

Simulation Weather Summary for Chicago, Illinois (TMY)

Multi-Story Office Building
Carrier Corporation

08/27/2002
02:13PM

Table 1. Descriptive Parameters:

City **Chicago**
 Location **Illinois**
 Type of Data **(TMY)**
 Latitude **41.8** Deg.
 Longitude **87.8** Deg.
 Elevation **607.0** ft
 Local Time Zone (GMT +/- N hours) **6.0** hours
 Daylight Savings Begins **April, 7**
 Daylight Savings Ends **October, 25**
 Average Ground Reflectance **0.20**

Table 2. Dry-Bulb Temperature Statistics (°F):

Month	Absolute Maximum	Average Maximum	Average	Average Minimum	Absolute Minimum
January	47.0	30.9	25.5	18.8	-9.5
February	53.1	33.1	26.2	19.1	-2.0
March	67.5	42.5	34.7	27.7	8.5
April	75.5	57.5	48.9	40.7	27.5
May	91.9	70.6	60.2	51.1	39.0
June	95.5	80.9	71.7	62.6	51.1
July	99.0	83.1	75.1	67.0	55.0
August	93.9	83.0	73.7	65.4	51.1
September	87.1	75.0	66.3	58.1	45.9
October	78.1	63.9	55.8	47.9	34.0
November	72.5	49.5	42.1	34.7	18.5
December	62.0	34.0	28.5	23.4	5.5

Table 3. Daily Solar Radiation Statistics:

Month	Daily Total Solar on Horizontal (BTU/ft ²)			Daily Clearness Number (dimensionless)		
	Maximum	Average	Minimum	Maximum	Average	Minimum
January	918.3	504.4	123.1	0.645	0.400	0.108
February	1383.1	806.0	186.0	0.707	0.464	0.123
March	1839.0	1122.2	333.5	0.734	0.470	0.124
April	2286.5	1414.1	482.8	0.727	0.466	0.154
May	2559.2	1772.6	472.2	0.716	0.507	0.140
June	2598.7	1955.1	498.6	0.709	0.531	0.135
July	2565.7	1989.6	433.6	0.698	0.556	0.120
August	2320.5	1787.4	1033.1	0.683	0.559	0.308
September	1900.3	1316.7	339.8	0.684	0.503	0.131
October	1407.7	922.0	216.6	0.624	0.473	0.116
November	1052.3	572.3	179.1	0.650	0.413	0.145
December	738.2	382.6	116.5	0.627	0.342	0.106

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Table 4. Time of Occurrence for Maximums and Minimums:

Month	Highest Dry-Bulb Temperature	Lowest Dry-Bulb Temperature	Maximum Total Solar	Minimum Total Solar
January	Jan 5, 0600	Jan 27, 0600	Jan 29	Jan 5
February	Feb 27, 1400	Feb 2, 0600	Feb 25	Feb 3
March	Mar 25, 1200	Mar 5, 0500	Mar 21	Mar 29
April	Apr 16, 1700	Apr 11, 0500	Apr 21	Apr 20
May	May 22, 1600	May 16, 0600	May 23	May 5
June	Jun 23, 1500	Jun 13, 0600	Jun 5	Jun 25
July	Jul 1, 1600	Jul 10, 0600	Jul 2	Jul 13
August	Aug 30, 1600	Aug 25, 0700	Aug 3	Aug 6
September	Sep 9, 1600	Sep 28, 0700	Sep 8	Sep 17
October	Oct 5, 1600	Oct 16, 0700	Oct 2	Oct 20
November	Nov 3, 1500	Nov 28, 0600	Nov 1	Nov 26
December	Dec 8, 0700	Dec 2, 0700	Dec 2	Dec 19

Table 5. Calendar Data:

Day of Week for January 1st **Tuesday**

Holidays:

Jan	1		
Mar	29		
May	27		
Jul	4		
Sep	2		
Nov	28	29	
Dec	25	26	27