

BINGHAMTON/BROOME NY	
Latitude = 42.22 N	WMO No. 725150
Longitude = 75.98 W	Elevation = 1631 feet
Period of Record = 1973 to 1996	Average Pressure = 28.25 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	89	71	94	11.0	W
0.4% Occurrence	85	70	94	10.2	W
1.0% Occurrence	83	69	90	10.0	SW
2.0% Occurrence	80	67	86	9.9	SW
Mean Daily Range	16	-	-	-	-
97.5% Occurrence	8	7	6	11.1	W
99.0% Occurrence	3	2	5	11.0	W
99.6% Occurrence	-2	-3	3	10.9	W
Median of Extreme Lows	-9	-10	2	10.5	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	76	85	124	8.9	W
0.4% Occurrence	73	81	113	9.6	SW
1.0% Occurrence	71	79	107	9.5	SW
2.0% Occurrence	70	77	104	9.4	SW
	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	130	81	0.82	8.3	W
0.4% Occurrence	117	78	0.74	8.7	SW
1.0% Occurrence	110	75	0.69	9.2	SW
2.0% Occurrence	105	74	0.67	8.7	SW
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		1	200	44	502

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	2.3	90	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 (#)
48.6	N/A	35	55

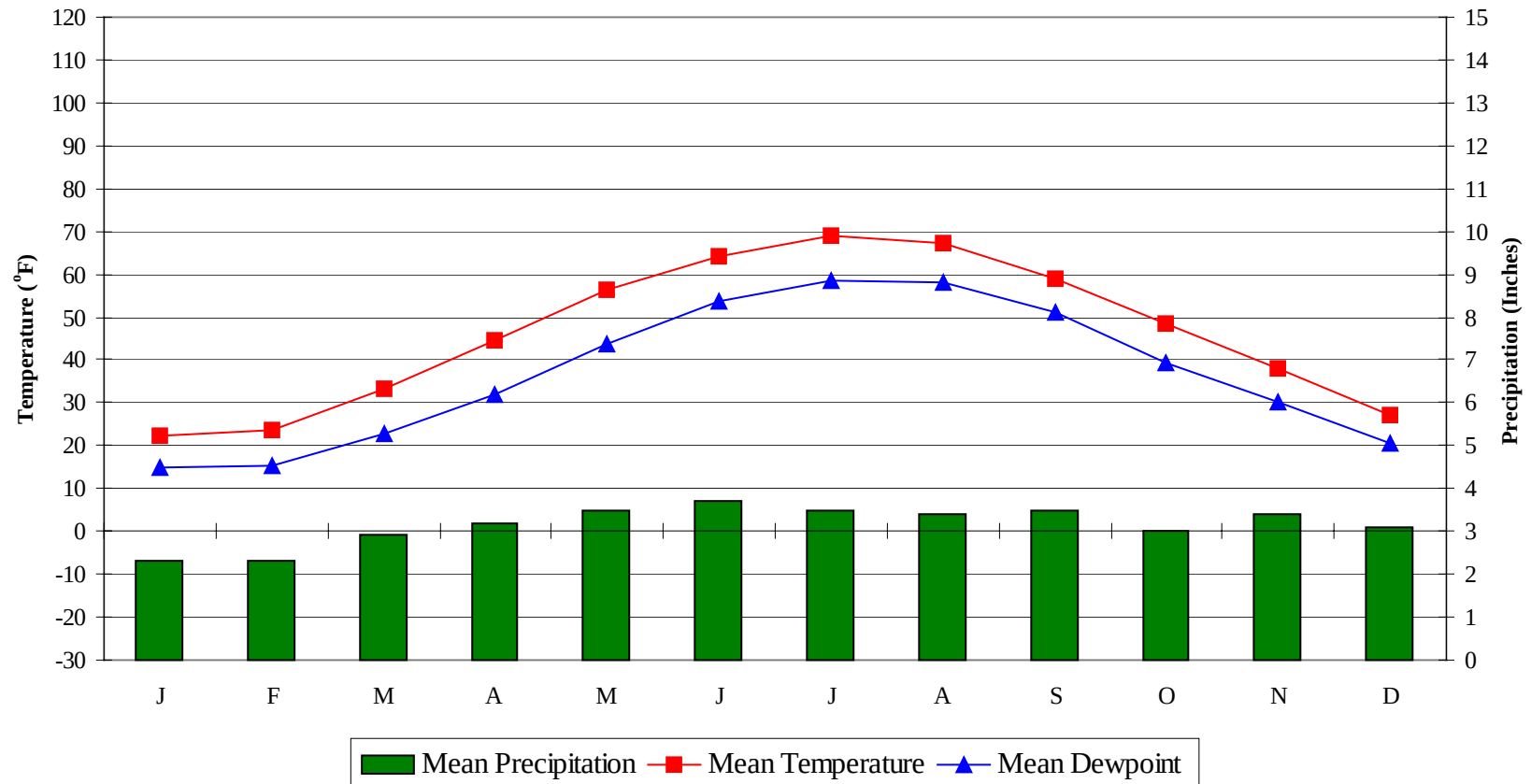
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

BINGHAMTON/BROOME

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Average Annual Climate

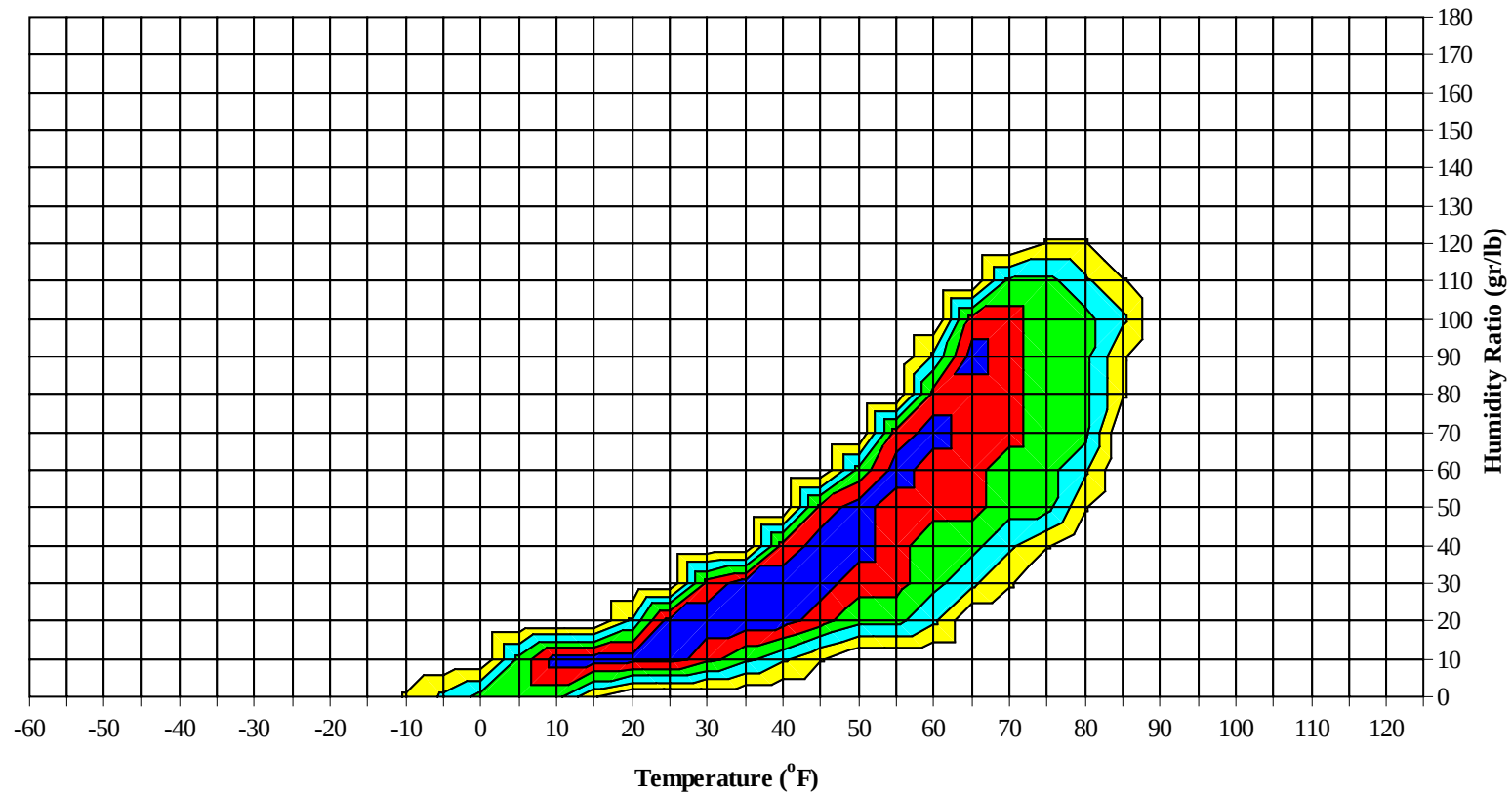


BINGHAMTON/BROOME

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Long Term Psychrometric Summary



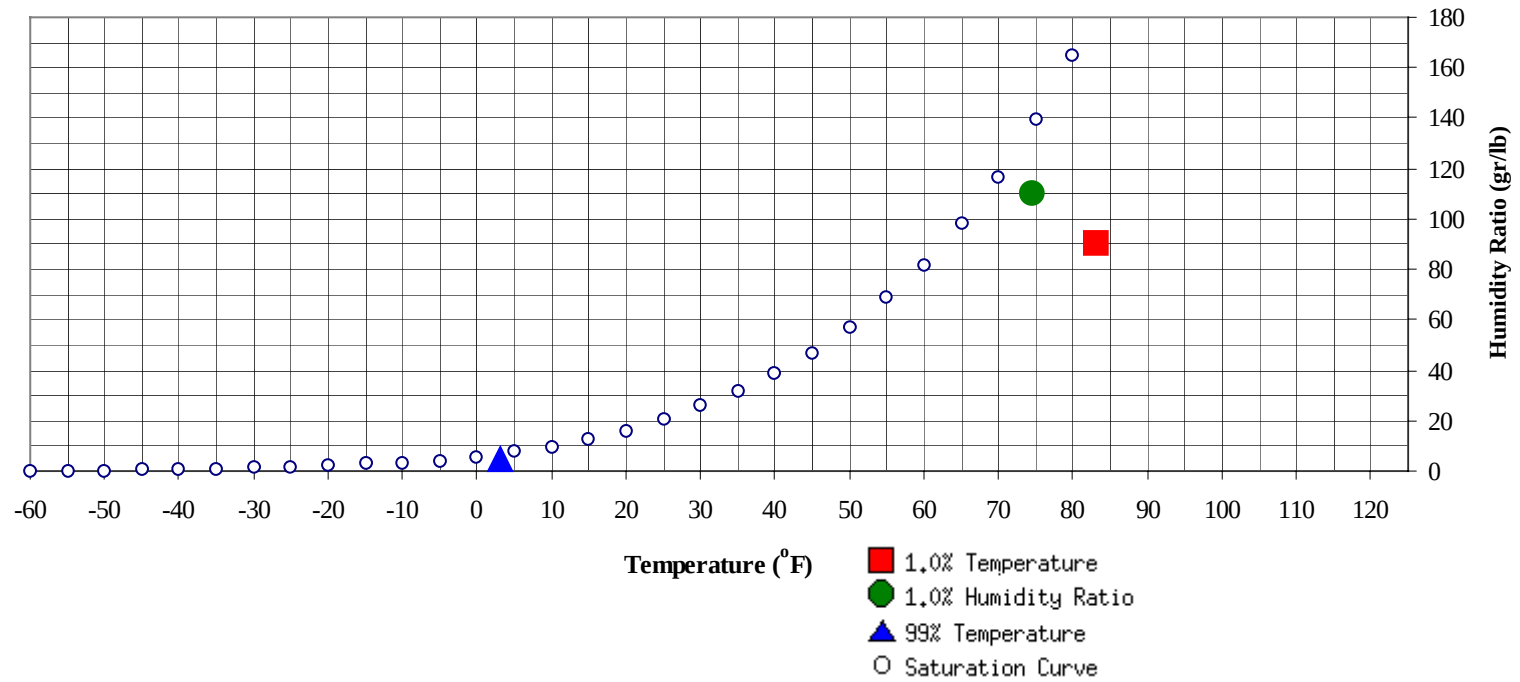
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

BINGHAMTON/BROOME

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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)
	3	4.6	1.4		109.9	74.5	70	68	35.1

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	83	90.2	69	34.1

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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												0		0	60.3
75 / 79												1	0	1	58.6
70 / 74												2	1	3	56.8
65 / 69												4	2	6	54.8
60 / 64		0	0	0	56.9		0	0	0	49.5	1	6	4	11	51.6
55 / 59	1	1	1	3	56.1		2	1	3	47.9	4	9	6	19	48.6
50 / 54	2	2	2	6	48.0	1	5	3	9	46.3	7	14	13	34	45.1
45 / 49	2	6	4	12	43.5	6	8	7	21	42.4	13	22	20	55	41.3
40 / 44	5	11	9	25	38.3	9	15	14	38	37.7	19	33	29	81	37.2
35 / 39	16	22	18	56	33.7	15	23	20	58	33.5	33	41	38	112	33.1
30 / 34	36	38	40	114	29.4	29	36	32	97	29.4	51	44	47	142	29.1
25 / 29	34	42	37	113	24.8	27	31	32	90	24.6	38	32	33	103	24.3
20 / 24	39	41	40	120	20.1	28	35	32	95	19.7	30	21	26	77	19.6
15 / 19	31	32	34	97	15.4	32	29	30	91	15.2	25	12	15	52	15.2
10 / 14	33	25	26	84	10.8	31	21	27	79	10.6	16	5	9	30	10.7
5 / 9	23	14	20	57	6.2	24	10	16	50	5.9	6	2	4	12	6.0
0 / 4	14	8	11	33	1.2	12	6	6	24	1.3	4	0	1	5	1.7
-5 / -1	6	2	3	11	-3.1	5	2	2	9	-3.2	1		0	1	-2.9
-10 / -6	5	2	2	9	-7.7	4	1	1	6	-7.4	0			0	-5.8
-15 / -11	3	0	0	3	-11.6	1	0	0	1	-12.2					
-20 / -16	0			0	-15.5	0			0	-15.5					

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.

BINGHAMTON/BROOME

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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															
90 / 94												0	0	0	68.3
85 / 89		0		0	63.4		2	0	2	67.3		7	1	8	70.4
80 / 84		3	1	4	61.9	0	11	3	14	64.7	0	21	6	27	67.7
75 / 79		4	2	6	60.0	0	19	8	27	62.5	2	39	19	61	65.0
70 / 74	0	8	5	13	57.0	2	29	17	48	60.0	11	56	39	106	62.7
65 / 69	2	13	9	24	54.5	13	32	28	73	57.5	43	52	58	153	60.6
60 / 64	7	20	14	41	51.9	29	42	40	111	54.5	63	36	53	153	57.3
55 / 59	14	26	21	61	48.6	43	41	44	127	51.1	54	17	36	107	53.1
50 / 54	18	34	31	83	44.7	51	38	44	132	47.2	40	9	19	68	49.0
45 / 49	31	37	38	106	41.1	50	21	35	106	43.3	20	2	6	28	44.5
40 / 44	45	37	43	125	37.8	37	9	20	66	38.8	6	0	2	8	40.1
35 / 39	45	28	33	106	33.3	19	3	7	29	34.1	1		0	1	36.3
30 / 34	43	20	26	89	29.3	6	1	1	8	30.5	0			0	32.5
25 / 29	24	6	12	42	24.6	0		0	0	24.2					
20 / 24	9	2	3	14	20.2										
15 / 19	2	1	1	4	15.6										
10 / 14	1	0	0	1	11.3										
5 / 9	0			0	8.5										
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															

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BINGHAMTON/BROOME

NY

WMO No. 725150

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		0		0	70.8										
90 / 94		2	1	3	70.9		1		1	73.4		0		0	74.0
85 / 89	0	16	4	20	71.1	0	10	2	12	72.0		2	0	2	70.6
80 / 84	1	43	15	59	68.8	0	29	9	38	69.4	0	7	2	9	68.7
75 / 79	5	64	38	107	66.4	2	56	28	86	66.6	1	17	6	24	66.6
70 / 74	34	61	64	159	64.7	23	66	58	147	64.8	6	36	18	60	64.0
65 / 69	72	37	67	176	62.3	66	49	68	183	62.5	20	45	36	100	61.5
60 / 64	76	18	41	135	58.7	76	25	53	154	58.8	41	52	50	142	57.5
55 / 59	42	5	15	62	54.1	51	9	23	83	54.4	50	44	53	146	53.4
50 / 54	16	1	3	20	49.7	23	2	6	31	49.9	52	26	43	121	49.2
45 / 49	2		0	2	46.0	7	0	2	9	45.4	40	9	22	71	44.6
40 / 44	0			0	43.3	1	0	0	1	41.2	20	2	8	30	40.3
35 / 39						0			0	37.5	10	0	2	12	36.0
30 / 34											2		0	2	31.7
25 / 29											0			0	26.4
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															

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BINGHAMTON/BROOME

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WMO No. 725150

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															
75 / 79	0	2	0	2	61.9		0		0	62.2					
70 / 74	0	9	1	10	60.3		1	0	1	60.4					
65 / 69	2	21	9	32	58.0	0	3	1	4	57.8	0			0	60.0
60 / 64	12	32	23	67	55.7	4	10	5	19	55.5	0	1	0	1	55.7
55 / 59	22	35	35	92	51.7	9	15	14	38	51.9	1	2	2	5	52.4
50 / 54	34	44	40	118	47.2	14	20	18	52	47.3	4	7	3	14	47.8
45 / 49	49	49	50	148	42.9	21	29	27	77	42.9	6	8	7	21	43.2
40 / 44	48	32	43	123	39.0	29	39	31	99	38.1	11	17	15	43	38.5
35 / 39	44	16	30	90	34.5	44	44	44	133	33.6	22	35	32	89	34.0
30 / 34	29	6	14	49	30.4	53	43	49	146	29.5	50	56	55	161	29.7
25 / 29	7	1	2	10	25.8	38	24	32	94	25.2	47	43	44	134	25.0
20 / 24	2		0	2	21.1	19	7	11	37	20.7	38	29	32	99	20.3
15 / 19	0			0	17.3	7	2	5	14	16.1	26	23	24	73	15.6
10 / 14						3	1	1	5	11.6	19	15	18	52	10.8
5 / 9						0	0	0	0	7.3	15	7	11	33	6.4
0 / 4						0			0	3.0	7	2	4	13	1.5
-5 / -1											3	1	1	5	-2.8
-10 / -6											1	0	0	1	-6.7
-15 / -11											0	0		0	-10.2
-20 / -16											0	0		0	

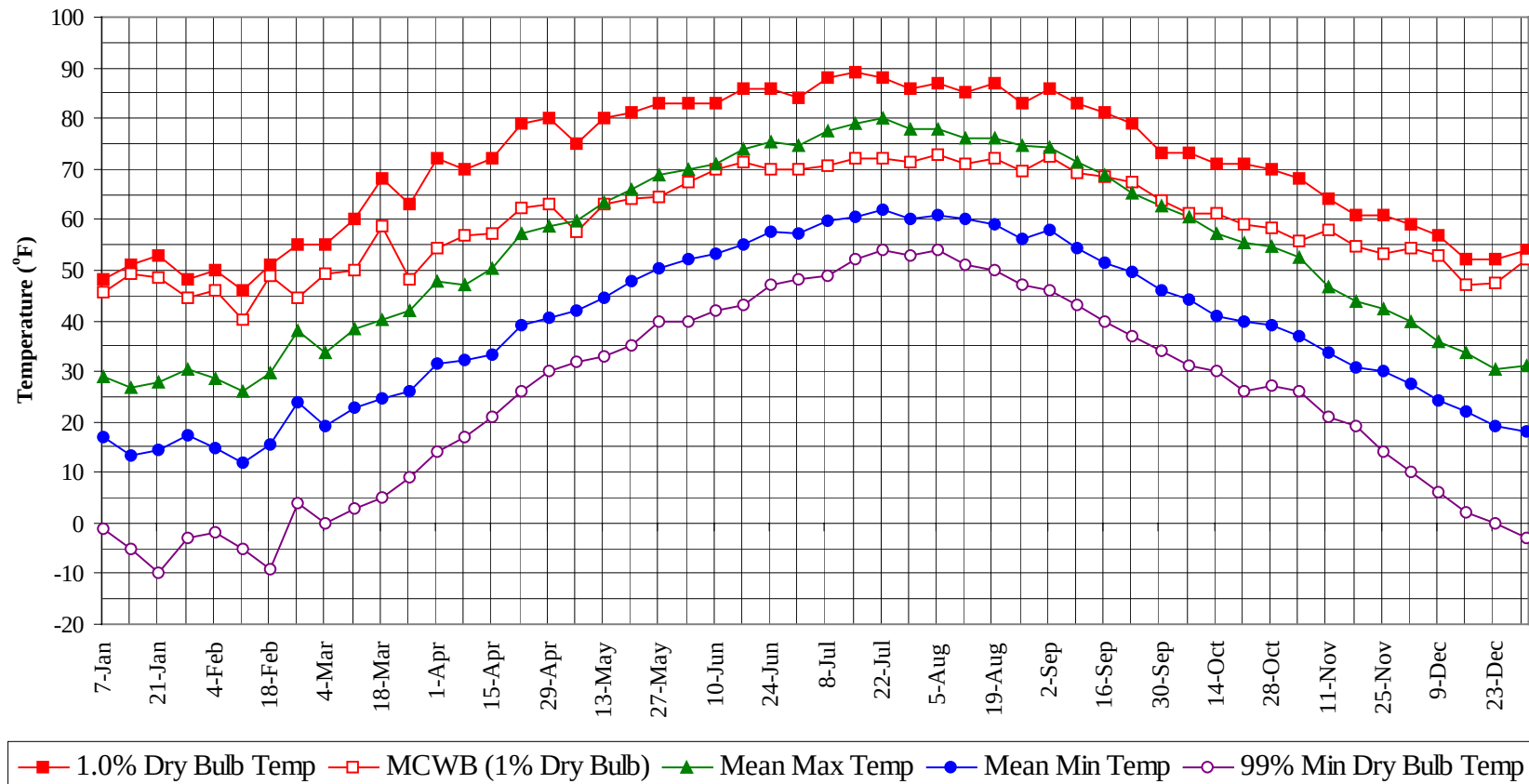
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BINGHAMTON/BROOME NY WMO No. 725150
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1973 to 1996

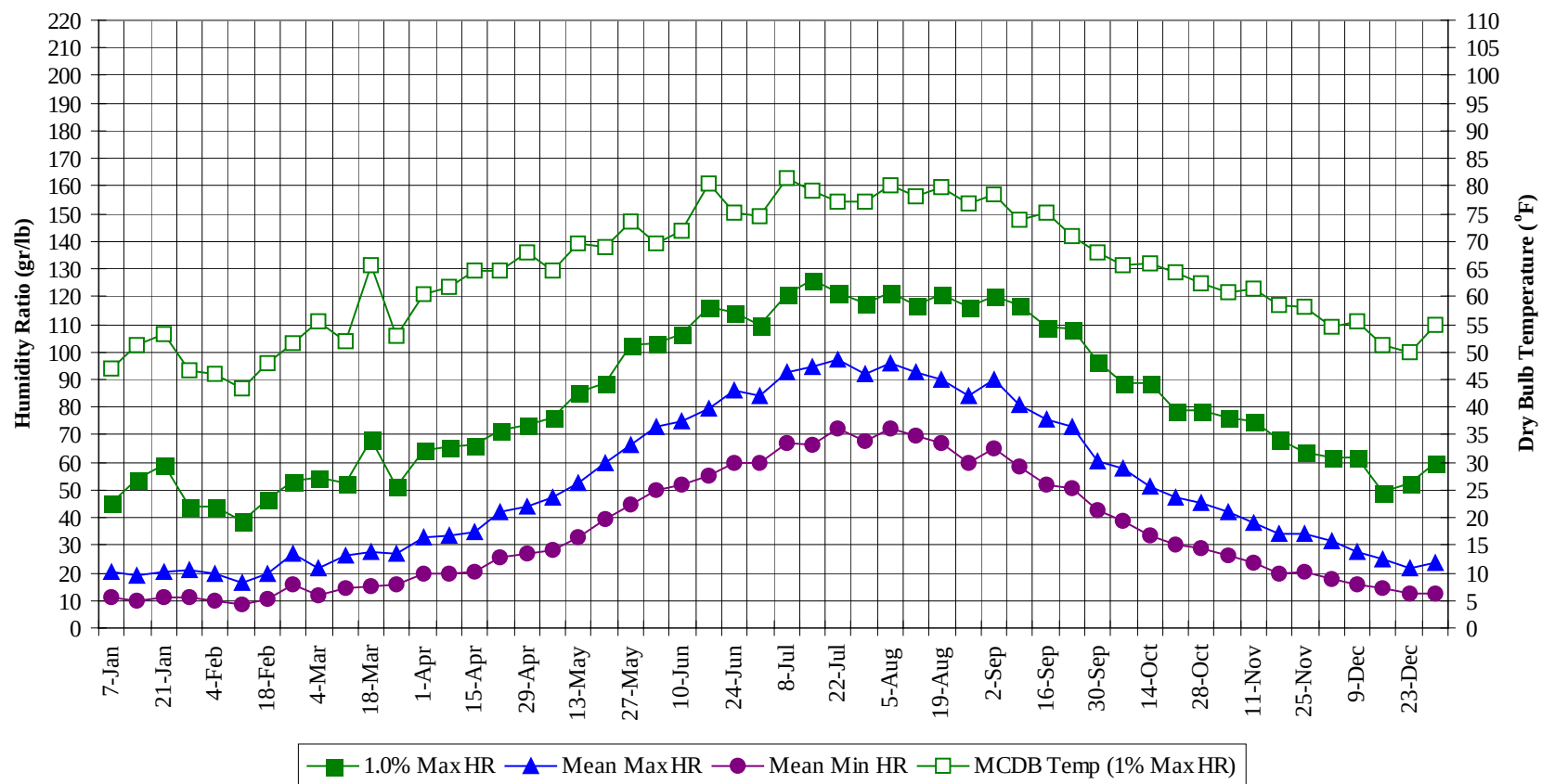
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
95 / 99		0		0	70.8
90 / 94		3	1	4	71.2
85 / 89	0	37	8	45	70.9
80 / 84	2	115	36	153	68.2
75 / 79	10	204	101	315	65.7
70 / 74	77	267	203	548	63.6
65 / 69	217	255	277	749	60.9
60 / 64	306	242	284	832	57.0
55 / 59	288	204	247	740	52.3
50 / 54	259	200	224	684	47.5
45 / 49	245	190	216	652	42.8
40 / 44	228	196	213	637	38.3
35 / 39	249	215	226	690	33.7
30 / 34	296	247	266	809	29.5
25 / 29	217	181	194	592	24.8
20 / 24	164	137	147	448	20.0
15 / 19	124	101	109	334	15.4
10 / 14	103	68	82	254	10.7
5 / 9	68	33	52	153	6.1
0 / 4	38	16	22	76	1.3
-5 / -1	15	4	7	26	-3.1
-10 / -6	10	2	3	15	-7.5
-15 / -11	4	1	0	5	-11.7
-20 / -16	0	0		0	-15.5

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



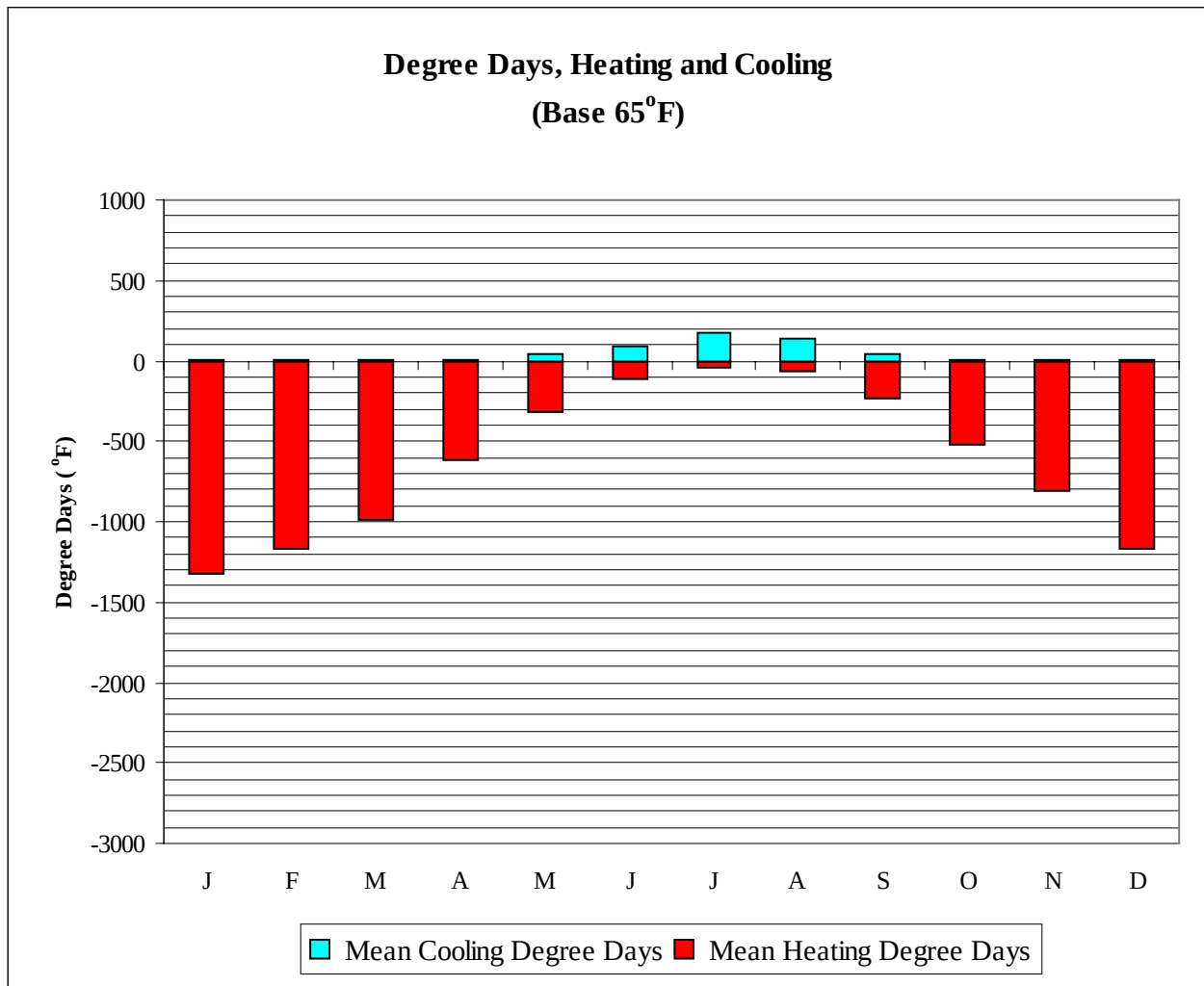
BINGHAMTON/BROOME**NY****WMO No. 725150****Long Term Dry Bulb Temperature and Humidity Summary**

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	48.0	45.8	28.9	16.8	-1.0	45.5	47.0	20.4	11.0
14-Jan	51.0	49.1	26.7	13.4	-5.0	53.9	51.3	19.2	9.6
21-Jan	53.0	48.5	27.7	14.3	-10.0	58.8	53.3	20.4	11.1
28-Jan	48.0	44.6	30.6	17.5	-3.0	44.1	46.8	21.3	11.2
4-Feb	50.0	46.0	28.7	15.0	-2.0	44.1	45.9	19.8	9.9
11-Feb	46.0	40.1	25.9	12.1	-5.0	38.5	43.3	16.4	8.5
18-Feb	51.0	49.0	29.8	15.6	-9.0	46.9	47.9	19.5	10.8
25-Feb	55.0	44.4	38.1	23.8	4.0	53.2	51.6	27.2	15.6
4-Mar	55.0	49.2	33.7	19.2	0.0	54.6	55.3	21.8	11.8
11-Mar	60.0	49.8	38.5	23.0	3.0	52.5	51.7	26.4	14.2
18-Mar	68.0	58.6	40.2	24.6	5.0	68.6	65.8	27.4	15.3
25-Mar	63.0	48.2	42.0	26.2	9.0	51.1	52.8	27.1	15.5
1-Apr	72.0	54.5	47.8	31.5	14.0	64.4	60.5	32.7	19.7
8-Apr	70.0	56.8	47.1	32.1	17.0	65.8	61.9	33.8	19.9
15-Apr	72.0	57.2	50.3	33.2	21.0	66.5	64.8	34.7	20.2
22-Apr	79.0	62.3	57.4	39.1	26.0	71.4	64.6	42.1	25.5
29-Apr	80.0	63.1	58.8	40.5	30.0	73.5	68.0	44.0	26.8
6-May	75.0	57.4	59.9	42.1	32.0	76.3	64.7	47.3	28.4
13-May	80.0	62.9	63.3	44.4	33.0	85.4	69.6	52.3	32.6
20-May	81.0	64.0	65.9	47.7	35.0	88.9	68.9	59.8	39.1
27-May	83.0	64.4	68.8	50.5	40.0	102.2	73.5	66.1	44.6
3-Jun	83.0	67.3	70.0	52.3	40.0	102.9	69.7	72.7	50.0
10-Jun	83.0	69.8	71.0	53.3	42.0	106.4	71.8	74.7	51.7
17-Jun	86.0	71.4	73.9	55.1	43.0	116.2	80.6	79.5	55.3
24-Jun	86.0	70.0	75.2	57.7	47.0	114.1	75.2	86.0	60.1
1-Jul	84.0	70.0	74.7	57.4	48.0	109.9	74.5	84.2	59.5
8-Jul	88.0	70.7	77.5	59.6	49.0	121.1	81.4	92.5	66.7
15-Jul	89.0	72.3	78.9	60.6	52.0	126.0	79.1	94.6	66.2
22-Jul	88.0	71.9	79.9	62.1	54.0	121.8	77.1	96.9	72.1
29-Jul	86.0	71.2	77.8	60.3	53.0	117.6	77.1	92.1	67.6
5-Aug	87.0	72.9	77.9	61.0	54.0	121.8	80.1	96.0	72.3
12-Aug	85.0	71.1	76.2	60.0	51.0	116.9	78.2	92.5	69.3
19-Aug	87.0	72.1	76.2	59.1	50.0	121.1	79.9	90.1	67.1
26-Aug	83.0	69.5	74.7	56.2	47.0	116.2	76.8	84.1	60.0
2-Sep	86.0	72.6	74.3	57.8	46.0	120.4	78.4	90.3	65.2
9-Sep	83.0	69.1	71.2	54.3	43.0	116.9	74.0	80.7	58.4
16-Sep	81.0	68.4	69.0	51.4	40.0	109.2	75.3	75.8	51.7
23-Sep	79.0	67.3	65.2	49.8	37.0	108.5	71.1	72.8	50.7
30-Sep	73.0	63.8	62.5	45.9	34.0	96.6	67.9	60.7	42.4
7-Oct	73.0	61.2	60.5	44.2	31.0	88.9	65.6	57.9	38.5
14-Oct	71.0	61.1	57.3	40.7	30.0	88.9	66.0	51.6	33.7
21-Oct	71.0	59.2	55.5	39.9	26.0	79.1	64.3	47.3	30.3
28-Oct	70.0	58.2	54.8	39.0	27.0	79.1	62.3	45.4	29.0
4-Nov	68.0	55.8	52.5	37.0	26.0	76.3	60.8	42.2	26.3
11-Nov	64.0	57.8	46.7	33.5	21.0	74.9	61.3	38.4	23.4
18-Nov	61.0	54.6	43.8	30.6	19.0	68.6	58.5	34.2	19.8
25-Nov	61.0	53.3	42.3	30.0	14.0	63.7	58.0	33.9	20.4
2-Dec	59.0	54.4	39.9	27.5	10.0	61.6	54.7	31.4	17.7
9-Dec	57.0	53.0	36.0	24.3	6.0	61.6	55.4	27.5	15.6
16-Dec	52.0	47.2	33.8	22.1	2.0	49.0	51.3	24.9	14.8
23-Dec	52.0	47.5	30.4	19.2	0.0	52.5	50.0	21.9	12.7
31-Dec	54.0	52.2	31.1	18.2	-3.0	59.5	54.8	23.4	12.6

BINGHAMTON/BROOME

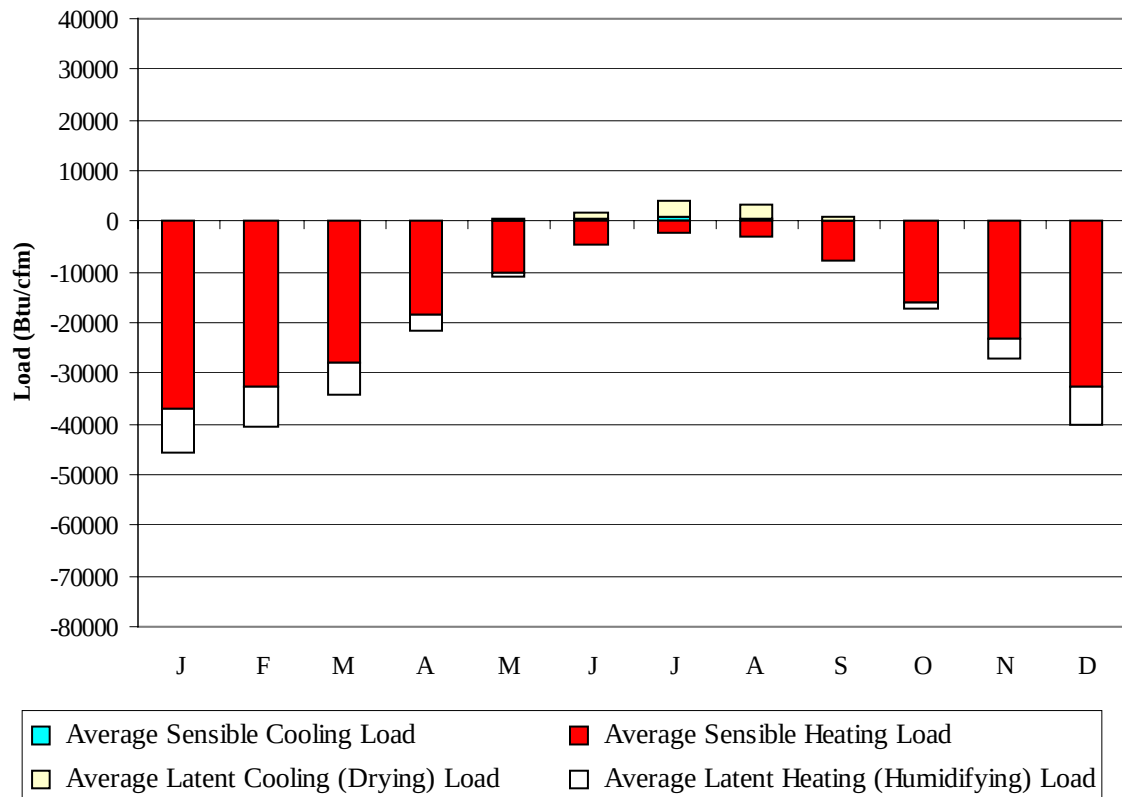
NY

WMO No. 725150



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1329
FEB	0	1168
MAR	2	989
APR	11	621
MAY	43	317
JUN	95	117
JUL	177	45
AUG	136	67
SEP	43	228
OCT	6	523
NOV	1	807
DEC	0	1171
ANN	514	7382

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	-36863	0	-8949
FEB	0	-32475	0	-8049
MAR	3	-28014	0	-6383
APR	40	-18303	0	-3354
MAY	163	-10201	228	-750
JUN	388	-4443	1247	-32
JUL	945	-2107	3164	0
AUG	568	-2860	2752	-4
SEP	129	-7771	924	-95
OCT	3	-15872	31	-1394
NOV	0	-23242	2	-3976
DEC	0	-32774	0	-7292
ANN	2239	-214925	8348	-40278

Average Annual Solar Radiation – Nearest Available Site

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

City: BINGHAMTON
 State: NY
 WBAN No: 4725
 Lat(N): 42.22
 Long(W): 75.98
 Elev(ft): 1637

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.597
 Vert Gap: 0.328

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	550	790	1110	1420	1680	1840	1830	1590	1240	870	530	430	1160
	Std Dev	42	62	81	117	150	139	120	77	104	69	45	33	26
	Minimum	480	690	970	1200	1390	1500	1590	1410	1020	750	450	380	1120
	Maximum	640	990	1260	1670	2010	2150	2090	1760	1400	1110	620	500	1210
	Diffuse	370	510	630	740	850	900	870	780	630	460	360	320	620
Clear Day	Global	830	1190	1680	2190	2520	2650	2560	2250	1800	1280	870	710	1710
NORTH	Global	200	280	360	440	540	610	590	480	370	270	200	170	380
	Diffuse	200	280	360	430	500	540	520	460	370	270	200	170	360
Clear Day	Global	170	230	310	420	570	690	630	470	340	250	170	150	370
EAST	Global	370	510	670	840	980	1030	1040	930	760	550	340	280	690
	Diffuse	250	340	440	520	590	630	630	560	450	330	240	200	430
Clear Day	Global	660	880	1140	1360	1480	1500	1470	1370	1170	910	680	580	1100
SOUTH	Global	790	910	980	910	830	800	840	920	980	960	680	610	850
	Diffuse	370	460	510	540	570	590	590	570	510	420	330	310	480
Clear Day	Global	1920	2020	1870	1500	1170	1020	1070	1330	1670	1890	1870	1810	1590
WEST	Global	360	500	690	830	940	1020	1030	940	760	570	350	280	690
	Diffuse	250	340	440	520	600	640	630	570	460	340	240	200	440
Clear Day	Global	660	880	1140	1360	1480	1500	1470	1370	1170	910	680	580	1100

Average Annual Solar Heat and Illumination – Nearest Available Site

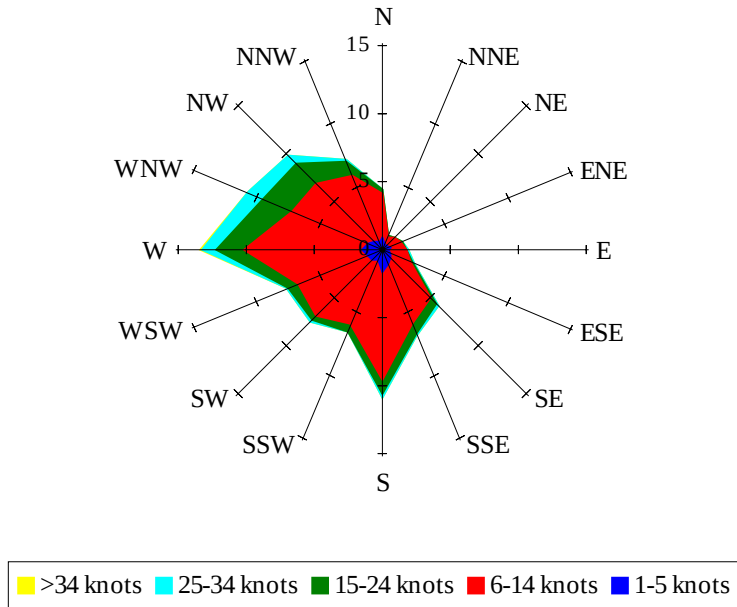
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 11		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	360	540	780	1010	1210	1320	1320	1140	880	600	350	280	820
NORTH	Unshaded	140	190	250	300	360	400	390	320	260	190	140	120	260
	Shaded	120	160	210	260	310	350	340	280	220	160	110	97	220
EAST	Unshaded	250	360	470	600	700	730	740	660	540	390	240	190	490
	Shaded	220	300	400	500	580	610	610	560	460	330	200	160	410
SOUTH	Unshaded	590	670	690	600	530	500	520	600	670	700	500	460	580
	Shaded	560	600	530	390	340	350	350	370	470	600	470	430	460
WEST	Unshaded	250	350	490	590	660	730	730	670	540	400	240	190	490
	Shaded	210	300	420	490	550	600	610	560	460	340	210	170	410

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	37	69	78	62	25	47	82	98	93	67
	M.Cloudy	22	42	47	38	16	29	52	66	64	45
NORTH	M.Clear	10	14	15	13	8	17	16	17	17	15
	M.Cloudy	9	16	17	14	7	13	17	19	19	15
EAST	M.Clear	72	56	15	13	8	77	71	31	17	15
	M.Cloudy	24	29	17	14	7	32	39	26	19	15
SOUTH	M.Clear	39	74	85	67	27	12	35	50	46	23
	M.Cloudy	16	35	40	31	12	11	25	36	33	19
WEST	M.Clear	10	14	22	65	63	12	16	17	51	77
	M.Cloudy	9	16	19	30	21	11	17	19	36	42
M.Clear	(% hrs)	22	21	20	21	24	34	30	22	22	26
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	27	63	80	74	46	11	35	41	24	0
	M.Cloudy	15	37	52	48	27	7	21	24	15	0
NORTH	M.Clear	8	14	16	15	11	5	9	10	7	0
	M.Cloudy	7	14	17	16	11	4	9	10	7	0
EAST	M.Clear	63	68	28	15	11	32	36	10	7	0
	M.Cloudy	19	31	22	16	11	9	15	10	7	0
SOUTH	M.Clear	21	57	76	70	39	29	74	83	55	1
	M.Cloudy	10	28	43	38	19	8	24	26	17	0
WEST	M.Clear	8	14	16	51	72	5	9	20	41	1
	M.Cloudy	7	14	17	31	30	4	9	12	14	0
M.Clear	(% hrs)	34	30	23	23	29	12	12	12	14	16

Wind Summary - December, January, and February

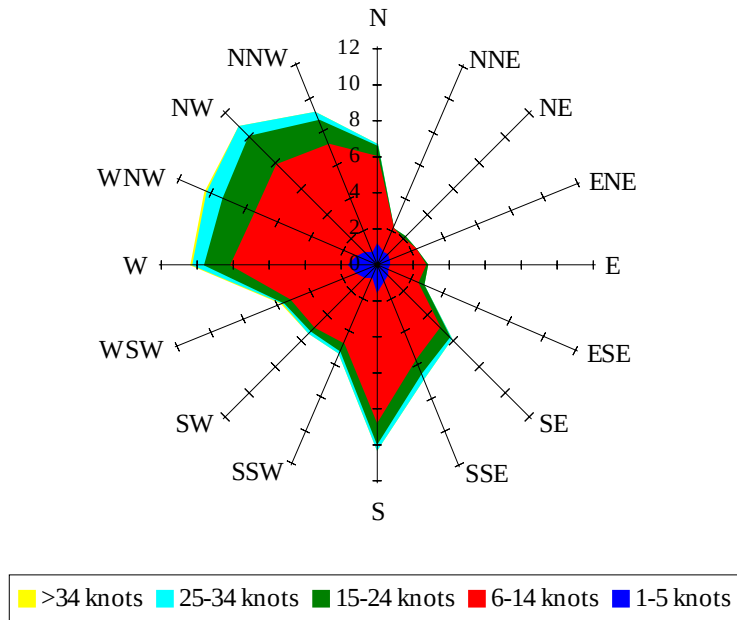
Labels of Percent Frequency on North Axis



Percent Calm = 1.68

Wind Summary - March, April, and May

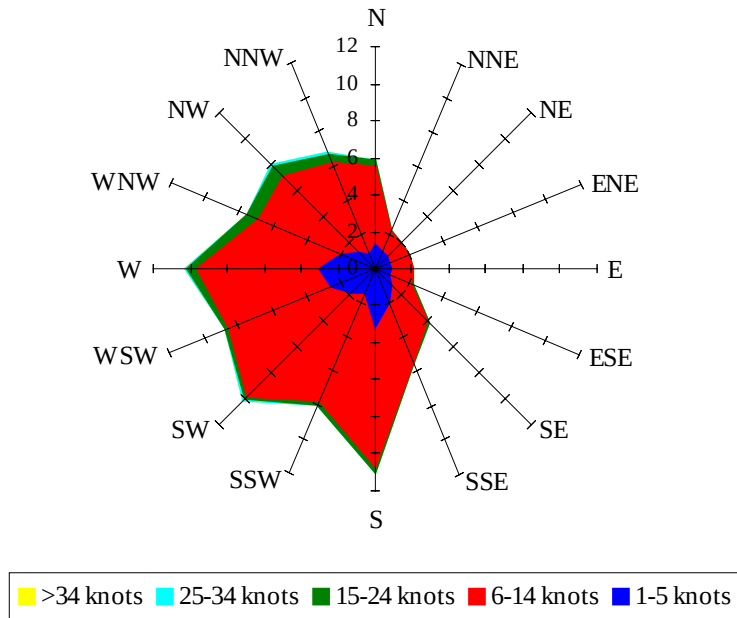
Labels of Percent Frequency on North Axis



Percent Calm = 1.86

Wind Summary - June, July, and August

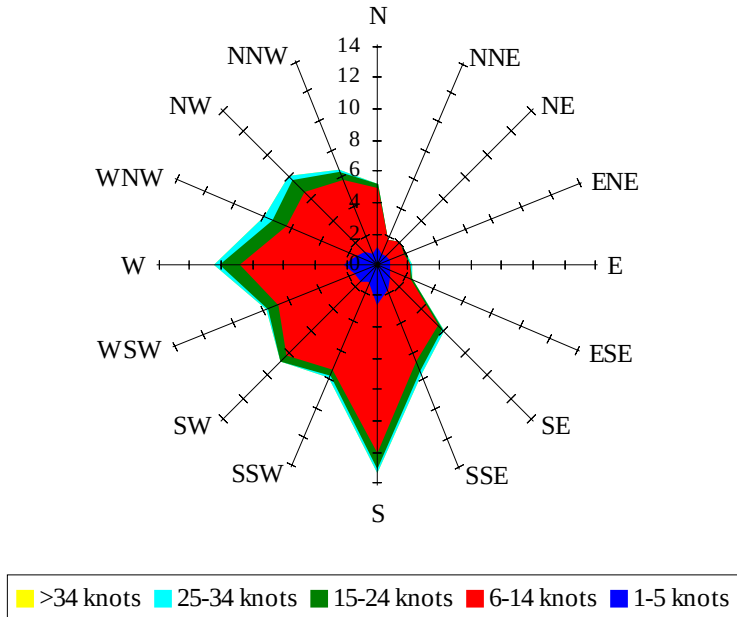
Labels of Percent Frequency on North Axis



Percent Calm = 3.56

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 2.30