

DECATUR IL

Latitude = 39.83 N

Longitude = 88.87 W

Period of Record = 1973 to 1996

WMO No. 725316

Elevation = 682 feet

Average Pressure = 29.28 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	115	12.2	SW
0.4% Occurrence	93	77	115	11.6	SW
1.0% Occurrence	91	76	112	11.4	SW
2.0% Occurrence	88	74	107	11.1	SSW
Mean Daily Range	19	-	-	-	-
97.5% Occurrence	10	9	7	11.4	NW
99.0% Occurrence	3	3	5	11.5	WNW
99.6% Occurrence	-2	-2	4	12.2	WNW
Median of Extreme Lows	-8	-8	3	12.3	NW
	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	82	92	148	10.7	SSW
0.4% Occurrence	79	89	134	10.8	SSW
1.0% Occurrence	78	88	130	10.9	SSW
2.0% Occurrence	76	85	122	10.4	SSW
	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	155	89	1.00	10.3	SSW
0.4% Occurrence	139	86	0.90	9.6	SSW
1.0% Occurrence	130	83	0.85	9.7	S
2.0% Occurrence	126	82	0.82	9.9	SSW
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		47	802	540	1543

Other Site Data

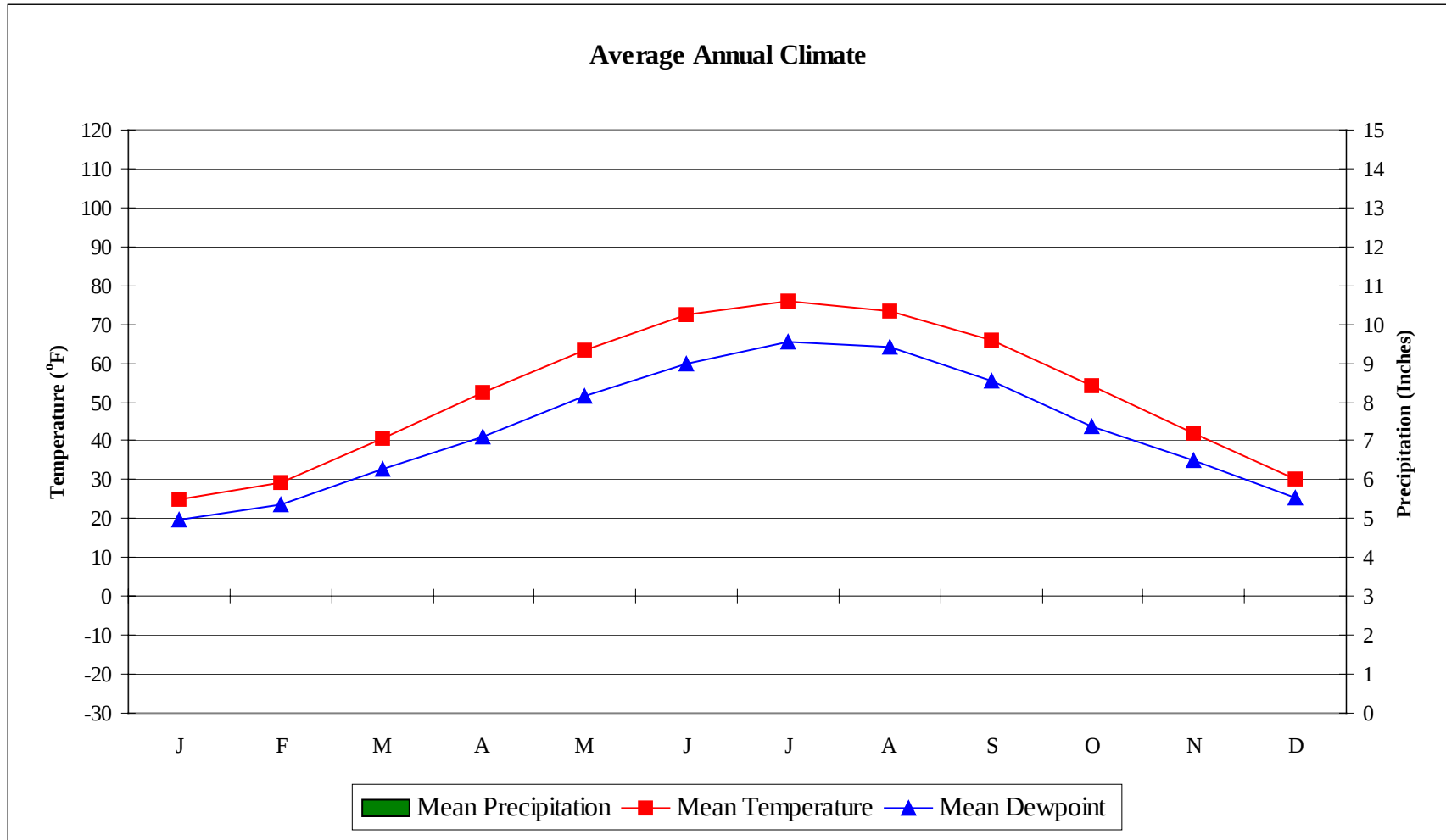
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
6	3.3	90	2.4 + 0.8
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
54.7	N/A	N/A	56

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

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IL

WMO No. 725316



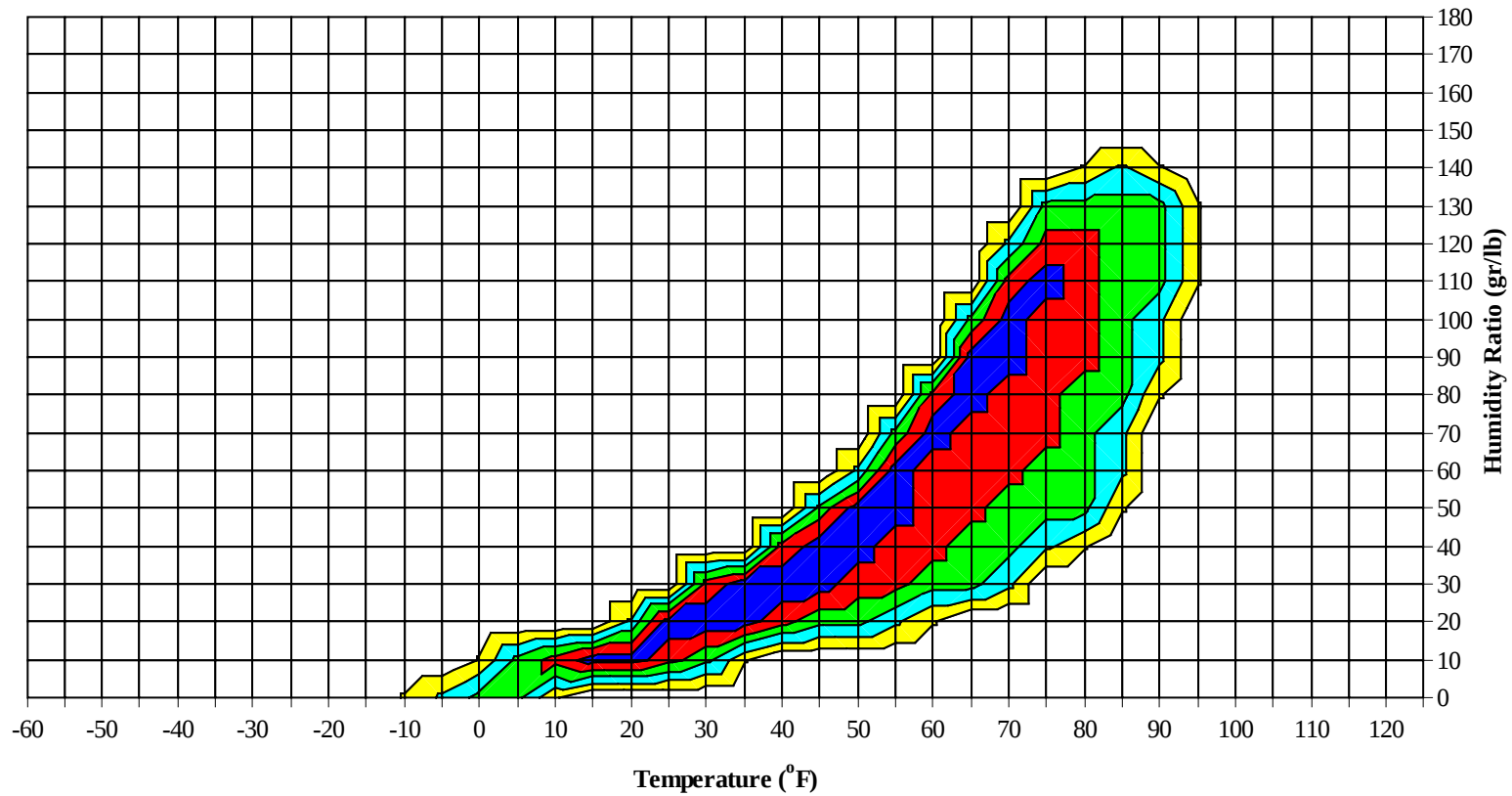
No Precipitation Data Available

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WMO No. 725316

Long Term Psychrometric Summary



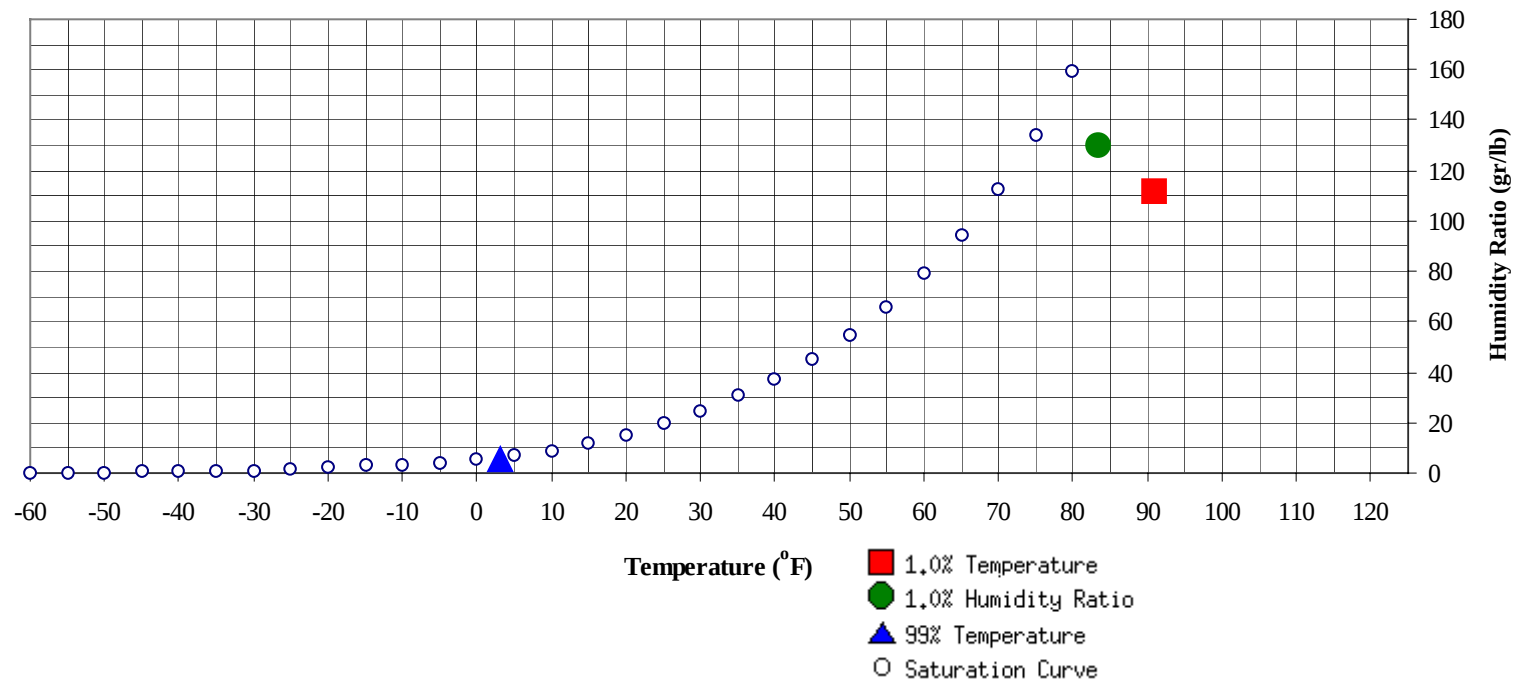
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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WMO No. 725316

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	3	5.2	1.5		130.2	83.3	76.5	74	40.4

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	91	111.9	75.6	39.4

DECATUR IL

WMO No. 725316

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		
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84												1	0	1	64.2
75 / 79												3	1	4	63.7
70 / 74							0		0	58.2		8	2	10	60.0
65 / 69		0		0	56.3		1	0	1	56.5		11	7	19	58.2
60 / 64	0	1	0	1	55.2	0	6	1	7	53.0	7	16	13	36	54.9
55 / 59	1	3	1	5	52.6	2	6	4	12	51.0	9	21	14	44	50.8
50 / 54	3	5	3	11	49.0	4	11	6	21	47.2	14	27	23	64	46.8
45 / 49	3	9	5	17	43.6	6	17	12	35	42.8	19	31	30	80	42.7
40 / 44	6	17	12	35	38.9	12	25	22	59	38.7	31	41	38	110	39.1
35 / 39	25	34	32	91	34.6	30	36	34	100	34.7	45	36	43	123	34.5
30 / 34	42	45	47	134	30.5	45	36	40	121	30.7	51	28	38	116	30.4
25 / 29	44	39	42	125	25.8	33	29	34	96	25.6	33	16	21	70	25.6
20 / 24	31	30	30	91	20.9	27	21	22	70	20.9	20	8	11	39	21.1
15 / 19	24	24	25	73	16.0	16	17	16	49	16.0	10	3	4	17	16.1
10 / 14	24	17	21	62	11.2	16	9	14	39	11.2	4	1	2	7	11.2
5 / 9	19	11	15	45	6.4	14	7	10	31	6.4	2	0	0	2	6.6
0 / 4	13	7	8	28	1.5	12	4	5	21	1.8	1			1	2.3
-5 / -1	7	2	3	12	-2.8	3	1	2	6	-2.6	0			0	-2.0
-10 / -6	4	2	2	8	-7.0	2	0	0	2	-7.2					
-15 / -11	2	0	1	3	-11.7	1	0	0	1	-11.4					
-20 / -16	1	0	0	1	-16.9	0			0	-15.0					
-25 / -21	0			0	-20.5										

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.

DECATUR IL

WMO No. 725316

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		
105 / 109															
100 / 104															
95 / 99							0		0	78.0		2	0	2	75.5
90 / 94							2	0	2	73.1		18	4	22	76.0
85 / 89		1	0	1	64.8		16	3	19	70.1		45	14	59	73.9
80 / 84		8	1	9	65.3	0	28	10	38	68.0	0	60	31	96	72.1
75 / 79	0	16	5	21	63.7	4	38	21	63	64.8	5	49	51	121	69.4
70 / 74	1	19	12	32	60.9	16	47	35	98	62.7	21	36	58	148	67.5
65 / 69	9	28	20	57	57.8	32	43	46	121	59.9	54	19	46	129	65.5
60 / 64	20	34	28	82	54.8	50	35	47	132	56.7	64	9	23	81	62.2
55 / 59	25	37	33	95	50.8	48	21	39	108	52.5	49	2	11	43	57.8
50 / 54	33	36	41	110	46.8	42	11	27	80	48.3	31	0	3	16	53.6
45 / 49	43	31	39	113	43.0	31	5	14	50	44.1	13	0	0	3	49.0
40 / 44	45	18	30	93	38.9	18	1	4	23	39.8	3	0	0	0	45.0
35 / 39	33	10	17	60	34.6	6	0	1	7	34.8	0			0	42.4
30 / 34	20	3	9	32	30.3	1			1	30.3					
25 / 29	8	0	3	11	26.0										
20 / 24	2	0	1	3	21.1										
15 / 19	0			0	18.3										
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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DECATUR IL

WMO No. 725316

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		
105 / 109			0	0											
100 / 104		1	0	1	78.5		1	0	1	77.8		0		0	80.3
95 / 99		10	1	11	77.6		5	1	6	78.4		1	0	1	77.3
90 / 94		31	8	39	76.4		22	4	26	77.3		7	1	8	74.4
85 / 89	2	61	23	86	74.3	1	41	12	54	74.7	0	22	4	26	72.0
80 / 84	12	72	47	131	71.9	5	70	32	107	71.8	0	40	12	52	69.0
75 / 79	44	43	61	148	70.1	29	59	54	142	70.0	7	43	26	76	67.0
70 / 74	75	22	61	159	67.9	62	34	70	165	67.8	28	46	42	116	65.2
65 / 69	64	7	31	103	64.1	68	12	43	123	64.3	38	35	47	120	61.4
60 / 64	33	1	12	46	59.5	47	3	24	74	59.6	42	24	41	107	57.3
55 / 59	14	0	3	17	55.1	27	0	8	35	55.4	45	14	33	92	53.3
50 / 54	4		0	4	50.9	9		1	10	51.2	39	6	23	68	49.1
45 / 49	0			0	47.5	1		0	1	45.8	24	1	9	34	44.9
40 / 44						0			0	41.8	10	0	2	12	40.4
35 / 39											4		1	5	35.9
30 / 34											1		0	1	32.0
25 / 29											0			0	27.3
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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DECATUR IL

WMO No. 725316

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		
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89		2		2	66.9										
80 / 84		9	1	10	66.1										
75 / 79	0	18	3	21	63.4		1		1	61.8					
70 / 74	2	30	10	42	61.6		5	0	5	61.4					
65 / 69	11	38	26	75	59.1	0	10	4	14	59.4	0	1	0	1	63.9
60 / 64	24	40	36	99	56.0	8	19	15	42	57.2	1	4	2	7	57.7
55 / 59	32	39	38	108	51.3	17	23	17	57	52.7	3	7	4	14	53.7
50 / 54	39	35	45	118	47.2	18	28	22	68	47.6	5	9	8	22	48.6
45 / 49	48	24	43	114	43.5	25	35	30	90	43.1	8	16	8	32	43.5
40 / 44	43	10	27	79	39.2	31	37	37	105	39.0	14	27	20	61	39.1
35 / 39	30	3	14	47	35.1	42	40	44	126	34.4	33	46	44	123	34.7
30 / 34	14	1	6	21	30.9	47	28	40	115	30.2	55	55	60	170	30.5
25 / 29	6		1	7	26.7	31	10	20	61	25.8	41	29	38	108	25.8
20 / 24	1		0	1	21.8	11	4	7	22	20.9	30	18	24	72	20.9
15 / 19						6	1	2	9	16.5	21	12	15	48	15.9
10 / 14						2	0	1	3	11.5	12	10	12	34	11.3
5 / 9						1	0	0	1	6.9	9	6	6	21	6.5
0 / 4						0			0	3.0	7	4	5	16	1.8
-5 / -1											4	2	2	8	-2.5
-10 / -6											2	1	1	4	-6.7
-15 / -11											1	1	1	3	-11.6
-20 / -16											1	0	0	1	-15.4
-25 / -21															

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DECATUR IL

WMO No. 725316

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		
105 / 109			0	0	
100 / 104		2	0	2	77.9
95 / 99		18	3	21	77.6
90 / 94		80	17	97	75.9
85 / 89	3	189	55	247	73.2
80 / 84	23	288	134	445	70.4
75 / 79	105	270	223	598	68.1
70 / 74	240	247	292	779	65.6
65 / 69	290	204	271	764	61.5
60 / 64	281	190	243	713	57.0
55 / 59	255	173	206	633	52.4
50 / 54	223	168	200	590	47.7
45 / 49	209	171	191	570	43.3
40 / 44	210	176	193	578	39.1
35 / 39	247	205	230	681	34.6
30 / 34	276	195	239	709	30.5
25 / 29	197	124	158	478	25.7
20 / 24	121	81	95	297	20.9
15 / 19	78	57	62	197	16.0
10 / 14	57	38	50	145	11.2
5 / 9	45	24	31	100	6.4
0 / 4	33	14	18	65	1.7
-5 / -1	14	5	8	27	-2.6
-10 / -6	7	3	4	14	-7.0
-15 / -11	3	1	2	6	-11.6
-20 / -16	2	0	0	2	-16.3
-25 / -21	0			0	-20.5

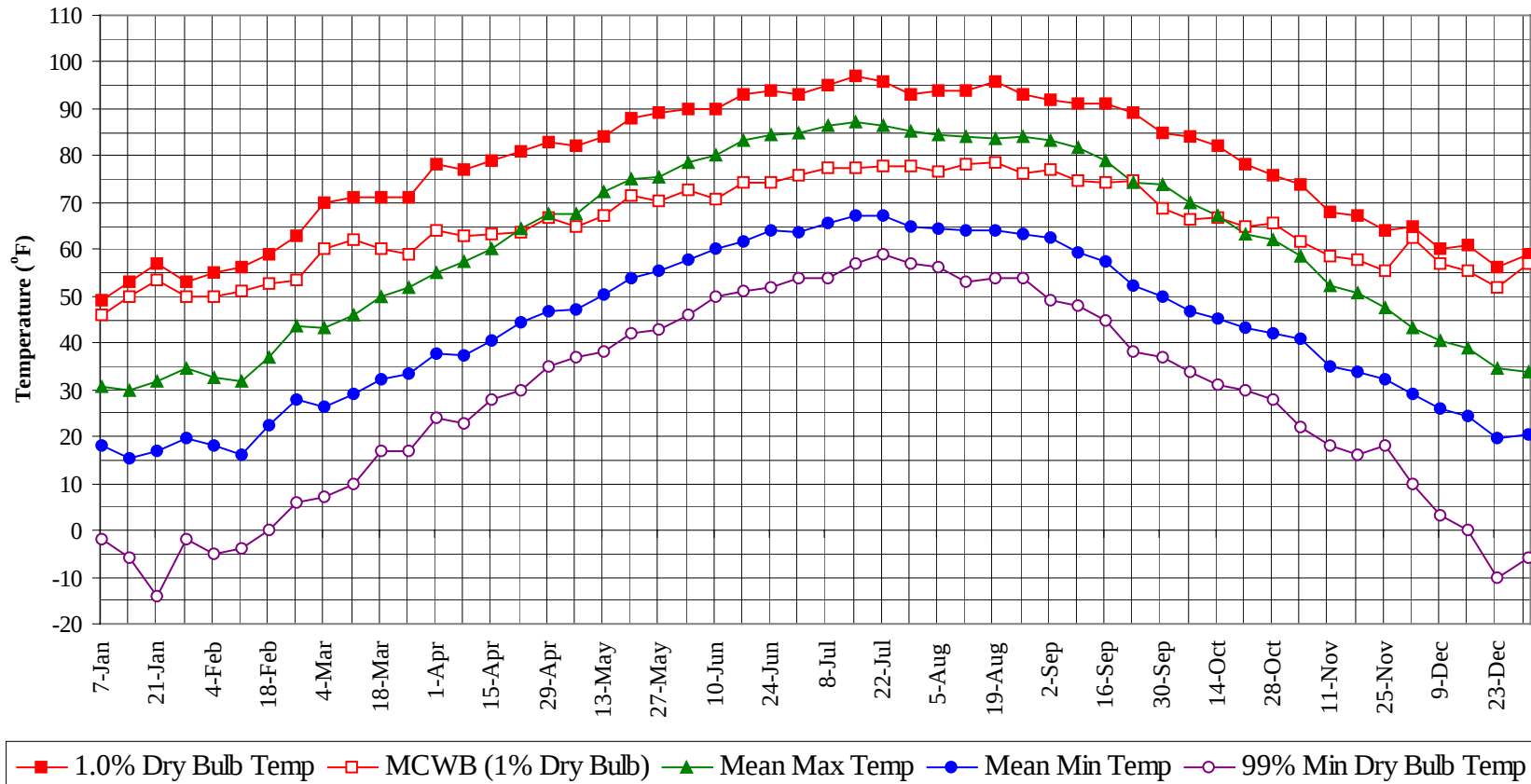
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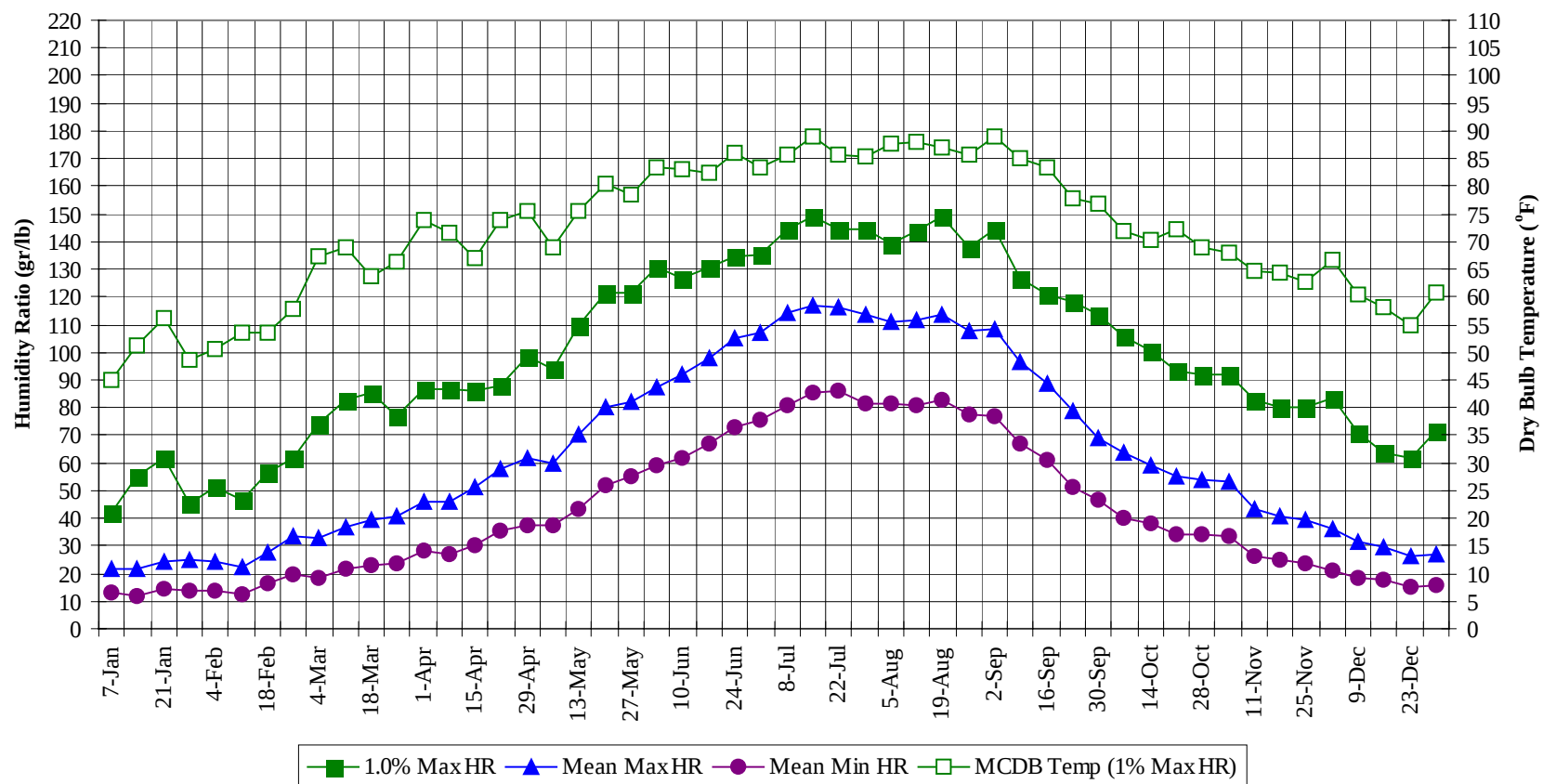
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WMO No. 725316

Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



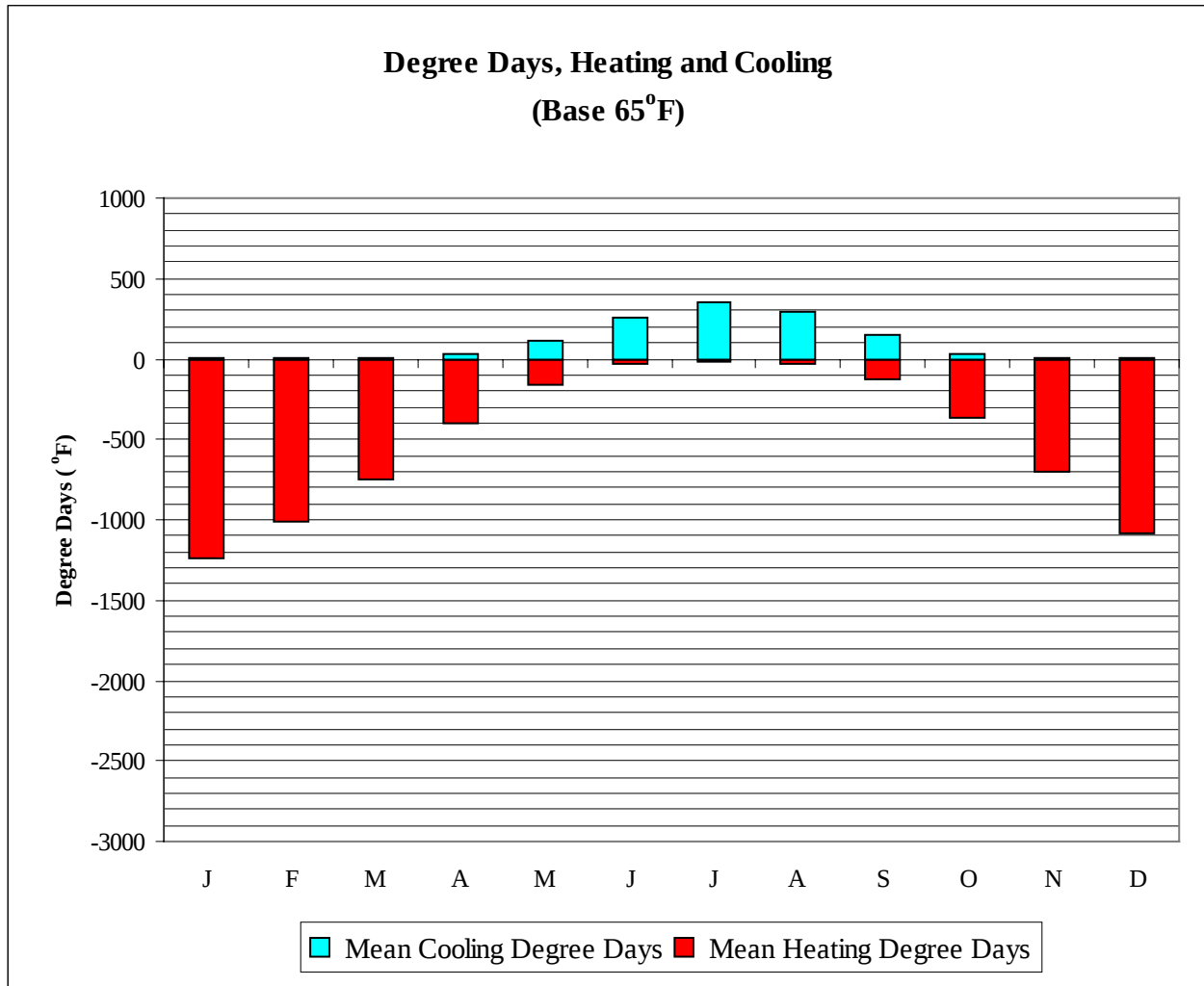
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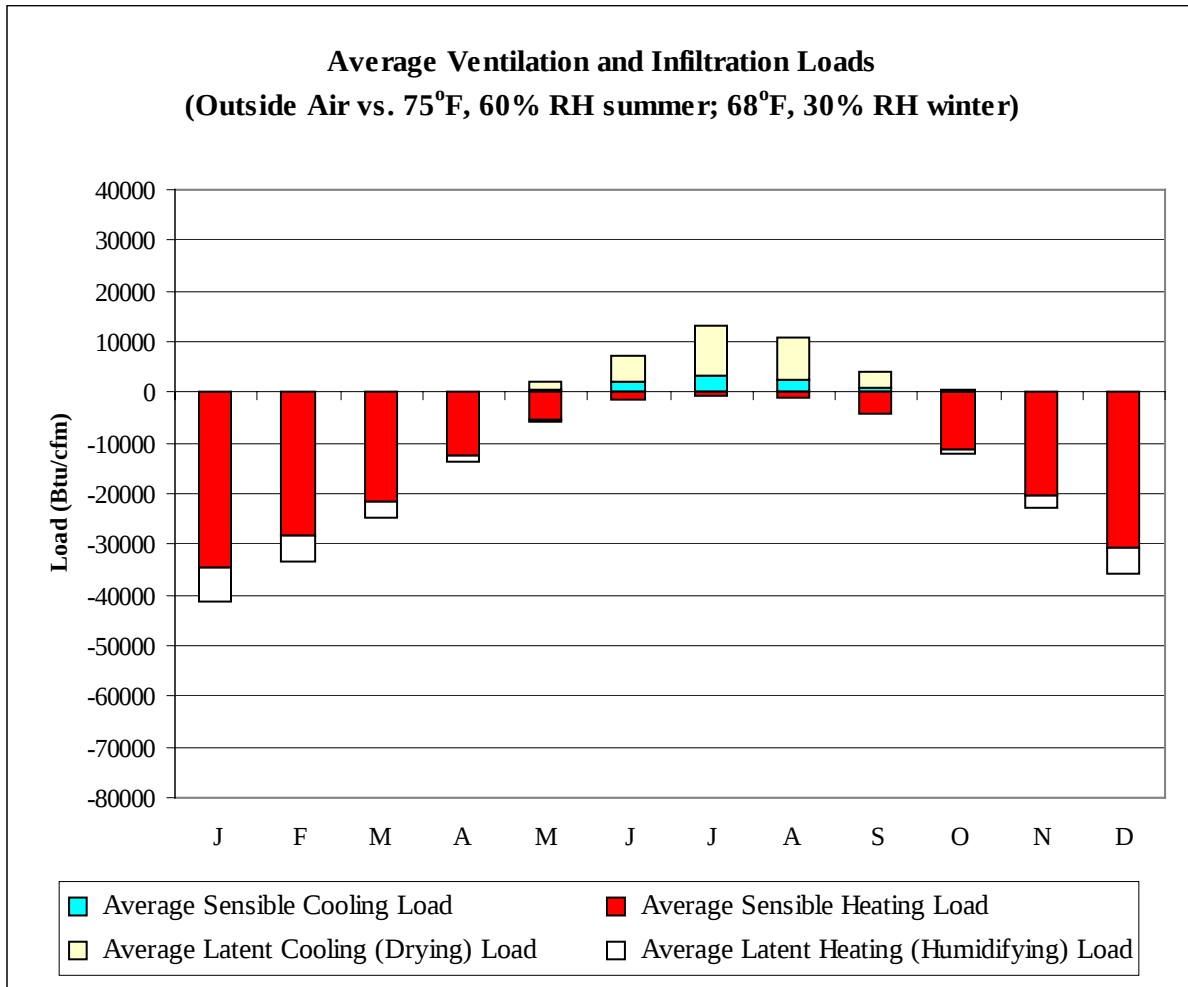
WMO No. 725316

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	49.0	46.1	30.8	18.0	-2.0	42.0	44.9	22.0	13.1
14-Jan	53.0	50.0	29.7	15.4	-6.0	55.3	51.4	21.6	11.8
21-Jan	57.0	53.5	31.9	17.1	-14.0	61.6	56.1	24.4	14.2
28-Jan	53.0	49.8	34.7	19.5	-2.0	45.5	48.6	25.3	14.1
4-Feb	55.0	50.0	32.8	18.3	-5.0	51.1	50.7	24.1	14.1
11-Feb	56.0	51.0	31.7	16.2	-4.0	46.9	53.7	22.5	12.5
18-Feb	59.0	52.8	37.1	22.2	0.0	56.7	53.6	27.9	16.4
25-Feb	63.0	53.3	43.7	27.9	6.0	61.6	57.7	33.8	20.0
4-Mar	70.0	60.1	43.3	26.4	7.0	74.2	67.3	32.7	18.6
11-Mar	71.0	62.1	46.1	29.3	10.0	82.6	68.8	37.1	21.9
18-Mar	71.0	60.0	49.9	32.2	17.0	85.4	63.6	39.2	23.3
25-Mar	71.0	59.0	51.7	33.5	17.0	77.0	66.4	40.9	23.6
1-Apr	78.0	63.9	55.1	37.8	24.0	86.8	74.0	45.8	28.4
8-Apr	77.0	63.1	57.4	37.4	23.0	86.8	71.7	46.1	27.2
15-Apr	79.0	63.4	60.3	40.5	28.0	86.1	67.1	51.1	29.9
22-Apr	81.0	63.5	64.6	44.4	30.0	88.2	73.7	57.6	35.7
29-Apr	83.0	66.7	67.5	46.6	35.0	98.7	75.6	61.8	37.6
6-May	82.0	64.9	67.5	47.2	37.0	93.8	69.0	60.1	37.1
13-May	84.0	67.3	72.1	50.1	38.0	109.9	75.7	70.1	43.5
20-May	88.0	71.4	75.0	53.9	42.0	121.8	80.4	80.1	52.1
27-May	89.0	70.2	75.6	55.4	43.0	121.8	78.5	82.4	55.3
3-Jun	90.0	72.7	78.6	57.8	46.0	130.9	83.5	87.6	58.9
10-Jun	90.0	70.8	80.3	60.3	50.0	126.7	83.1	92.0	61.5
17-Jun	93.0	74.5	83.4	61.8	51.0	130.9	82.5	97.8	67.0
24-Jun	94.0	74.4	84.6	63.9	52.0	134.4	86.1	105.1	72.7
1-Jul	93.0	75.9	84.8	63.8	54.0	135.1	83.5	106.8	75.2
8-Jul	95.0	77.3	86.5	65.7	54.0	144.2	85.8	114.4	80.9
15-Jul	97.0	77.4	87.1	67.3	57.0	149.1	88.8	117.0	85.6
22-Jul	96.0	77.8	86.6	67.2	59.0	144.2	85.6	116.4	85.8
29-Jul	93.0	77.9	85.3	64.8	57.0	144.2	85.3	113.5	81.7
5-Aug	94.0	76.6	84.5	64.5	56.0	139.3	87.7	110.7	81.6
12-Aug	94.0	78.1	84.1	64.0	53.0	143.5	87.9	111.7	80.9
19-Aug	96.0	78.7	83.8	64.0	54.0	149.1	87.1	113.6	82.5
26-Aug	93.0	76.3	84.0	63.2	54.0	137.9	85.6	107.4	77.8
2-Sep	92.0	77.1	83.2	62.5	49.0	144.2	89.1	108.1	76.8
9-Sep	91.0	74.7	81.6	59.3	48.0	126.7	85.1	96.4	66.8
16-Sep	91.0	74.5	78.9	57.3	45.0	121.1	83.4	88.3	60.8
23-Sep	89.0	74.5	74.3	52.4	38.0	118.3	77.7	78.6	51.0
30-Sep	85.0	68.7	73.7	49.8	37.0	113.4	77.0	69.2	46.3
7-Oct	84.0	66.3	69.9	47.0	34.0	105.7	72.0	63.7	40.0
14-Oct	82.0	66.8	67.0	45.1	31.0	100.8	70.4	59.4	37.9
21-Oct	78.0	64.8	63.4	43.3	30.0	93.1	72.3	55.1	34.3
28-Oct	76.0	65.5	61.9	41.9	28.0	91.7	68.8	53.6	34.0
4-Nov	74.0	61.8	58.5	40.7	22.0	91.7	67.9	53.4	33.4
11-Nov	68.0	58.7	52.1	35.0	18.0	82.6	64.7	43.2	26.3
18-Nov	67.0	57.7	50.6	33.9	16.0	79.8	64.5	41.0	24.7
25-Nov	64.0	55.5	47.4	32.2	18.0	79.8	62.9	39.4	23.5
2-Dec	65.0	62.7	43.2	29.2	10.0	83.3	66.6	36.1	20.8
9-Dec	60.0	56.9	40.6	26.0	3.0	70.7	60.5	31.8	18.4
16-Dec	61.0	55.5	38.8	24.6	0.0	63.7	58.1	29.9	17.8
23-Dec	56.0	51.7	34.5	19.7	-10.0	61.6	54.8	26.3	14.9
31-Dec	59.0	56.8	34.0	20.5	-6.0	71.4	60.9	26.6	15.8



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1241
FEB	0	1007
MAR	7	748
APR	30	406
MAY	111	158
JUN	262	34
JUL	356	12
AUG	290	25
SEP	150	121
OCT	34	361
NOV	3	700
DEC	0	1083
ANN	1242	5896



	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	-34592	0	-6539
FEB	0	-28290	0	-4967
MAR	15	-21740	39	-2886
APR	113	-12539	139	-1057
MAY	645	-5534	1529	-185
JUN	2110	-1470	5040	-4
JUL	3284	-640	9842	0
AUG	2315	-1164	8587	0
SEP	990	-4318	2962	-55
OCT	113	-11353	313	-631
NOV	0	-20445	25	-2502
DEC	0	-30482	9	-5165
ANN	9585	-172567	28485	-23991

Average Annual Solar Radiation – Nearest Available Site

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

City: SPRINGFIELD
 State: IL
 WBAN No: 93822
 Lat(N): 39.83
 Long(W): 89.67
 Elev(ft): 614

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.529
 Vert Gap: 0.32

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	660	910	1180	1570	1890	2070	2030	1810	1460	1080	680	540	1330
	Std Dev	48	65	95	123	152	115	104	113	101	88	66	51	40
	Minimum	520	790	990	1350	1490	1860	1840	1550	1240	880	550	450	1260
	Maximum	740	1050	1400	1800	2200	2340	2260	2010	1690	1250	850	650	1440
	Diffuse	320	430	590	700	790	810	790	700	570	420	340	290	570
Clear Day	Global	900	1250	1730	2210	2520	2630	2550	2270	1850	1360	950	790	1750
NORTH	Global	200	270	350	440	550	630	600	480	380	290	210	180	380
	Diffuse	200	270	350	430	500	530	520	460	370	290	210	180	360
Clear Day	Global	180	240	330	430	580	680	630	480	350	270	200	160	380
EAST	Global	450	590	730	930	1080	1150	1140	1050	880	700	450	370	790
	Diffuse	250	330	430	530	600	630	620	560	470	360	260	220	440
Clear Day	Global	690	890	1140	1340	1450	1470	1440	1350	1170	930	710	610	1100
SOUTH	Global	1060	1130	1030	980	870	810	850	980	1150	1230	990	900	1000
	Diffuse	350	430	490	540	560	570	570	560	510	440	350	310	480
Clear Day	Global	1900	1960	1800	1410	1080	930	980	1250	1610	1850	1860	1820	1530
WEST	Global	450	590	710	910	1050	1140	1150	1070	890	690	460	370	790
	Diffuse	250	330	430	530	610	640	630	570	470	360	260	220	440
Clear Day	Global	690	890	1140	1340	1450	1470	1440	1350	1170	930	710	610	1100

Average Annual Solar Heat and Illumination – Nearest Available Site

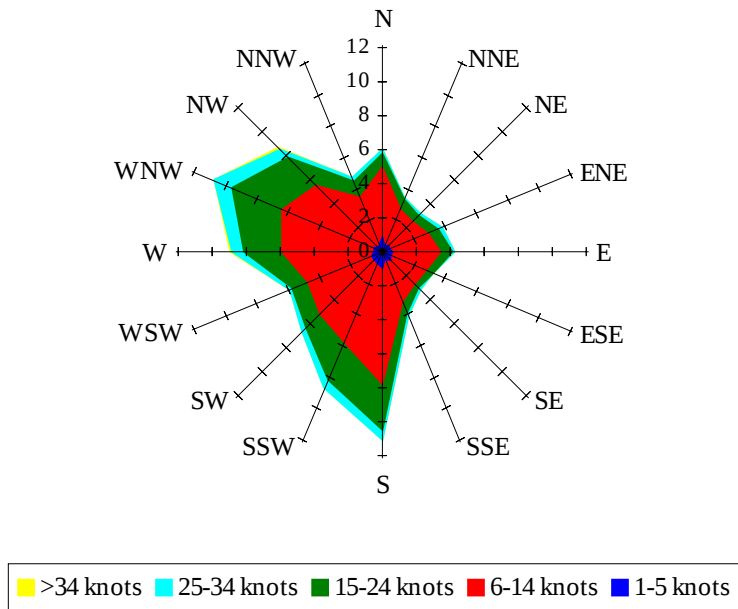
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	430	620	830	1130	1370	1510	1480	1310	1040	750	450	350	940
NORTH	Unshaded	140	190	250	300	360	410	390	320	260	200	150	120	260
	Shaded	120	170	220	270	320	360	350	290	230	180	130	110	230
EAST	Unshaded	310	410	510	660	770	820	810	740	630	490	310	250	560
	Shaded	280	370	450	570	660	700	690	640	540	440	280	230	490
SOUTH	Unshaded	800	830	720	640	530	490	510	620	770	890	740	680	680
	Shaded	780	770	570	420	350	350	360	390	560	780	710	660	560
WEST	Unshaded	310	410	500	650	750	810	820	760	630	490	320	250	560
	Shaded	280	370	440	560	640	690	700	660	550	430	280	220	490

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	41	73	80	63	24	49	85	102	95	67
	M.Cloudy	23	44	50	38	15	33	60	73	71	49
NORTH	M.Clear	10	14	15	13	7	18	16	17	17	15
	M.Cloudy	9	16	17	14	7	14	18	19	19	16
EAST	M.Clear	74	55	15	13	7	79	72	29	17	15
	M.Cloudy	25	29	17	14	7	40	47	26	19	16
SOUTH	M.Clear	41	75	82	64	25	12	33	47	42	20
	M.Cloudy	17	36	41	30	11	12	27	37	34	18
WEST	M.Clear	10	14	25	67	61	12	16	17	54	79
	M.Cloudy	9	16	21	31	21	12	18	19	41	50
M.Clear	(% hrs)	30	27	26	25	26	45	42	37	37	38
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	29	68	85	77	45	15	41	46	27	1
	M.Cloudy	18	43	57	52	30	9	24	27	16	1
NORTH	M.Clear	9	14	16	15	11	5	10	10	8	1
	M.Cloudy	8	15	17	17	11	4	10	11	7	0
EAST	M.Clear	67	69	26	15	11	41	38	10	8	1
	M.Cloudy	25	36	22	17	11	11	17	11	7	0
SOUTH	M.Clear	23	59	76	68	37	39	81	88	60	2
	M.Cloudy	12	32	45	41	21	10	28	31	18	1
WEST	M.Clear	9	14	16	55	74	5	10	23	48	3
	M.Cloudy	8	15	17	35	36	4	10	14	16	1
M.Clear	(% hrs)	46	46	43	44	46	29	28	28	29	31

Wind Summary - December, January, and February

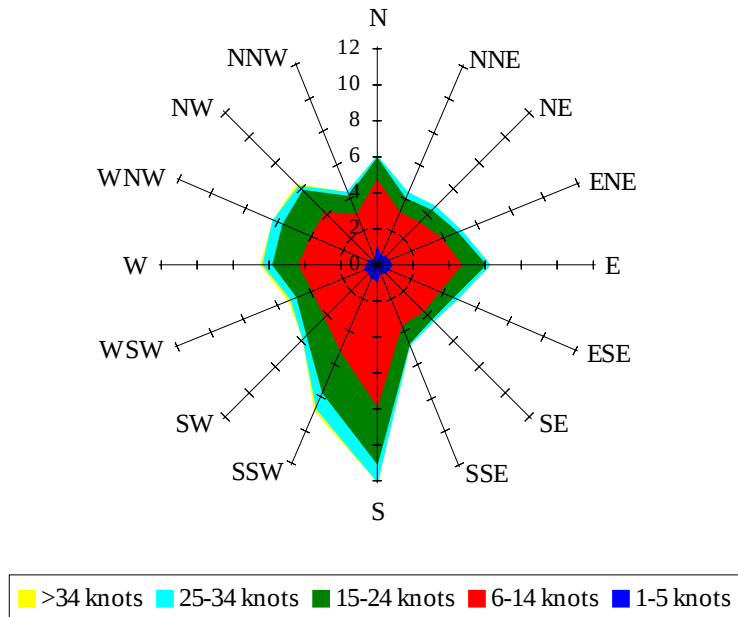
Labels of Percent Frequency on North Axis



Percent Calm = 4.70

Wind Summary - March, April, and May

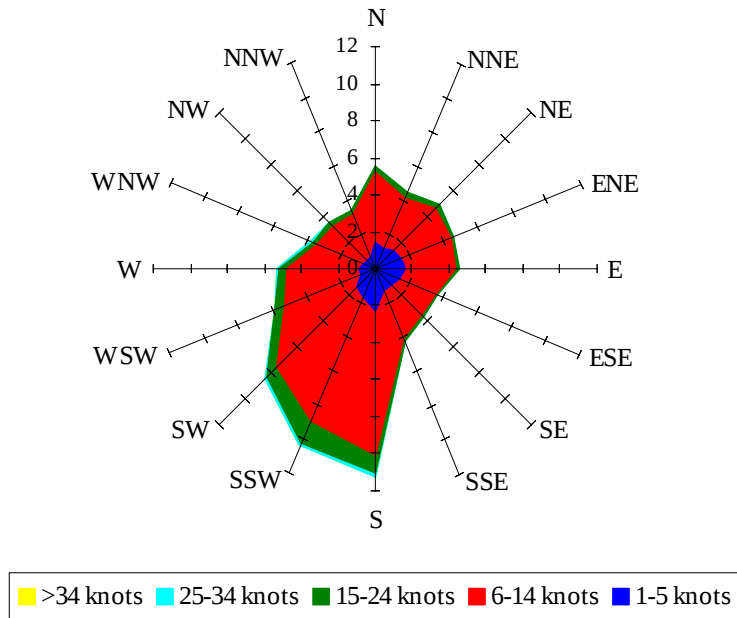
Labels of Percent Frequency on North Axis



Percent Calm = 5.80

Wind Summary - June, July, and August

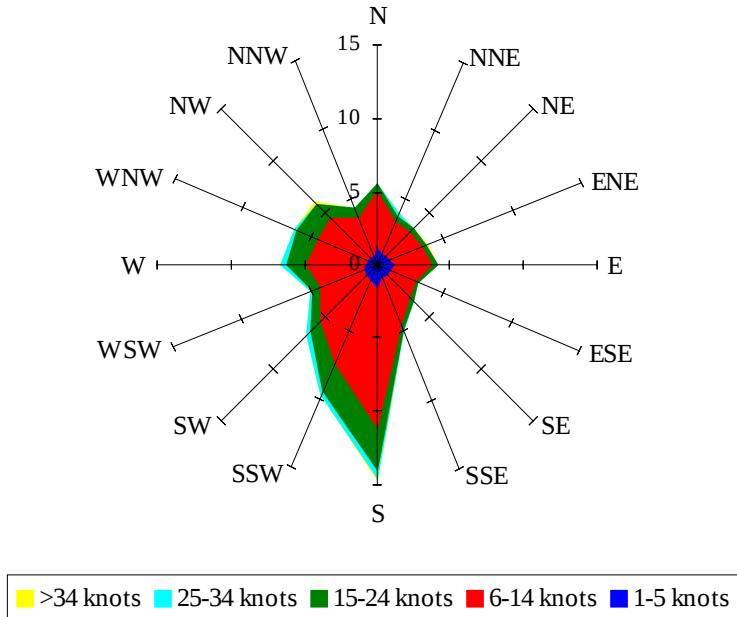
Labels of Percent Frequency on North Axis



Percent Calm = 12.79

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 9.83