

QUILLAYUTE STATE WA

Latitude = 47.95 N

WMO No. 727970

Longitude = 124.50 W

Elevation = 203 feet

Period of Record = 1973 to 1996

Average Pressure = 29.78 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	91	66	57	9.5	NNE
0.4% Occurrence	81	63	57	8.3	WSW
1.0% Occurrence	75	61	60	8.0	SW
2.0% Occurrence	71	60	60	7.9	NW
Mean Daily Range	15	-	-	-	-
97.5% Occurrence	30	29	22	3.6	NE
99.0% Occurrence	26	25	17	3.7	NE
99.6% Occurrence	23	22	14	4.9	NE
Median of Extreme Lows	17	16	9	7.6	NE
	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	69	85	77	7.1	WSW
0.4% Occurrence	65	78	70	7.6	SW
1.0% Occurrence	63	73	69	7.7	SW
2.0% Occurrence	61	68	67	7.5	S
	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	86	71	0.58	6.1	S
0.4% Occurrence	78	66	0.52	6.8	S
1.0% Occurrence	75	65	0.50	6.6	S
2.0% Occurrence	72	63	0.48	6.3	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		1	43	0	11

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
6	1.4	N/A	0.0 + 0.0
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 (#)
51.7	N/A	15	36

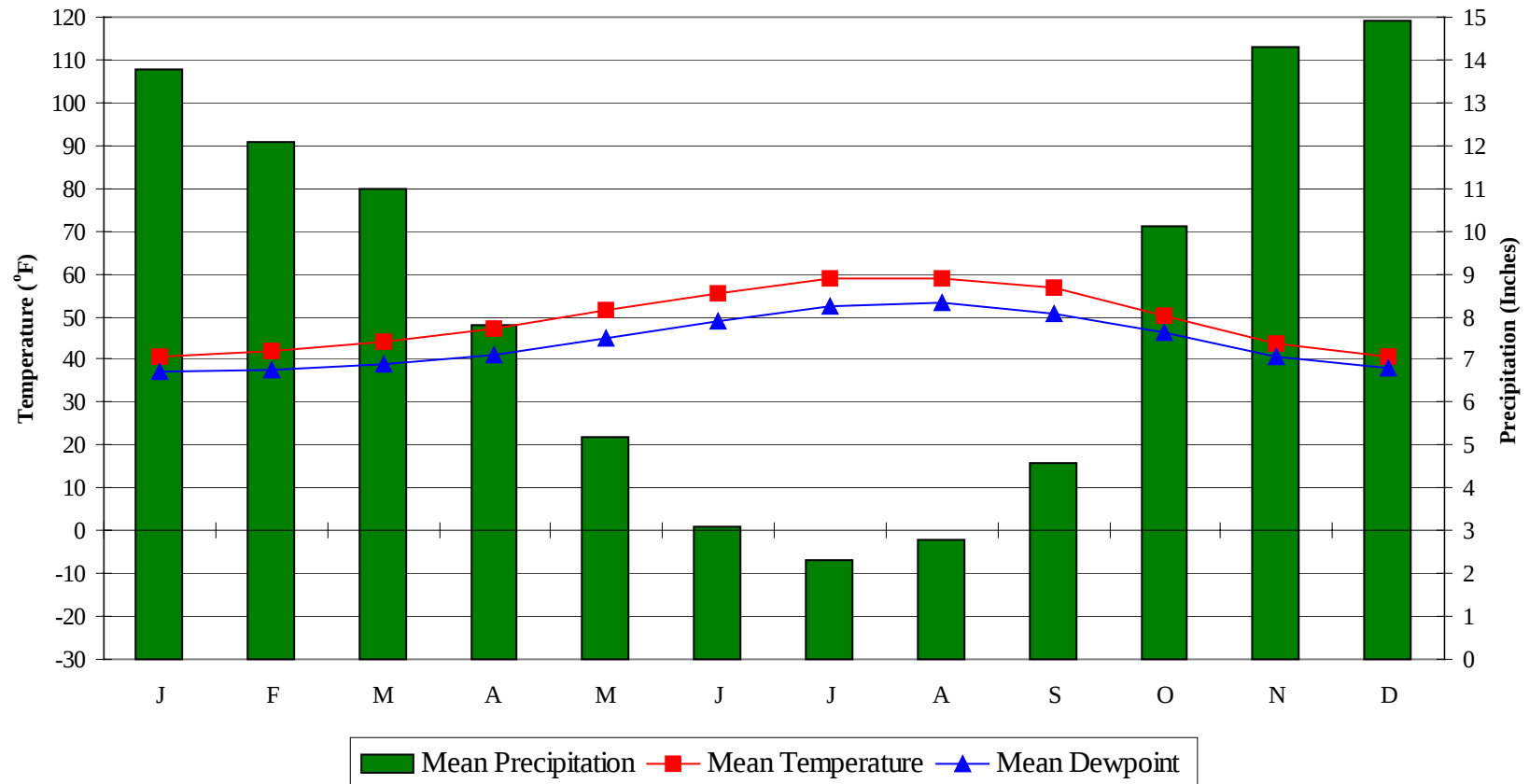
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

QUILLAYUTE STATE

WA

WMO No. 727970

Average Annual Climate

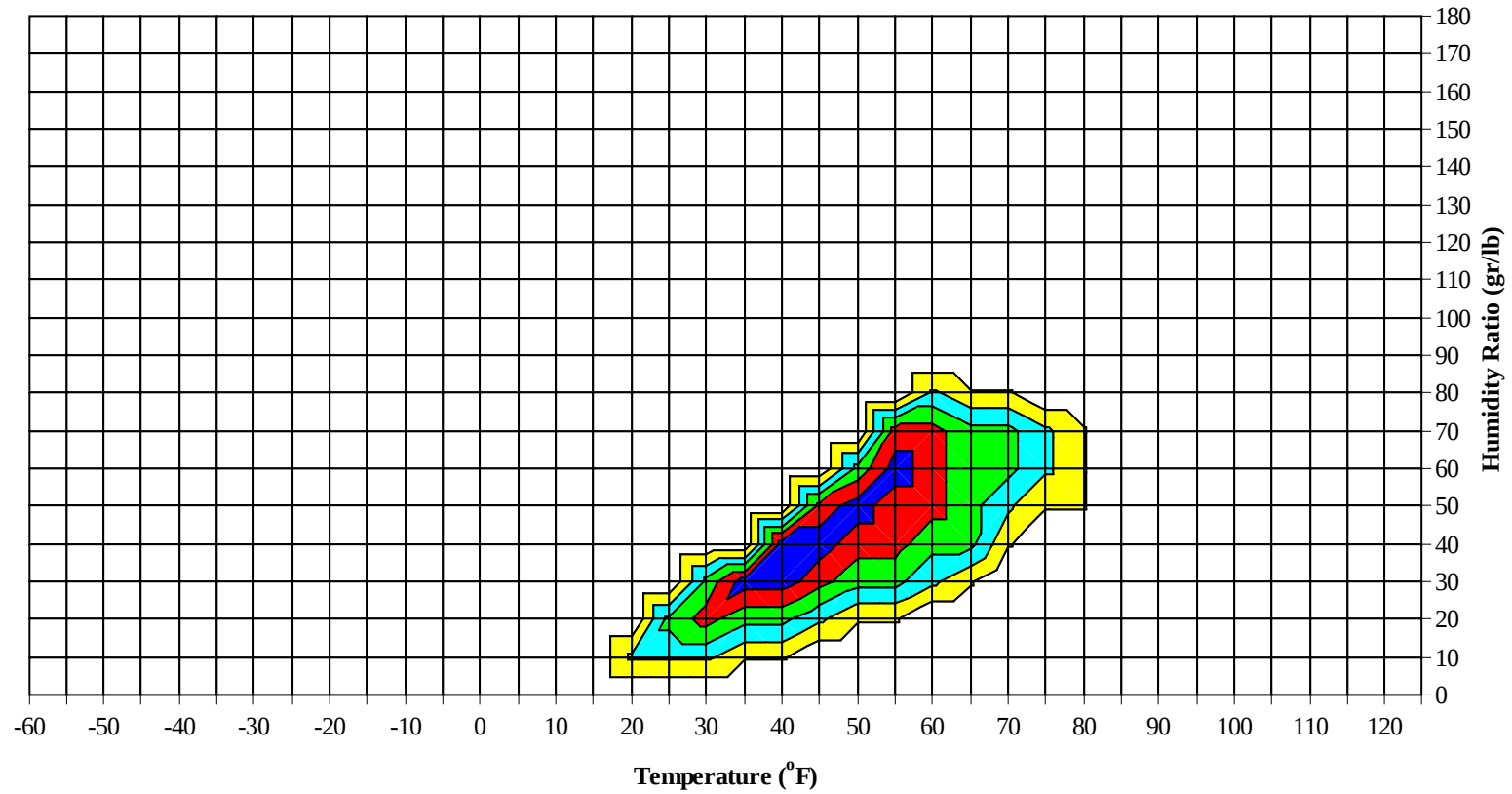


QUILLAYUTE STATE

WA

WMO No. 727970

Long Term Psychrometric Summary

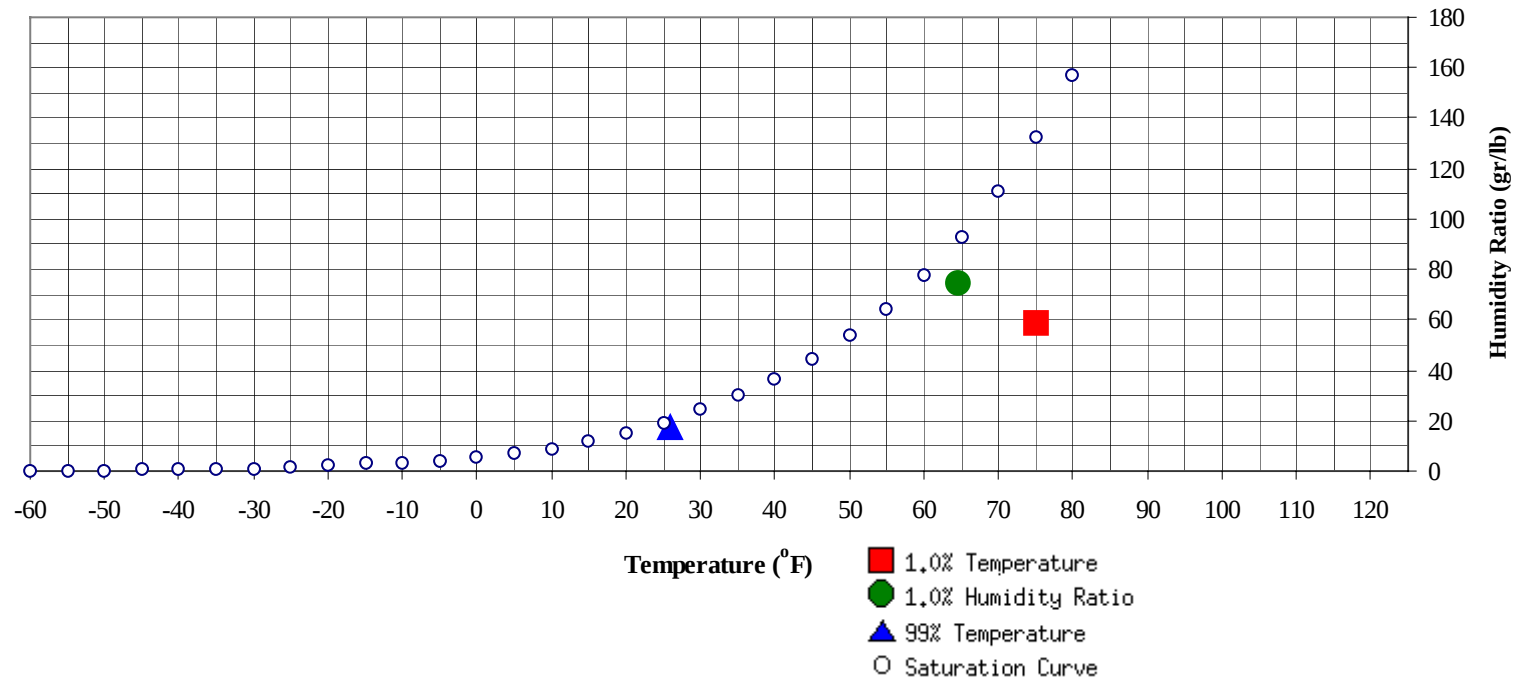


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

QUILLAYUTE STATE WA

WMO No. 727970

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	26	17.1	8.9	Ratio	74.9	64.7	61	59	27.2

1.0% Dry Bulb	(°F)	MCHR	MCWB	Enthalpy
		(gr/lb)	(°F)	(btu/lb)
	75	58.7	61.2	27.2

QUILLAYUTE STATE WA WMO No. 727970
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															
70 / 74							0		0	56.5		0	0	0	54.8
65 / 69			0	0	48.0		1	0	1	54.3		2	0	2	51.5
60 / 64	0	1	0	1	52.3		4	0	4	51.2		8	1	9	49.9
55 / 59	1	3	1	5	49.6	1	10	2	13	49.8	0	25	5	30	48.6
50 / 54	14	32	15	61	49.1	14	41	21	76	48.6	8	68	26	101	47.4
45 / 49	53	83	62	198	45.7	44	79	62	185	45.3	51	93	83	226	44.7
40 / 44	53	64	65	182	40.7	54	50	59	164	40.4	76	40	80	196	40.5
35 / 39	49	39	51	139	35.8	47	26	46	119	35.6	64	10	40	114	36.3
30 / 34	46	20	38	104	31.2	41	9	25	75	31.4	38	2	13	53	31.8
25 / 29	21	5	13	39	26.0	15	2	7	24	26.2	10	0	1	11	26.8
20 / 24	8	1	3	12	21.3	7	0	1	8	21.1	1		0	1	21.6
15 / 19	3	0	0	3	16.7	1	1	1	3	15.1					
10 / 14	0	0	0	0	11.8	0		0	0	13.0					
5 / 9															

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.

QUILLAYUTE STATE WA WMO No. 727970
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	67.0
90 / 94							0	0	0	65.3		0	0	0	64.3
85 / 89							1	0	1	62.5		2	1	3	62.6
80 / 84		0		0	56.0		2	1	3	61.1		3	1	4	62.2
75 / 79		1	0	1	55.0		4	1	5	59.6		5	1	6	61.3
70 / 74		3	1	4	54.5		7	2	9	57.6		8	3	11	60.0
65 / 69	0	8	2	10	53.1	0	14	5	19	56.0	1	25	8	34	57.5
60 / 64	0	18	4	22	51.7	2	34	11	47	54.1	3	75	26	104	55.0
55 / 59	1	39	13	53	49.8	11	82	36	129	51.4	39	96	82	217	53.2
50 / 54	19	86	47	152	47.8	58	86	91	235	49.0	115	25	90	230	50.5
45 / 49	67	67	91	225	44.9	97	17	70	183	45.8	59	1	26	86	46.5
40 / 44	82	16	58	156	41.2	56	1	28	85	41.7	19		3	22	42.1
35 / 39	52	1	22	74	36.8	22	0	4	26	37.2	3		0	3	37.6
30 / 34	18		3	21	32.3	1		0	1	32.8	0			0	33.0
25 / 29	1		0	1	27.2										
20 / 24															
15 / 19															
10 / 14															
5 / 9															

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QUILLAYUTE STATE WA WMO No. 727970
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	0	65.8		0		0	69.4		0	0	0	67.5
90 / 94		1	0	1	66.8		1	0	1	67.4		0	0	0	66.6
85 / 89		1	1	2	65.3		2	1	3	66.9		2	0	2	64.2
80 / 84		5	2	7	63.9		5	2	7	64.5		6	1	7	62.5
75 / 79	0	9	3	12	63.0	0	11	3	14	63.3		12	3	15	61.4
70 / 74	1	23	7	31	61.0	0	25	8	33	61.6	0	19	6	25	60.0
65 / 69	2	57	20	79	58.6	1	67	19	87	59.2	1	46	11	57	58.3
60 / 64	9	98	51	159	56.7	12	92	56	161	57.6	9	83	38	130	56.9
55 / 59	102	51	112	265	54.8	110	42	110	263	55.4	59	60	85	204	54.9
50 / 54	96	2	44	142	51.5	86	2	40	128	51.7	80	11	64	154	51.1
45 / 49	31	0	8	39	46.8	33	0	8	41	47.0	56	1	25	83	46.5
40 / 44	7	0	0	7	42.8	6	0	1	7	42.3	27	0	7	34	42.0
35 / 39	0			0	39.0	0			0	37.7	7		0	7	37.1
30 / 34											0			0	32.9
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															

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QUILLAYUTE STATE WA

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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															
85 / 89															
80 / 84		0		0	63.6										
75 / 79		2	0	2	60.0										
70 / 74		4	0	4	57.7										
65 / 69		13	1	14	56.5		0		0	57.2					
60 / 64	1	34	5	40	54.9	0	3	0	3	54.0	0	0	0	0	51.3
55 / 59	25	89	45	159	53.7	8	21	9	38	53.5	1	1	1	3	51.2
50 / 54	54	74	75	203	50.3	31	64	38	132	50.1	20	33	22	75	50.0
45 / 49	61	25	65	152	46.2	52	81	63	196	45.4	49	81	53	183	45.6
40 / 44	57	6	40	104	41.6	56	44	61	161	41.1	53	69	60	182	40.8
35 / 39	35	1	16	52	36.8	46	18	42	107	36.3	50	38	54	142	36.1
30 / 34	12	0	1	13	32.2	31	6	18	55	31.4	46	18	41	104	31.8
25 / 29	1		0	1	27.3	11	2	7	20	26.0	22	5	12	39	26.7
20 / 24						4	1	2	7	21.2	6	3	4	13	20.5
15 / 19						0	0	0	0	16.2	2	0	1	3	15.4
10 / 14						0	0	0	0	11.2	0		0	0	10.8
5 / 9						0			0	8.0					

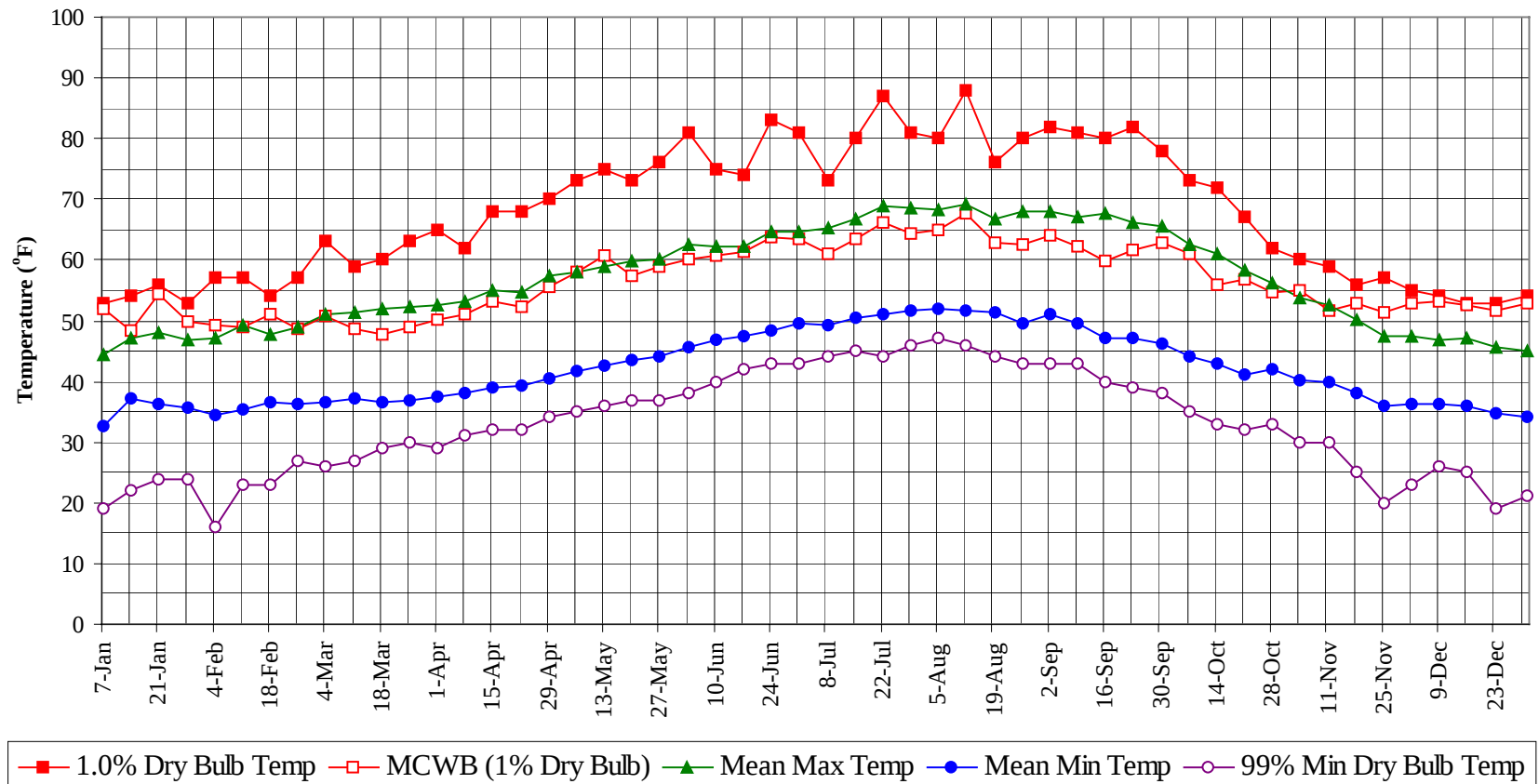
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

QUILLAYUTE STATE WA WMO No. 727970
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1973 to 1996

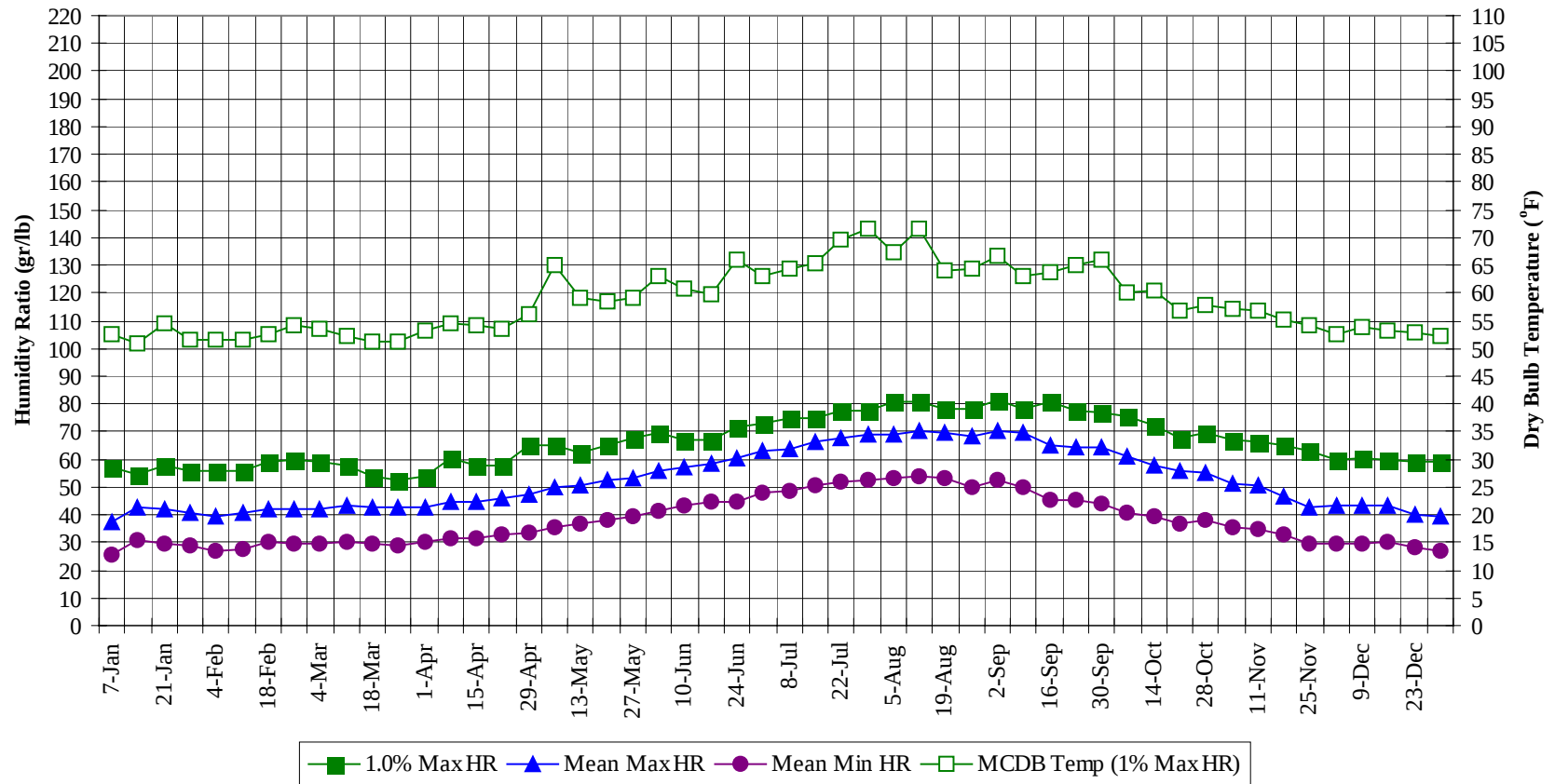
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
95 / 99		1	0	1	67.5
90 / 94		3	1	4	66.5
85 / 89		8	2	10	64.7
80 / 84		21	7	28	63.1
75 / 79	0	43	12	55	61.9
70 / 74	2	89	27	117	60.3
65 / 69	6	233	64	304	58.1
60 / 64	37	451	195	683	56.1
55 / 59	356	517	499	1372	53.8
50 / 54	591	523	567	1681	49.9
45 / 49	652	529	616	1798	45.6
40 / 44	547	292	464	1303	41.0
35 / 39	378	134	277	788	36.2
30 / 34	236	55	137	428	31.6
25 / 29	82	14	40	135	26.3
20 / 24	26	5	10	41	21.0
15 / 19	6	1	2	9	15.8
10 / 14	1	0	1	2	11.5
5 / 9	0			0	8.0

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.

Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



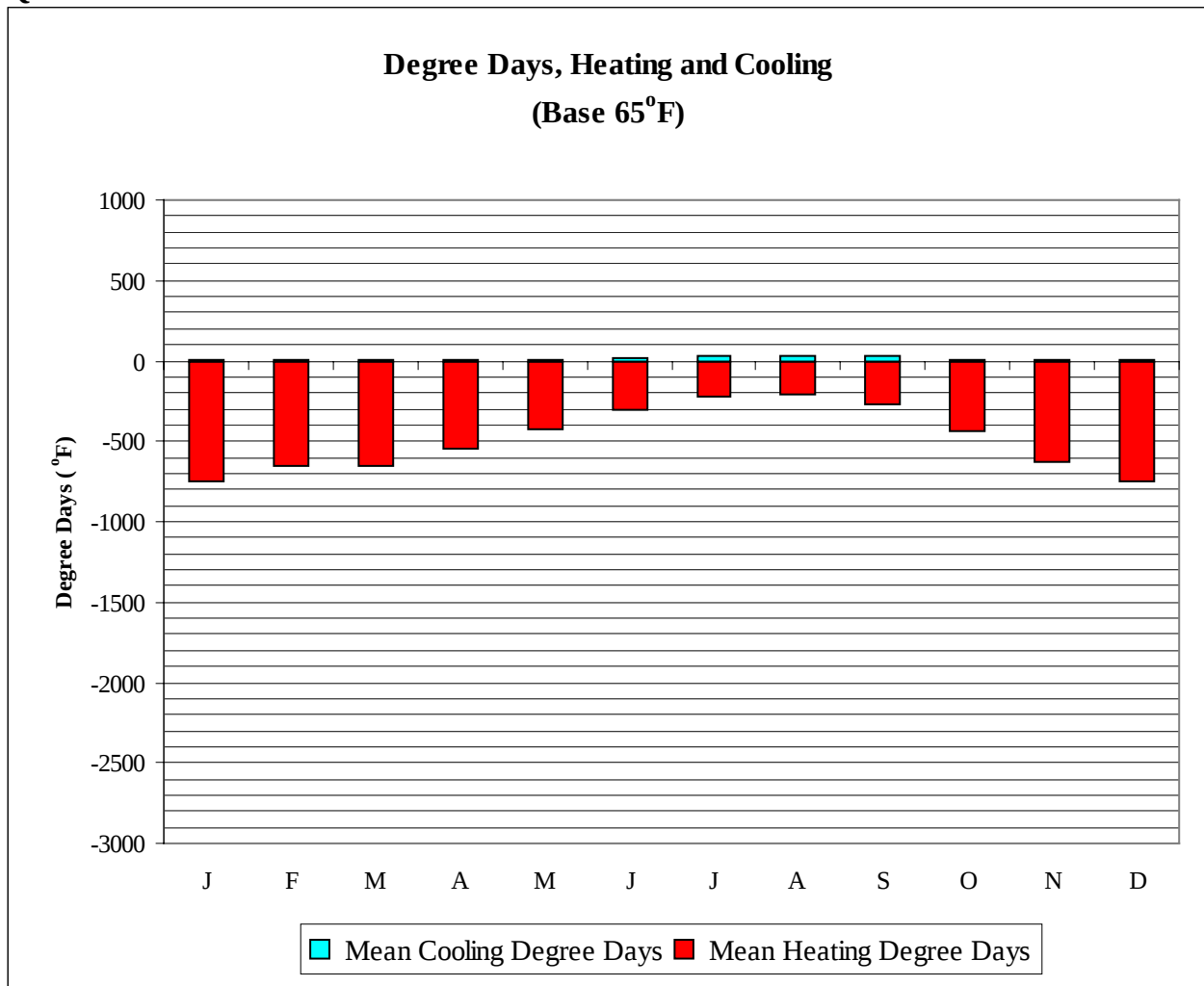
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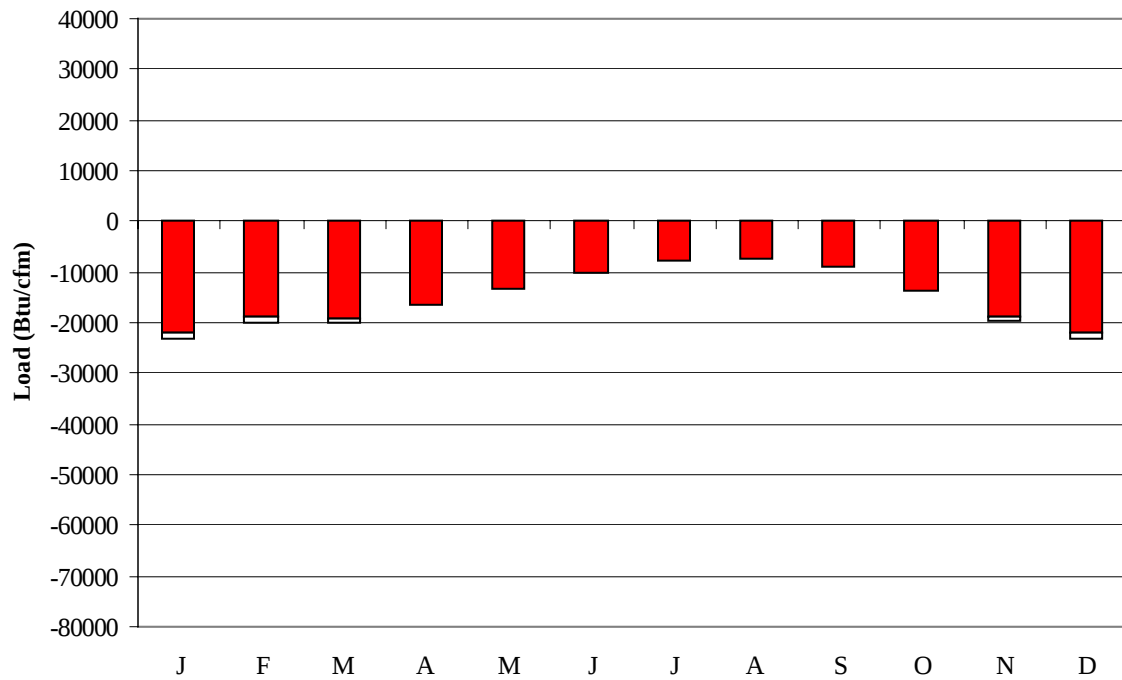
Long Term Dry Bulb Temperature and Humidity Summary

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	53.0	52.0	44.3	32.7	19.0	57.4	52.4	37.7	25.6
14-Jan	54.0	48.2	47.0	37.2	22.0	54.6	50.9	42.7	30.6
21-Jan	56.0	54.3	48.1	36.2	24.0	58.1	54.4	42.1	29.8
28-Jan	53.0	49.8	46.9	35.7	24.0	56.0	51.6	41.0	28.7
4-Feb	57.0	49.2	47.1	34.3	16.0	56.0	51.5	39.7	27.1
11-Feb	57.0	48.9	49.3	35.5	23.0	56.0	51.4	41.0	27.6
18-Feb	54.0	51.1	47.6	36.7	23.0	58.8	52.6	41.9	30.0
25-Feb	57.0	48.8	48.9	36.3	27.0	59.5	54.3	42.0	29.3
4-Mar	63.0	50.7	51.0	36.7	26.0	58.8	53.6	41.9	29.3
11-Mar	59.0	48.6	51.4	37.1	27.0	58.1	52.3	43.3	30.1
18-Mar	60.0	47.8	52.0	36.6	29.0	53.9	51.2	42.5	29.6
25-Mar	63.0	48.9	52.3	36.7	30.0	52.5	51.1	42.6	29.2
1-Apr	65.0	50.1	52.4	37.6	29.0	53.9	53.1	42.6	30.3
8-Apr	62.0	51.1	53.3	38.2	31.0	60.2	54.6	44.7	31.6
15-Apr	68.0	53.2	55.1	39.0	32.0	58.1	54.1	44.8	31.4
22-Apr	68.0	52.3	54.8	39.2	32.0	58.1	53.4	45.9	32.6
29-Apr	70.0	55.5	57.3	40.6	34.0	65.1	56.1	47.3	33.4
6-May	73.0	58.0	58.0	41.7	35.0	65.1	64.9	50.0	35.7
13-May	75.0	60.7	58.8	42.7	36.0	62.3	59.0	50.9	36.8
20-May	73.0	57.3	59.9	43.4	37.0	65.1	58.5	52.4	37.9
27-May	76.0	59.0	60.2	44.1	37.0	67.9	59.2	53.5	39.3
3-Jun	81.0	60.1	62.5	45.8	38.0	69.3	63.2	56.1	41.3
10-Jun	75.0	60.7	62.1	46.9	40.0	67.2	60.9	57.0	43.1
17-Jun	74.0	61.2	62.3	47.5	42.0	67.2	59.8	58.6	44.4
24-Jun	83.0	63.8	64.5	48.2	43.0	71.4	65.9	60.7	44.9
1-Jul	81.0	63.5	64.7	49.6	43.0	72.8	63.2	62.7	47.7
8-Jul	73.0	60.9	65.2	49.3	44.0	74.9	64.5	63.6	48.3
15-Jul	80.0	63.3	66.9	50.5	45.0	74.9	65.3	66.3	50.2
22-Jul	87.0	66.2	69.0	51.2	44.0	77.7	69.6	67.4	51.8
29-Jul	81.0	64.2	68.7	51.6	46.0	77.7	71.5	68.6	52.4
5-Aug	80.0	65.0	68.3	52.1	47.0	80.5	67.4	68.7	53.2
12-Aug	88.0	67.7	69.3	51.7	46.0	80.5	71.5	70.2	53.7
19-Aug	76.0	62.8	66.8	51.4	44.0	78.4	64.0	69.5	53.4
26-Aug	80.0	62.7	68.0	49.4	43.0	78.4	64.2	68.2	49.9
2-Sep	82.0	64.0	68.1	51.0	43.0	81.2	66.5	70.6	52.7
9-Sep	81.0	62.3	67.2	49.6	43.0	78.4	63.1	69.5	50.1
16-Sep	80.0	59.9	67.7	47.2	40.0	80.5	63.6	65.1	45.6
23-Sep	82.0	61.5	66.3	47.2	39.0	77.7	64.9	64.1	45.1
30-Sep	78.0	62.9	65.5	46.2	38.0	77.0	65.9	64.2	44.0
7-Oct	73.0	61.2	62.6	44.1	35.0	75.6	60.0	60.9	40.6
14-Oct	72.0	55.8	60.9	42.9	33.0	72.1	60.6	58.1	39.5
21-Oct	67.0	56.7	58.4	41.0	32.0	67.9	56.9	55.5	36.9
28-Oct	62.0	54.7	56.2	42.1	33.0	69.3	57.7	54.9	38.1
4-Nov	60.0	55.0	53.8	40.1	30.0	67.2	57.0	51.5	35.7
11-Nov	59.0	51.7	52.5	39.9	30.0	66.5	56.8	50.5	34.5
18-Nov	56.0	52.7	50.3	38.1	25.0	65.1	55.1	46.9	32.8
25-Nov	57.0	51.4	47.5	36.0	20.0	63.0	54.2	43.0	29.4
2-Dec	55.0	52.8	47.5	36.3	23.0	59.5	52.7	43.5	29.5
9-Dec	54.0	53.2	46.9	36.3	26.0	60.2	53.7	43.0	29.9
16-Dec	53.0	52.5	47.0	36.1	25.0	59.5	53.2	43.2	30.2
23-Dec	53.0	51.6	45.5	34.7	19.0	58.8	52.8	40.1	28.2
31-Dec	54.0	52.9	45.0	34.1	21.0	58.8	52.3	39.5	27.1



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	753
FEB	0	648
MAR	0	650
APR	2	539
MAY	9	427
JUN	14	300
JUL	27	219
AUG	29	211
SEP	24	269
OCT	3	442
NOV	0	632
DEC	0	754
ANN	107	5844

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 (Drying) Load ■ Average Latent Heating (Humidifying) Load

	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	-21924	0	-1355
FEB	0	-18983	0	-1138
MAR	0	-19249	0	-725
APR	2	-16281	0	-237
MAY	36	-13388	1	-28
JUN	79	-9987	2	-2
JUL	124	-7806	5	0
AUG	129	-7564	18	0
SEP	109	-9065	12	-18
OCT	4	-13723	0	-126
NOV	0	-18728	0	-708
DEC	0	-21953	0	-1137
ANN	483	-178651	38	-5474

Average Annual Solar Radiation – Nearest Available Site

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

City: QUILLAYUTE
 State: WA
 WBAN No: 94240
 Lat(N): 47.95
 Long(W): 124.55
 Elev(ft): 180

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.763
 Vert Gap: 0.325

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	310	510	820	1180	1490	1610	1640	1440	1120	680	370	260	950
	Std Dev	42	64	83	116	116	159	174	149	87	83	41	27	35
	Minimum	230	380	690	890	1280	1340	1260	1150	950	550	300	220	890
	Maximum	390	640	1040	1370	1710	1880	1960	1710	1380	860	470	340	1030
	Diffuse	210	320	470	660	790	850	790	680	500	360	240	180	500
Clear Day	Global	560	900	1430	2020	2450	2630	2530	2160	1620	1050	630	470	1540
NORTH	Global	120	180	280	390	500	560	540	430	320	220	140	100	320
	Diffuse	120	180	280	380	470	500	490	420	320	220	140	100	300
Clear Day	Global	120	180	270	390	580	700	640	450	300	210	130	100	340
EAST	Global	210	340	520	680	810	820	830	760	700	440	250	180	550
	Diffuse	140	220	330	450	540	570	550	490	390	260	160	120	350
Clear Day	Global	510	720	1040	1340	1520	1580	1540	1390	1140	820	550	450	1050
SOUTH	Global	490	680	810	850	840	810	860	940	1030	840	560	470	760
	Diffuse	210	290	390	490	550	560	550	520	440	340	230	180	400
Clear Day	Global	1670	1860	1890	1630	1340	1200	1250	1480	1770	1860	1700	1570	1600
WEST	Global	210	340	530	730	900	980	1020	910	740	470	250	190	610
	Diffuse	140	220	330	460	560	590	580	510	390	270	160	120	360
Clear Day	Global	510	720	1040	1340	1520	1580	1540	1390	1140	820	550	450	1050

Average Annual Solar Heat and Illumination – Nearest Available Site

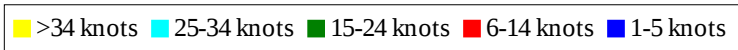
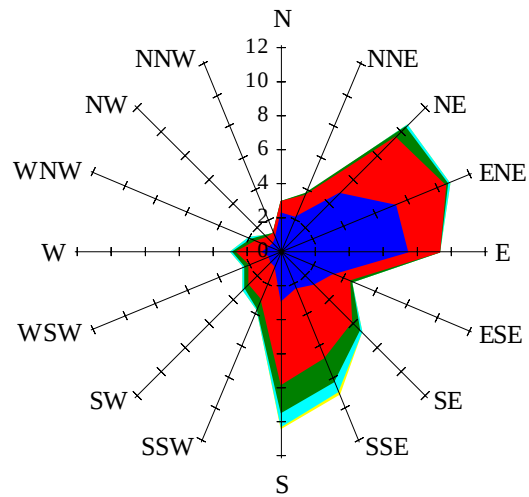
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	190	330	570	830	1070	1160	1190	1030	790	450	230	160	670
NORTH	Unshaded	83	130	190	260	340	380	360	290	220	150	96	71	210
	Shaded	64	99	150	210	270	300	290	240	180	120	74	54	170
EAST	Unshaded	150	240	370	480	570	580	590	540	490	310	170	120	390
	Shaded	120	190	290	370	430	440	440	410	390	250	140	100	300
SOUTH	Unshaded	370	500	580	580	550	520	560	630	720	610	420	350	530
	Shaded	350	440	420	330	300	310	310	320	460	510	390	330	370
WEST	Unshaded	140	240	380	520	640	700	730	650	520	330	170	130	430
	Shaded	120	190	300	400	490	530	550	500	420	270	140	100	340

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	26	56	65	53	24	44	76	93	91	71
	M.Cloudy	15	30	34	31	14	23	40	55	55	39
NORTH	M.Clear	8	12	13	11	7	15	14	16	16	14
	M.Cloudy	6	12	13	12	6	10	15	18	18	14
EAST	M.Clear	62	56	13	11	7	78	74	35	16	14
	M.Cloudy	17	23	13	12	6	22	30	25	18	14
SOUTH	M.Clear	33	72	86	69	31	11	38	57	55	32
	M.Cloudy	11	27	31	27	11	10	21	33	33	20
WEST	M.Clear	8	12	14	55	60	11	14	16	44	78
	M.Cloudy	6	12	13	24	18	10	15	18	29	33
M.Clear	(% hrs)	18	16	16	17	19	14	17	21	26	29
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	20	54	72	69	46	3	23	30	18	0
	M.Cloudy	11	28	42	40	24	2	12	14	10	0
NORTH	M.Clear	7	12	14	13	11	2	7	8	6	0
	M.Cloudy	5	11	15	15	10	1	6	6	5	0
EAST	M.Clear	58	69	32	13	11	15	34	8	6	0
	M.Cloudy	14	24	21	15	10	3	10	6	5	0
SOUTH	M.Clear	18	58	81	76	47	13	65	78	53	0
	M.Cloudy	7	22	36	35	19	3	15	16	12	0
WEST	M.Clear	7	12	14	45	73	2	7	13	35	0
	M.Cloudy	5	11	15	25	25	1	6	7	9	0
M.Clear	(% hrs)	31	34	35	36	36	15	15	15	15	17

Wind Summary - December, January, and February

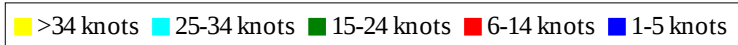
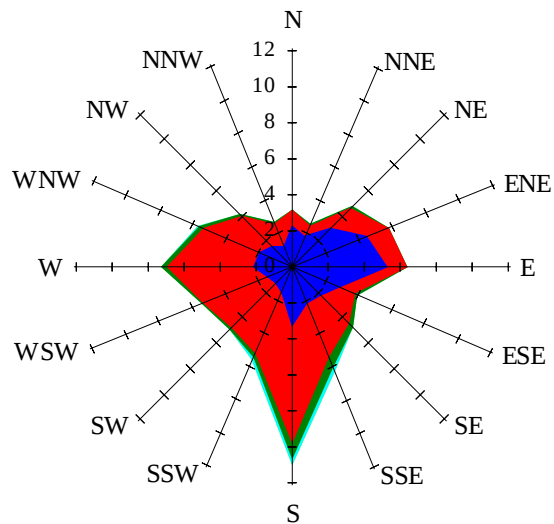
Labels of Percent Frequency on North Axis



Percent Calm = 16.71

Wind Summary - March, April, and May

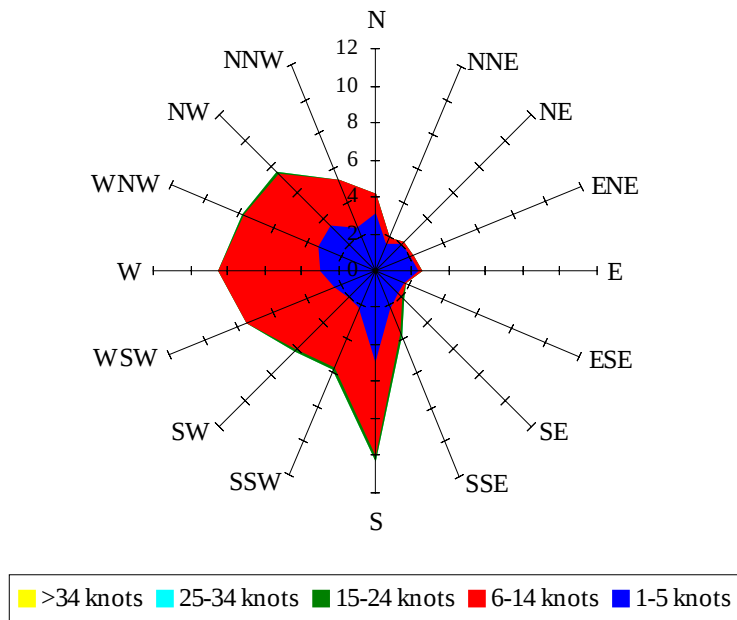
Labels of Percent Frequency on North Axis



Percent Calm = 17.06

Wind Summary - June, July, and August

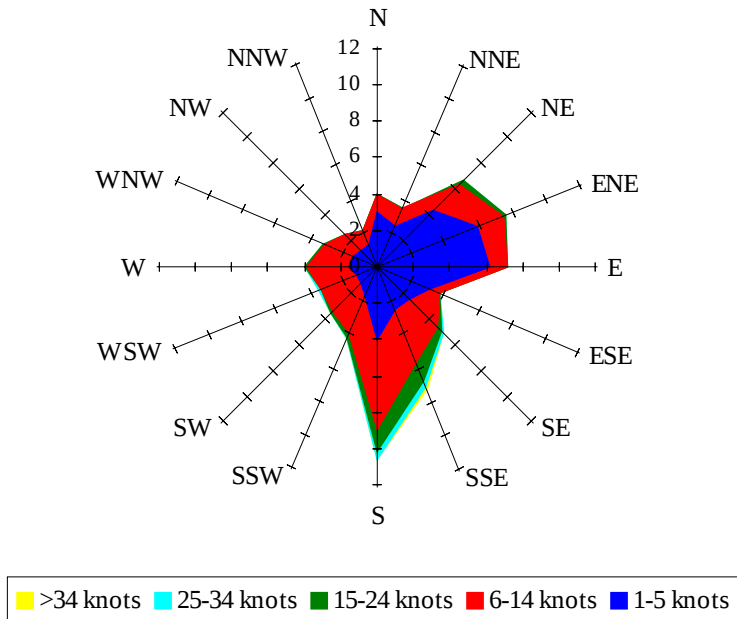
Labels of Percent Frequency on North Axis



Percent Calm = 21.30

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 21.86