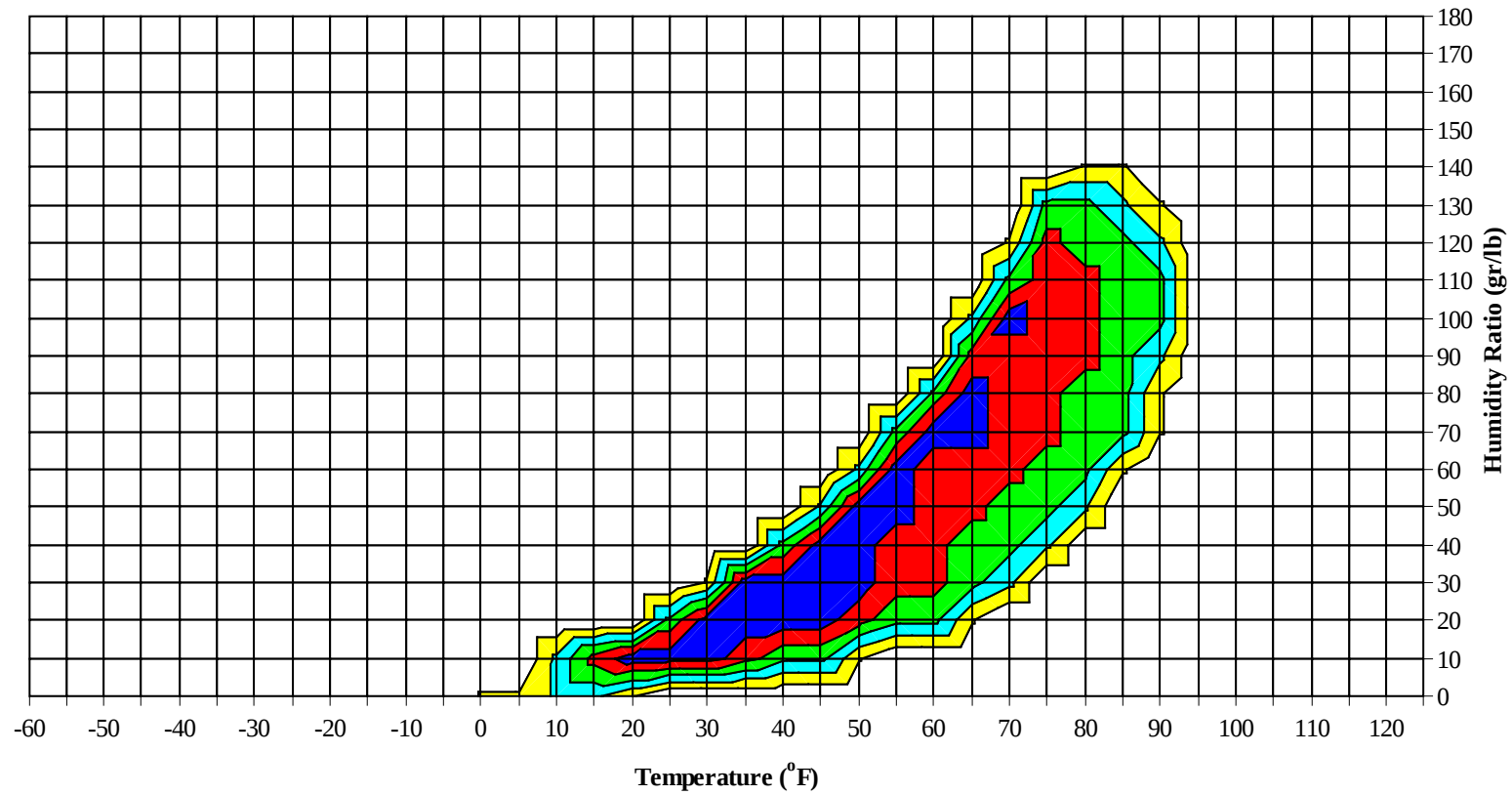
Average Annual Climate



WILMINGTON DE

WMO No. 724089

Long Term Psychrometric Summary

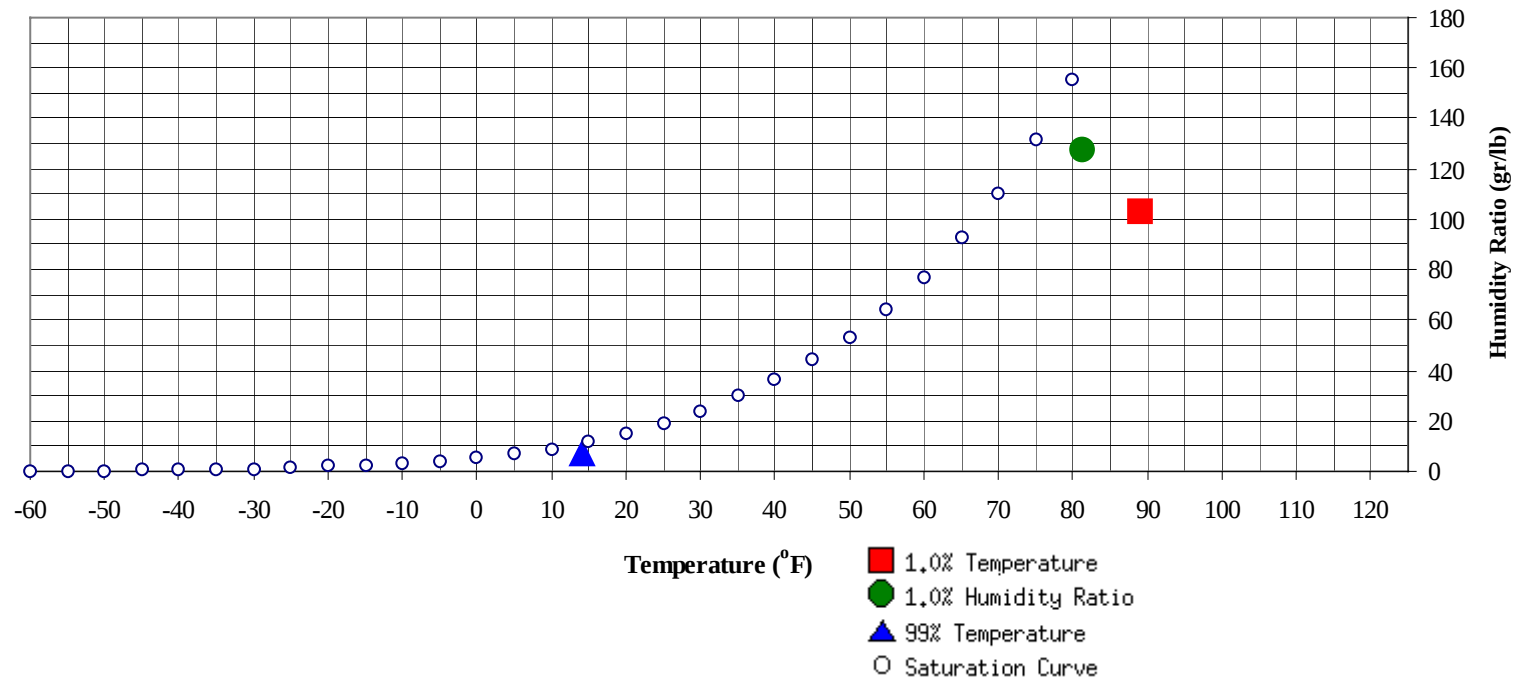


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

WILMINGTON DE

WMO No. 724089

Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)	1.0% Humidity Ratio	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
99% Dry Bulb	14	6.9	4.4		127.4	81.3	76	74	39.5

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	89	103.2	74.1	37.6

WILMINGTON DE

WMO No. 724089

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												0		0	66.0
80 / 84												1	0	1	65.5
75 / 79							0	0	0	62.5		3	1	4	61.6
70 / 74						0	0	0	1	59.3	0	5	2	7	58.6
65 / 69		0	0	1	58.1	0	3	1	3	53.8	1	7	3	12	56.0
60 / 64	1	2	1	4	55.8	1	5	2	8	53.3	3	17	8	28	52.8
55 / 59	2	6	3	11	51.9	2	8	5	16	49.5	7	27	17	51	49.4
50 / 54	3	11	7	21	47.2	4	18	11	34	45.9	18	42	34	94	45.6
45 / 49	7	23	12	42	42.4	12	26	19	57	41.9	28	46	45	119	41.4
40 / 44	17	38	30	85	37.7	20	35	29	84	37.5	46	43	51	140	37.3
35 / 39	41	51	48	140	33.4	32	42	44	118	33.0	55	30	44	129	32.9
30 / 34	52	45	55	152	29.0	44	35	44	123	28.4	45	16	25	87	28.4
25 / 29	42	31	36	110	24.2	40	28	32	100	23.6	26	5	12	43	23.6
20 / 24	31	20	27	78	19.5	31	14	21	65	19.3	11	3	3	18	19.1
15 / 19	27	10	18	55	15.1	20	6	10	37	15.0	5	1	2	8	14.9
10 / 14	15	5	7	27	10.4	12	2	4	19	10.5	2	0	0	3	10.5
5 / 9	6	2	2	11	6.0	3	1	1	5	5.6	1		0	1	5.7
0 / 4	3	1	1	4	1.0	2	0	0	2	0.8	0			0	4.0
-5 / -1	1	0	0	2	-3.1	1		0	1	-3.1					
-10 / -6	1	0	0	1	-7.3	0			0	-6.0					
-15 / -11	0	0		0	-11.7										

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.

WILMINGTON DE

WMO No. 724089

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						0			0	74.0		1	0	1	76.0
90 / 94		1	0	1	68.1	3	0	3	72.7		10	2	12	74.6	
85 / 89		2	0	3	66.4	10	3	13	69.9		0	28	9	37	72.3
80 / 84		5	1	6	64.7	0	22	8	30	67.8	3	58	25	86	69.6
75 / 79	0	10	4	13	62.1	2	33	16	52	65.1	17	65	51	133	67.5
70 / 74	1	19	9	29	59.0	11	47	30	88	62.0	62	43	68	173	65.7
65 / 69	6	27	17	50	56.0	29	48	45	123	59.4	64	23	49	135	61.9
60 / 64	15	41	28	84	53.1	54	41	57	151	56.5	53	10	26	89	58.0
55 / 59	25	46	41	113	49.7	57	29	46	132	52.3	28	2	8	38	53.2
50 / 54	44	42	55	141	46.2	52	13	30	94	48.2	10	0	2	12	48.6
45 / 49	57	30	46	132	42.0	29	3	10	41	43.7	3		0	4	44.4
40 / 44	48	11	26	85	37.8	12	0	2	14	39.4	0			0	43.0
35 / 39	29	4	9	42	33.1	2		0	2	34.5					
30 / 34	13	1	4	18	29.1	0			0	28.3					
25 / 29	2	0	0	3	23.7										
20 / 24	0		0	0	19.6										
15 / 19	0			0	15.5										
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															

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.

WILMINGTON DE

WMO No. 724089

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		5	1	6	77.9		2	0	2	77.7		1	0	1	74.8
90 / 94		25	7	32	75.7	0	15	3	17	75.4		5	1	5	75.3
85 / 89	1	59	22	82	73.6	0	48	13	62	74.0		14	2	16	72.9
80 / 84	10	77	51	138	71.5	4	80	42	126	71.7	1	35	11	47	70.7
75 / 79	57	53	79	189	70.2	43	61	79	183	70.2	8	50	30	88	68.3
70 / 74	98	22	63	183	67.8	92	28	68	188	67.6	40	60	56	155	65.6
65 / 69	51	4	20	76	63.1	61	9	32	102	63.5	48	44	53	145	61.6
60 / 64	24	2	5	31	58.7	32	2	11	46	59.1	56	23	50	129	57.8
55 / 59	6	0	1	7	53.7	12	0	2	14	54.2	42	6	24	73	53.4
50 / 54	1		0	1	49.0	3		0	3	49.6	27	1	9	37	49.1
45 / 49						1		0	1	44.6	14	0	3	17	44.9
40 / 44						0			0	41.0	4	0	0	5	41.0
35 / 39											0			0	36.2
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															

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.

WILMINGTON DE

WMO No. 724089

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		0		0	66.8										
80 / 84		5	0	5	68.4		0		0	66.0					
75 / 79	0	14	3	17	66.7		2		2	63.0					
70 / 74	3	31	12	46	63.4		7	2	8	62.2		0		0	63.4
65 / 69	12	43	25	81	60.4	2	14	5	21	59.4	0	2	1	3	61.4
60 / 64	26	55	44	125	56.3	9	26	16	51	56.5	2	6	3	11	56.9
55 / 59	41	49	53	143	51.8	16	34	27	78	51.9	4	9	6	19	52.5
50 / 54	45	32	47	125	47.3	28	45	37	110	47.0	9	21	14	44	47.6
45 / 49	48	13	39	100	43.2	37	47	43	126	42.0	17	42	22	81	42.6
40 / 44	39	3	19	61	39.1	43	36	49	128	37.6	31	51	47	129	37.9
35 / 39	24	1	6	31	35.2	44	20	37	101	33.2	45	49	54	148	33.1
30 / 34	7	0	1	8	30.0	37	6	19	62	29.1	55	32	47	134	28.7
25 / 29	2			2	25.7	18	2	5	25	24.8	39	18	27	84	24.1
20 / 24						5	0	1	6	20.5	21	12	16	49	19.4
15 / 19						1	0	0	1	16.7	14	4	8	26	15.0
10 / 14											8	1	2	10	10.8
5 / 9											3	1	1	4	6.2
0 / 4											0	0	0	1	0.4
-5 / -1											0		0	0	-4.0
-10 / -6											0		0	0	-6.6
-15 / -11															

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.

WILMINGTON DE

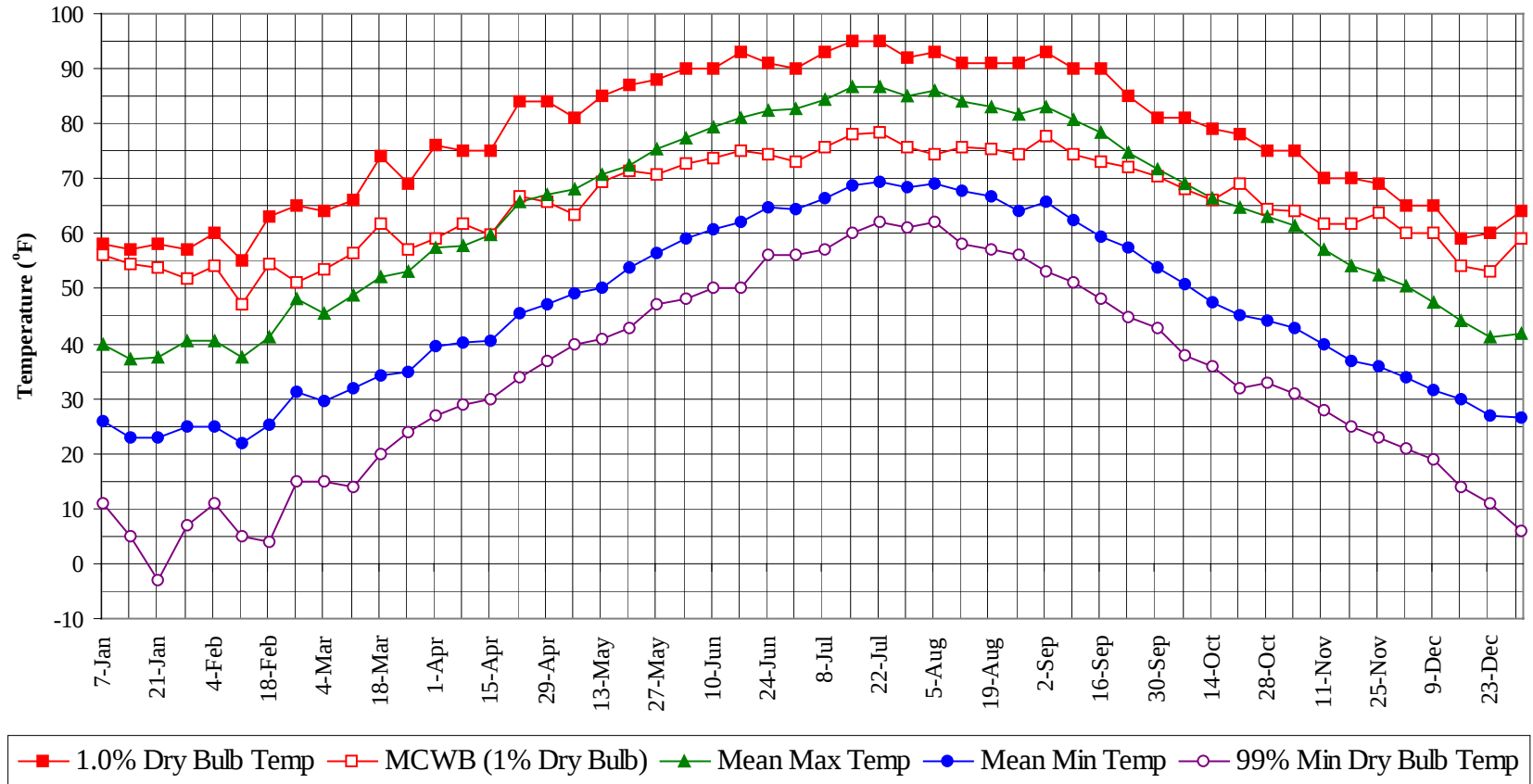
WMO No. 724089

Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)**Period of Record = 1973 to 1996**

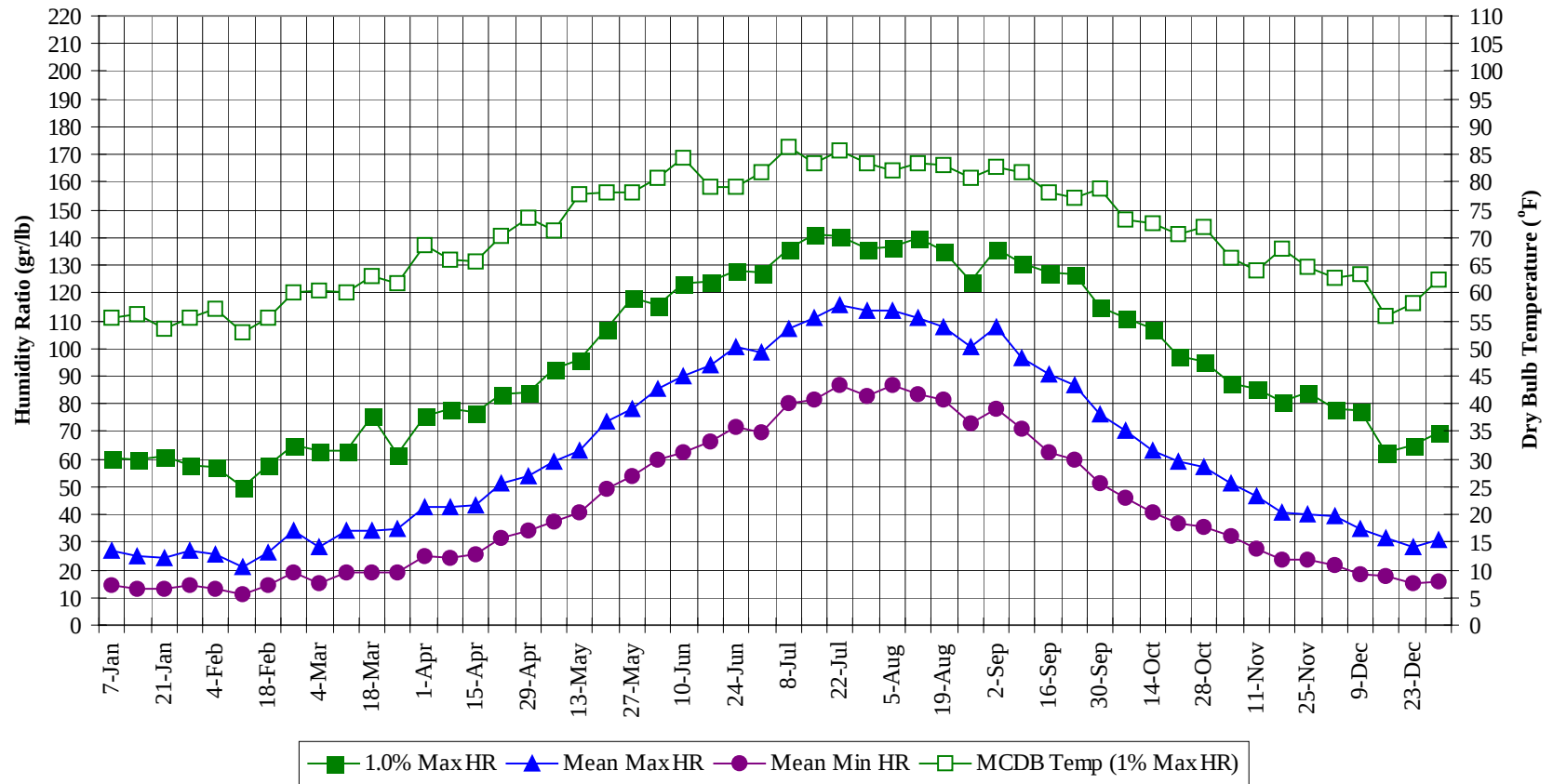
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
95 / 99		9	1	10	77.3
90 / 94	0	58	12	70	75.2
85 / 89	1	162	50	213	73.1
80 / 84	18	283	137	439	70.7
75 / 79	128	291	261	681	68.7
70 / 74	307	262	309	878	65.7
65 / 69	275	225	251	751	61.0
60 / 64	276	229	252	758	56.5
55 / 59	243	217	235	695	51.7
50 / 54	246	225	246	718	47.0
45 / 49	253	229	238	721	42.3
40 / 44	261	216	254	731	37.8
35 / 39	273	196	241	711	33.2
30 / 34	253	136	196	585	28.7
25 / 29	169	84	113	367	24.0
20 / 24	99	50	68	216	19.4
15 / 19	67	21	38	126	15.0
10 / 14	37	8	13	58	10.5
5 / 9	12	4	4	20	5.9
0 / 4	5	1	2	8	0.9
-5 / -1	2	0	1	3	-3.2
-10 / -6	1	0	0	2	-7.1
-15 / -11	0	0		0	-11.7

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



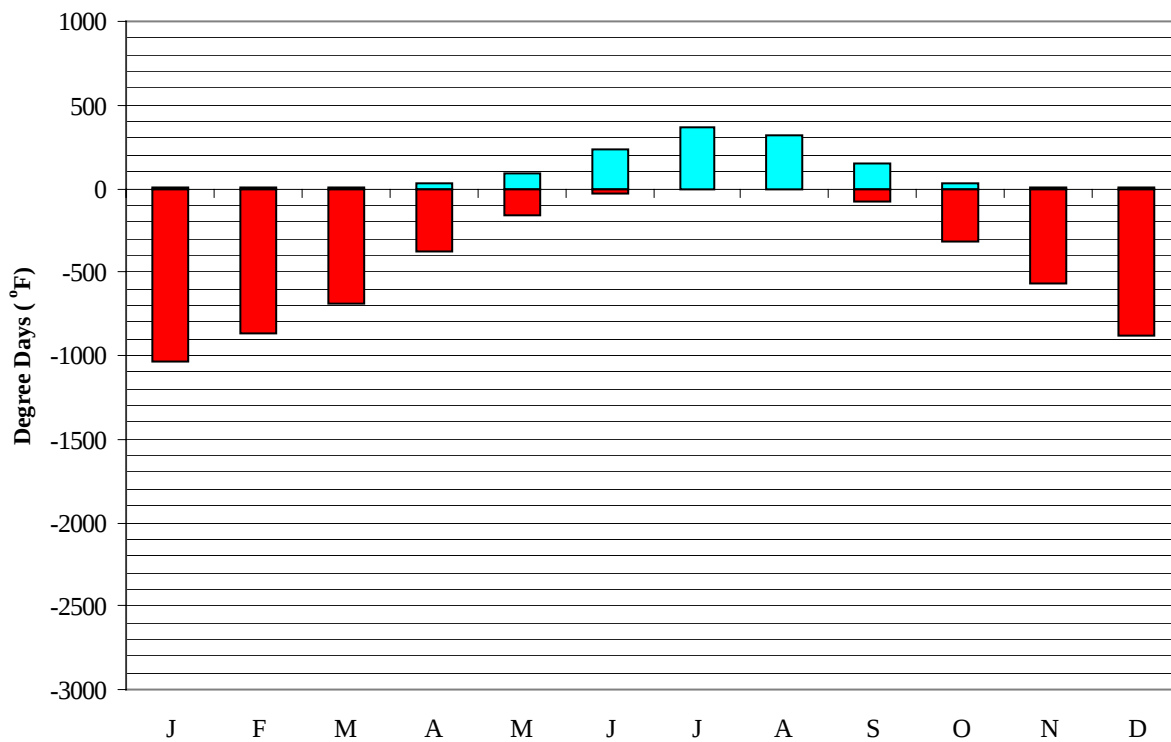
WILMINGTON DE**WMO No. 724089****Long Term Dry Bulb Temperature and Humidity Summary**

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	58.0	56.1	39.7	26.1	11.0	60.2	55.3	26.9	14.6
14-Jan	57.0	54.5	37.3	22.7	5.0	59.5	56.0	24.9	12.8
21-Jan	58.0	53.7	37.6	22.8	-3.0	60.9	53.6	24.5	13.2
28-Jan	57.0	51.8	40.6	25.0	7.0	58.1	55.6	26.8	14.4
4-Feb	60.0	54.1	40.5	24.8	11.0	57.4	57.3	25.8	13.4
11-Feb	55.0	47.1	37.6	21.9	5.0	49.7	52.9	21.1	11.4
18-Feb	63.0	54.5	41.1	25.2	4.0	58.1	55.6	26.2	14.3
25-Feb	65.0	51.2	48.1	31.3	15.0	65.1	59.9	34.1	19.1
4-Mar	64.0	53.6	45.4	29.5	15.0	63.0	60.4	28.0	15.4
11-Mar	66.0	56.6	48.9	31.9	14.0	63.0	60.1	34.1	19.0
18-Mar	74.0	61.9	52.1	34.0	20.0	75.6	63.1	34.4	18.8
25-Mar	69.0	57.2	53.1	35.0	24.0	61.6	61.6	34.8	19.3
1-Apr	76.0	59.3	57.5	39.4	27.0	75.6	68.8	42.8	24.8
8-Apr	75.0	61.7	57.9	40.1	29.0	78.4	65.9	42.8	24.5
15-Apr	75.0	59.7	59.9	40.6	30.0	77.0	65.6	43.5	25.5
22-Apr	84.0	66.6	65.9	45.4	34.0	83.3	70.3	51.4	31.7
29-Apr	84.0	65.9	67.1	47.2	37.0	84.0	73.7	54.0	33.9
6-May	81.0	63.4	68.0	49.0	40.0	92.4	71.4	59.1	37.3
13-May	85.0	69.3	70.8	50.3	41.0	95.9	77.7	63.1	41.0
20-May	87.0	71.5	72.5	53.9	43.0	107.1	78.1	73.6	48.9
27-May	88.0	70.7	75.5	56.6	47.0	118.3	78.1	77.8	54.2
3-Jun	90.0	72.7	77.4	59.2	48.0	115.5	80.7	85.3	59.6
10-Jun	90.0	73.7	79.5	60.7	50.0	123.2	84.3	90.3	62.4
17-Jun	93.0	75.1	80.9	62.3	50.0	123.9	79.2	93.8	66.3
24-Jun	91.0	74.6	82.2	64.8	56.0	128.1	79.2	100.6	71.8
1-Jul	90.0	73.0	82.6	64.6	56.0	127.4	81.8	98.5	69.6
8-Jul	93.0	75.8	84.2	66.6	57.0	135.8	86.3	106.9	79.9
15-Jul	95.0	77.9	86.6	68.7	60.0	141.4	83.4	111.0	81.6
22-Jul	95.0	78.3	86.8	69.4	62.0	140.7	85.6	115.9	86.9
29-Jul	92.0	75.8	85.0	68.5	61.0	135.8	83.5	113.6	82.7
5-Aug	93.0	74.4	86.0	69.1	62.0	136.5	82.3	113.5	86.5
12-Aug	91.0	75.6	84.0	67.8	58.0	140.0	83.6	110.7	83.4
19-Aug	91.0	75.4	83.2	66.7	57.0	135.1	83.0	107.6	81.2
26-Aug	91.0	74.5	81.9	64.1	56.0	123.9	80.7	100.5	72.8
2-Sep	93.0	77.8	83.1	65.6	53.0	135.8	82.9	107.7	78.3
9-Sep	90.0	74.3	80.6	62.5	51.0	130.9	81.6	96.8	70.9
16-Sep	90.0	73.1	78.4	59.5	48.0	127.4	78.3	90.8	62.6
23-Sep	85.0	72.2	74.7	57.4	45.0	126.7	77.1	86.5	60.0
30-Sep	81.0	70.3	71.6	53.7	43.0	114.8	79.0	76.2	51.1
7-Oct	81.0	68.1	69.2	50.7	38.0	111.3	73.3	70.1	46.3
14-Oct	79.0	66.2	66.6	47.5	36.0	107.1	72.6	62.9	41.0
21-Oct	78.0	69.2	64.9	45.1	32.0	97.3	70.7	59.0	36.8
28-Oct	75.0	64.3	63.3	44.3	33.0	95.2	72.0	56.8	35.6
4-Nov	75.0	64.2	61.3	42.8	31.0	87.5	66.2	51.3	32.2
11-Nov	70.0	61.9	57.1	39.9	28.0	85.4	64.2	46.7	27.9
18-Nov	70.0	61.6	54.3	37.0	25.0	80.5	68.0	40.9	23.5
25-Nov	69.0	63.7	52.5	35.8	23.0	84.0	64.6	40.0	23.7
2-Dec	65.0	60.2	50.6	33.9	21.0	78.4	62.6	39.4	21.5
9-Dec	65.0	60.2	47.6	31.7	19.0	77.7	63.5	34.8	18.3
16-Dec	59.0	54.0	44.2	29.8	14.0	62.3	55.8	31.7	17.9
23-Dec	60.0	53.2	41.3	26.8	11.0	65.1	58.2	28.1	15.4
31-Dec	64.0	59.2	42.0	26.6	6.0	69.3	62.5	30.6	15.6

WILMINGTON DE

WMO No. 724089

Degree Days, Heating and Cooling
(Base 65°F)



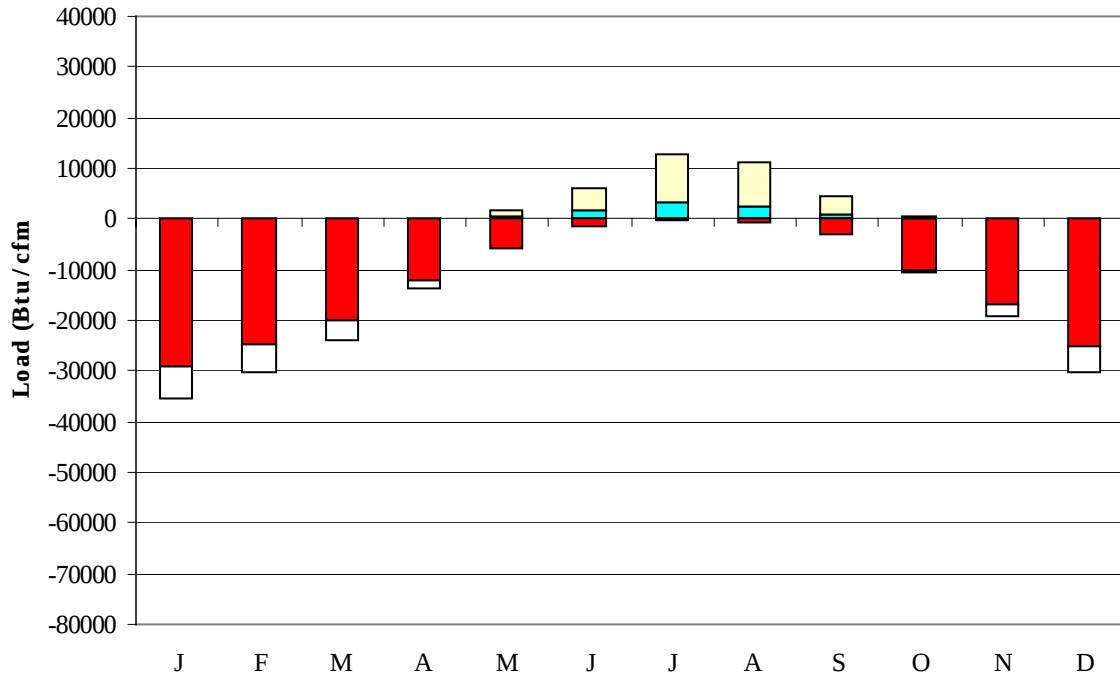
■ Mean Cooling Degree Days ■ Mean Heating Degree Days

	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1034
FEB	0	874
MAR	5	687
APR	25	383
MAY	95	158
JUN	236	31
JUL	369	6
AUG	320	11
SEP	154	75
OCT	30	314
NOV	5	565
DEC	0	882
ANN	1240	5020

WILMINGTON DE

WMO No. 724089

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 (Drying) Load	■ Average Latent Heating (Humidifying) Load

	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	-29229	1	-6189
FEB	0	-24852	0	-5541
MAR	13	-20172	9	-3849
APR	113	-12017	38	-1633
MAY	513	-5679	1055	-198
JUN	1569	-1398	4598	-5
JUL	3116	-347	9806	-1
AUG	2373	-598	8867	-1
SEP	809	-2973	3777	-13
OCT	61	-10181	610	-516
NOV	4	-16922	63	-2369
DEC	0	-25279	4	-4918
ANN	8571	-149647	28828	-25233

Average Annual Solar Radiation – Nearest Available Site

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

City: WILMINGTON
 State: DE
 WBAN No: 13781
 Lat(N): 39.67
 Long(W): 75.6
 Elev(ft): 79

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.524
 Vert Gap: 0.319

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	640	900	1230	1550	1790	1980	1920	1730	1390	1040	690	550	1290
	Std Dev	44	76	92	119	134	115	114	76	95	77	54	40	34
	Minimum	550	750	1070	1320	1600	1750	1670	1590	1240	900	550	470	1220
	Maximum	720	1090	1400	1810	2090	2180	2140	1910	1570	1200	820	620	1340
	Diffuse	320	420	550	710	840	880	870	770	630	450	340	280	590
Clear Day	Global	910	1260	1740	2210	2500	2600	2510	2240	1820	1340	950	800	1740
NORTH	Global	200	270	350	440	550	610	580	480	380	290	210	180	380
	Diffuse	200	270	350	430	500	540	520	470	380	290	210	180	360
Clear Day	Global	180	240	320	430	580	680	620	480	370	280	200	160	380
EAST	Global	440	590	760	920	990	1060	1050	970	820	660	460	380	760
	Diffuse	240	330	420	530	600	640	630	570	480	360	260	220	440
Clear Day	Global	700	900	1140	1340	1430	1440	1400	1300	1140	900	700	620	1080
SOUTH	Global	1020	1130	1100	960	830	790	820	950	1070	1170	1010	930	980
	Diffuse	350	420	490	540	570	590	590	580	530	450	360	320	480
Clear Day	Global	1920	1970	1790	1420	1080	930	980	1230	1570	1800	1830	1830	1530
WEST	Global	440	590	760	900	990	1070	1060	980	830	660	460	380	760
	Diffuse	250	330	430	530	610	650	640	580	480	360	260	220	450
Clear Day	Global	700	900	1140	1340	1430	1440	1400	1300	1140	900	700	620	1080

Average Annual Solar Heat and Illumination – Nearest Available Site

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

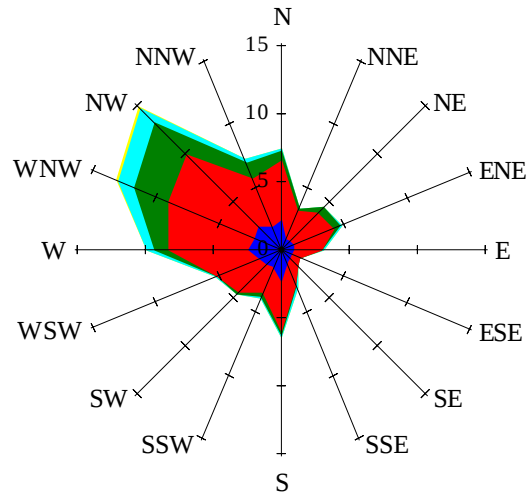
AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 11		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	420	620	870	1120	1290	1440	1400	1250	990	720	460	350	910
NORTH	Unshaded	140	180	240	300	360	400	380	330	270	200	150	120	260
	Shaded	120	160	210	270	320	360	340	290	240	180	130	110	230
EAST	Unshaded	300	410	540	650	700	750	740	690	580	460	320	260	540
	Shaded	270	370	470	560	600	640	630	590	510	410	290	240	460
SOUTH	Unshaded	770	830	760	630	520	480	500	610	720	840	760	700	680
	Shaded	750	760	600	420	350	360	360	390	530	740	730	680	560
WEST	Unshaded	310	410	540	640	700	760	750	700	580	470	320	260	540
	Shaded	280	370	470	550	600	640	640	600	510	410	280	230	460

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	40	72	80	64	26	47	83	101	94	67
	M.Cloudy	23	44	49	40	16	29	55	73	68	46
NORTH	M.Clear	10	14	15	13	8	18	17	17	17	15
	M.Cloudy	9	15	16	14	7	13	18	20	19	16
EAST	M.Clear	74	56	15	13	8	75	72	31	17	15
	M.Cloudy	26	30	16	14	7	33	43	28	19	16
SOUTH	M.Clear	40	73	82	65	26	12	32	47	42	21
	M.Cloudy	17	36	41	33	12	11	25	36	33	18
WEST	M.Clear	10	14	23	66	63	12	17	17	52	77
	M.Cloudy	9	15	19	34	23	11	18	20	38	44
M.Clear	(% hrs)	35	34	31	30	35	39	39	34	37	37

		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	27	66	83	76	46	14	40	45	28	2
	M.Cloudy	16	40	55	51	29	9	23	26	17	2
NORTH	M.Clear	9	14	16	16	12	5	10	10	8	1
	M.Cloudy	7	15	18	17	11	4	9	10	7	1
EAST	M.Clear	60	68	28	16	12	40	38	10	8	1
	M.Cloudy	20	32	23	17	11	11	17	10	7	1
SOUTH	M.Clear	20	56	74	67	37	37	78	86	60	6
	M.Cloudy	10	28	43	39	19	10	28	31	20	2
WEST	M.Clear	9	14	16	52	71	5	10	21	46	8
	M.Cloudy	7	15	18	33	31	4	9	13	17	2
M.Clear	(% hrs)	42	44	41	38	41	34	34	31	31	34

Wind Summary - December, January, and February

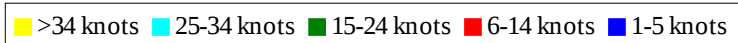
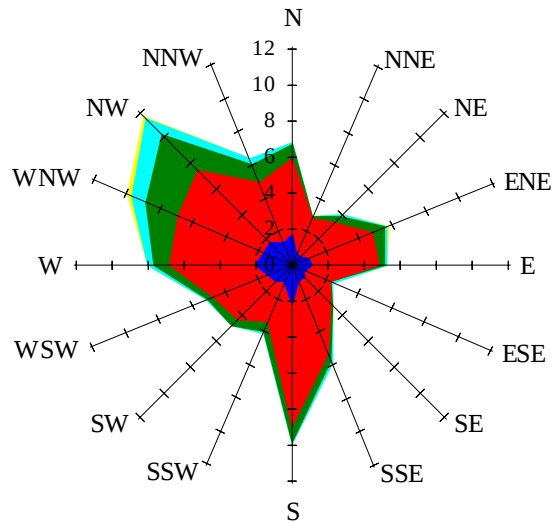
Labels of Percent Frequency on North Axis



Percent Calm = 7.18

Wind Summary - March, April, and May

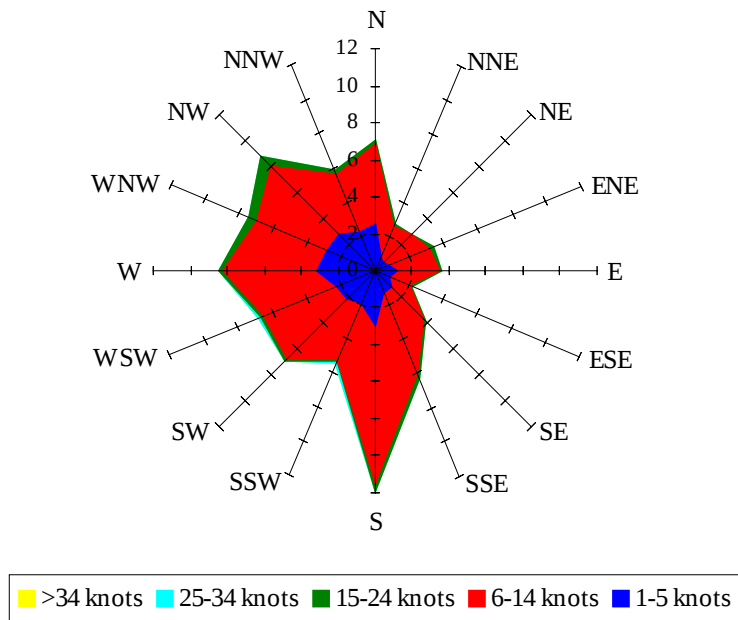
Labels of Percent Frequency on North Axis



Percent Calm = 5.21

Wind Summary - June, July, and August

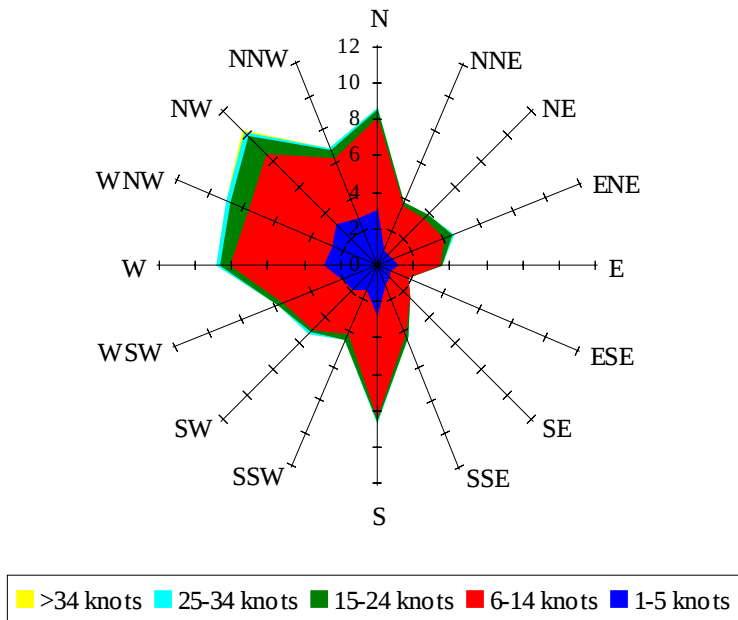
Labels of Percent Frequency on North Axis



Percent Calm = 7.11

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 8.56