

TORONTO/PEARSON CN

Latitude = 43.67 N

WMO No. 716240

Longitude = 79.63 W

Elevation = 568 feet

Period of Record = 1973 to 1996

Average Pressure = 29.36 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	93	74	97	13.0	W
0.4% Occurrence	87	71	94	11.6	W
1.0% Occurrence	84	70	91	10.8	W
2.0% Occurrence	81	69	86	10.3	W
Mean Daily Range	16	-	-	-	-
97.5% Occurrence	7	6	6	10.2	N
99.0% Occurrence	1	0	4	10.2	N
99.6% Occurrence	-4	-5	3	9.3	NNW
Median of Extreme Lows	-9	-9	3	10.1	NNW
	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	78	88	128	11.3	W
0.4% Occurrence	74	83	113	9.8	W
1.0% Occurrence	72	80	106	9.1	W
2.0% Occurrence	71	78	103	8.6	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	85	0.88	9.9	WSW
0.4% Occurrence	119	79	0.78	8.0	SW
1.0% Occurrence	112	77	0.74	7.5	W
2.0% Occurrence	105	75	0.69	7.3	W
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		5	239	86	561

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	N/A	N/A	0.7 + 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 (#)
48.2	N/A	N/A	56

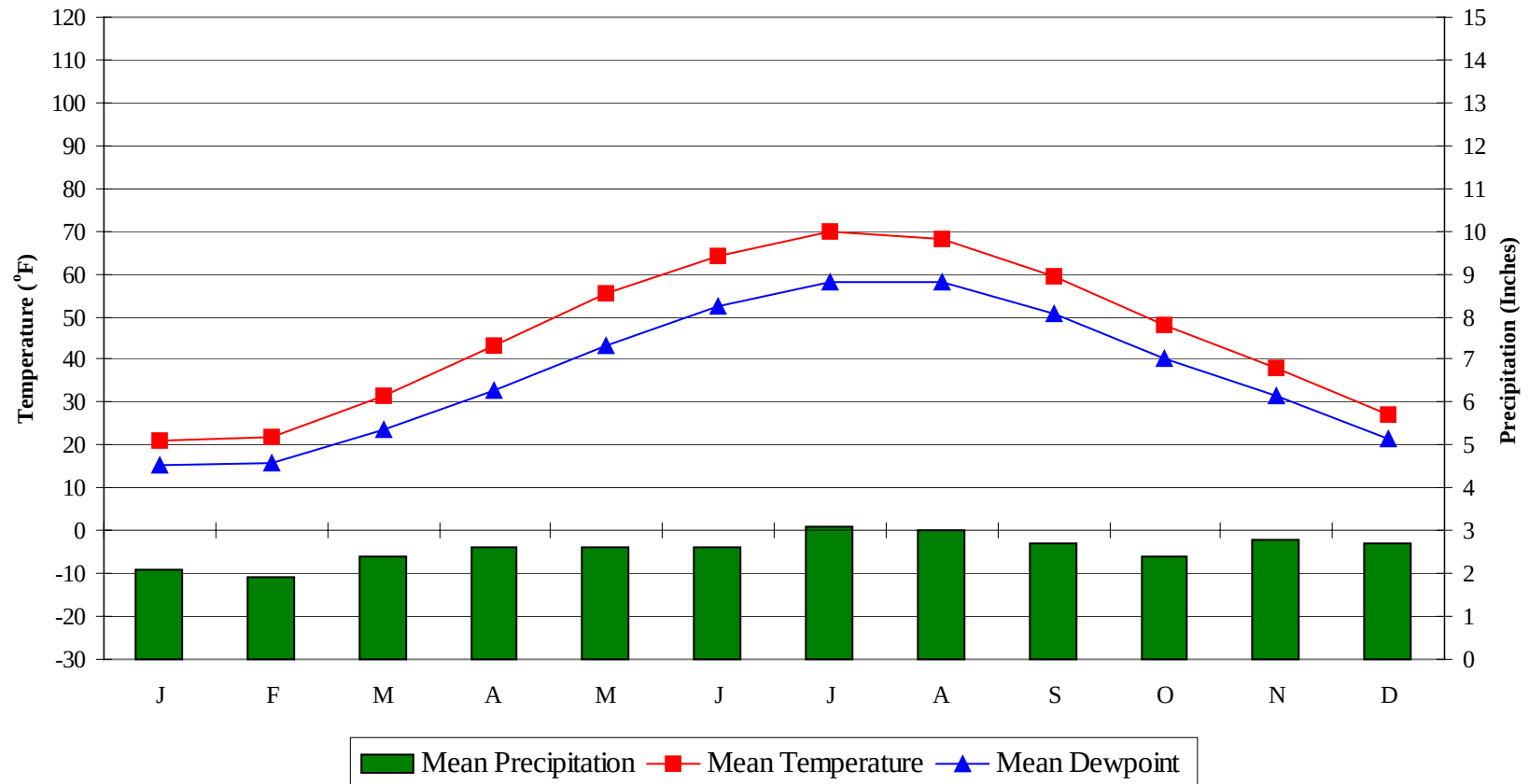
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

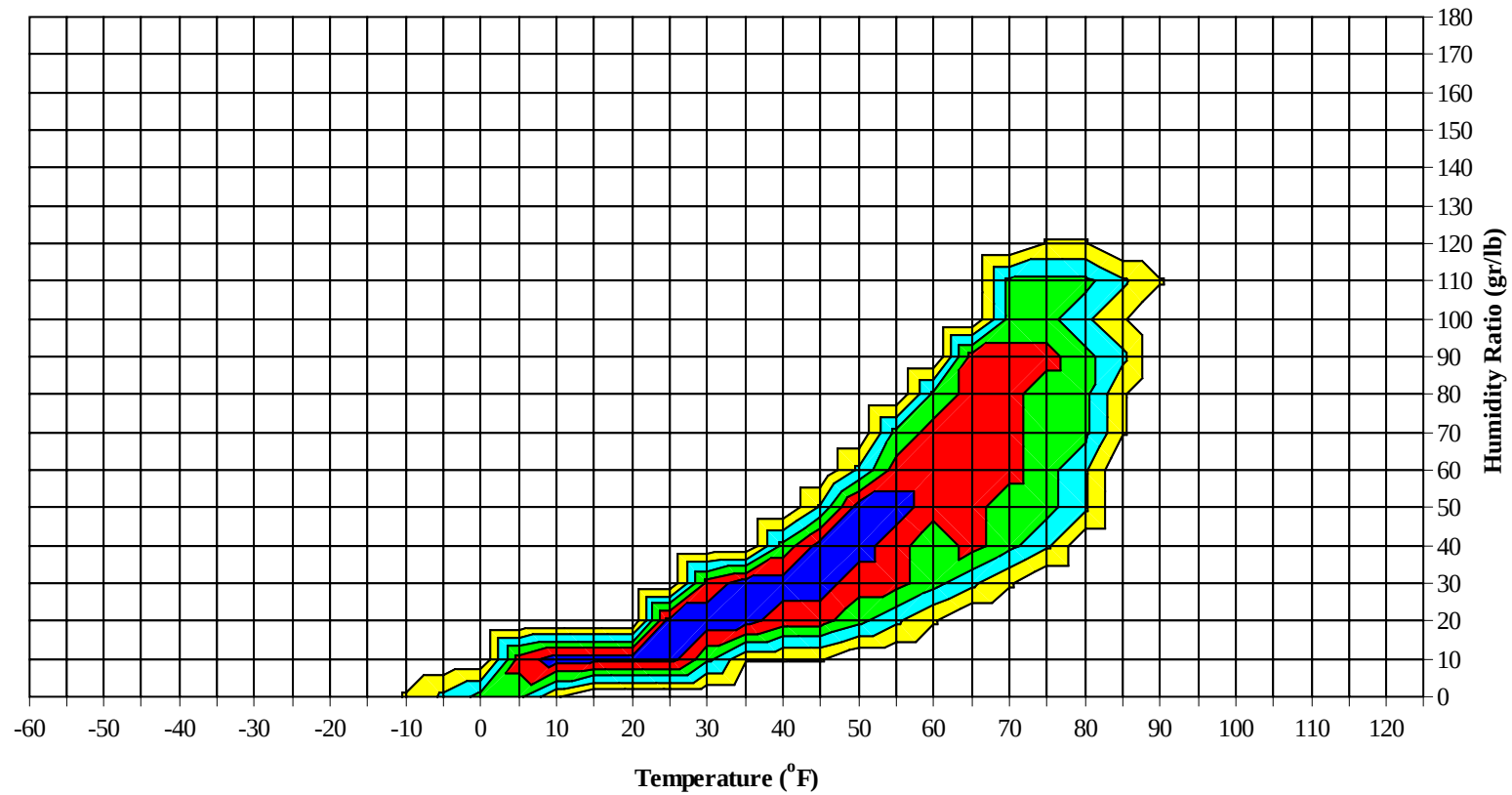


TORONTO/PEARSON

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Long Term Psychrometric Summary



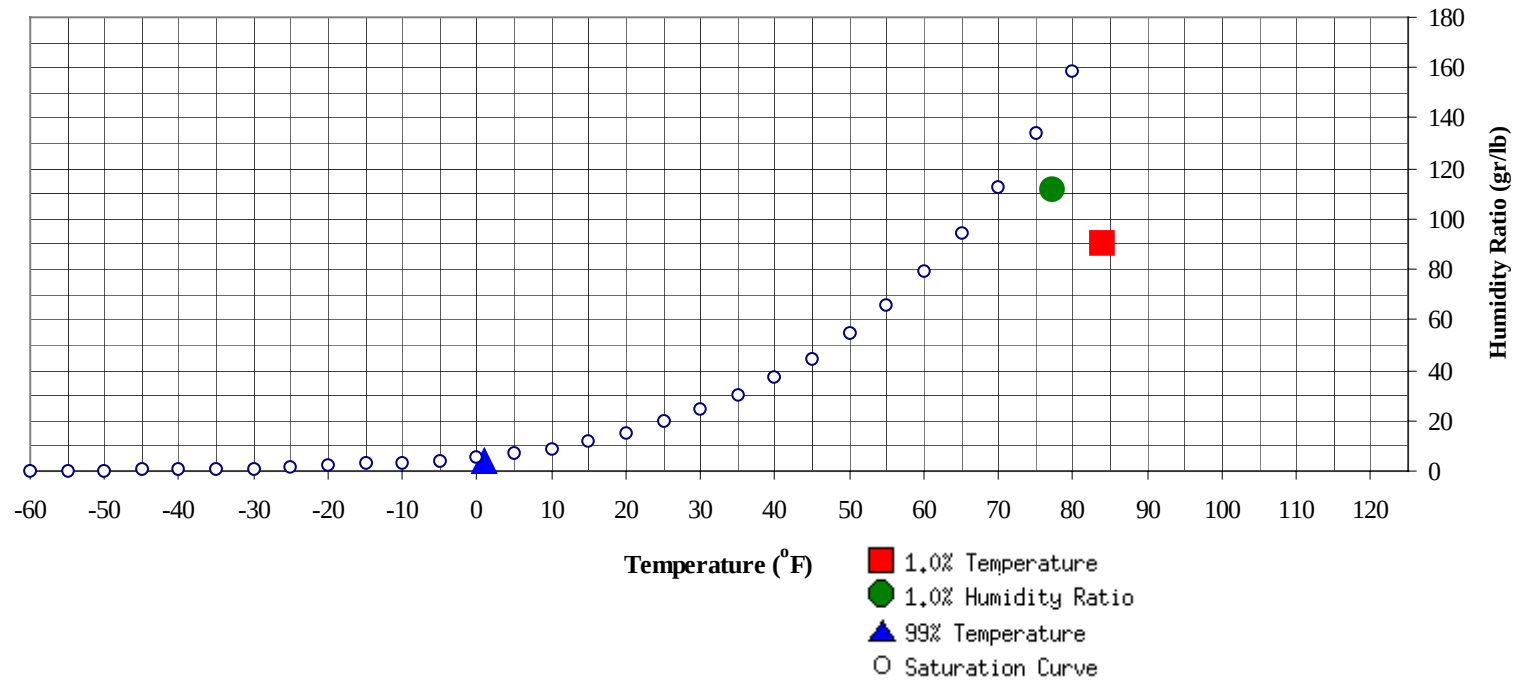
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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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)
	1	4.3	0.9		112	77.3	72	69.8	36.1

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	84	90.6	70.4	34.4

TORONTO/PEARSON CN

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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												0		0	60.0
70 / 74												1	0	1	58.2
65 / 69												1	1	2	55.9
60 / 64												2	2	4	53.3
55 / 59		0		0	49.0		0	0	0	47.2	1	7	3	11	50.0
50 / 54	0	2	1	3	48.2	0	2	1	3	45.8	3	14	9	26	46.0
45 / 49	2	2	2	6	43.3	2	5	3	10	43.0	7	22	16	45	41.9
40 / 44	4	7	4	15	39.1	3	9	6	18	38.8	11	27	18	56	38.0
35 / 39	19	28	22	69	34.9	17	27	24	68	34.8	35	52	49	136	34.3
30 / 34	39	40	43	122	30.3	37	38	39	114	30.5	61	46	58	165	30.0
25 / 29	36	39	38	113	25.0	28	35	32	95	24.8	44	35	41	120	24.5
20 / 24	24	32	28	84	20.4	22	28	26	76	20.3	31	18	20	69	20.2
15 / 19	37	34	39	110	16.1	31	33	36	100	15.9	24	14	19	57	16.0
10 / 14	32	26	30	88	11.0	30	23	29	82	11.0	17	6	8	31	10.9
5 / 9	22	19	24	65	6.0	27	14	17	58	5.9	9	3	4	16	6.0
0 / 4	18	10	11	39	0.9	20	7	8	35	1.0	3	1	1	5	1.2
-5 / -1	5	3	4	12	-3.6	5	2	2	9	-3.5	1	0	0	1	-3.5
-10 / -6	8	3	3	14	-7.5	4	1	1	6	-7.4	1			1	-6.7
-15 / -11	1	1	1	3	-12.4	0	0	0	0	-12.2					
-20 / -16	1	0	0	1	-16.6	1	0		1	-15.6					
-25 / -21	1	0		1	-21.5										

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.

TORONTO/PEARSON CN

WMO No. 716240

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	0	73.6
90 / 94							0		0	72.1		3	1	4	71.9
85 / 89		0	0	0	69.0		1	0	1	68.6		6	2	8	69.2
80 / 84		2	0	2	64.8		10	3	13	66.8	0	22	8	30	68.4
75 / 79		2	1	3	62.0	0	15	7	22	64.4	4	41	21	65	65.0
70 / 74	0	5	3	8	58.6	3	26	16	45	60.7	14	60	41	115	62.0
65 / 69	1	8	4	13	56.7	7	24	17	48	57.7	26	43	40	108	60.0
60 / 64	5	16	10	31	53.3	20	48	35	103	54.4	60	41	59	160	57.2
55 / 59	7	27	18	52	49.1	37	51	51	139	50.9	63	19	42	125	53.3
50 / 54	16	38	29	83	45.4	55	42	52	149	47.2	42	5	19	66	48.6
45 / 49	31	49	46	127	41.7	55	21	41	117	42.8	23	1	6	30	44.0
40 / 44	36	36	36	108	38.0	34	7	16	57	38.8	6		1	7	39.8
35 / 39	56	32	47	135	34.1	29	1	9	39	35.0	2		0	2	36.9
30 / 34	51	16	31	98	29.8	8		1	9	30.4					
25 / 29	28	5	11	44	24.9	1		0	1	26.3					
20 / 24	7	1	2	10	20.4										
15 / 19	2	1	1	4	16.1										
10 / 14	0	0	0	0	11.6										
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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WMO No. 716240

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		1	0	1	74.7										
90 / 94	0	6	2	8	74.0		4	1	5	75.0		0	0	0	73.8
85 / 89	0	15	5	20	72.1		9	3	12	72.2		2	0	2	71.9
80 / 84	1	48	20	69	69.2	0	37	13	50	69.8		9	3	12	69.5
75 / 79	10	73	47	130	66.4	6	65	35	106	67.0	1	22	10	33	66.8
70 / 74	44	67	70	181	64.1	32	74	67	173	64.6	9	40	21	70	64.1
65 / 69	51	24	44	119	61.9	47	34	50	131	62.2	17	38	25	80	61.2
60 / 64	70	11	39	120	58.6	70	21	49	140	59.0	37	55	50	143	57.6
55 / 59	48	2	17	67	54.2	56	4	22	82	54.6	48	47	58	154	53.1
50 / 54	22		3	25	49.8	28	0	7	35	50.2	52	20	40	112	48.8
45 / 49	3		0	3	45.6	7		1	8	45.1	42	5	22	69	44.4
40 / 44						1		0	1	40.2	20	0	8	28	40.2
35 / 39						0			0	37.7	11	0	2	13	36.5
30 / 34											3		0	3	31.5
25 / 29											0			0	28.0
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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WMO No. 716240

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		0		0	66.0										
75 / 79		2	1	3	64.2										
70 / 74		7	2	9	62.0		1		1	61.5					
65 / 69	2	12	4	18	59.2	0	1	0	1	58.7		0		0	62.5
60 / 64	7	31	16	54	56.1	1	6	2	9	57.0		0	0	0	59.6
55 / 59	22	45	30	96	52.2	6	12	9	27	53.1	1	1	1	3	53.6
50 / 54	35	55	48	138	47.9	12	23	15	50	48.3	2	3	3	8	48.8
45 / 49	51	56	59	166	43.3	25	35	27	87	43.5	4	8	4	16	43.5
40 / 44	42	24	39	105	39.2	26	37	34	97	39.3	7	12	8	27	39.6
35 / 39	53	14	35	102	35.4	54	60	56	170	34.7	31	49	42	122	34.8
30 / 34	27	2	11	40	31.0	57	42	57	156	30.1	61	59	62	182	30.6
25 / 29	9	0	3	12	26.0	36	16	27	79	25.4	43	41	45	129	25.1
20 / 24	1		0	1	22.2	14	4	8	26	20.8	25	22	23	70	20.6
15 / 19						8	2	3	13	16.8	30	25	28	83	16.2
10 / 14						2	0	1	3	11.5	21	15	20	56	11.2
5 / 9											12	8	9	29	6.1
0 / 4											7	3	3	13	0.9
-5 / -1											3	1	1	5	-3.6
-10 / -6											1	0	1	2	-7.3
-15 / -11											0	0	0	0	-12.1
-20 / -16											0	0		0	-16.1
-25 / -21															

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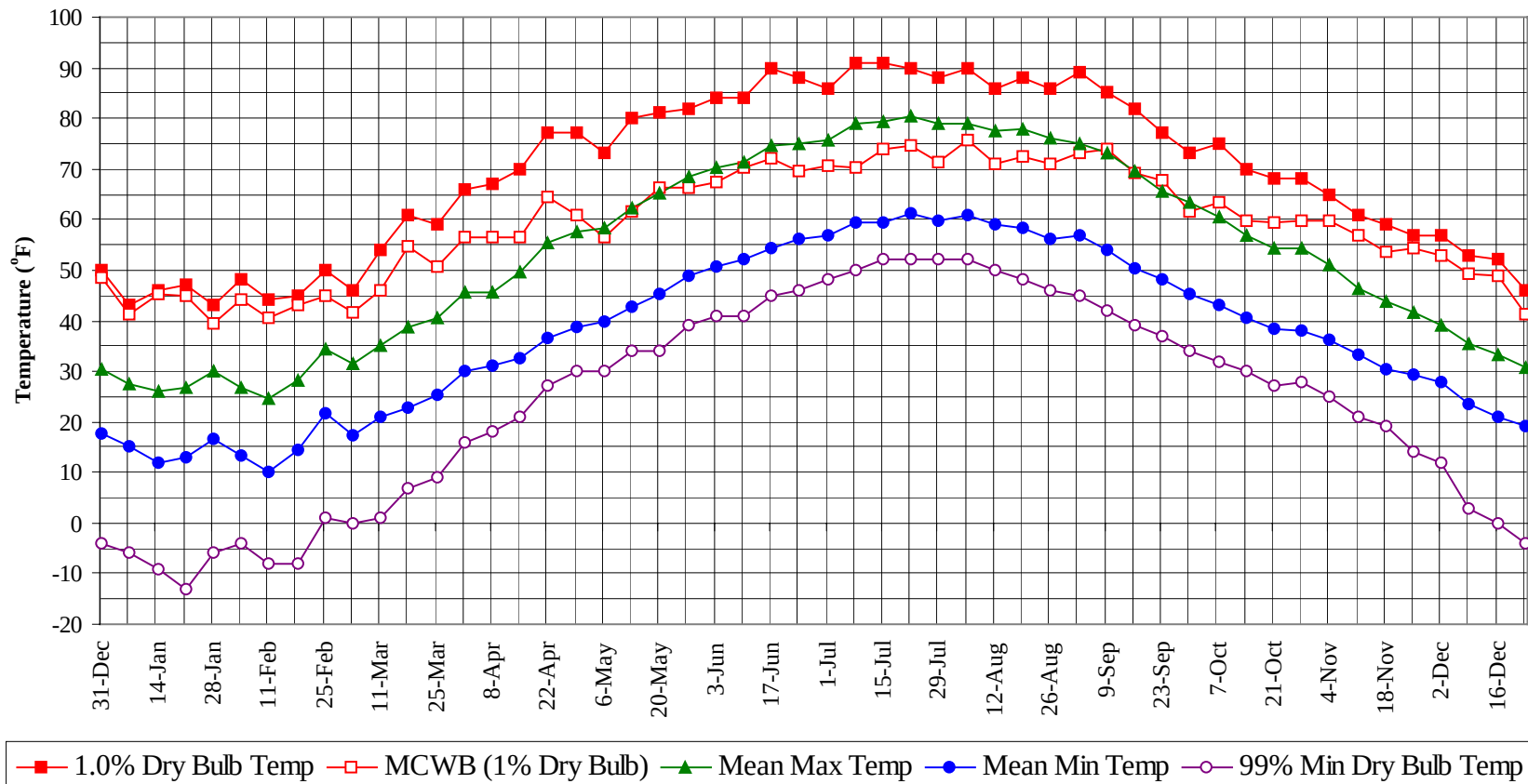
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

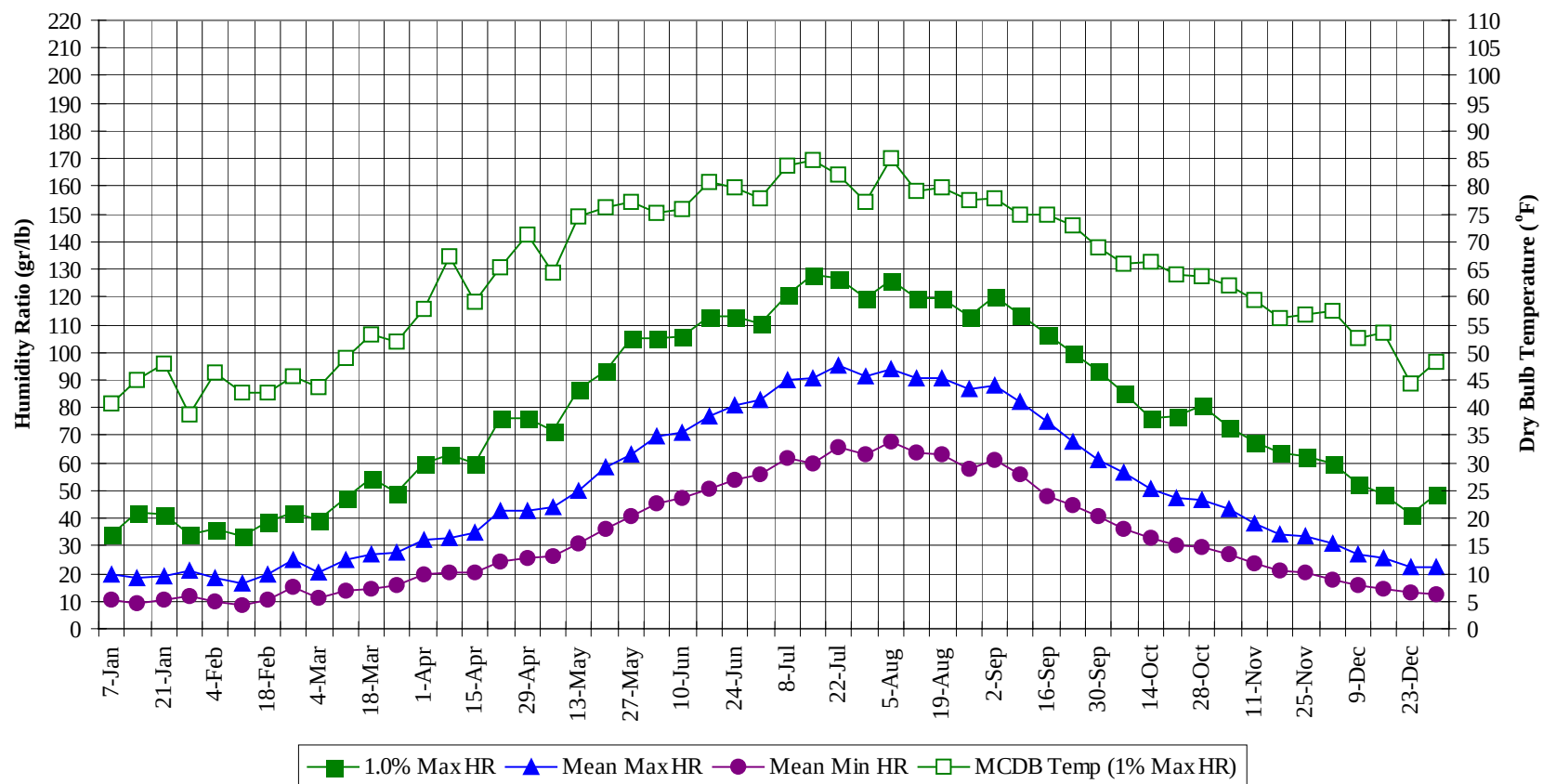
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
95 / 99		2	0	2	74.5
90 / 94	0	14	3	17	73.8
85 / 89	0	34	10	44	71.4
80 / 84	2	128	48	178	69.0
75 / 79	21	220	122	363	66.2
70 / 74	102	279	220	601	63.5
65 / 69	150	183	184	516	60.8
60 / 64	268	232	261	761	57.2
55 / 59	289	215	250	754	52.5
50 / 54	265	204	228	697	47.8
45 / 49	251	206	227	684	43.0
40 / 44	189	160	171	519	38.9
35 / 39	306	266	287	859	34.7
30 / 34	343	245	302	890	30.3
25 / 29	224	173	195	592	25.0
20 / 24	123	106	108	337	20.4
15 / 19	132	109	127	368	16.1
10 / 14	103	71	89	263	11.1
5 / 9	70	43	54	167	6.0
0 / 4	49	20	23	92	1.0
-5 / -1	15	5	8	28	-3.6
-10 / -6	13	4	4	21	-7.4
-15 / -11	2	1	1	4	-12.4
-20 / -16	2	0	0	2	-16.3
-25 / -21	1	0		1	-21.5

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



TORONTO/PEARSON

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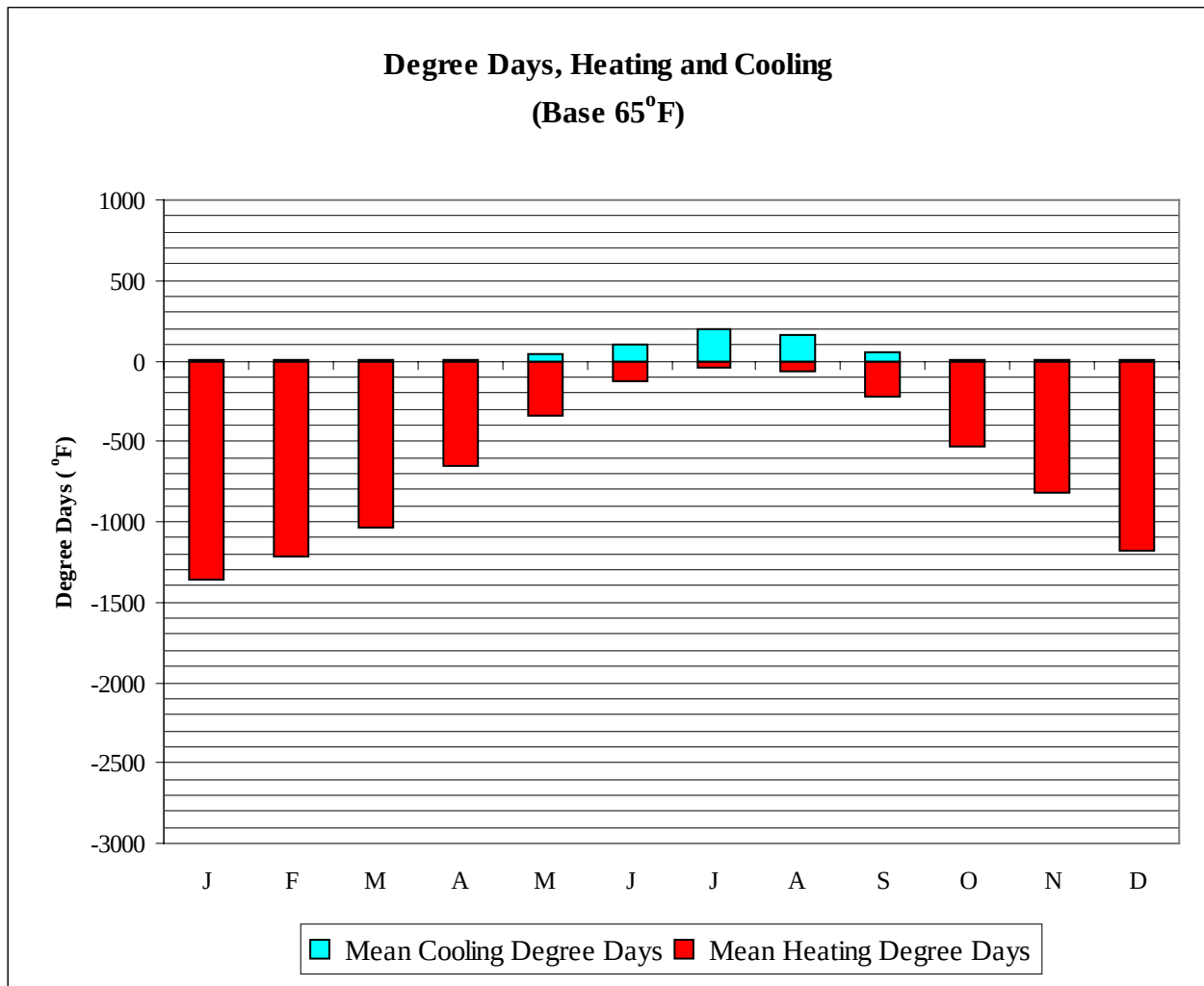
Long Term Dry Bulb Temperature and Humidity Summary

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	43.0	41.3	27.7	15.2	-6.0	34.3	40.8	19.4	10.5
14-Jan	46.0	45.4	26.0	11.9	-9.0	42.0	45.0	18.5	9.3
21-Jan	47.0	45.0	26.6	12.8	-13.0	41.3	48.0	19.3	10.7
28-Jan	43.0	39.4	29.9	16.5	-6.0	34.3	38.9	21.2	11.5
4-Feb	48.0	44.1	26.6	13.4	-4.0	36.4	46.2	18.1	9.7
11-Feb	44.0	40.5	24.8	10.1	-8.0	33.6	42.8	16.4	8.3
18-Feb	45.0	43.0	28.4	14.3	-8.0	38.5	42.7	19.5	10.5
25-Feb	50.0	45.0	34.6	21.5	1.0	42.0	45.5	25.3	14.8
4-Mar	46.0	41.5	31.4	17.4	0.0	39.2	43.7	20.6	11.5
11-Mar	54.0	45.9	35.2	21.0	1.0	47.6	48.9	25.1	14.0
18-Mar	61.0	54.6	38.7	22.9	7.0	54.6	53.2	26.9	14.5
25-Mar	59.0	50.8	40.6	25.2	9.0	49.0	51.8	27.4	15.7
1-Apr	66.0	56.5	45.6	30.1	16.0	59.5	57.8	32.5	19.5
8-Apr	67.0	56.7	45.6	31.1	18.0	63.0	67.2	33.1	20.2
15-Apr	70.0	56.6	49.5	32.7	21.0	59.5	59.2	34.7	20.5
22-Apr	77.0	64.3	55.2	36.5	27.0	76.3	65.4	42.4	24.6
29-Apr	77.0	60.7	57.5	38.7	30.0	76.3	71.3	42.4	25.8
6-May	73.0	56.6	58.5	39.7	30.0	71.4	64.4	43.8	26.2
13-May	80.0	61.5	62.2	42.8	34.0	86.8	74.4	50.0	31.1
20-May	81.0	66.4	65.2	45.2	34.0	93.1	76.2	58.7	35.8
27-May	82.0	66.3	68.5	48.9	39.0	105.0	77.1	62.9	40.7
3-Jun	84.0	67.4	70.4	50.8	41.0	105.0	75.1	69.4	45.0
10-Jun	84.0	70.2	71.5	52.1	41.0	105.7	75.7	71.2	47.0
17-Jun	90.0	72.0	74.5	54.3	45.0	112.7	80.8	77.1	50.7
24-Jun	88.0	69.7	74.8	56.0	46.0	112.7	79.9	81.1	53.8
1-Jul	86.0	70.6	75.7	56.8	48.0	110.6	77.7	82.5	55.7
8-Jul	91.0	70.3	79.1	59.5	50.0	121.1	83.8	90.0	61.6
15-Jul	91.0	74.0	79.3	59.6	52.0	128.1	84.7	90.4	59.7
22-Jul	90.0	74.6	80.5	61.2	52.0	126.7	82.0	95.1	65.5
29-Jul	88.0	71.4	79.1	59.7	52.0	119.7	77.1	91.3	62.9
5-Aug	90.0	75.7	79.0	60.7	52.0	126.0	85.1	94.1	67.6
12-Aug	86.0	71.1	77.6	59.2	50.0	119.7	79.2	90.7	64.0
19-Aug	88.0	72.4	77.8	58.4	48.0	119.7	79.6	90.5	63.4
26-Aug	86.0	70.9	76.1	56.1	46.0	112.7	77.6	86.5	57.9
2-Sep	89.0	73.2	75.1	57.0	45.0	120.4	77.9	88.1	61.3
9-Sep	85.0	74.0	73.0	54.0	42.0	113.4	74.9	81.9	55.6
16-Sep	82.0	69.3	69.5	50.5	39.0	106.4	74.9	74.9	48.2
23-Sep	77.0	67.6	65.4	48.3	37.0	100.1	72.7	67.9	44.9
30-Sep	73.0	61.4	63.4	45.3	34.0	93.1	68.8	61.2	40.5
7-Oct	75.0	63.4	60.4	43.2	32.0	85.4	66.0	56.2	36.3
14-Oct	70.0	59.6	56.7	40.6	30.0	76.3	66.2	50.5	32.5
21-Oct	68.0	59.3	54.4	38.5	27.0	77.0	64.2	47.5	29.9
28-Oct	68.0	59.7	54.3	38.2	28.0	80.5	63.8	46.4	29.4
4-Nov	65.0	59.8	51.1	36.3	25.0	72.8	62.0	43.0	26.6
11-Nov	61.0	56.9	46.4	33.2	21.0	67.9	59.4	38.2	23.6
18-Nov	59.0	53.4	43.8	30.5	19.0	63.7	56.2	34.4	20.9
25-Nov	57.0	54.5	41.6	29.4	14.0	62.3	56.9	33.4	20.1
2-Dec	57.0	52.8	38.9	27.7	12.0	59.5	57.6	30.7	18.0
9-Dec	53.0	49.1	35.6	23.4	3.0	52.5	52.6	27.1	15.5
16-Dec	52.0	48.9	33.4	21.0	0.0	48.3	53.6	25.3	14.3
23-Dec	46.0	41.2	30.7	19.0	-4.0	41.3	44.3	22.6	13.1
31-Dec	50.0	48.4	30.4	17.7	-4.0	48.3	48.4	22.3	12.5

TORONTO/PEARSON

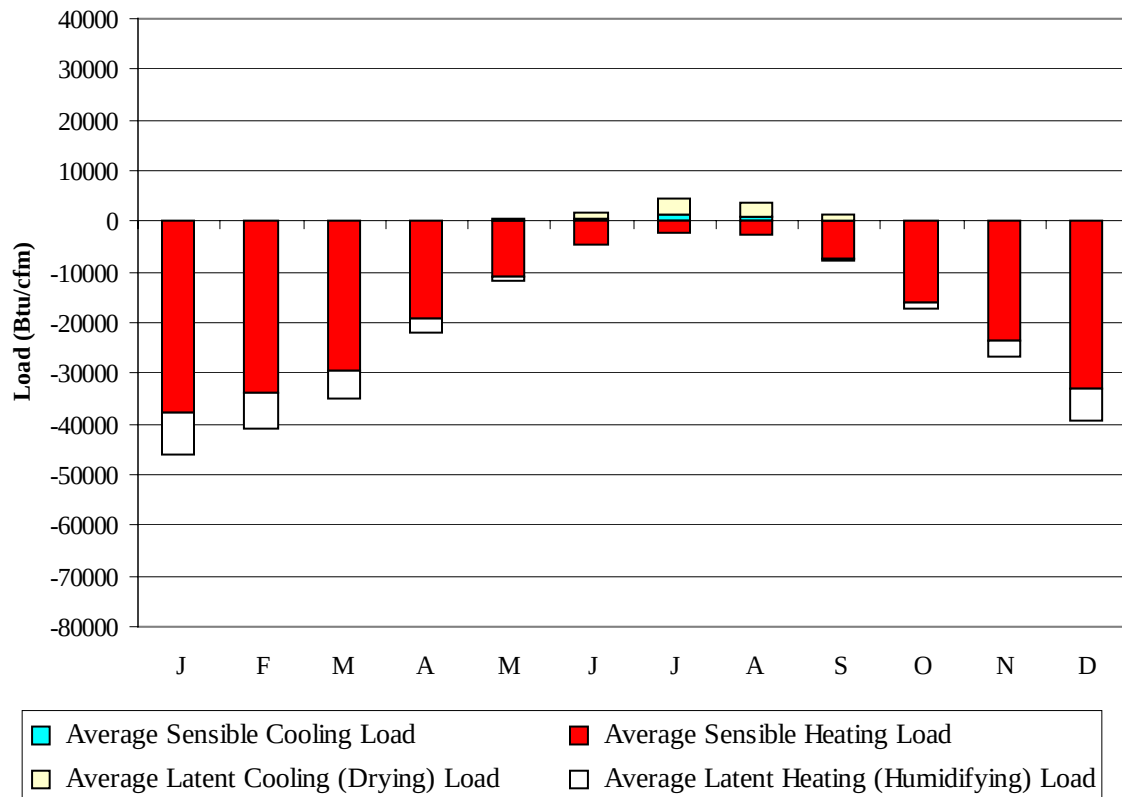
CN

WMO No. 716240



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1358
FEB	0	1214
MAR	0	1041
APR	7	655
MAY	38	339
JUN	104	122
JUL	201	47
AUG	161	65
SEP	53	222
OCT	5	535
NOV	0	815
DEC	0	1179
ANN	569	7592

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	-37612	0	-8246
FEB	0	-33662	0	-7444
MAR	0	-29386	0	-5793
APR	28	-19236	10	-2845
MAY	165	-10836	254	-720
JUN	509	-4543	1075	-28
JUL	1186	-2048	3249	-1
AUG	795	-2693	2910	-1
SEP	184	-7550	1026	-81
OCT	5	-16209	18	-880
NOV	0	-23463	0	-3106
DEC	0	-32966	0	-6386
ANN	2872	-220204	8542	-35531

Average Annual Solar Radiation – Nearest Available Site

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

City: BUFFALO
 State: NY
 WBAN No: 14733
 Lat(N): 42.93
 Long(W): 78.73
 Elev(ft): 705

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.618
 Vert Gap: 0.33

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	500	740	1070	1440	1740	1940	1910	1640	1240	840	500	400	1170
	Std Dev	40	59	85	119	157	134	109	101	110	73	42	38	39
	Minimum	430	640	940	1140	1360	1610	1700	1460	1070	700	420	330	1080
	Maximum	580	870	1270	1640	2060	2200	2110	1870	1430	1060	590	480	1260
	Diffuse	360	500	600	700	790	840	820	740	600	450	340	300	590
Clear Day	Global	790	1150	1640	2170	2510	2650	2560	2240	1770	1240	830	670	1690
NORTH	Global	190	270	340	430	530	610	590	470	360	270	190	160	370
	Diffuse	190	270	340	420	490	530	520	450	360	270	190	160	350
Clear Day	Global	170	230	310	420	570	690	640	460	340	250	170	150	370
EAST	Global	320	460	660	860	990	1070	1070	960	760	540	320	260	690
	Diffuse	240	330	420	510	580	620	620	550	450	320	220	190	420
Clear Day	Global	630	850	1110	1350	1480	1520	1480	1360	1160	880	650	550	1090
SOUTH	Global	680	850	970	940	870	840	870	970	1000	940	630	550	840
	Diffuse	360	440	490	530	560	580	580	560	500	410	310	290	470
Clear Day	Global	1850	1990	1870	1510	1180	1040	1090	1340	1680	1860	1810	1740	1580
WEST	Global	320	470	650	850	1000	1090	1090	970	770	540	310	260	700
	Diffuse	240	330	420	510	590	630	630	560	450	330	220	190	430
Clear Day	Global	630	850	1110	1350	1480	1520	1480	1360	1160	880	650	550	1090

Average Annual Solar Heat and Illumination – Nearest Available Site

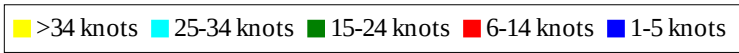
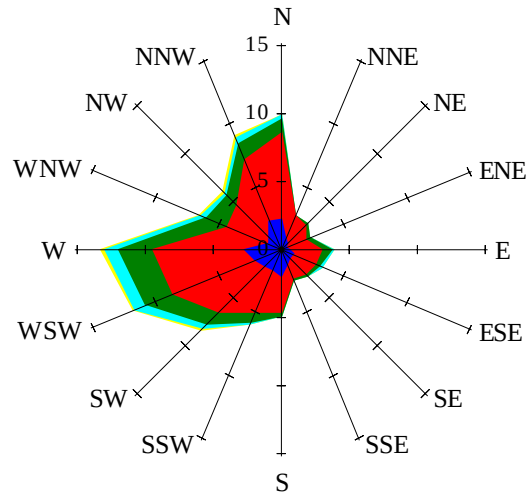
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	330	510	750	1030	1260	1410	1380	1180	880	570	330	260	830
NORTH	Unshaded	130	190	240	290	350	400	380	320	250	180	130	110	250
	Shaded	110	150	200	250	310	350	330	280	220	160	110	91	210
EAST	Unshaded	220	330	470	610	700	760	760	680	540	380	220	170	490
	Shaded	190	270	400	510	570	620	630	570	450	320	190	150	410
SOUTH	Unshaded	510	620	680	630	550	520	540	630	690	680	470	410	580
	Shaded	480	550	520	390	340	350	350	370	480	580	440	390	430
WEST	Unshaded	220	330	460	610	710	780	780	690	550	380	220	170	490
	Shaded	190	280	390	510	590	640	640	580	460	320	180	150	410

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	66	78	63	29	44	80	98	95	71
	M.Cloudy	19	39	46	38	17	27	51	67	65	48
NORTH	M.Clear	9	13	14	13	8	18	16	17	17	15
	M.Cloudy	8	14	16	14	7	12	16	18	18	16
EAST	M.Clear	70	59	14	13	8	77	74	35	17	15
	M.Cloudy	23	29	16	14	7	32	41	28	18	16
SOUTH	M.Clear	36	73	86	70	32	11	33	51	48	26
	M.Cloudy	14	33	39	31	13	10	24	37	35	21
WEST	M.Clear	9	13	17	62	68	11	16	17	47	78
	M.Cloudy	8	14	17	29	21	10	16	18	34	45
M.Clear	(% hrs)	23	21	19	19	21	37	33	31	33	33
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	23	60	79	75	49	8	32	40	25	2
	M.Cloudy	13	35	50	48	29	5	19	23	15	2
NORTH	M.Clear	7	13	15	15	12	4	9	10	8	1
	M.Cloudy	6	13	16	16	11	3	8	10	7	1
EAST	M.Clear	57	70	32	15	12	24	37	10	8	1
	M.Cloudy	18	32	23	16	11	6	14	10	7	1
SOUTH	M.Clear	17	55	76	71	43	21	71	83	57	6
	M.Cloudy	8	27	41	39	21	5	21	25	17	2
WEST	M.Clear	7	13	15	47	73	4	9	16	40	8
	M.Cloudy	6	13	16	29	30	3	8	11	13	2
M.Clear	(% hrs)	35	28	26	27	32	11	11	11	11	12

Wind Summary - December, January, and February

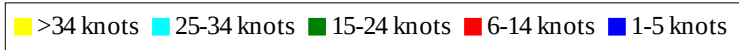
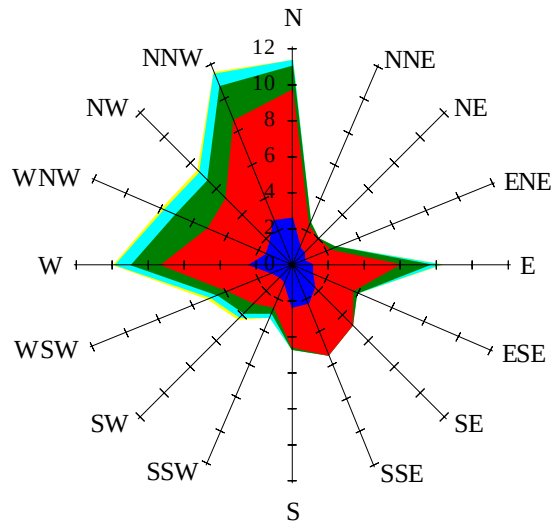
Labels of Percent Frequency on North Axis



Percent Calm = 5.96

Wind Summary - March, April, and May

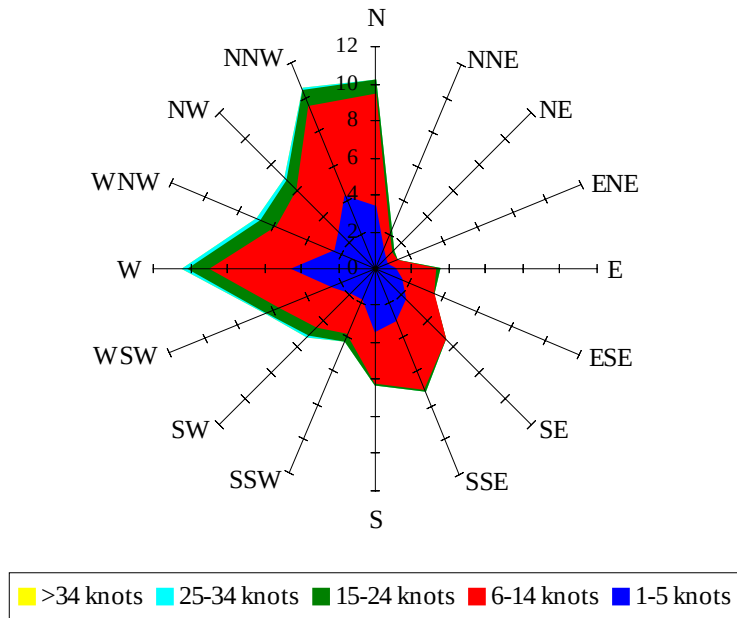
Labels of Percent Frequency on North Axis



Percent Calm = 6.14

Wind Summary - June, July, and August

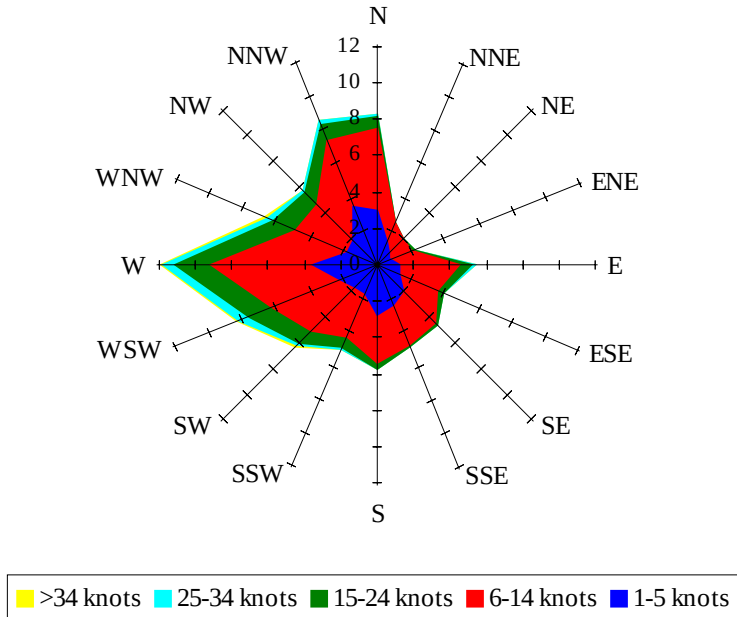
Labels of Percent Frequency on North Axis



Percent Calm = 8.80

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 8.49