

CHICAGO/MIDWAY IL

Latitude = 41.78 N

Longitude = 87.75 W

Period of Record = 1973 to 1996

WMO No. 725340

Elevation = 623 feet

Average Pressure = 29.33 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	96	77	112	13.3	SW
0.4% Occurrence	92	75	107	12.7	SW
1.0% Occurrence	89	73	101	12.2	SSW
2.0% Occurrence	86	72	96	11.7	SSW
Mean Daily Range	16	-	-	-	-
97.5% Occurrence	9	8	6	10.3	W
99.0% Occurrence	2	1	4	11.2	W
99.6% Occurrence	-4	-5	3	11.7	W
Median of Extreme Lows	-8	-9	2	11.4	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	81	91	143	12.2	SW
0.4% Occurrence	78	88	129	11.7	SW
1.0% Occurrence	76	85	121	10.7	SSW
2.0% Occurrence	74	83	114	10.0	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	150	87	0.97	10.9	SSW
0.4% Occurrence	134	84	0.88	9.9	SSW
1.0% Occurrence	125	82	0.82	9.6	SSW
2.0% Occurrence	118	80	0.77	9.8	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		28	611	314	1102

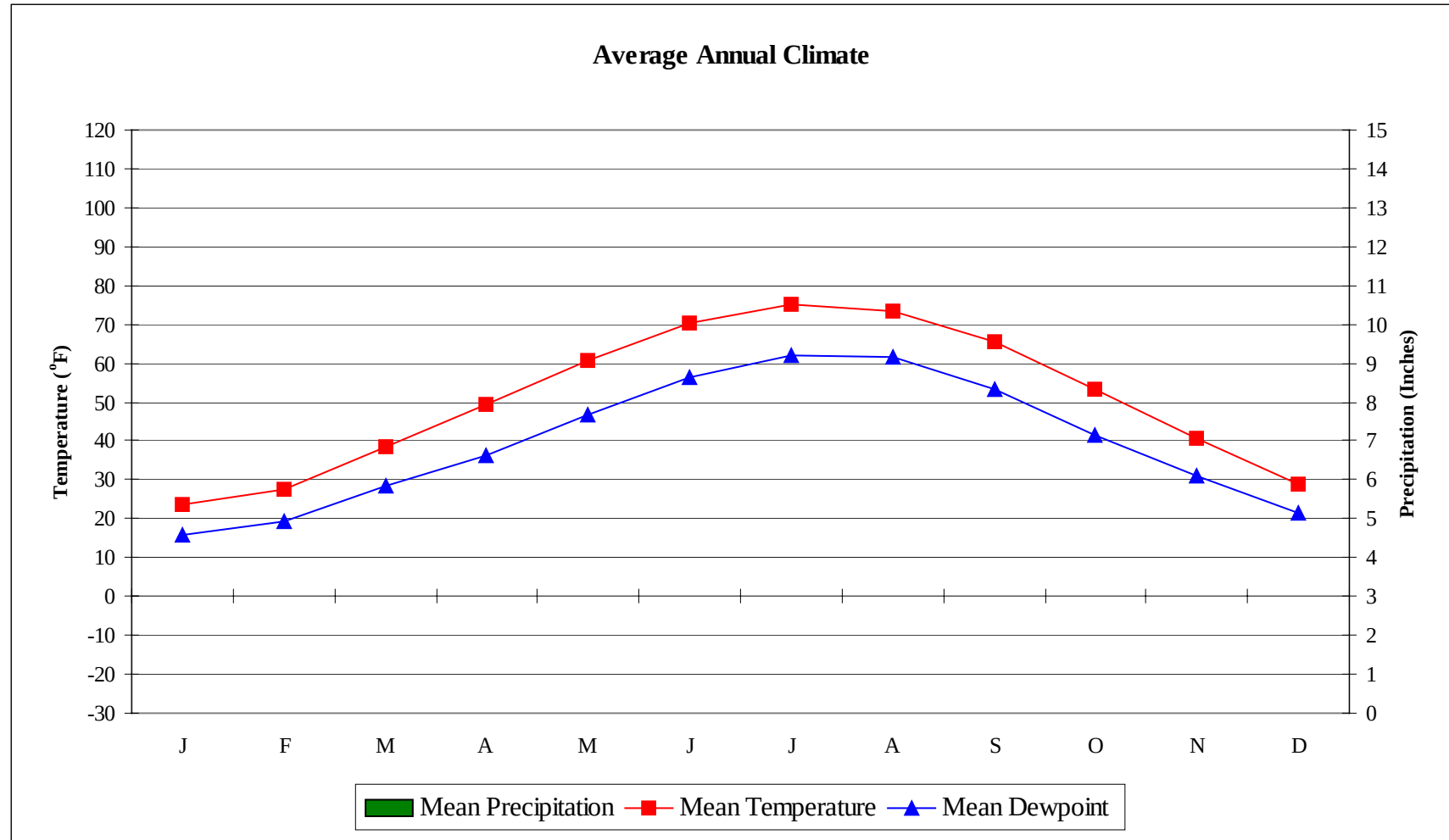
Other Site Data

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	3.1	90	1.5 + 0.6
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 (#)
53.0	59	22	48

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

CHICAGO/MIDWAY IL

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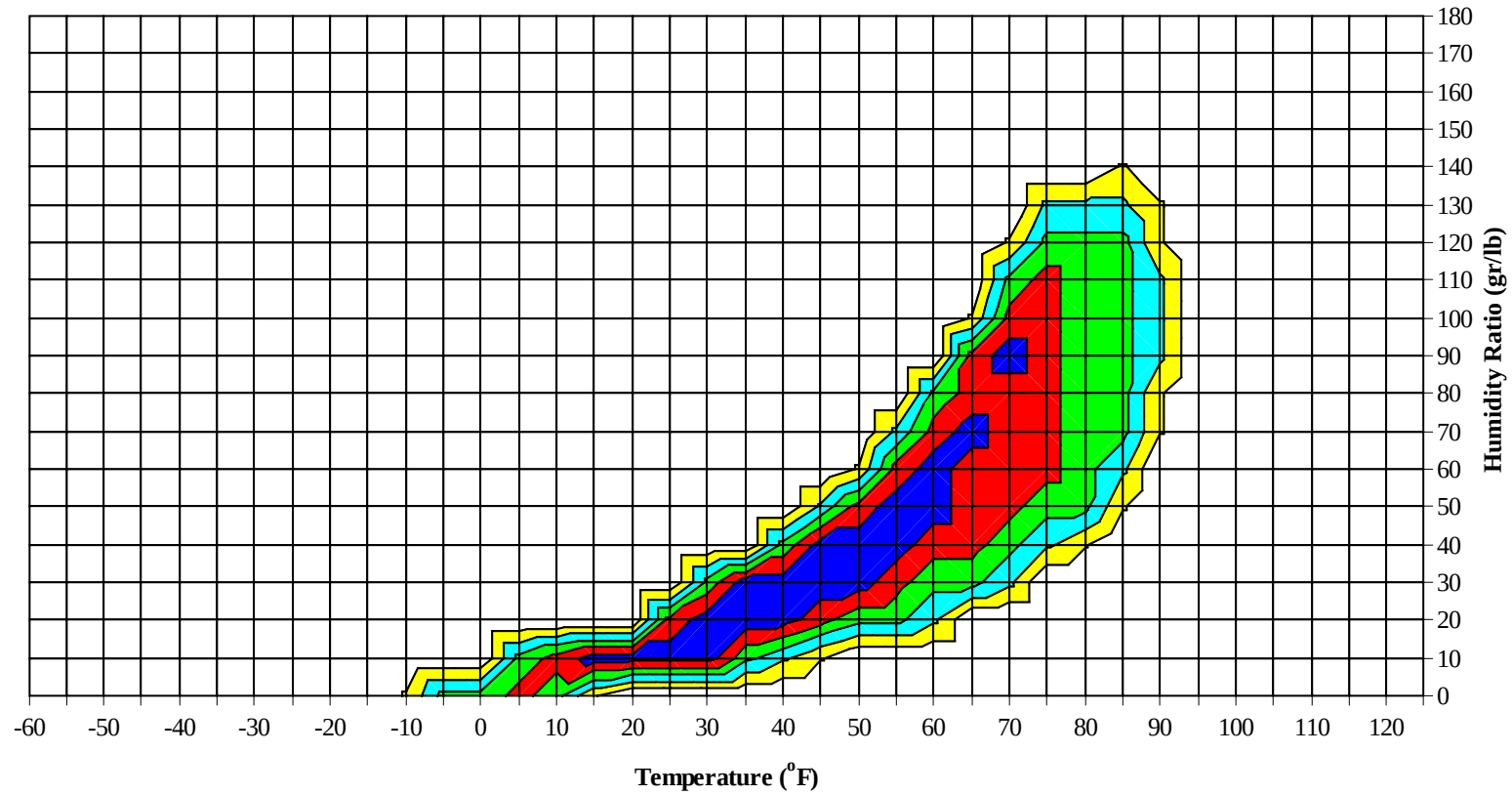
No Precipitation Data Available

CHICAGO/MIDWAY

IL

WMO No. 725340

Long Term Psychrometric Summary

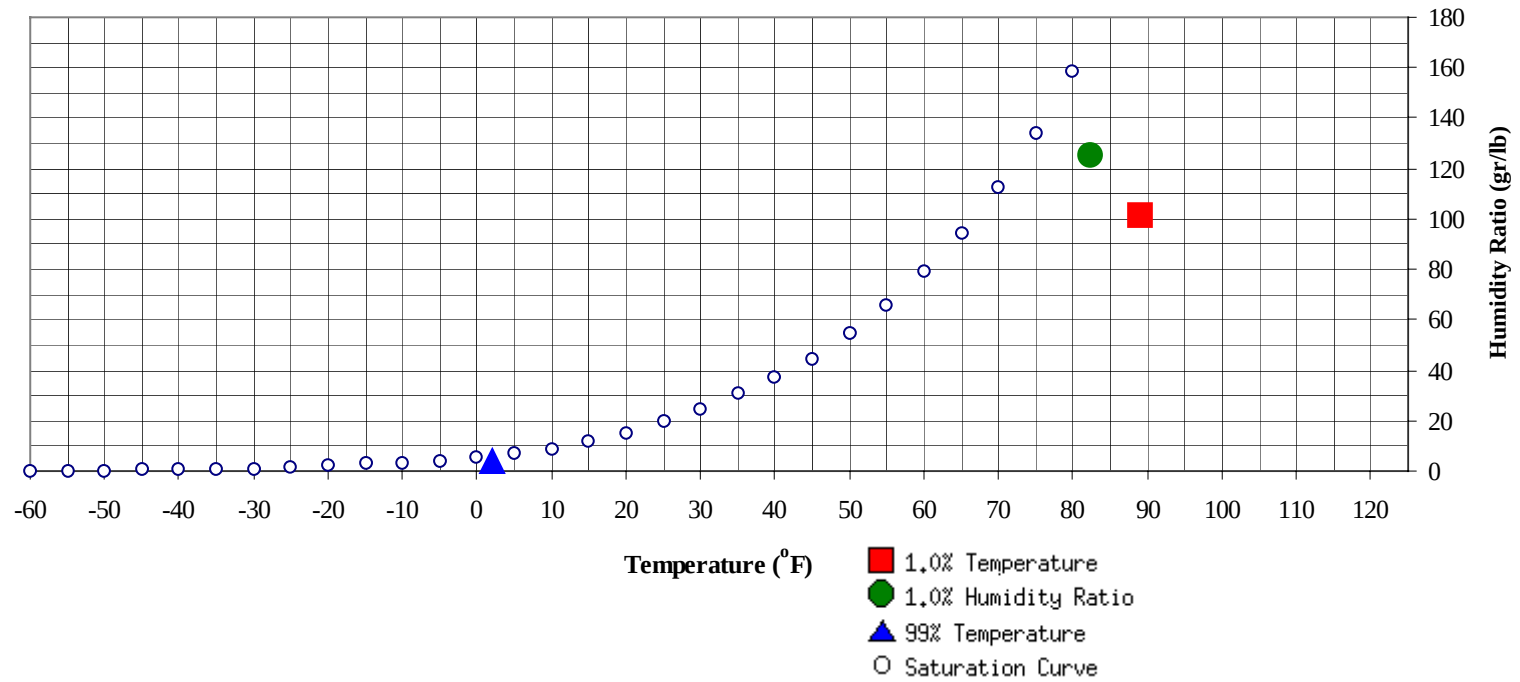


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

CHICAGO/MIDWAY IL

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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)
	2	3.8	1.1		125.3	82.3	75.6	73	39.4

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	89	101.7	73.4	37.3

CHICAGO/MIDWAY IL

WMO No. 725340

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												0	0	0	63.0
80 / 84												1	0	1	61.5
75 / 79												1	1	2	61.6
70 / 74							0	0	0	53.0		5	2	7	58.5
65 / 69							0	0	0	53.7	1	7	5	13	56.7
60 / 64		0	0	0	54.2		2	0	2	51.0	5	11	8	24	53.6
55 / 59	1	1	1	3	52.9	1	4	2	7	49.1	7	14	12	33	50.1
50 / 54	1	3	2	6	47.6	2	5	4	11	45.2	9	19	15	43	45.7
45 / 49	2	5	3	10	42.7	4	13	9	26	42.0	16	31	23	70	41.7
40 / 44	6	14	10	30	38.5	11	21	16	48	37.9	27	46	36	109	37.8
35 / 39	23	33	30	86	34.1	31	42	40	113	33.9	56	47	58	161	33.7
30 / 34	42	43	47	132	29.8	42	37	39	118	29.4	54	34	43	131	29.3
25 / 29	41	45	44	130	24.8	36	36	36	108	24.7	33	20	26	79	24.4
20 / 24	34	34	31	99	20.1	26	26	27	79	19.8	20	9	10	39	19.9
15 / 19	27	25	25	77	15.3	20	17	20	57	15.3	11	4	6	21	15.1
10 / 14	19	18	20	57	10.4	17	12	15	44	10.6	5	1	2	8	10.9
5 / 9	21	12	15	48	5.8	16	6	8	30	6.0	2	0	0	2	5.9
0 / 4	15	8	10	33	1.0	9	3	5	17	1.2	1		0	1	1.5
-5 / -1	7	3	5	15	-3.3	5	1	2	8	-3.1					
-10 / -6	4	2	3	9	-7.3	1	0	1	2	-7.5					
-15 / -11	3	2	2	7	-12.3	1	0	0	1	-12.3					
-20 / -16	2	0	1	3	-16.9	0			0	-16.4					
-25 / -21	0	0	0	0	-21.7										

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.

CHICAGO/MIDWAY IL

WMO No. 725340

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												0		0	74.0
95 / 99												1	0	1	73.7
90 / 94		0		0	63.0		2	1	3	70.2		10	3	13	73.1
85 / 89		2	0	2	65.6		11	4	15	69.4	0	29	11	40	71.0
80 / 84		5	3	8	64.1	0	20	9	29	67.1	4	45	25	74	68.5
75 / 79		6	4	10	62.2	4	26	15	45	64.0	22	54	42	118	66.3
70 / 74	2	12	8	22	59.6	15	34	24	73	61.6	46	45	46	137	63.8
65 / 69	8	18	13	39	57.3	27	37	32	96	58.6	59	29	46	135	60.3
60 / 64	13	26	19	58	53.5	35	41	39	115	54.7	51	18	35	105	56.3
55 / 59	17	33	25	75	49.4	45	37	40	122	50.7	33	8	20	61	52.3
50 / 54	24	40	33	97	45.3	49	25	41	115	46.9	17	2	10	29	48.1
45 / 49	45	38	43	126	42.0	42	12	30	84	42.8	6	0	1	7	44.2
40 / 44	53	32	43	128	38.0	22	3	11	36	38.9	0		0	0	40.8
35 / 39	42	19	31	92	33.9	6	1	2	9	34.7					
30 / 34	24	7	14	45	29.1	2	0	0	2	30.6					
25 / 29	8	1	3	12	24.9										
20 / 24	2	0	1	3	19.9										
15 / 19	1	0	0	1	16.1										
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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CHICAGO/MIDWAY IL

WMO No. 725340

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	0	82.7										
100 / 104		1	0	1	80.4		0		0	73.0					
95 / 99		6	1	7	77.2		2	0	2	77.9		0	0	0	77.0
90 / 94		20	6	26	75.2		14	4	18	76.2		3	1	4	74.1
85 / 89	1	45	19	65	72.9	0	30	12	42	73.8		12	3	15	71.0
80 / 84	12	61	44	116	70.4	7	57	33	97	70.9	0	29	11	40	68.8
75 / 79	45	63	61	169	68.0	33	72	57	162	68.4	9	35	24	68	66.7
70 / 74	80	36	64	179	65.4	76	48	74	198	65.9	28	46	39	114	64.1
65 / 69	66	14	37	117	61.7	68	20	46	134	61.7	43	45	46	134	60.4
60 / 64	35	3	14	52	58.2	44	5	19	68	57.6	48	39	50	137	56.0
55 / 59	8	0	2	10	53.7	17	1	4	22	53.7	49	21	37	106	51.9
50 / 54	1			1	50.6	3	0	0	3	48.8	37	8	20	65	48.0
45 / 49						0			0	43.2	18	2	7	27	43.5
40 / 44											6	0	1	7	39.1
35 / 39											2		0	2	35.1
30 / 34											0			0	31.0
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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CHICAGO/MIDWAY IL

WMO No. 725340

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		1		1	66.2										
80 / 84		4	1	5	65.3										
75 / 79		10	3	13	62.9		0		0	61.9					
70 / 74	1	21	10	32	60.2		3	1	4	60.2					
65 / 69	8	29	21	58	57.9	1	5	4	10	58.7	0	1	0	1	60.2
60 / 64	22	40	33	95	55.0	7	14	11	32	56.3	1	2	1	4	56.9
55 / 59	35	44	41	121	50.5	13	18	15	46	52.0	2	4	3	9	52.6
50 / 54	44	47	50	141	46.5	16	25	18	59	46.5	3	6	5	14	47.3
45 / 49	52	33	45	129	42.4	23	38	31	92	42.2	5	10	7	22	43.1
40 / 44	45	14	28	86	38.4	38	42	46	126	38.1	10	22	16	48	38.2
35 / 39	29	5	13	47	34.2	44	43	45	132	33.5	42	49	44	135	34.1
30 / 34	10	1	3	14	30.1	48	32	39	119	29.1	54	59	63	176	29.8
25 / 29	2		0	2	25.4	28	13	18	59	24.5	43	33	38	113	24.9
20 / 24	0			0	22.4	10	4	8	22	19.9	27	21	22	70	20.0
15 / 19						8	1	3	12	15.5	22	15	17	54	15.5
10 / 14						1	1	1	3	10.3	13	12	14	39	10.4
5 / 9						1	0	1	2	5.9	12	8	10	30	5.8
0 / 4						0	0		0	1.5	7	4	5	16	1.2
-5 / -1											4	2	1	7	-3.2
-10 / -6											2	1	1	4	-7.2
-15 / -11											1	0	1	2	-11.6
-20 / -16											0	0	0	0	-16.9
-25 / -21															

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CHICAGO/MIDWAY IL

WMO No. 725340

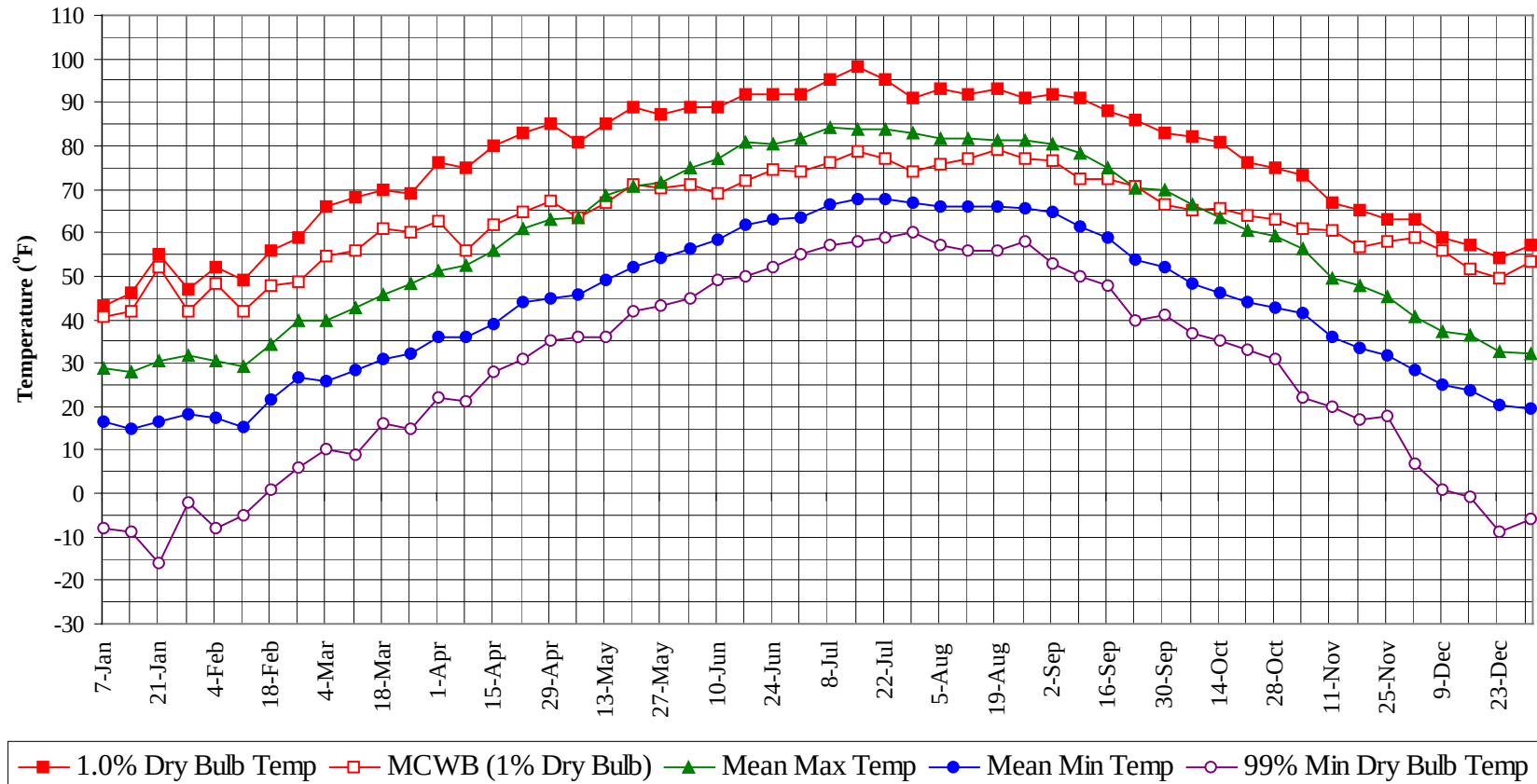
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

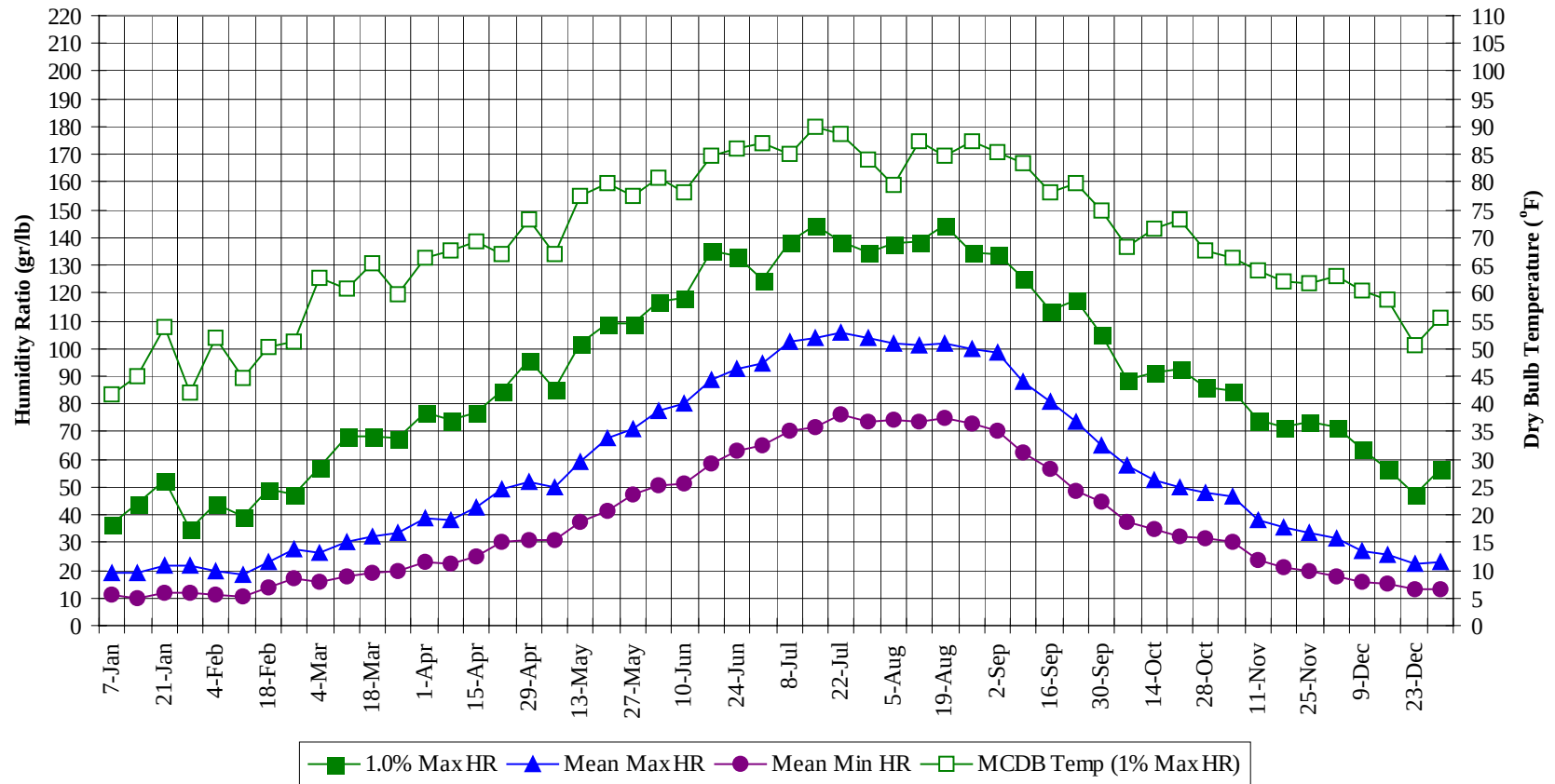
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
105 / 109		0	0	0	82.7
100 / 104		1	0	1	78.8
95 / 99		10	2	12	76.8
90 / 94		49	14	63	74.7
85 / 89	2	128	49	179	72.1
80 / 84	23	217	121	361	69.5
75 / 79	111	263	204	578	67.1
70 / 74	245	248	263	755	64.2
65 / 69	276	204	250	729	60.1
60 / 64	260	201	229	689	55.7
55 / 59	227	183	201	611	51.1
50 / 54	206	181	199	586	46.6
45 / 49	215	181	201	597	42.3
40 / 44	219	194	209	622	38.1
35 / 39	277	241	266	783	33.9
30 / 34	278	215	252	744	29.5
25 / 29	194	149	169	511	24.7
20 / 24	122	95	100	317	19.9
15 / 19	92	63	71	226	15.3
10 / 14	57	44	51	152	10.5
5 / 9	51	27	34	112	5.9
0 / 4	33	16	20	69	1.1
-5 / -1	16	5	8	29	-3.2
-10 / -6	8	4	5	17	-7.3
-15 / -11	5	2	3	10	-12.1
-20 / -16	3	1	1	5	-16.8
-25 / -21	0	0	0	0	-21.7

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



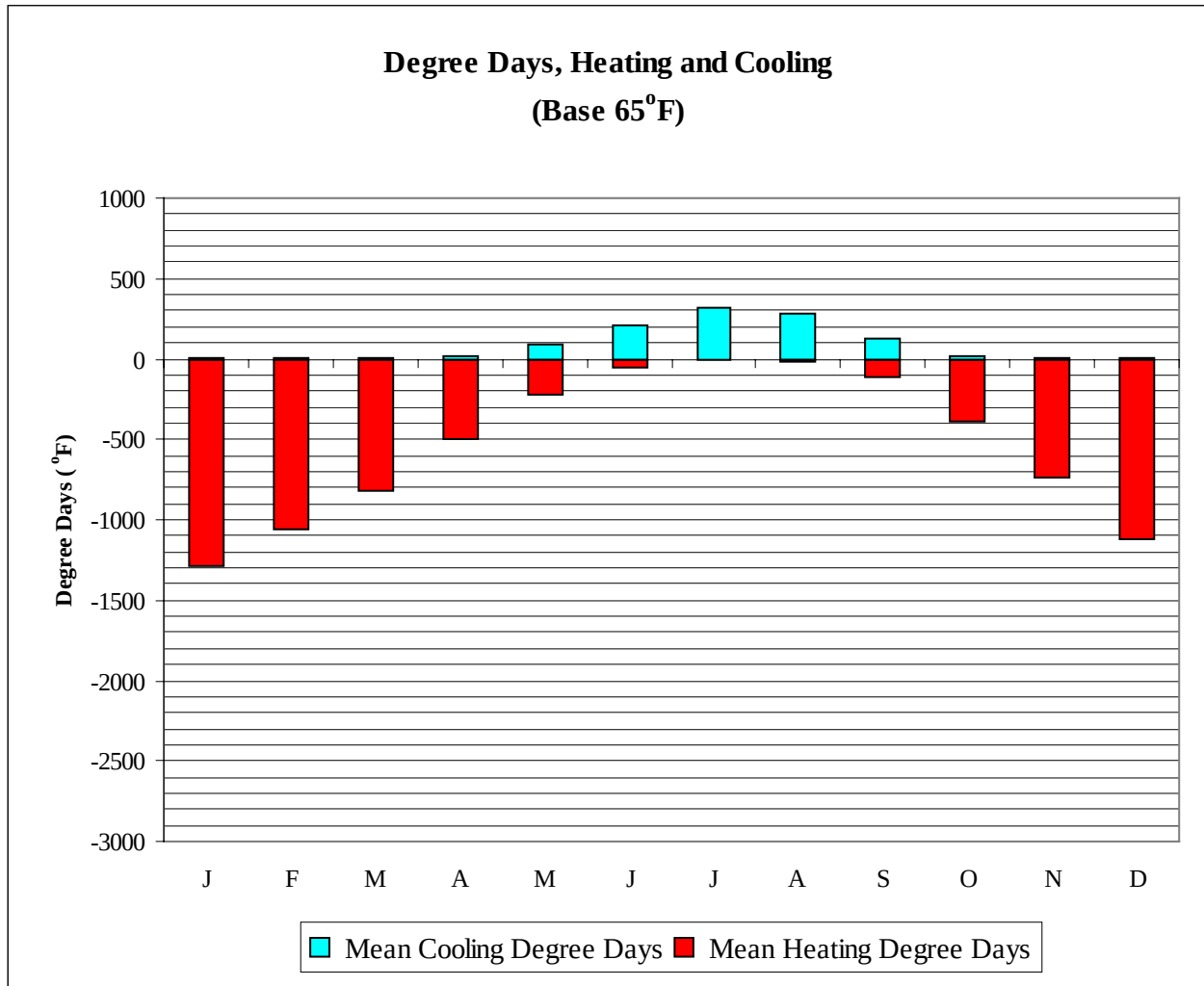
CHICAGO/MIDWAY**IL****WMO No. 725340****Long Term Dry Bulb Temperature and Humidity Summary**

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	43.0	40.8	28.7	16.6	-8.0	37.1	41.6	19.3	11.2
14-Jan	46.0	41.9	28.1	14.8	-9.0	44.1	45.0	18.8	10.1
21-Jan	55.0	51.9	30.4	16.7	-16.0	52.5	53.8	21.4	12.0
28-Jan	47.0	41.9	31.9	18.3	-2.0	35.0	41.9	21.4	11.9
4-Feb	52.0	48.1	30.7	17.3	-8.0	44.1	51.8	19.9	11.5
11-Feb	49.0	42.1	29.3	15.4	-5.0	39.2	44.6	18.1	10.2
18-Feb	56.0	47.7	34.5	21.7	1.0	49.0	50.3	22.8	13.8
25-Feb	59.0	48.5	39.9	26.7	6.0	47.6	51.3	27.5	17.1
4-Mar	66.0	54.6	39.7	25.8	10.0	57.4	62.9	26.1	15.5
11-Mar	68.0	56.0	43.0	28.3	9.0	68.6	60.7	30.3	18.0
18-Mar	70.0	60.8	45.6	31.1	16.0	68.6	65.5	31.9	19.3
25-Mar	69.0	60.0	48.2	32.2	15.0	67.9	59.6	33.5	19.6
1-Apr	76.0	62.7	51.1	35.9	22.0	77.0	66.5	38.6	23.0
8-Apr	75.0	55.9	52.5	36.1	21.0	74.2	67.7	37.9	22.0
15-Apr	80.0	61.6	55.9	39.0	28.0	77.0	69.4	42.6	24.7
22-Apr	83.0	64.9	61.0	43.9	31.0	84.7	66.9	49.2	30.2
29-Apr	85.0	67.4	63.0	45.0	35.0	95.9	73.4	51.9	30.8
6-May	81.0	63.6	63.4	45.7	36.0	85.4	67.0	50.1	30.8
13-May	85.0	67.0	68.4	49.2	36.0	101.5	77.4	59.2	37.2
20-May	89.0	70.9	70.9	52.1	42.0	109.2	79.8	67.8	41.1
27-May	87.0	70.3	71.7	54.2	43.0	109.2	77.5	70.7	47.1
3-Jun	89.0	71.1	74.8	56.3	45.0	116.9	80.7	77.3	50.6
10-Jun	89.0	68.9	77.1	58.5	49.0	118.3	78.2	80.1	51.4
17-Jun	92.0	71.7	80.6	61.6	50.0	135.1	84.8	88.5	58.7
24-Jun	92.0	74.4	80.6	63.1	52.0	133.0	86.1	92.6	63.1
1-Jul	92.0	74.0	81.6	63.7	55.0	124.6	87.1	94.9	64.7
8-Jul	95.0	76.2	84.3	66.4	57.0	138.6	85.1	102.2	70.2
15-Jul	98.0	78.7	83.6	67.5	58.0	144.2	89.9	103.8	71.8
22-Jul	95.0	77.0	84.0	67.8	59.0	138.6	88.7	105.8	76.0
29-Jul	91.0	73.9	82.8	66.9	60.0	134.4	84.2	103.6	73.7
5-Aug	93.0	75.6	81.6	66.2	57.0	137.9	79.6	101.6	74.3
12-Aug	92.0	76.9	81.6	66.1	56.0	138.6	87.5	101.2	73.8
19-Aug	93.0	79.1	81.3	65.9	56.0	144.2	84.6	101.7	75.1
26-Aug	91.0	76.9	81.4	65.5	58.0	134.4	87.5	100.1	72.8
2-Sep	92.0	76.5	80.3	64.6	53.0	133.7	85.3	98.3	70.4
9-Sep	91.0	72.5	78.3	61.4	50.0	125.3	83.5	88.0	62.7
16-Sep	88.0	72.5	74.9	58.7	48.0	113.4	78.1	80.7	56.2
23-Sep	86.0	70.9	70.4	53.8	40.0	117.6	79.8	73.5	48.3
30-Sep	83.0	66.4	69.9	51.9	41.0	105.0	74.9	65.0	44.7
7-Oct	82.0	65.3	66.4	48.2	37.0	88.9	68.3	57.7	37.2
14-Oct	81.0	65.6	63.4	46.3	35.0	91.0	71.7	52.8	35.1
21-Oct	76.0	63.9	60.4	44.1	33.0	92.4	73.2	50.2	32.4
28-Oct	75.0	63.1	59.2	42.7	31.0	86.1	67.7	47.9	31.6
4-Nov	73.0	61.0	56.2	41.4	22.0	84.7	66.3	47.0	30.3
11-Nov	67.0	60.7	49.6	35.9	20.0	74.2	63.9	38.0	23.4
18-Nov	65.0	56.6	48.0	33.6	17.0	71.4	62.1	35.4	21.3
25-Nov	63.0	58.0	45.1	31.7	18.0	73.5	61.6	33.5	19.7
2-Dec	63.0	58.8	40.8	28.4	7.0	71.4	63.1	31.4	18.1
9-Dec	59.0	55.9	37.4	25.2	1.0	63.7	60.5	27.2	16.1
16-Dec	57.0	51.8	36.2	23.7	-1.0	56.7	58.8	25.3	15.4
23-Dec	54.0	49.5	32.7	20.3	-9.0	47.6	50.4	22.5	13.3
31-Dec	57.0	53.1	32.2	19.4	-6.0	56.7	55.5	22.7	13.1

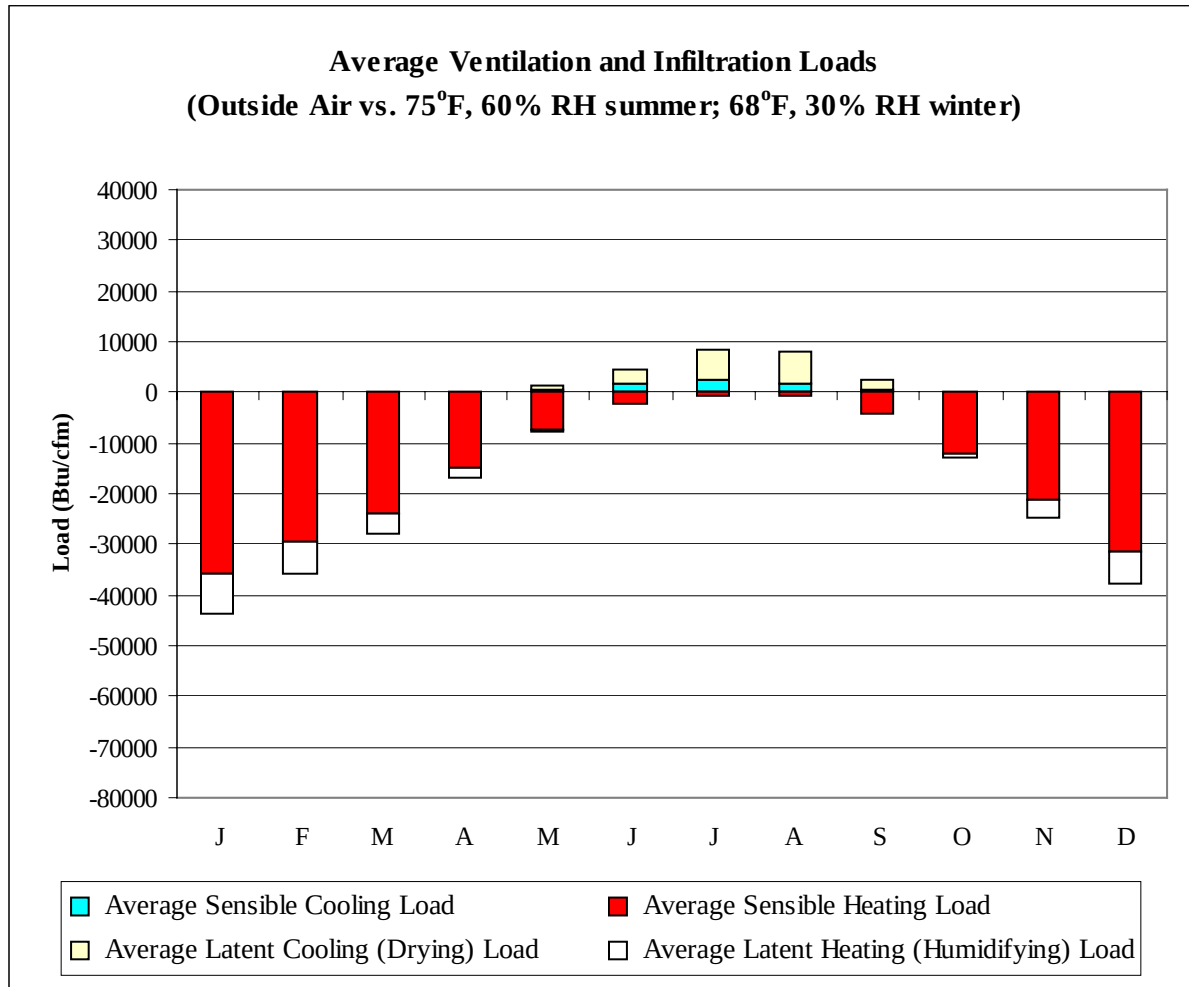
CHICAGO/MIDWAY

IL

WMO No. 725340



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1289
FEB	0	1056
MAR	5	825
APR	22	494
MAY	86	225
JUN	213	53
JUL	322	8
AUG	277	15
SEP	123	113
OCT	23	384
NOV	2	731
DEC	0	1124
ANN	1072	6317



	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	-35809	0	-7822
FEB	0	-29563	0	-6211
MAR	12	-23751	2	-4150
APR	105	-14925	63	-1936
MAY	517	-7540	761	-412
JUN	1524	-2184	2917	-15
JUL	2648	-536	5909	0
AUG	1906	-814	5940	0
SEP	662	-4206	1857	-91
OCT	64	-12092	107	-913
NOV	0	-21242	3	-3395
DEC	0	-31542	0	-6302
ANN	7438	-184204	17559	-31247

Average Annual Solar Radiation – Nearest Available Site

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

City: CHICAGO
 State: IL
 WBAN No: 94846
 Lat(N): 41.78
 Long(W): 87.75
 Elev(ft): 623

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	570	820	1100	1450	1800	1990	1940	1700	1330	950	570	460	1220
	Std Dev	46	70	68	115	147	115	105	111	98	68	47	43	36
	Minimum	460	710	970	1260	1510	1800	1730	1510	1140	790	450	380	1170
	Maximum	650	950	1220	1690	2130	2290	2110	1940	1560	1090	670	550	1330
	Diffuse	320	450	600	730	830	870	860	760	610	450	330	280	590
Clear Day	Global	810	1160	1640	2150	2480	2600	2520	2220	1770	1260	850	690	1680
NORTH	Global	190	260	350	430	550	620	590	480	370	280	200	160	370
	Diffuse	190	260	350	430	500	540	530	460	370	280	200	160	360
Clear Day	Global	180	240	330	430	580	680	620	480	360	270	190	160	380
EAST	Global	390	520	680	860	1020	1100	1090	980	800	610	370	300	730
	Diffuse	230	320	420	520	600	650	640	570	460	350	230	190	430
Clear Day	Global	620	820	1080	1300	1430	1460	1420	1310	1120	870	630	540	1050
SOUTH	Global	910	1020	980	940	880	840	870	980	1070	1080	800	740	930
	Diffuse	340	430	500	540	580	590	600	580	520	440	330	290	480
Clear Day	Global	1770	1880	1790	1470	1150	1010	1060	1300	1620	1790	1730	1660	1520
WEST	Global	380	530	660	830	1010	1090	1080	980	800	590	370	310	720
	Diffuse	230	320	420	520	610	650	640	580	470	350	240	200	440
Clear Day	Global	620	820	1080	1300	1430	1460	1420	1310	1120	870	630	540	1050

Average Annual Solar Heat and Illumination – Nearest Available Site

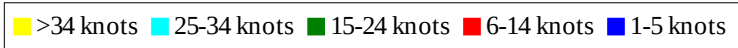
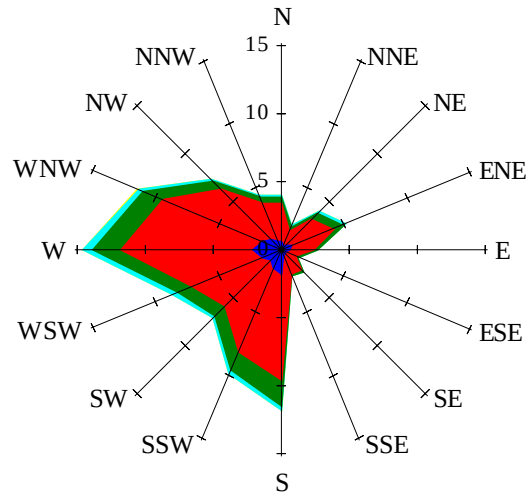
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	560	770	1040	1300	1440	1400	1220	950	650	380	290	870
NORTH	Unshaded	130	180	240	300	360	410	390	330	260	190	140	110	250
	Shaded	110	160	210	260	320	350	340	290	230	170	120	95	220
EAST	Unshaded	260	360	480	610	730	780	770	700	570	430	260	200	510
	Shaded	230	310	410	510	610	650	640	590	480	370	220	180	430
SOUTH	Unshaded	690	750	690	620	550	520	540	630	730	780	600	560	640
	Shaded	660	680	540	400	350	360	360	390	520	680	570	540	500
WEST	Unshaded	260	370	460	590	720	770	770	700	570	420	260	210	510
	Shaded	230	320	390	500	600	640	640	590	490	360	220	180	430

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	40	70	76	57	20	51	85	100	92	64
	M.Cloudy	23	42	48	34	12	33	59	71	67	45
NORTH	M.Clear	10	14	15	13	7	16	17	17	17	15
	M.Cloudy	9	15	16	13	6	13	18	19	19	15
EAST	M.Clear	70	51	15	13	7	77	68	26	17	15
	M.Cloudy	24	27	16	13	6	38	44	24	19	15
SOUTH	M.Clear	43	76	82	61	20	13	37	51	44	20
	M.Cloudy	18	35	41	28	9	12	28	38	34	18
WEST	M.Clear	10	14	28	66	52	13	17	17	56	78
	M.Cloudy	9	15	21	29	16	12	18	19	41	46
M.Clear	(% hrs)	28	25	22	23	24	40	39	33	32	34
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	30	66	81	71	40	14	37	40	21	0
	M.Cloudy	18	41	52	48	26	8	21	23	13	0
NORTH	M.Clear	9	14	16	15	11	5	10	10	7	0
	M.Cloudy	8	15	17	16	10	4	9	10	6	0
EAST	M.Clear	64	65	23	15	11	36	33	10	7	0
	M.Cloudy	22	33	20	16	10	8	14	10	6	0
SOUTH	M.Clear	24	60	76	66	34	35	76	81	50	0
	M.Cloudy	12	31	43	38	18	8	24	26	14	0
WEST	M.Clear	9	14	16	55	67	5	10	24	41	0
	M.Cloudy	8	15	17	33	30	4	9	13	12	0
M.Clear	(% hrs)	42	41	37	36	40	25	26	26	27	30

Wind Summary - December, January, and February

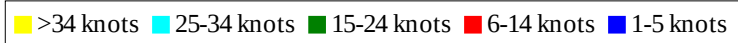
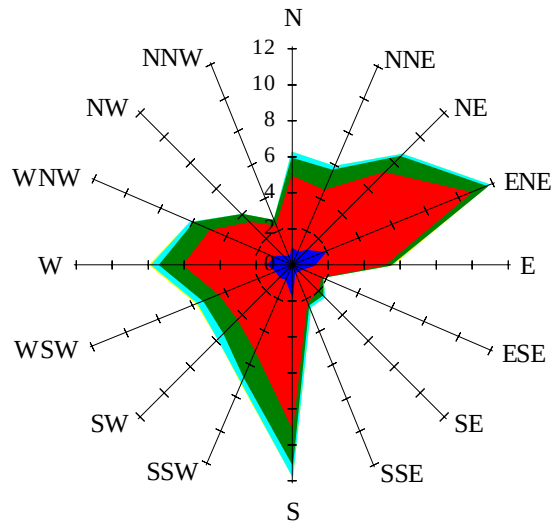
Labels of Percent Frequency on North Axis



Percent Calm = 3.27

Wind Summary - March, April, and May

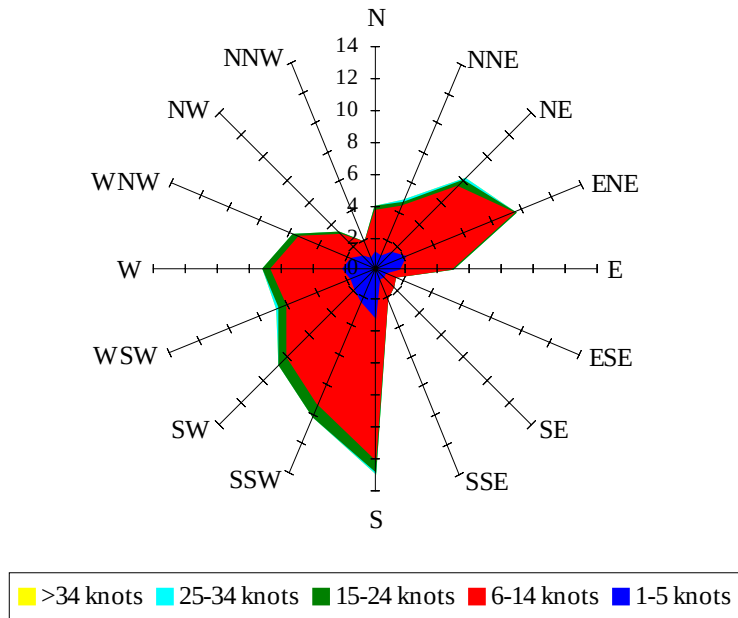
Labels of Percent Frequency on North Axis



Percent Calm = 4.93

Wind Summary - June, July, and August

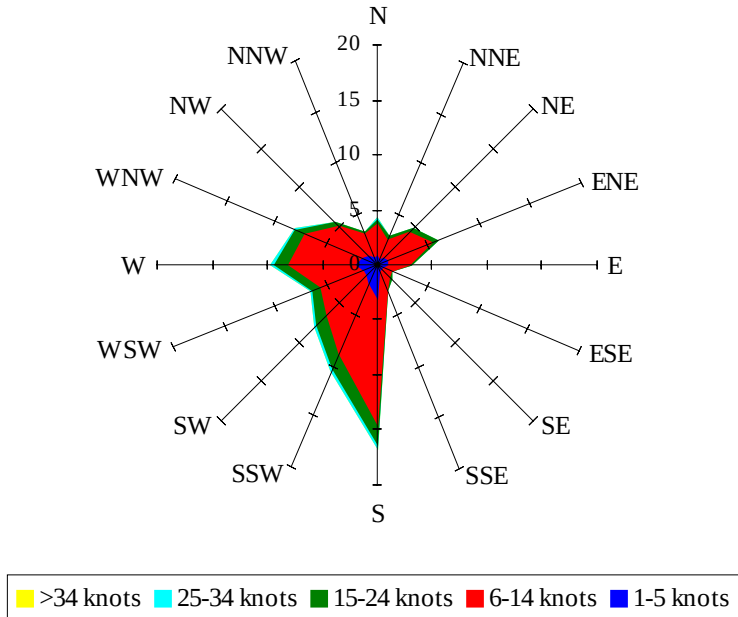
Labels of Percent Frequency on North Axis



Percent Calm = 7.94

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 5.70