

SALEM/MCNARY	OR	
Latitude = 44.92 N		WMO No. 726940
Longitude = 123.00 W		Elevation = 200 feet
Period of Record = 1973 to 1996		Average Pressure = 29.81 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	100	70	63	9.9	N
0.4% Occurrence	92	67	61	9.7	N
1.0% Occurrence	88	66	60	9.5	N
2.0% Occurrence	84	65	60	9.0	N
Mean Daily Range	20	-	-	-	-
97.5% Occurrence	29	28	19	3.8	S
99.0% Occurrence	25	24	15	3.9	N
99.6% Occurrence	20	18	11	5.5	N
Median of Extreme Lows	16	14	8	5.7	N
	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	73	95	83	8.4	N
0.4% Occurrence	69	89	73	8.7	N
1.0% Occurrence	67	85	69	8.7	N
2.0% Occurrence	65	81	65	8.5	N
	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	90	78	0.61	6.5	N
0.4% Occurrence	81	76	0.54	6.7	N
1.0% Occurrence	76	73	0.50	6.9	N
2.0% Occurrence	72	71	0.48	6.9	N
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		34	332	3	111

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
7	1.4	85	0.0 + 0.3
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft²)	Average Annual Freeze-Thaw Cycles (#)
55.0	N/A	7	39

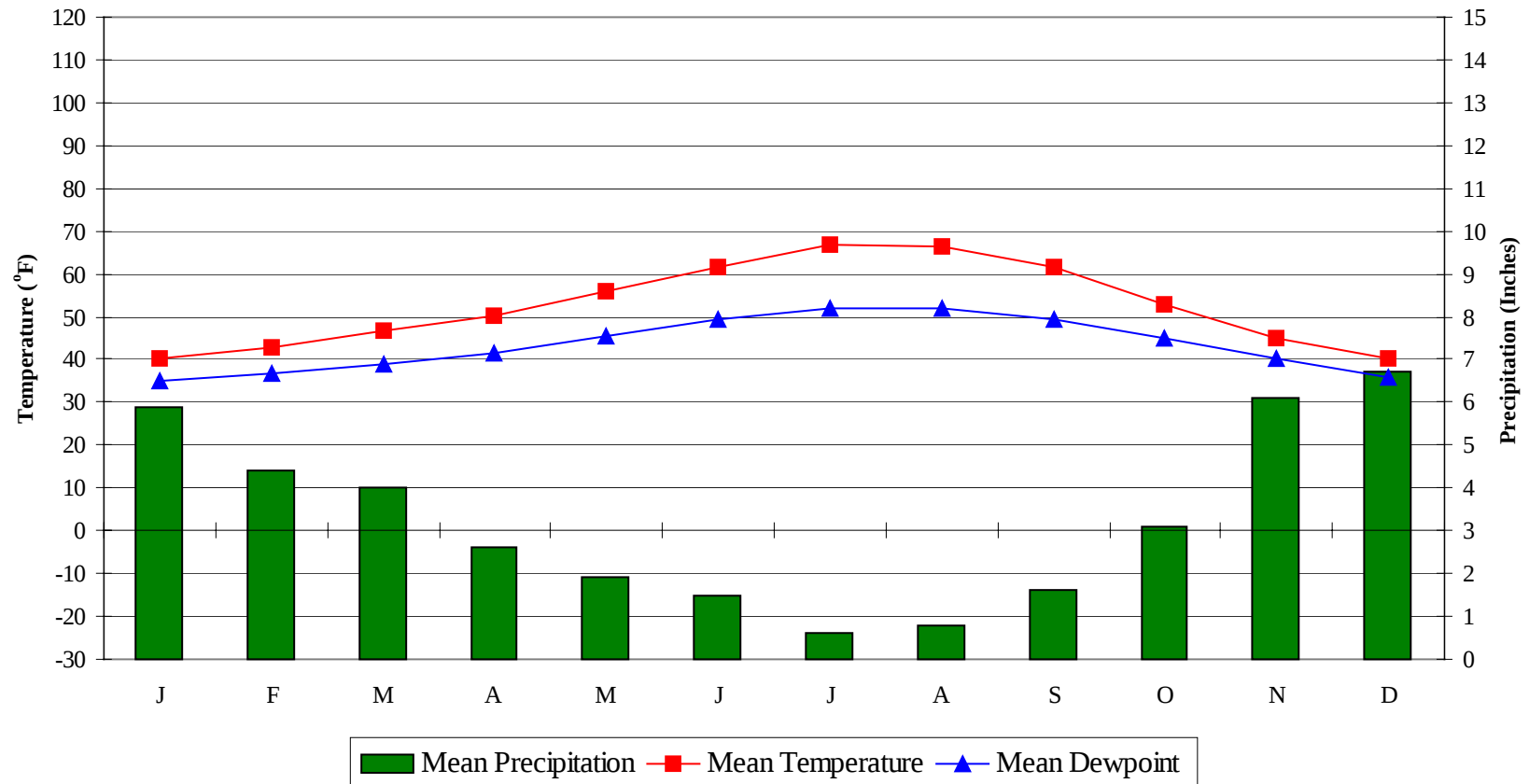
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

SALEM/MCNARY

OR

WMO No. 726940

Average Annual Climate

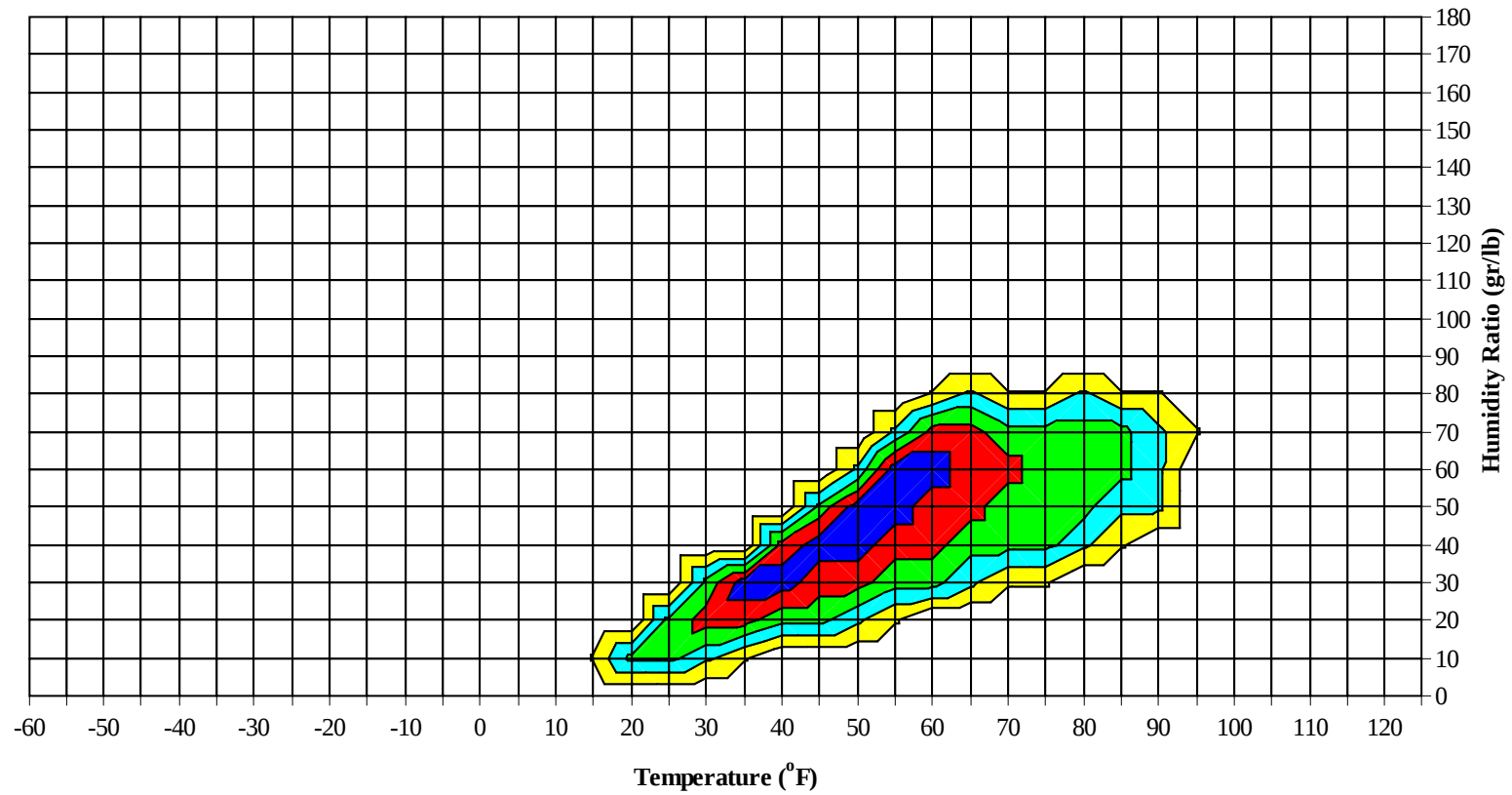


SALEM/MCNARY

OR

WMO No. 726940

Long Term Psychrometric Summary



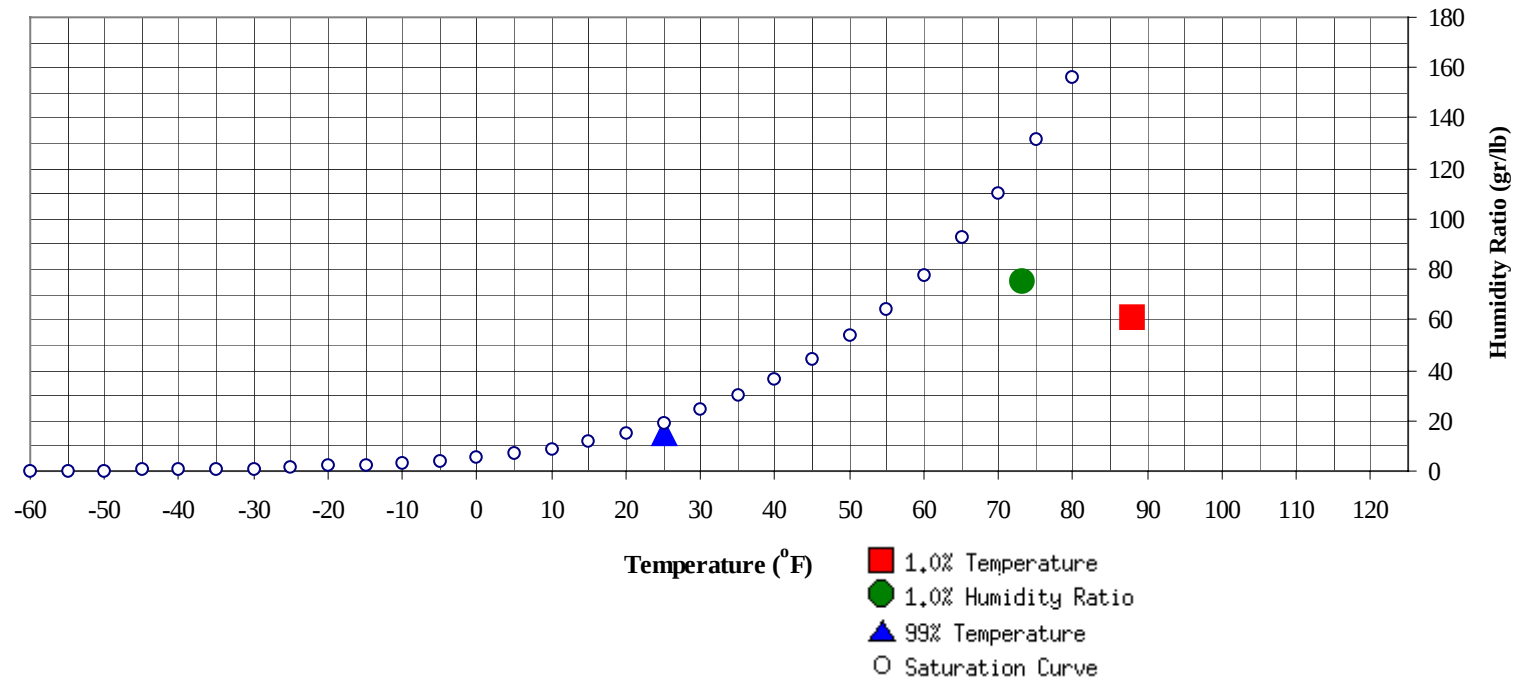
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

SALEM/MCNARY

OR

WMO No. 726940

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)
	25	15.2	8.3		75.6	73.1	64	59	29.4

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	88	61.1	66	30.7

SALEM/MCNARY

OR

WMO No. 726940

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		
110 / 114															
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79												0	0	0	56.0
70 / 74							0		0	54.7		2	1	3	54.3
65 / 69		0		0	59.0		2	0	2	53.5		8	3	11	53.5
60 / 64	0	2	0	2	55.5	0	8	2	10	53.1		21	8	29	51.8
55 / 59	3	13	4	20	52.2	3	25	10	38	51.5	1	45	20	66	49.7
50 / 54	17	39	23	80	48.4	16	51	33	100	48.0	18	78	52	147	47.1
45 / 49	36	61	51	148	44.4	38	58	53	150	44.2	60	65	75	199	44.0
40 / 44	52	57	54	163	40.1	51	42	56	150	39.8	72	25	58	155	39.9
35 / 39	49	40	51	140	35.4	47	23	39	109	35.3	59	4	26	89	35.7
30 / 34	42	24	37	103	30.6	41	10	22	73	31.0	30	0	6	36	31.3
25 / 29	28	9	19	56	25.5	19	2	6	27	25.6	7		0	7	26.9
20 / 24	15	2	6	23	20.6	5	1	2	8	20.3	0			0	22.3
15 / 19	5	0	2	7	15.5	2	1	0	3	15.3					
10 / 14	2	0	0	2	10.6	1	0	0	1	10.9					
5 / 9	0			0	7.3	0	0	0	0	6.2					
0 / 4						0		0	0	1.6					

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.

SALEM/MCNARY

OR

WMO No. 726940

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		
110 / 114															
105 / 109												0		0	72.0
100 / 104							0		0	72.0		0	0	0	72.1
95 / 99							0	0	0	72.5		1	0	1	68.7
90 / 94							0	0	0	68.2		3	2	5	67.1
85 / 89							3	1	4	67.0		9	4	13	65.8
80 / 84		0	0	0	63.2		8	4	12	63.8	0	17	8	25	64.3
75 / 79		4	1	5	60.8		14	7	21	61.5	0	25	13	38	62.0
70 / 74		11	4	15	58.3	0	23	11	34	59.1	2	37	20	59	59.7
65 / 69		19	9	28	55.5	2	33	17	52	56.6	7	53	33	93	57.3
60 / 64	0	35	16	51	52.8	8	56	33	97	53.8	23	60	51	135	55.1
55 / 59	8	58	33	99	50.4	29	68	56	153	51.5	74	29	63	166	52.8
50 / 54	37	70	64	170	47.5	73	35	67	175	48.4	82	6	37	126	49.5
45 / 49	70	36	64	169	44.3	77	7	38	122	44.9	37	0	7	44	45.7
40 / 44	72	7	38	117	40.4	41	0	13	54	41.0	11		1	12	41.4
35 / 39	37	0	10	47	36.0	15		2	17	36.5	3		0	3	36.4
30 / 34	16		1	17	31.6	3			3	32.2	0			0	33.2
25 / 29	1			1	27.9										
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															

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SALEM/MCNARY

OR

WMO No. 726940

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		
110 / 114			0	0											
105 / 109			0	0	71.0		0	0	0	71.0					
100 / 104		1	0	1	69.9		2	1	3	70.2		0	0	0	67.7
95 / 99		5	2	7	69.8		4	2	6	68.7		1	0	1	65.4
90 / 94		10	6	16	68.3		10	4	14	67.1		6	2	8	65.0
85 / 89		20	11	31	65.8		19	9	28	65.9		12	4	16	63.6
80 / 84	0	32	17	49	64.4	0	33	17	50	64.0		22	8	30	62.6
75 / 79	1	42	25	68	62.4	1	47	25	73	62.1	0	30	12	42	61.1
70 / 74	5	55	35	95	60.3	3	54	35	92	60.3	0	43	20	63	59.2
65 / 69	16	49	47	112	58.5	13	49	50	112	58.8	4	53	33	90	57.6
60 / 64	60	28	57	145	56.4	66	27	62	154	56.9	26	49	56	131	56.2
55 / 59	91	5	39	135	53.6	87	3	35	125	54.0	68	20	61	150	53.6
50 / 54	57	0	8	65	50.1	54	0	8	62	50.1	73	4	34	111	49.8
45 / 49	17		1	18	46.3	21		1	22	46.0	47	0	9	56	45.6
40 / 44	2		0	2	42.3	4			4	42.1	18		1	19	41.4
35 / 39	0			0	38.5	0			0	39.0	3			3	36.3
30 / 34											0			0	32.3
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															

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SALEM/MCNARY

OR

WMO No. 726940

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		
110 / 114															
105 / 109															
100 / 104															
95 / 99															
90 / 94		0		0	65.1										
85 / 89		1	0	1	62.8										
80 / 84		4	1	5	60.5										
75 / 79		7	1	8	58.7										
70 / 74		17	4	21	57.6		0		0	59.0					
65 / 69	0	31	8	39	56.0		2	0	2	58.2	0	0		0	55.3
60 / 64	3	59	24	86	54.3	1	10	2	13	56.0	1	1	1	3	54.6
55 / 59	27	57	53	137	52.5	13	32	18	63	52.8	4	10	5	19	52.7
50 / 54	58	47	67	173	49.4	30	64	42	136	48.8	20	36	22	78	48.9
45 / 49	65	19	51	135	45.4	54	64	62	181	44.9	35	62	45	143	44.4
40 / 44	54	4	30	88	41.0	56	40	55	151	40.5	54	61	58	174	40.1
35 / 39	29	0	9	38	36.4	41	18	35	94	36.0	53	46	56	156	35.6
30 / 34	11	0	1	12	31.7	27	6	19	52	31.2	45	22	40	108	31.2
25 / 29	1			1	27.3	11	2	5	18	25.7	19	5	12	36	26.2
20 / 24						4	1	2	7	20.9	10	3	4	17	21.1
15 / 19						2	0	1	3	16.4	4	2	2	8	15.6
10 / 14						0		0	0	12.7	2	0	1	3	10.6
5 / 9											0			0	7.1
0 / 4															

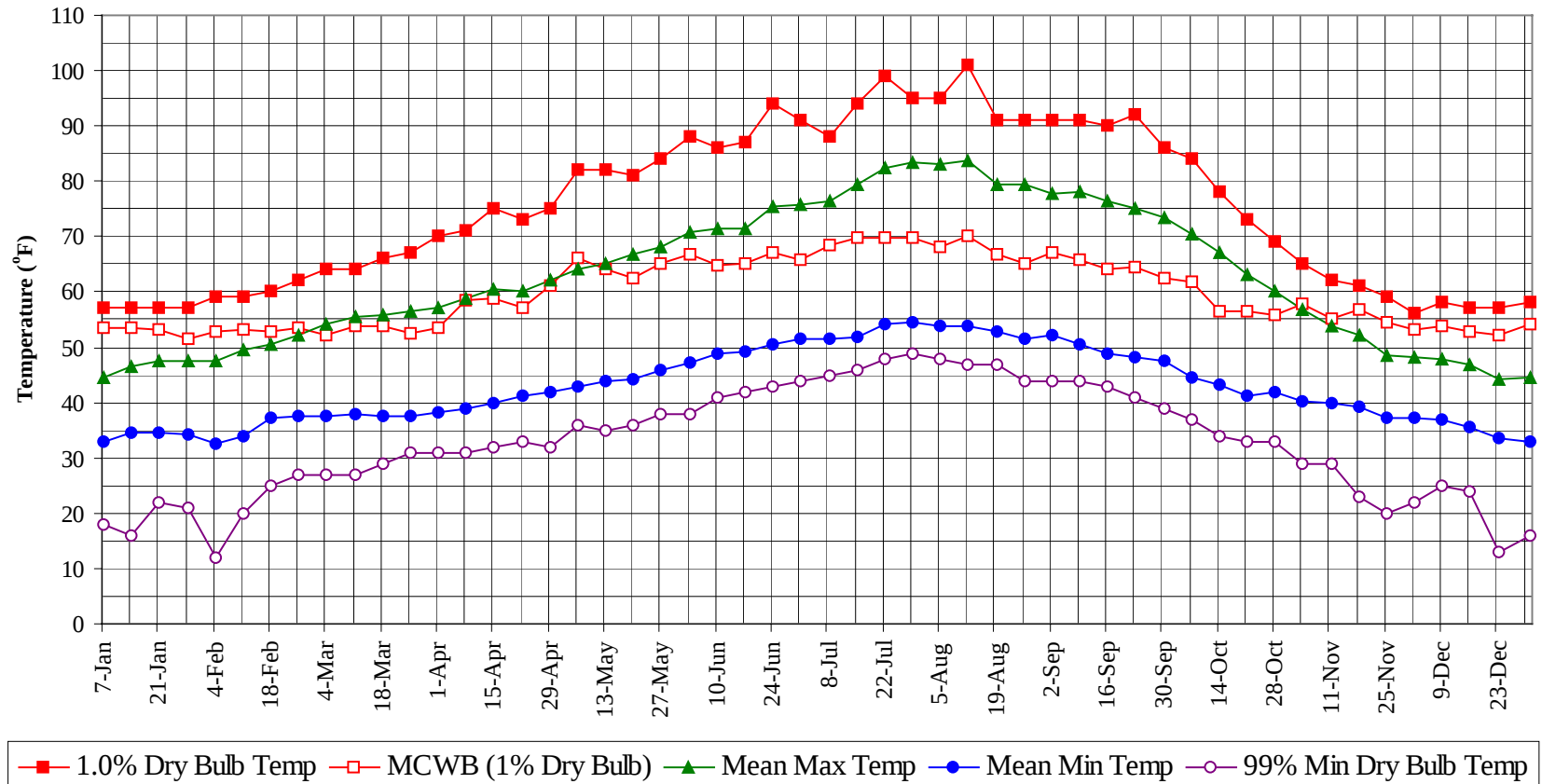
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SALEM/MCNARY OR WMO No. 726940
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1973 to 1996

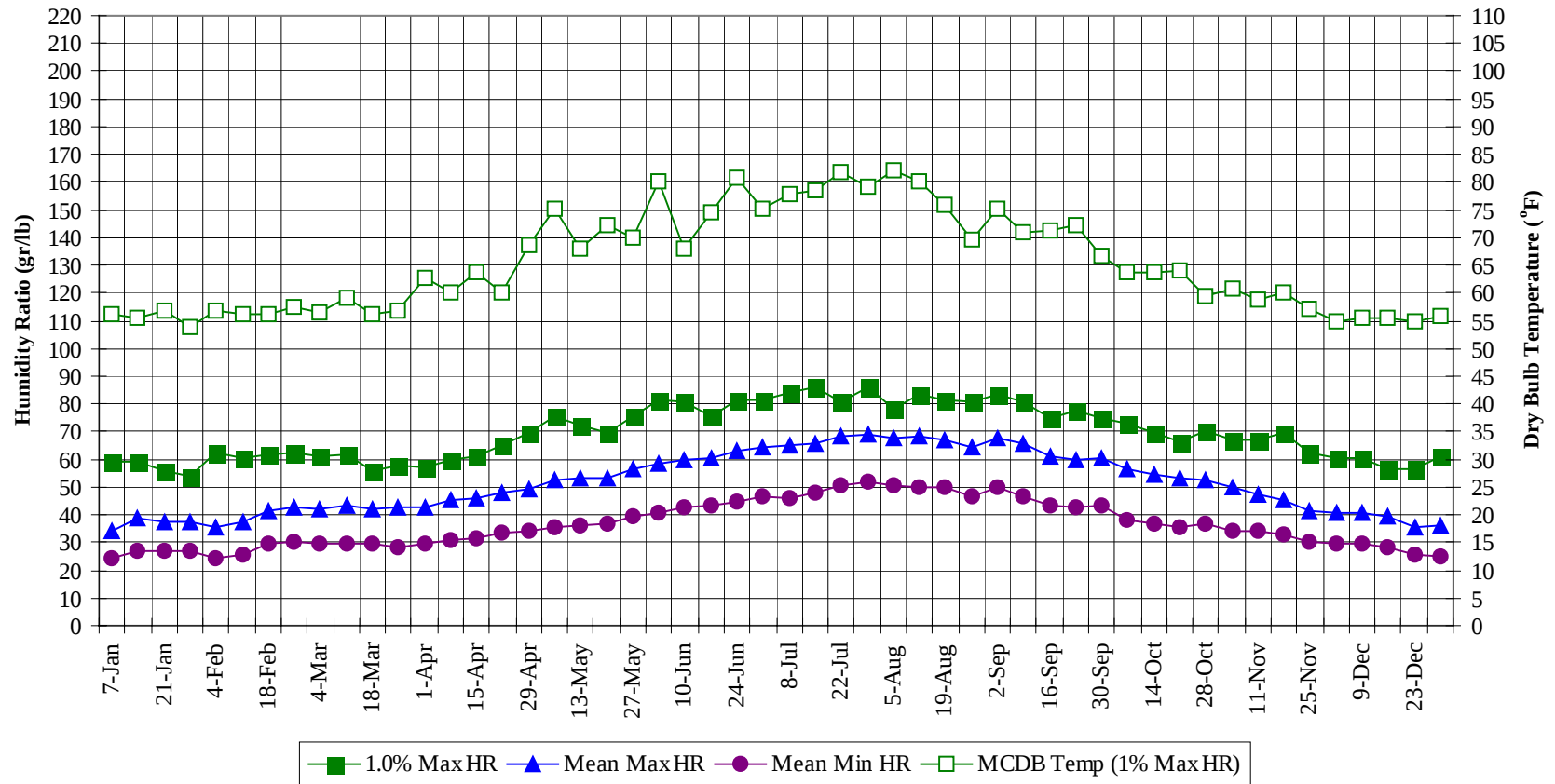
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
110 / 114			0	0	
105 / 109		0	0	0	71.1
100 / 104		3	1	4	70.1
95 / 99		11	5	16	68.9
90 / 94		30	14	44	67.2
85 / 89		64	30	94	65.5
80 / 84	0	119	56	174	63.8
75 / 79	2	170	85	257	61.8
70 / 74	10	241	127	378	59.7
65 / 69	41	295	200	536	57.6
60 / 64	190	351	310	851	55.4
55 / 59	407	364	392	1163	52.5
50 / 54	533	431	455	1419	48.7
45 / 49	554	375	458	1387	44.6
40 / 44	487	239	366	1093	40.3
35 / 39	338	136	230	703	35.7
30 / 34	217	63	128	408	31.1
25 / 29	87	18	43	148	25.8
20 / 24	35	7	14	56	20.8
15 / 19	13	3	5	21	15.6
10 / 14	5	0	2	7	10.8
5 / 9	1	0	0	1	6.6
0 / 4	0		0	0	1.6

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



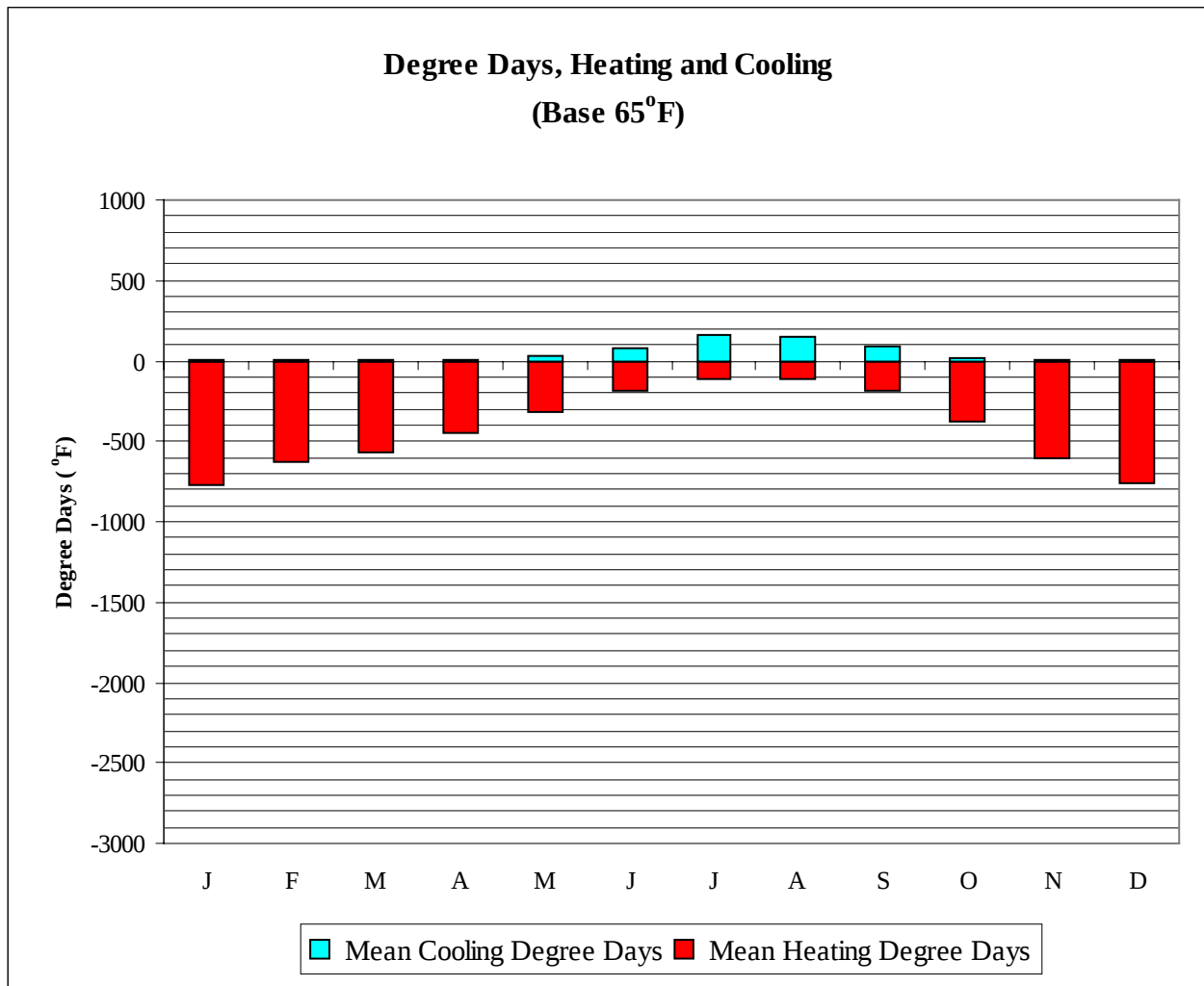
SALEM/MCNARY

OR

WMO No. 726940

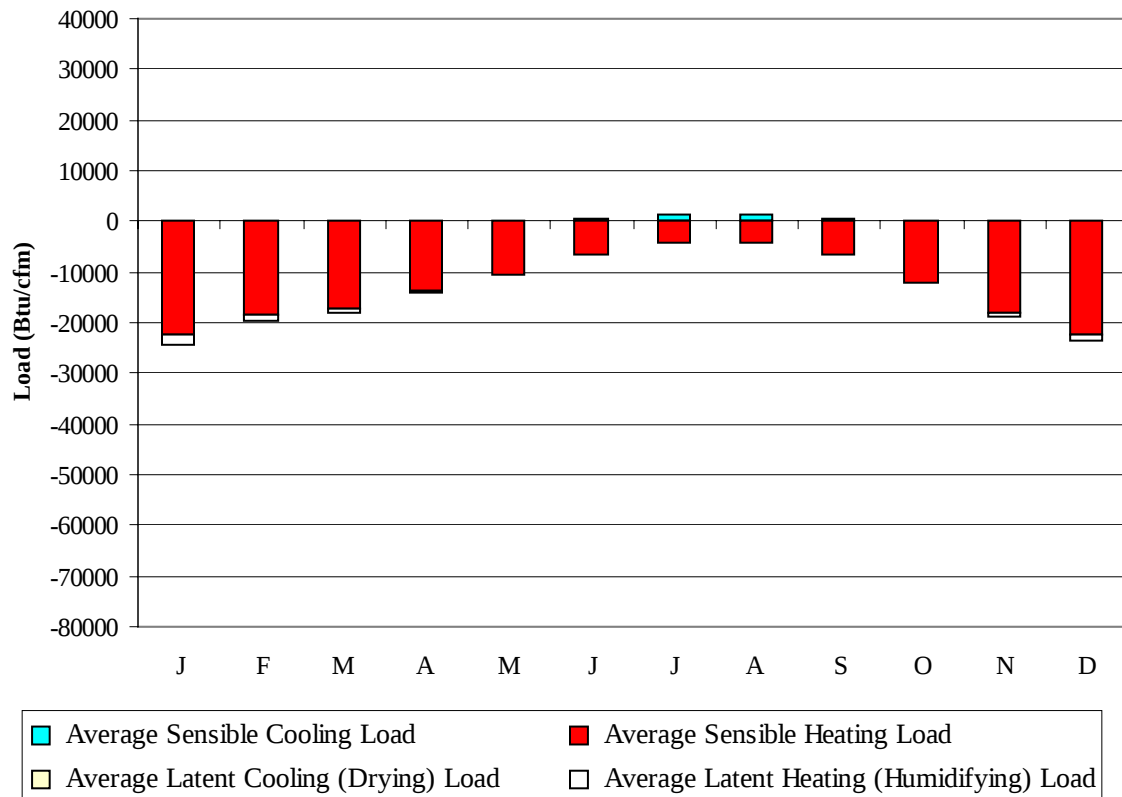
Long Term Dry Bulb Temperature and Humidity Summary

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	57.0	53.5	44.4	32.9	18.0	58.8	56.0	34.1	24.4
14-Jan	57.0	53.7	46.5	34.6	16.0	58.8	55.5	38.8	27.2
21-Jan	57.0	53.1	47.6	34.6	22.0	56.0	56.7	37.4	26.6
28-Jan	57.0	51.5	47.5	34.3	21.0	53.9	54.0	37.3	26.6
4-Feb	59.0	53.0	47.6	32.5	12.0	62.3	56.9	35.4	24.4
11-Feb	59.0	53.2	49.6	33.8	20.0	60.2	56.3	37.7	25.5
18-Feb	60.0	53.0	50.6	37.1	25.0	61.6	56.2	41.7	29.5
25-Feb	62.0	53.4	52.3	37.5	27.0	62.3	57.4	42.5	30.1
4-Mar	64.0	52.1	54.1	37.5	27.0	60.9	56.6	42.2	29.5
11-Mar	64.0	53.7	55.7	37.8	27.0	61.6	59.1	43.2	29.8
18-Mar	66.0	53.7	55.8	37.5	29.0	56.0	56.3	42.3	29.4
25-Mar	67.0	52.5	56.6	37.4	31.0	58.1	56.7	42.6	28.5
1-Apr	70.0	53.5	57.3	38.4	31.0	57.4	62.6	42.7	29.2
8-Apr	71.0	58.4	58.7	39.0	31.0	59.5	60.1	45.0	30.7
15-Apr	75.0	58.9	60.6	39.7	32.0	60.9	63.7	46.3	31.3
22-Apr	73.0	57.0	60.1	41.3	33.0	65.1	60.1	47.9	33.4
29-Apr	75.0	61.0	62.1	41.8	32.0	69.3	68.8	49.0	34.0
6-May	82.0	66.3	64.0	42.9	36.0	75.6	75.3	52.3	35.7
13-May	82.0	64.2	65.3	43.9	35.0	72.1	67.8	53.4	36.3
20-May	81.0	62.5	66.8	44.4	36.0	69.3	72.1	53.0	36.9
27-May	84.0	65.1	68.1	46.0	38.0	75.6	69.8	56.5	39.6
3-Jun	88.0	66.9	71.0	47.3	38.0	81.2	80.1	58.4	40.8
10-Jun	86.0	64.8	71.4	48.8	41.0	80.5	67.9	59.8	42.4
17-Jun	87.0	65.1	71.6	49.2	42.0	75.6	74.6	60.2	43.2
24-Jun	94.0	67.3	75.5	50.6	43.0	81.2	80.8	63.3	44.7
1-Jul	91.0	65.9	75.9	51.4	44.0	81.2	75.3	64.2	46.7
8-Jul	88.0	68.4	76.5	51.7	45.0	84.0	78.0	64.9	46.3
15-Jul	94.0	69.8	79.5	51.9	46.0	86.1	78.6	66.0	47.7
22-Jul	99.0	69.9	82.5	54.1	48.0	80.5	81.7	68.5	50.7
29-Jul	95.0	69.9	83.4	54.4	49.0	86.1	79.2	69.2	52.0
5-Aug	95.0	68.0	83.0	53.9	48.0	78.4	82.1	67.4	50.4
12-Aug	101.0	70.2	83.6	53.8	47.0	83.3	80.1	68.5	50.1
19-Aug	91.0	66.9	79.4	52.8	47.0	81.2	75.8	66.8	49.8
26-Aug	91.0	65.1	79.4	51.6	44.0	80.5	69.7	64.5	46.9
2-Sep	91.0	67.1	77.9	52.3	44.0	83.3	75.3	67.9	49.7
9-Sep	91.0	65.7	78.1	50.5	44.0	80.5	71.0	65.5	46.7
16-Sep	90.0	64.2	76.4	48.8	43.0	74.9	71.2	61.0	43.3
23-Sep	92.0	64.6	75.0	48.2	41.0	77.7	72.2	59.6	43.0
30-Sep	86.0	62.3	73.5	47.6	39.0	74.9	66.5	60.7	43.1
7-Oct	84.0	61.7	70.4	44.6	37.0	72.8	63.7	56.2	38.2
14-Oct	78.0	56.3	67.1	43.3	34.0	69.3	63.8	54.4	36.9
21-Oct	73.0	56.6	63.0	41.3	33.0	66.5	64.0	53.0	35.7
28-Oct	69.0	55.9	60.1	42.0	33.0	70.0	59.4	52.5	36.7
4-Nov	65.0	57.8	56.8	40.4	29.0	67.2	60.8	49.7	34.2
11-Nov	62.0	55.3	54.0	39.9	29.0	67.2	58.9	47.5	34.2
18-Nov	61.0	56.7	52.0	39.2	23.0	69.3	59.9	45.0	33.0
25-Nov	59.0	54.5	48.6	37.1	20.0	62.3	57.1	41.3	30.0
2-Dec	56.0	53.2	48.2	37.2	22.0	60.2	55.0	40.8	29.4
9-Dec	58.0	54.0	48.0	36.9	25.0	60.2	55.4	40.7	29.3
16-Dec	57.0	53.0	46.9	35.6	24.0	56.7	55.3	39.1	28.0
23-Dec	57.0	52.3	44.2	33.5	13.0	56.7	54.7	35.5	25.7
31-Dec	58.0	54.1	44.6	32.9	16.0	60.9	55.9	36.1	25.1



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	772
FEB	0	626
MAR	1	572
APR	9	447
MAY	35	322
JUN	80	182
JUL	159	109
AUG	155	111
SEP	90	187
OCT	16	380
NOV	0	604
DEC	0	763
ANN	546	5075

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	-22424	0	-1982
FEB	0	-18423	0	-1324
MAR	0	-17203	0	-710
APR	11	-13801	1	-257
MAY	186	-10429	19	-48
JUN	545	-6430	26	-10
JUL	1353	-4169	61	-1
AUG	1282	-4217	28	-8
SEP	664	-6517	12	-35
OCT	66	-11983	0	-190
NOV	0	-17976	0	-754
DEC	0	-22198	0	-1544
ANN	4107	-155770	147	-6863

Average Annual Solar Radiation – Nearest Available Site

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

City: SALEM
 State: OR
 WBAN No: 24232
 Lat(N): 44.92
 Long(W): 123.02
 Elev(ft): 200

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.676
 Vert Gap: 0.331

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	400	620	990	1390	1740	1940	2080	1820	1380	850	450	330	1170
	Std Dev	51	71	103	98	151	168	162	129	118	92	49	33	43
	Minimum	300	470	800	1120	1430	1610	1760	1540	1120	640	340	280	1070
	Maximum	530	770	1250	1570	1960	2220	2350	2060	1630	1060	570	450	1240
	Diffuse	270	390	560	740	850	870	740	660	530	420	310	240	550
Clear Day	Global	670	1020	1540	2100	2490	2650	2560	2210	1710	1160	740	570	1620
NORTH	Global	150	220	320	430	550	630	610	480	360	260	170	130	360
	Diffuse	150	220	320	430	510	550	520	450	360	260	170	130	340
Clear Day	Global	150	210	300	410	580	690	640	460	330	230	160	130	360
EAST	Global	260	380	600	810	960	1040	1150	1040	840	520	280	210	680
	Diffuse	180	260	390	520	600	630	610	550	440	310	200	160	410
Clear Day	Global	550	770	1070	1340	1500	1550	1510	1380	1150	850	600	480	1060
SOUTH	Global	590	760	930	960	910	880	990	1120	1220	1010	620	490	870
	Diffuse	270	360	470	560	600	600	580	560	500	410	290	240	450
Clear Day	Global	1700	1880	1860	1570	1260	1110	1170	1410	1720	1850	1720	1600	1570
WEST	Global	270	410	620	840	1040	1160	1270	1130	910	590	310	220	730
	Diffuse	180	270	390	530	620	650	630	560	450	320	210	160	420
Clear Day	Global	550	770	1070	1340	1500	1550	1510	1380	1150	850	600	480	1060

Average Annual Solar Heat and Illumination – Nearest Available Site

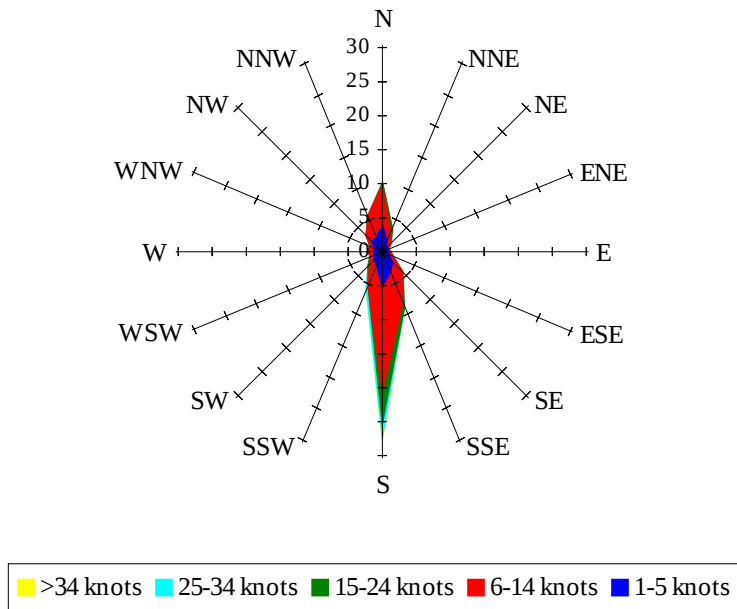
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	260	420	690	990	1250	1400	1510	1310	980	580	300	210	830
NORTH	Unshaded	110	150	220	300	370	420	400	320	250	180	120	92	240
	Shaded	85	130	180	250	310	350	350	280	220	150	96	73	210
EAST	Unshaded	180	270	420	570	680	740	820	740	590	360	190	140	480
	Shaded	150	220	350	460	550	590	660	600	490	300	160	120	390
SOUTH	Unshaded	440	560	660	650	590	550	610	720	850	730	460	370	600
	Shaded	420	500	500	390	350	350	350	380	560	610	430	350	430
WEST	Unshaded	180	290	440	600	740	830	910	810	650	410	210	150	520
	Shaded	160	240	360	490	600	660	730	660	530	350	180	130	420

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	31	63	73	59	26	46	80	99	95	72
	M.Cloudy	18	38	43	36	16	27	49	64	64	47
NORTH	M.Clear	9	13	14	13	8	16	15	16	16	14
	M.Cloudy	8	14	15	13	7	12	17	20	19	16
EAST	M.Clear	66	56	14	13	8	80	74	34	16	14
	M.Cloudy	22	28	15	13	7	30	37	27	19	16
SOUTH	M.Clear	36	73	86	69	29	11	36	55	51	28
	M.Cloudy	14	34	40	32	12	11	24	36	36	21
WEST	M.Clear	9	13	18	61	61	11	15	16	48	80
	M.Cloudy	8	14	16	29	21	11	17	20	35	43
M.Clear	(% hrs)	18	16	17	17	20	31	31	33	35	38
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	24	59	79	74	47	6	28	35	21	0
	M.Cloudy	13	35	51	49	30	4	16	19	13	0
NORTH	M.Clear	7	13	15	14	11	3	8	9	7	0
	M.Cloudy	6	13	17	16	11	2	7	8	6	0
EAST	M.Clear	61	69	31	14	11	21	34	9	7	0
	M.Cloudy	18	31	24	16	11	5	12	8	6	0
SOUTH	M.Clear	19	58	80	75	44	19	67	79	53	0
	M.Cloudy	9	27	44	43	24	5	18	21	15	0
WEST	M.Clear	7	13	15	49	75	3	8	16	37	0
	M.Cloudy	6	13	17	31	36	2	7	9	12	0
M.Clear	(% hrs)	43	46	47	49	49	9	10	11	12	16

Wind Summary - December, January, and February

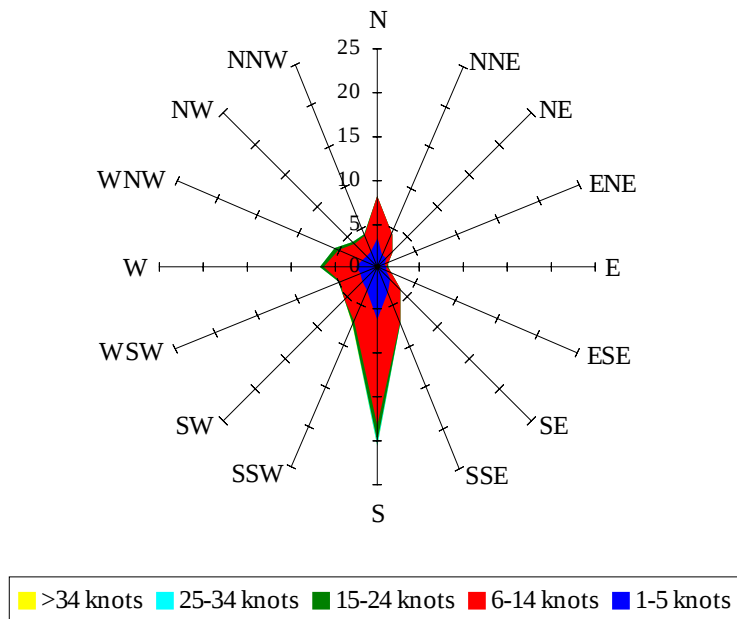
Labels of Percent Frequency on North Axis



Percent Calm = 18.72

Wind Summary - March, April, and May

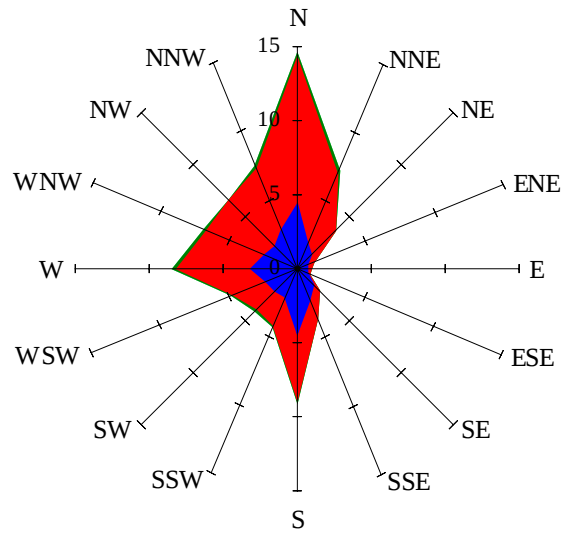
Labels of Percent Frequency on North Axis



Percent Calm = 15.51

Wind Summary - June, July, and August

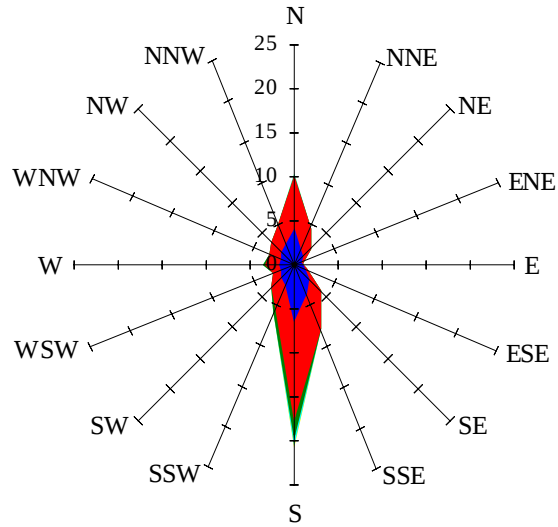
Labels of Percent Frequency on North Axis



Percent Calm = 15.03

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 20.76