

NASSAU BA

Latitude = 25.05 N

Longitude = 77.47 W

Period of Record = 1973 to 1996

WMO No. 780730

Elevation = 23 feet

Average Pressure = 29.97 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	92	79	127	10.1	SE
0.4% Occurrence	91	78	127	10.5	SE
1.0% Occurrence	90	78	127	10.5	SE
2.0% Occurrence	89	78	127	10.6	ESE
Mean Daily Range	12	-	-	-	-
97.5% Occurrence	63	59	68	5.9	E
99.0% Occurrence	59	56	61	3.7	WNW
99.6% Occurrence	55	53	55	2.6	NNW
Median of Extreme Lows	48	47	47	0.2	VARIABLE
	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	83	88	157	9.7	SSE
0.4% Occurrence	81	87	146	9.8	ESE
1.0% Occurrence	80	86	141	9.4	ESE
2.0% Occurrence	80	86	141	9.4	ESE
	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	171	83	0.89	17.8	ESE
0.4% Occurrence	150	83	0.99	7.5	E
1.0% Occurrence	149	83	0.99	7.4	E
2.0% Occurrence	142	82	0.94	8.4	SSE
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		3	3125	4342	6883

Other Site Data

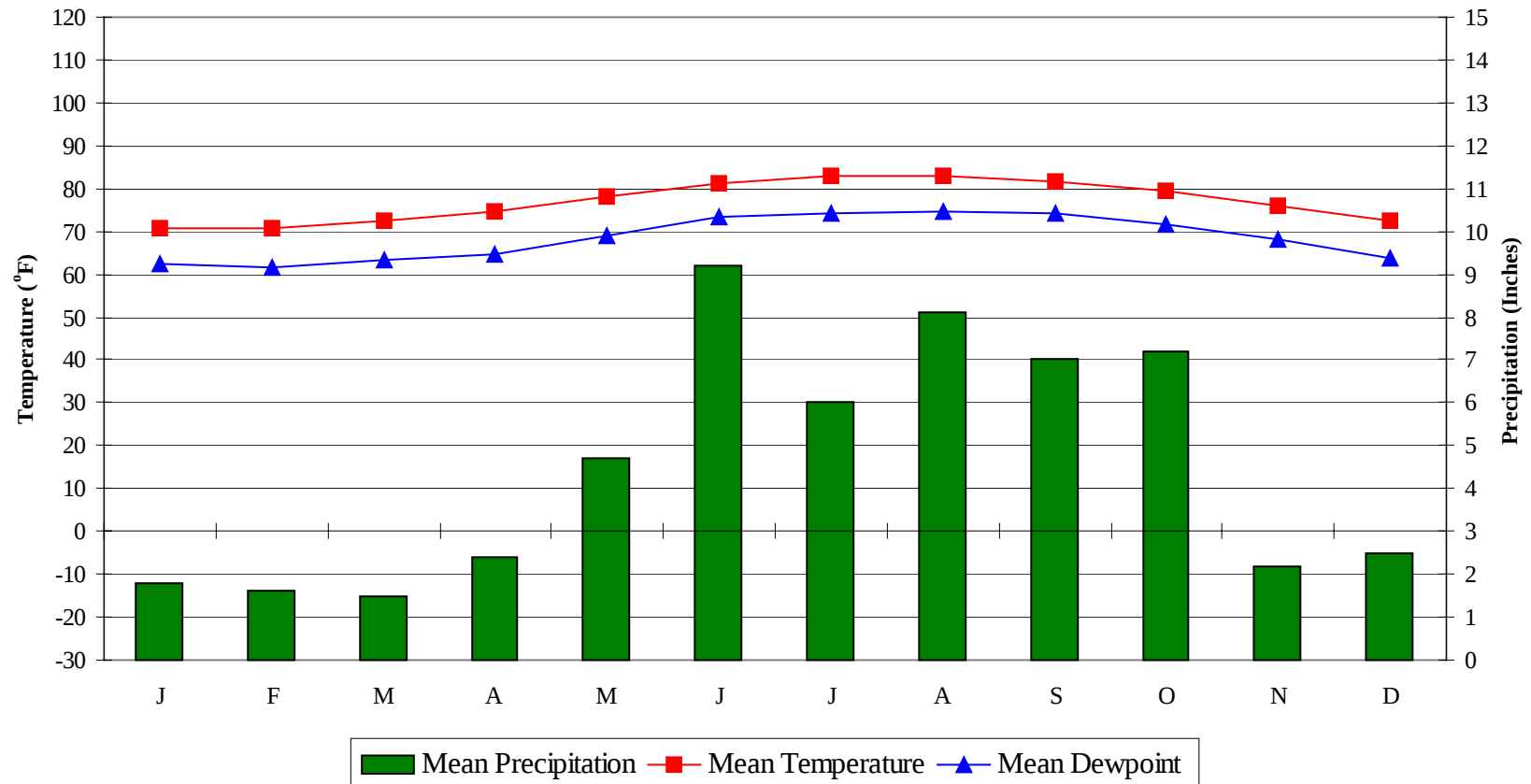
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
10	N/A	N/A	12.9 + 2.9
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
79.4	N/A	N/A	0

*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

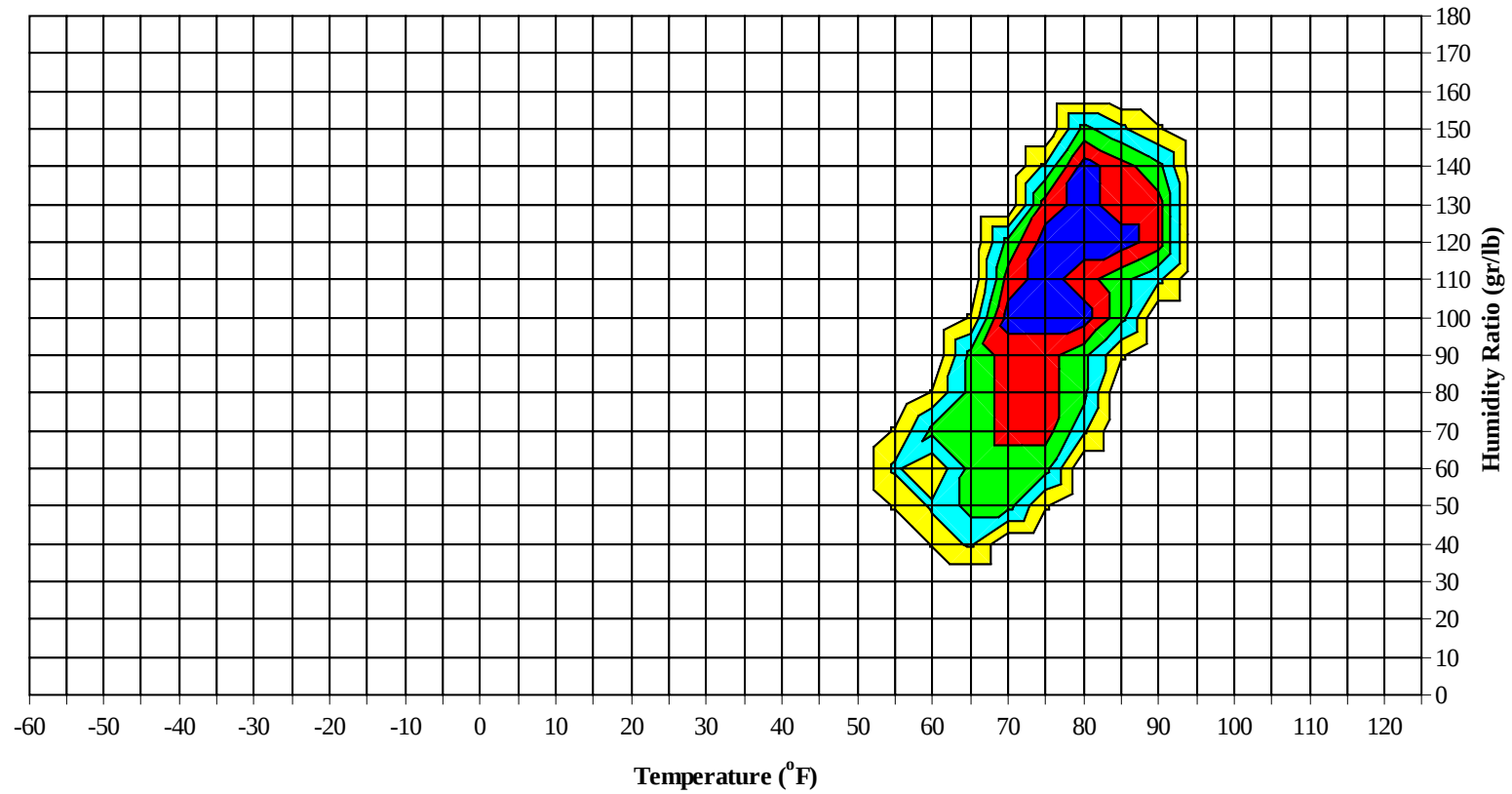


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Long Term Psychrometric Summary

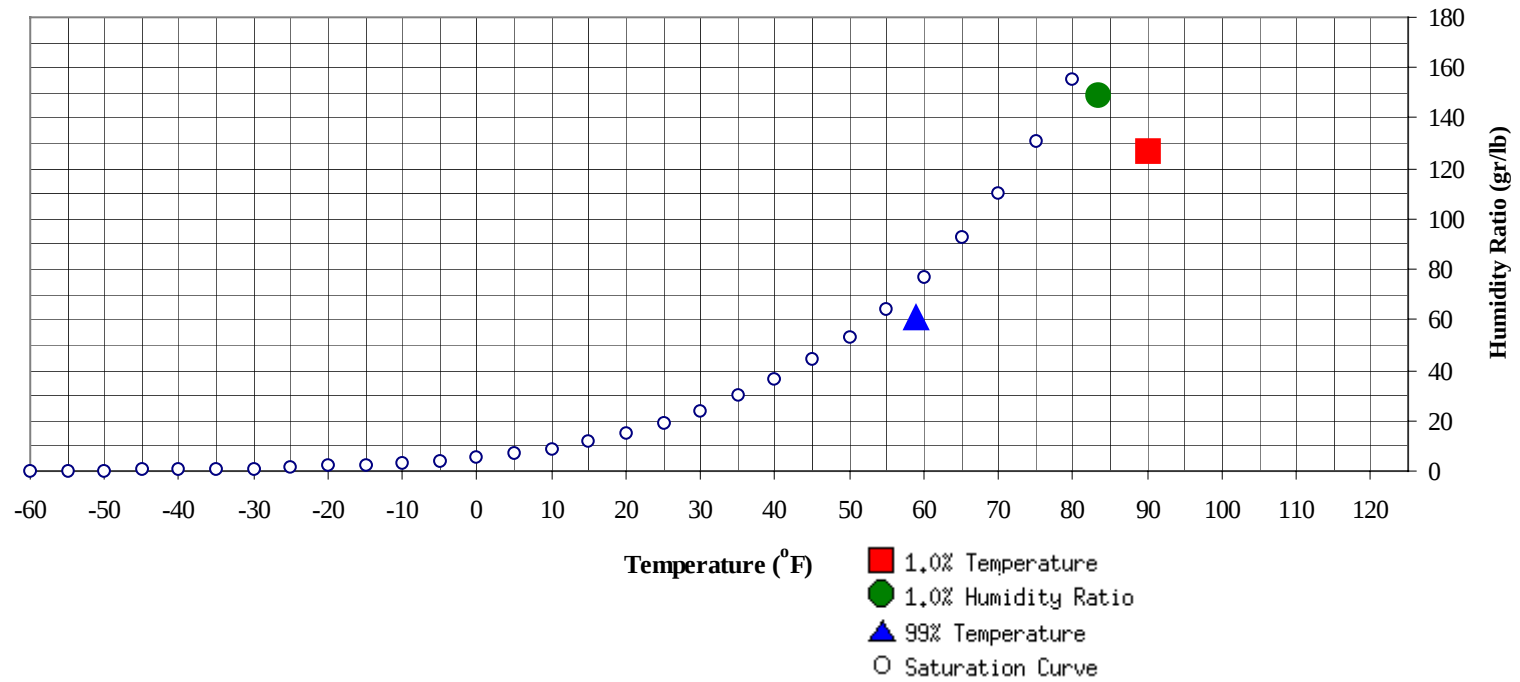


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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Psychrometric Summary of Peak Design Values



	(°F)	MCHR	Enthalpy	1.0% Humidity Ratio	(gr/lb)	MCDB	MCWB	MC Dewpt	Enthalpy
		(gr/lb)	(btu/lb)			(°F)	(°F)	(°F)	(btu/lb)
99% Dry Bulb	59	61.1	23.6	Ratio	149.1	83.4	80	78.8	43.4

		MCHR	MCWB	Enthalpy
	(°F)	(gr/lb)	(°F)	(btu/lb)
1.0% Dry Bulb	90	127.2	78.4	41.6

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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		0	0	0	73.0		0		0	74.6		0		0	76.0
80 / 84	0	36	1	37	72.7	0	35	2	37	72.4	0	62	6	69	71.9
75 / 79	12	114	37	163	70.0	11	98	37	146	69.7	25	124	63	212	69.3
70 / 74	103	71	119	294	67.0	90	66	100	257	66.6	115	50	126	291	66.6
65 / 69	57	20	49	126	62.2	53	18	44	115	61.8	60	7	37	104	62.2
60 / 64	48	7	32	87	58.3	45	6	31	82	57.9	36	2	14	52	58.9
55 / 59	20	1	8	29	54.5	17	1	8	26	54.3	10	0	2	12	54.8
50 / 54	6	0	1	7	50.5	7		1	8	51.4	1		0	1	50.9
45 / 49	1			1	46.5	1		0	1	47.6	0			0	45.0

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.

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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	74.3		2		2	76.6	0	20	0	20	78.0
85 / 89		9	0	9	74.3	0	40	2	42	75.3	2	108	16	127	77.1
80 / 84	3	96	14	113	71.8	22	159	55	236	73.5	81	90	129	301	76.1
75 / 79	57	117	95	268	69.4	126	44	146	316	71.9	130	19	87	236	74.3
70 / 74	121	18	112	250	66.7	85	4	43	131	68.7	26	3	7	36	71.1
65 / 69	38	1	15	55	62.7	11	0	2	13	64.9	1		0	1	65.6
60 / 64	19		4	23	60.1	3		0	3	61.1	0		0	0	60.4
55 / 59	2		0	2	56.0	1			1	56.8					
50 / 54	0			0	50.5										
45 / 49															

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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	80.0					
90 / 94		50	3	53	78.4	0	57	3	60	78.8		30	0	30	78.6
85 / 89	11	144	37	191	77.6	10	131	33	175	78.0	5	130	16	151	77.8
80 / 84	121	42	163	326	76.8	121	45	159	324	77.1	85	67	145	297	76.7
75 / 79	107	11	43	161	75.0	109	14	51	173	75.5	131	12	75	218	75.1
70 / 74	9	1	3	13	71.7	9	1	2	12	72.1	19	1	4	24	71.9
65 / 69		0	0	0	68.0						0			0	68.0
60 / 64															
55 / 59															
50 / 54															
45 / 49															

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.

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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		6		6	77.9	0	0		0	74.5					
85 / 89	0	69	3	72	77.1	0	9	0	9	76.2	0	0		0	75.7
80 / 84	35	139	76	250	75.1	3	127	13	143	74.0	0	55	2	57	73.0
75 / 79	154	30	146	330	72.9	102	90	140	331	71.6	25	126	61	212	70.3
70 / 74	50	4	22	76	70.1	102	14	75	191	67.8	121	53	124	299	67.0
65 / 69	9		1	10	66.3	21	1	9	31	64.4	51	11	36	98	62.4
60 / 64	0		0	0	63.2	10		3	13	61.4	36	3	20	58	58.6
55 / 59						2			2	57.3	12	0	4	16	55.4
50 / 54											3	0	1	4	50.9
45 / 49											0			0	48.0

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.

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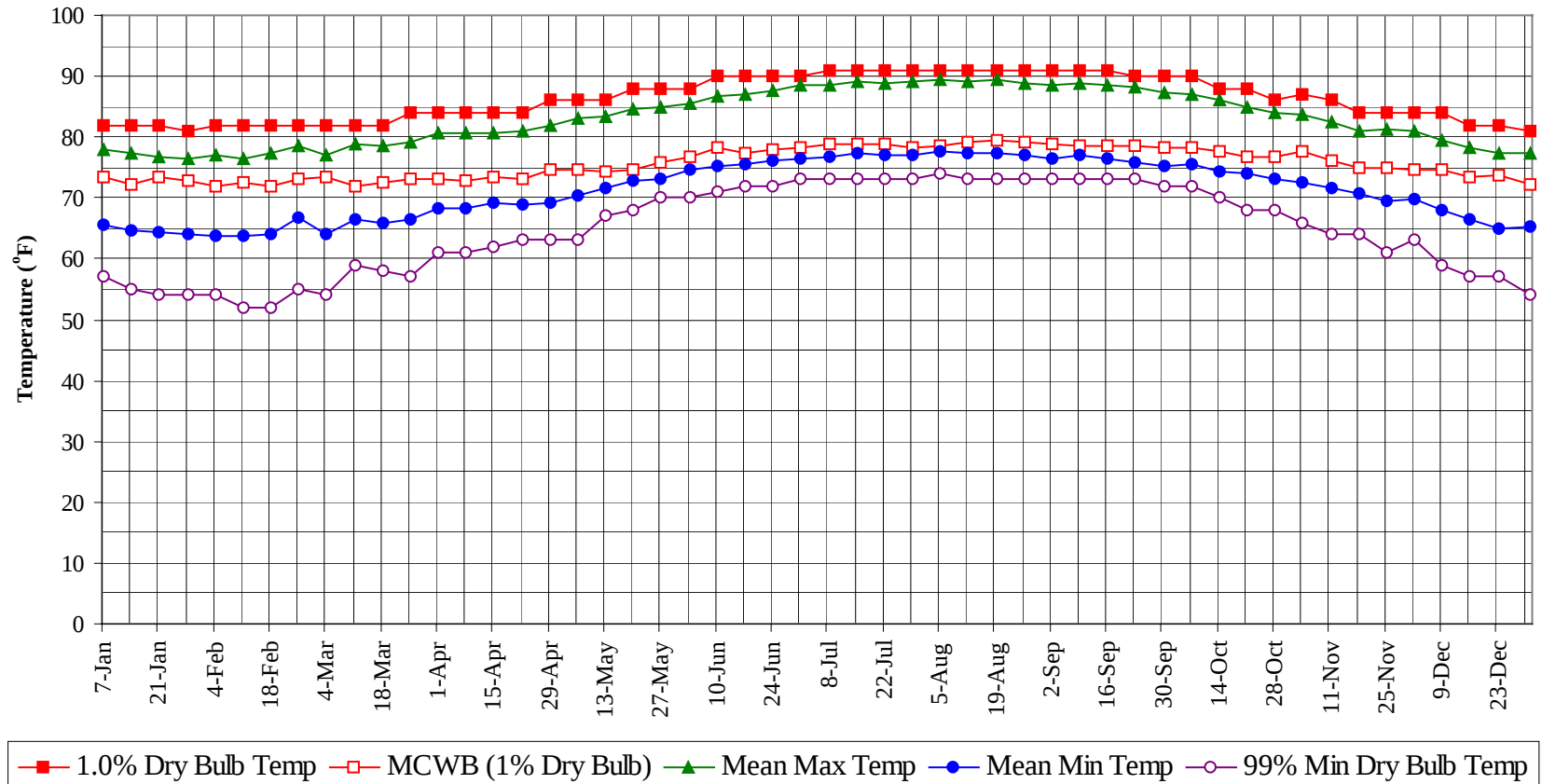
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

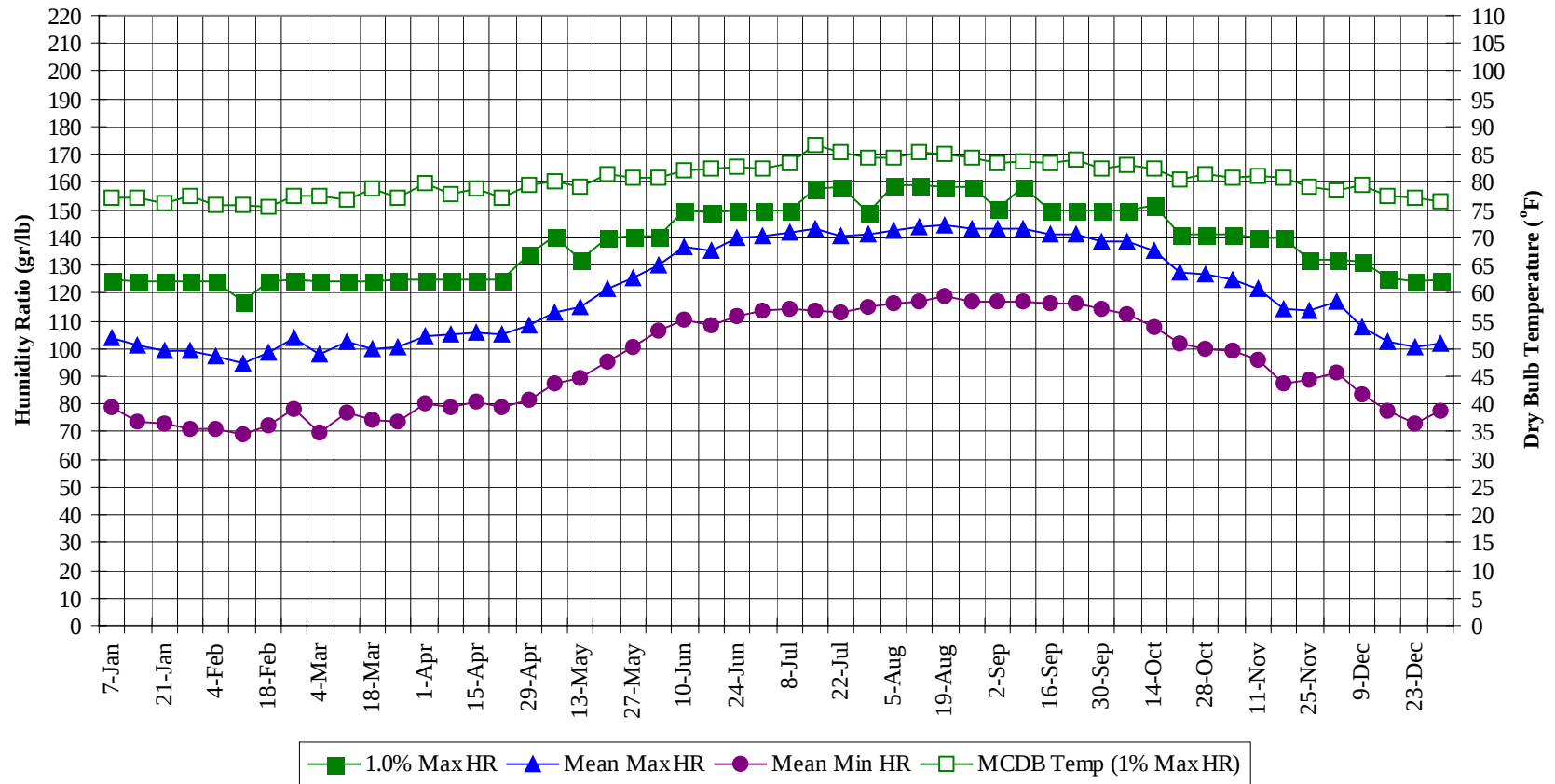
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
95 / 99		0		0	80.0
90 / 94	0	166	7	173	78.5
85 / 89	29	641	107	777	77.4
80 / 84	476	950	761	2187	75.4
75 / 79	987	797	973	2758	72.1
70 / 74	843	287	743	1873	67.4
65 / 69	303	56	195	554	62.4
60 / 64	199	19	108	326	58.7
55 / 59	64	3	22	89	54.8
50 / 54	17	1	3	21	50.9
45 / 49	2		0	2	47.1

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.

Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary

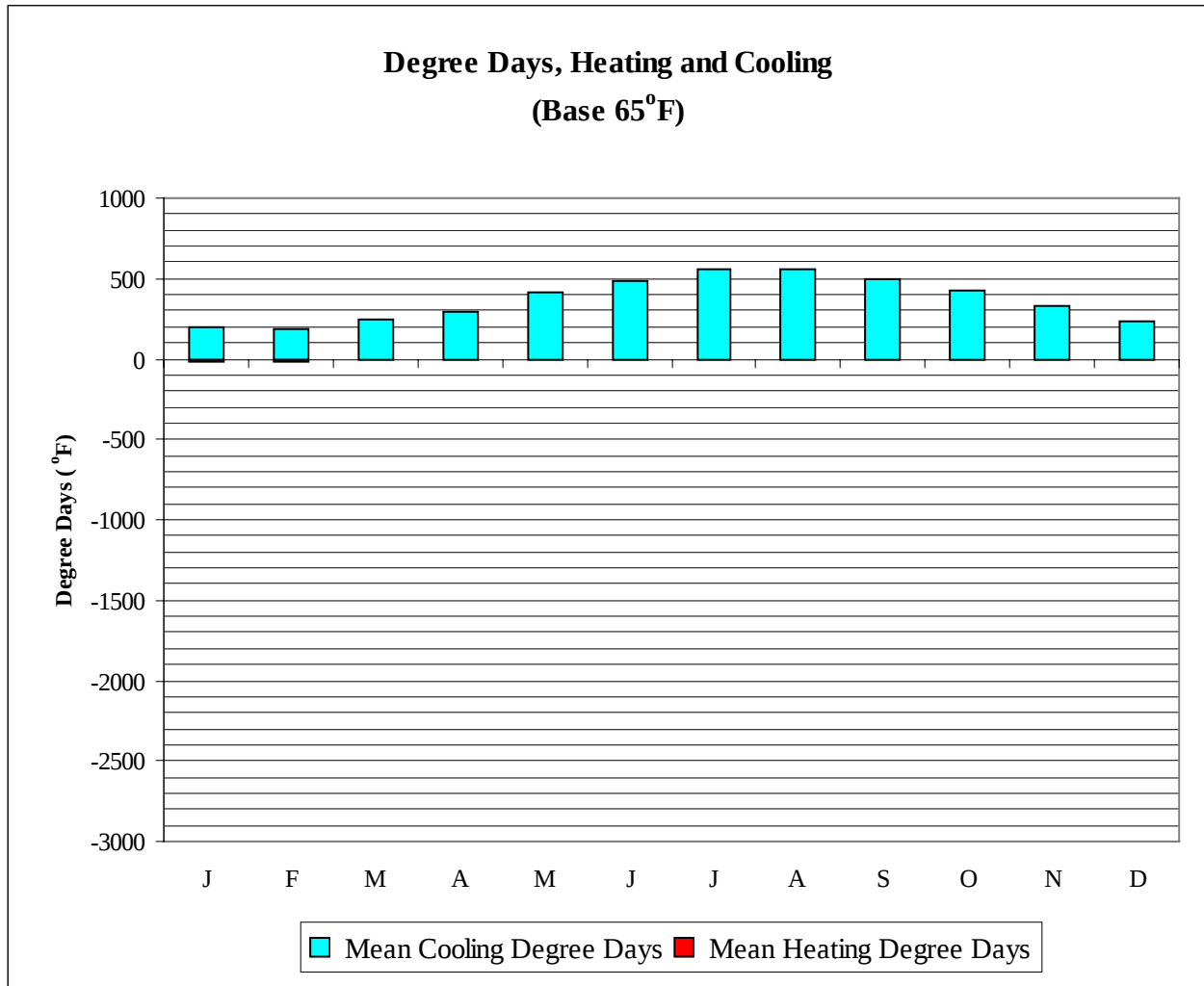


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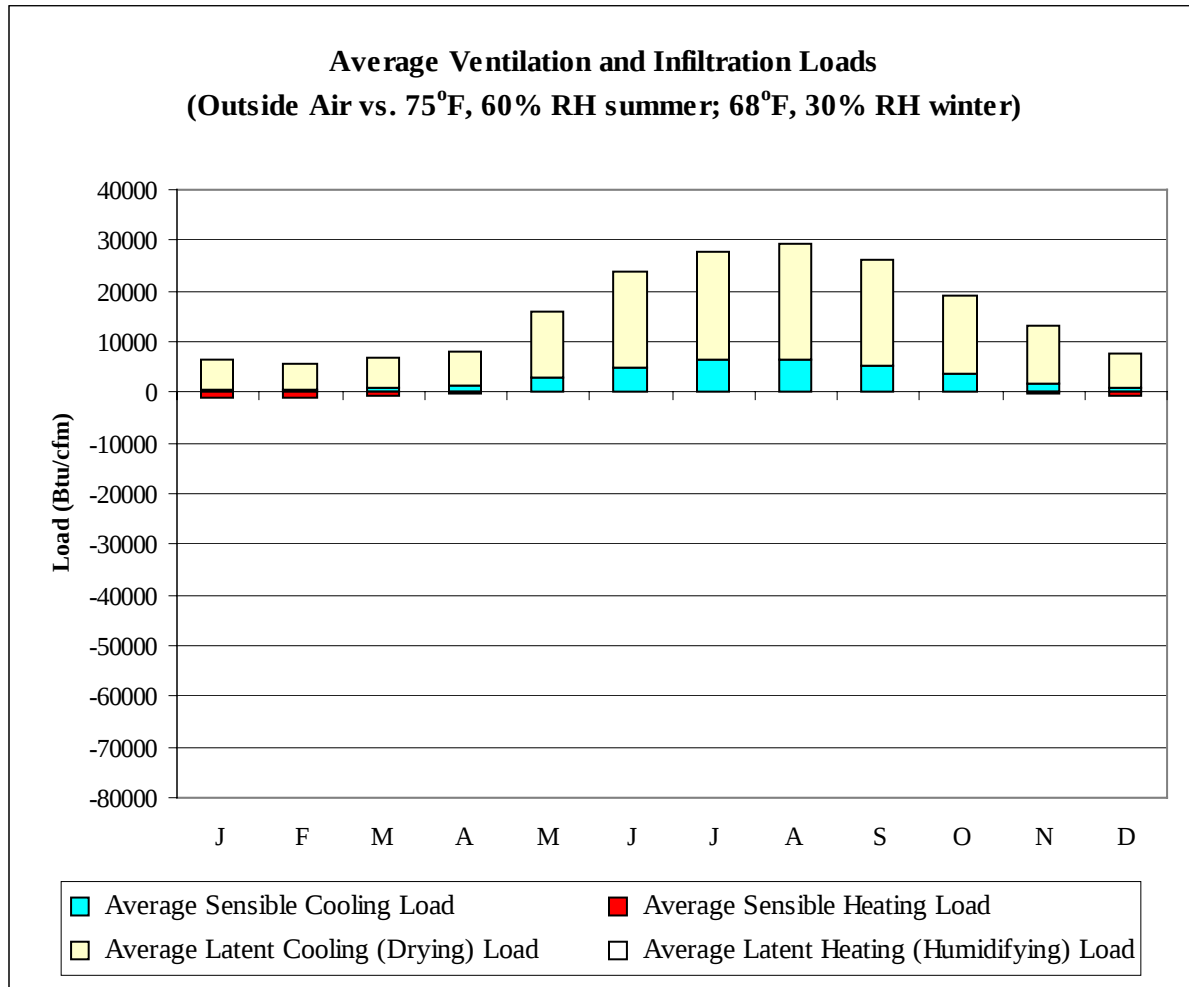
WMO No. 780730

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	82.0	73.4	78.0	65.7	57.0	124.6	77.0	104.0	78.7
14-Jan	82.0	72.4	77.3	64.6	55.0	123.9	77.2	101.3	73.4
21-Jan	82.0	73.4	76.7	64.4	54.0	123.9	76.2	99.1	73.1
28-Jan	81.0	72.7	76.5	64.0	54.0	123.9	77.4	99.0	71.2
4-Feb	82.0	72.0	77.1	63.7	54.0	123.9	75.9	97.0	70.9
11-Feb	82.0	72.6	76.3	63.6	52.0	116.9	75.8	94.8	68.6
18-Feb	82.0	72.0	77.2	64.1	52.0	123.9	75.4	98.3	72.2
25-Feb	82.0	73.3	78.4	66.6	55.0	124.6	77.4	103.5	78.0
4-Mar	82.0	73.4	77.2	64.2	54.0	123.9	77.5	97.6	69.6
11-Mar	82.0	72.0	78.7	66.4	59.0	123.9	77.0	102.6	76.8
18-Mar	82.0	72.6	78.5	65.9	58.0	123.9	78.9	100.0	74.3
25-Mar	84.0	73.1	79.2	66.5	57.0	124.6	77.2	100.3	73.8
1-Apr	84.0	73.2	80.7	68.1	61.0	124.6	79.7	104.6	80.4
8-Apr	84.0	72.9	80.7	68.2	61.0	124.6	77.9	104.9	79.0
15-Apr	84.0	73.6	80.8	69.1	62.0	124.6	78.8	106.0	80.7
22-Apr	84.0	73.0	81.0	68.9	63.0	124.6	77.1	105.2	78.9
29-Apr	86.0	74.7	81.9	69.0	63.0	133.7	79.6	108.1	81.5
6-May	86.0	74.6	83.0	70.4	63.0	140.7	80.1	112.7	87.5
13-May	86.0	74.5	83.4	71.7	67.0	132.3	79.3	115.1	89.5
20-May	88.0	74.7	84.5	72.9	68.0	140.0	81.5	121.2	95.3
27-May	88.0	76.0	84.9	73.2	70.0	140.7	80.7	125.5	100.4
3-Jun	88.0	76.8	85.6	74.5	70.0	140.7	80.7	130.4	106.1
10-Jun	90.0	78.3	86.7	75.1	71.0	149.8	82.0	136.9	110.1
17-Jun	90.0	77.3	87.0	75.5	72.0	149.1	82.5	135.0	108.1
24-Jun	90.0	78.0	87.5	76.1	72.0	149.8	82.6	140.2	112.0
1-Jul	90.0	78.2	88.4	76.3	73.0	149.8	82.5	140.4	113.9
8-Jul	91.0	78.7	88.6	76.9	73.0	149.8	83.4	141.9	114.3
15-Jul	91.0	78.8	89.0	77.2	73.0	157.5	86.7	143.1	113.8
22-Jul	91.0	78.9	88.8	77.0	73.0	158.2	85.2	140.6	112.8
29-Jul	91.0	78.3	89.0	76.9	73.0	149.1	84.3	141.0	114.7
5-Aug	91.0	78.5	89.4	77.6	74.0	158.9	84.4	142.4	116.1
12-Aug	91.0	79.2	89.2	77.3	73.0	158.9	85.4	143.9	117.1
19-Aug	91.0	79.5	89.3	77.2	73.0	158.2	85.2	144.3	119.2
26-Aug	91.0	79.2	88.8	77.0	73.0	158.2	84.3	143.4	117.0
2-Sep	91.0	78.8	88.6	76.5	73.0	150.5	83.3	142.9	117.1
9-Sep	91.0	78.7	88.9	76.9	73.0	158.2	83.8	143.1	117.1
16-Sep	91.0	78.4	88.6	76.4	73.0	149.8	83.3	141.3	116.2
23-Sep	90.0	78.5	88.2	75.8	73.0	149.8	84.2	141.1	116.1
30-Sep	90.0	78.4	87.3	75.2	72.0	149.8	82.3	138.3	114.3
7-Oct	90.0	78.4	86.9	75.4	72.0	149.8	83.0	138.3	112.4
14-Oct	88.0	77.5	86.1	74.3	70.0	151.9	82.3	135.4	107.5
21-Oct	88.0	76.7	84.8	74.0	68.0	141.4	80.5	127.2	102.0
28-Oct	86.0	76.8	84.0	73.1	68.0	141.4	81.3	126.8	100.1
4-Nov	87.0	77.7	83.6	72.5	66.0	141.4	80.7	124.5	98.9
11-Nov	86.0	76.2	82.6	71.5	64.0	140.0	81.2	121.7	95.8
18-Nov	84.0	75.0	81.0	70.6	64.0	140.0	80.7	114.2	87.6
25-Nov	84.0	74.9	81.1	69.5	61.0	132.3	79.2	113.7	88.7
2-Dec	84.0	74.8	81.0	69.8	63.0	132.3	78.5	116.6	91.1
9-Dec	84.0	74.8	79.5	68.1	59.0	131.6	79.5	108.0	83.3
16-Dec	82.0	73.5	78.4	66.4	57.0	125.3	77.5	102.4	77.3
23-Dec	82.0	73.6	77.3	65.1	57.0	123.9	77.2	100.7	72.7
31-Dec	81.0	72.3	77.5	65.4	54.0	124.6	76.5	102.1	77.5



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	197	19
FEB	180	19
MAR	241	8
APR	291	2
MAY	408	0
JUN	484	0
JUL	552	0
AUG	551	0
SEP	500	0
OCT	424	0
NOV	332	1
DEC	236	10
ANN	4396	59



	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	511	-1013	5964	0
FEB	496	-977	4975	0
MAR	843	-507	5923	0
APR	1382	-169	6634	0
MAY	3044	-28	12848	0
JUN	4890	-10	18940	0
JUL	6325	0	21443	0
AUG	6280	0	23082	0
SEP	5296	0	21040	0
OCT	3575	-7	15682	0
NOV	1802	-101	11340	0
DEC	739	-593	6920	0
ANN	35183	-3405	154791	0

Average Annual Solar Radiation – Nearest Available Site
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

No Solar Radiation
Data Available

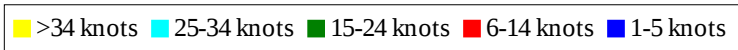
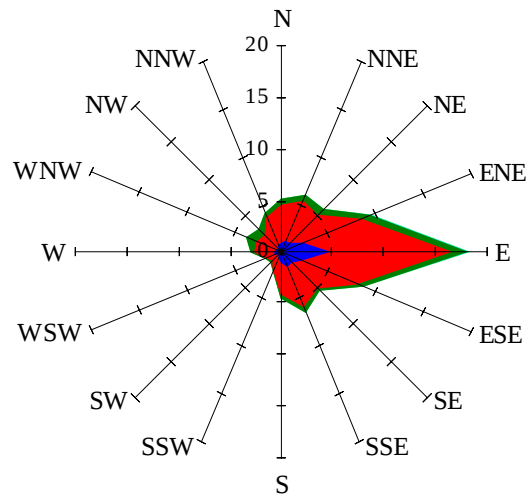


Average Annual Solar Heat and Illumination – Nearest Available Site

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

Wind Summary - December, January, and February

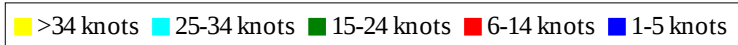
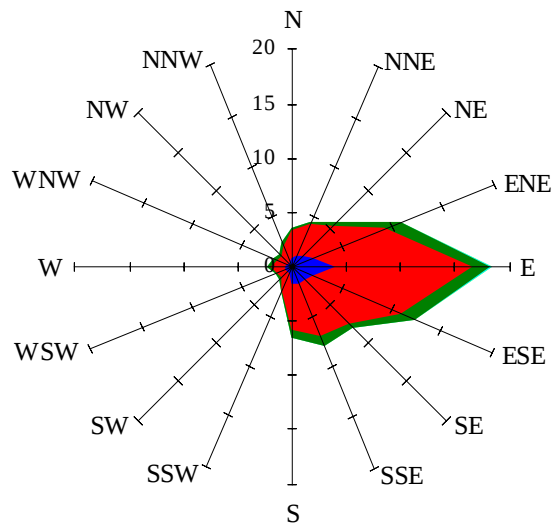
Labels of Percent Frequency on North Axis



Percent Calm = 12.57

Wind Summary - March, April, and May

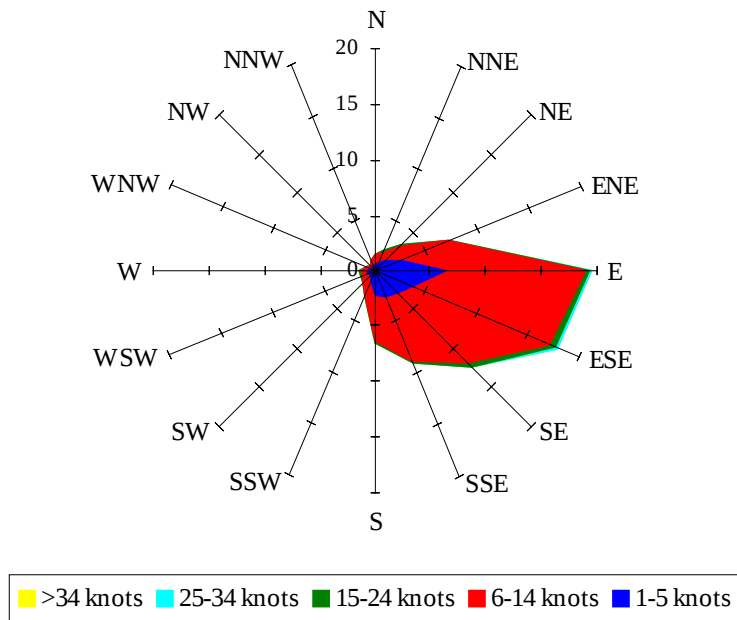
Labels of Percent Frequency on North Axis



Percent Calm = 9.72

Wind Summary - June, July, and August

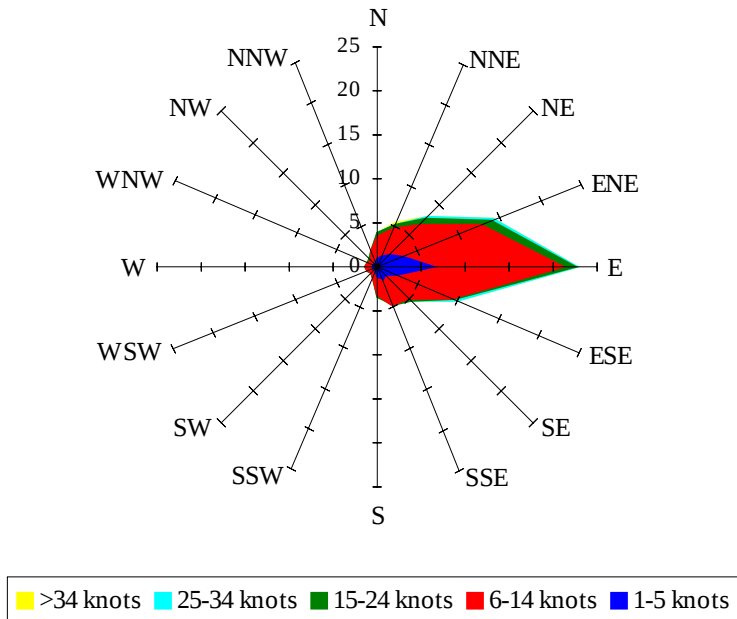
Labels of Percent Frequency on North Axis



Percent Calm = 12.47

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 13.60