

KELSO-LONGVEIW WA

Latitude = 46.12 N

Longitude = 122.90 W

Period of Record = 1990 to 1996

WMO No. 727924

Elevation = 16 feet

Average Pressure = 30.00 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	94	70	70	9.8	NE
0.4% Occurrence	87	68	70	9.9	N
1.0% Occurrence	82	65	65	9.2	N
2.0% Occurrence	79	64	63	9.3	NNW
Mean Daily Range	15	-	-	-	-
97.5% Occurrence	30	28	19	2.5	S
99.0% Occurrence	26	24	15	2.9	NNE
99.6% Occurrence	21	19	11	2.8	SSE
Median of Extreme Lows	18	16	10	2.9	SSE
	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	72	89	86	9.6	NNW
0.4% Occurrence	68	84	75	9.3	NNW
1.0% Occurrence	66	81	71	9.2	N
2.0% Occurrence	64	76	68	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	92	81	0.61	8.1	WNW
0.4% Occurrence	81	74	0.54	6.9	N
1.0% Occurrence	77	72	0.52	6.6	NNW
2.0% Occurrence	71	69	0.49	6.6	NNW
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		6	133	1	72

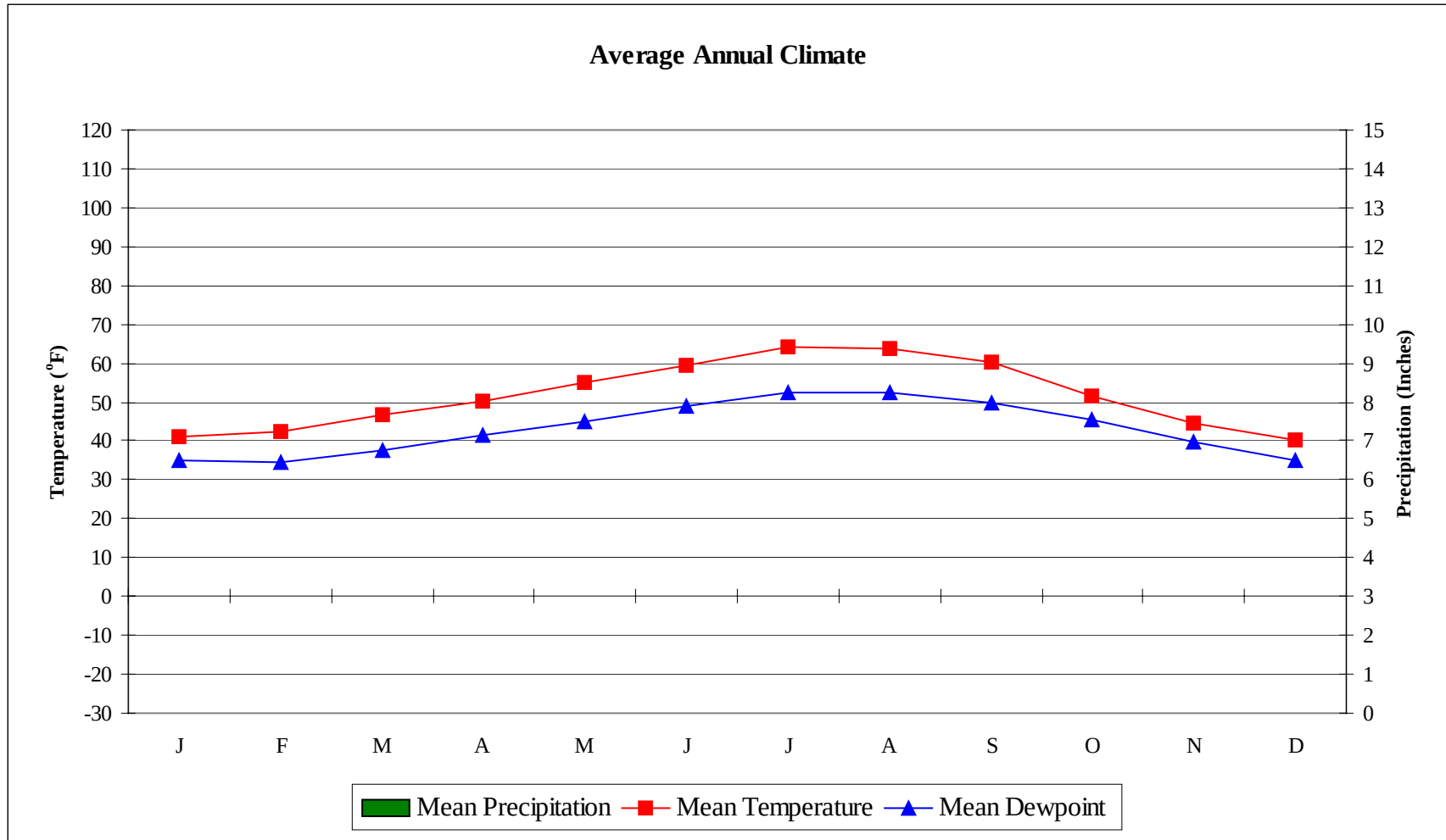
Other Site Data

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	1.0	85	0.0 + 0.1
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 (#)
54.0	N/A	N/A	27

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

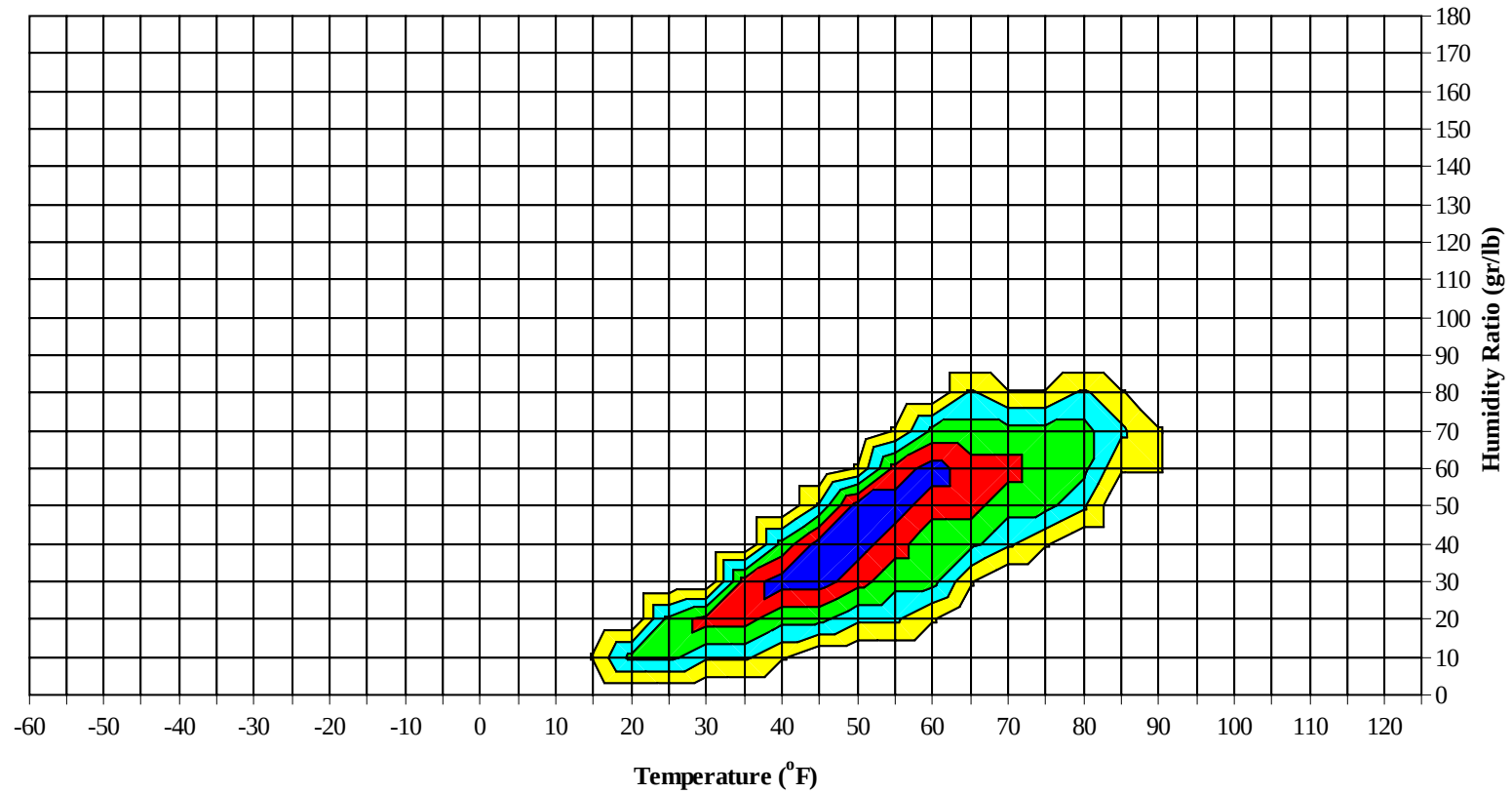
KELSO-LONGVEIW WA

WMO No. 727924



No Precipitation Data Available

Long Term Psychrometric Summary

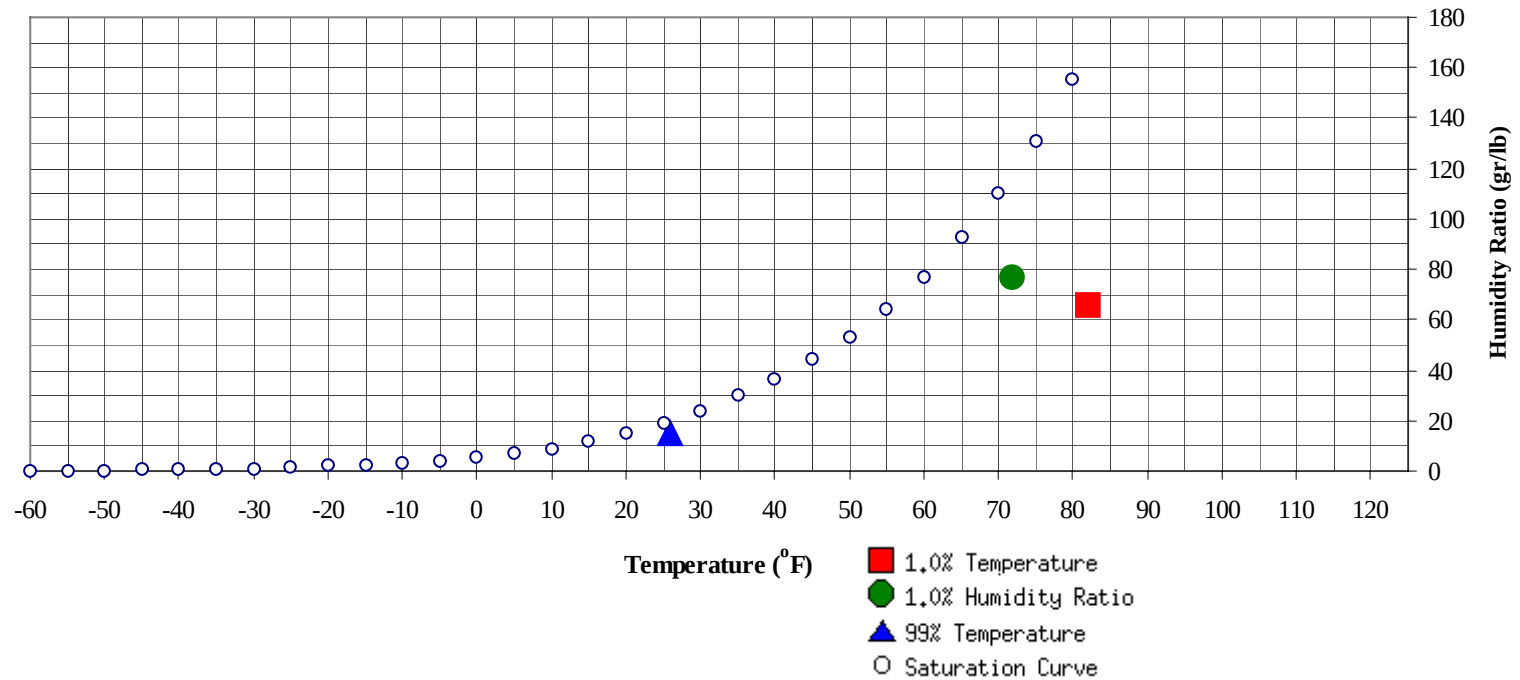


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

KELSO-LONGVEIW WA

WMO No. 727924

Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)	1.0% Humidity Ratio	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
99% Dry Bulb	26	15.2	8.6		77	71.8	64.2	60	29.3

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	82	66	65.2	30.0

KELSO-LONGVEIW WA

WMO No. 727924

Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1990 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		
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84												0	0	0	55.0
75 / 79												0	0	0	54.7
70 / 74												3	1	4	52.7
65 / 69							1		1	53.5		5	2	7	51.0
60 / 64		1		1	55.3		4	0	4	49.9		14	4	18	49.7
55 / 59	1	11	2	14	51.0	2	29	12	43	50.7		45	18	63	48.4
50 / 54	13	36	25	73	47.9	20	45	40	105	48.1	16	78	60	155	46.6
45 / 49	53	77	56	186	44.1	42	51	49	142	43.5	78	62	83	223	43.8
40 / 44	53	51	67	170	39.7	41	43	45	128	39.2	67	32	54	153	39.6
35 / 39	55	42	49	147	35.0	44	29	40	113	34.2	55	7	21	83	35.2
30 / 34	40	21	32	93	30.2	40	18	25	83	30.0	23	1	3	27	30.8
25 / 29	18	5	13	37	25.0	17	4	11	33	24.9	9		1	10	25.9
20 / 24	10	2	3	15	20.6	11	1	1	13	20.1	1			1	20.8
15 / 19	6	1	1	8	15.9	6	0	0	6	15.8					
10 / 14						1			1	11.3					
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.

KELSO-LONGVEIW WA

WMO No. 727924

Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1990 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		
100 / 104															
95 / 99															
90 / 94															
85 / 89							1	0	1	62.5		3	1	4	67.2
80 / 84							6	1	7	63.3		3	1	4	66.4
75 / 79		1		1	61.7		11	3	14	60.9		7	3	10	64.9
70 / 74		8	2	10	57.0		18	8	26	58.7		20	6	26	62.5
65 / 69		14	4	18	55.1	0	31	11	42	56.7	0	29	11	40	59.7
60 / 64	0	29	13	41	52.6	2	52	24	79	53.7	1	52	24	78	57.5
55 / 59	10	55	31	96	50.4	2	52	24	79	53.7	16	71	55	142	55.1
50 / 54	47	79	77	202	47.5	32	79	71	182	51.1	85	47	86	219	52.5
45 / 49	89	49	75	214	44.1	104	45	92	241	48.3	95	8	45	148	49.3
40 / 44	65	5	34	104	40.3	76	5	31	111	44.8	36		8	44	45.3
35 / 39	24		4	28	35.9	27	0	6	33	40.2	7		0	7	41.3
30 / 34	5			5	32.0	8		0	8	36.5	0			0	37.0
25 / 29	0			0		0			0	32.5					
20 / 24	0			0	17.0										
15 / 19															
10 / 14															
5 / 9															

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KELSO-LONGVEIW WA

WMO No. 727924

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1990 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		
100 / 104		0		0	69.0										
95 / 99		1	0	1	68.6		1		1	70.0					
90 / 94		8	3	11	69.8		4	1	5	68.9		0		0	65.0
85 / 89		10	4	14	68.6		7	2	9	66.2		5	1	6	67.2
80 / 84		18	8	27	66.1		23	9	31	64.9		13	3	16	64.4
75 / 79	1	35	15	51	63.5	0	40	16	56	62.9		25	8	33	62.4
70 / 74	1	47	27	75	61.0	2	57	29	87	60.8		41	15	55	60.2
65 / 69	6	60	40	106	58.8	10	61	40	111	59.0	2	52	32	85	58.4
60 / 64	78	61	86	225	56.6	73	47	90	211	57.3	37	67	68	172	56.6
55 / 59	112	7	55	174	53.3	93	8	47	148	53.7	87	31	67	185	53.5
50 / 54	41	0	8	49	49.8	47		12	59	49.6	54	6	28	88	49.6
45 / 49	9		1	10	44.8	21		2	23	45.2	37	1	14	51	44.6
40 / 44	1			1	41.4	2			2	40.9	19	0	3	22	40.5
35 / 39											5			5	37.3
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															

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KELSO-LONGVEIW WA

WMO No. 727924

Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)

Period of Record = 1990 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		
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84		1	0	1	63.5										
75 / 79		2	0	2	58.1										
70 / 74		8	1	9	58.2										
65 / 69		22	3	25	57.1		1		1	59.0					
60 / 64	1	49	12	63	54.9		4	1	5	57.9	0			0	50.0
55 / 59	31	83	61	175	53.0	10	29	19	58	53.6	1	1	2	4	49.4
50 / 54	71	53	78	202	49.4	33	56	37	126	49.0	14	24	16	54	48.4
45 / 49	57	24	47	128	45.0	51	75	71	198	44.4	37	69	53	159	44.2
40 / 44	56	6	32	94	40.9	58	50	55	163	40.0	67	72	66	205	39.6
35 / 39	25	1	11	38	36.2	58	20	39	117	35.9	60	56	65	181	35.0
30 / 34	5	0	2	7	30.1	17	5	12	34	30.8	47	19	32	98	30.5
25 / 29	2			2	26.3	9	1	5	15	25.5	14	4	10	28	25.8
20 / 24						2	0	1	3	21.2	4	3	3	10	20.5
15 / 19						2		0	2	17.2	3	1	0	4	15.5
10 / 14											0			0	
5 / 9											0			0	7.0

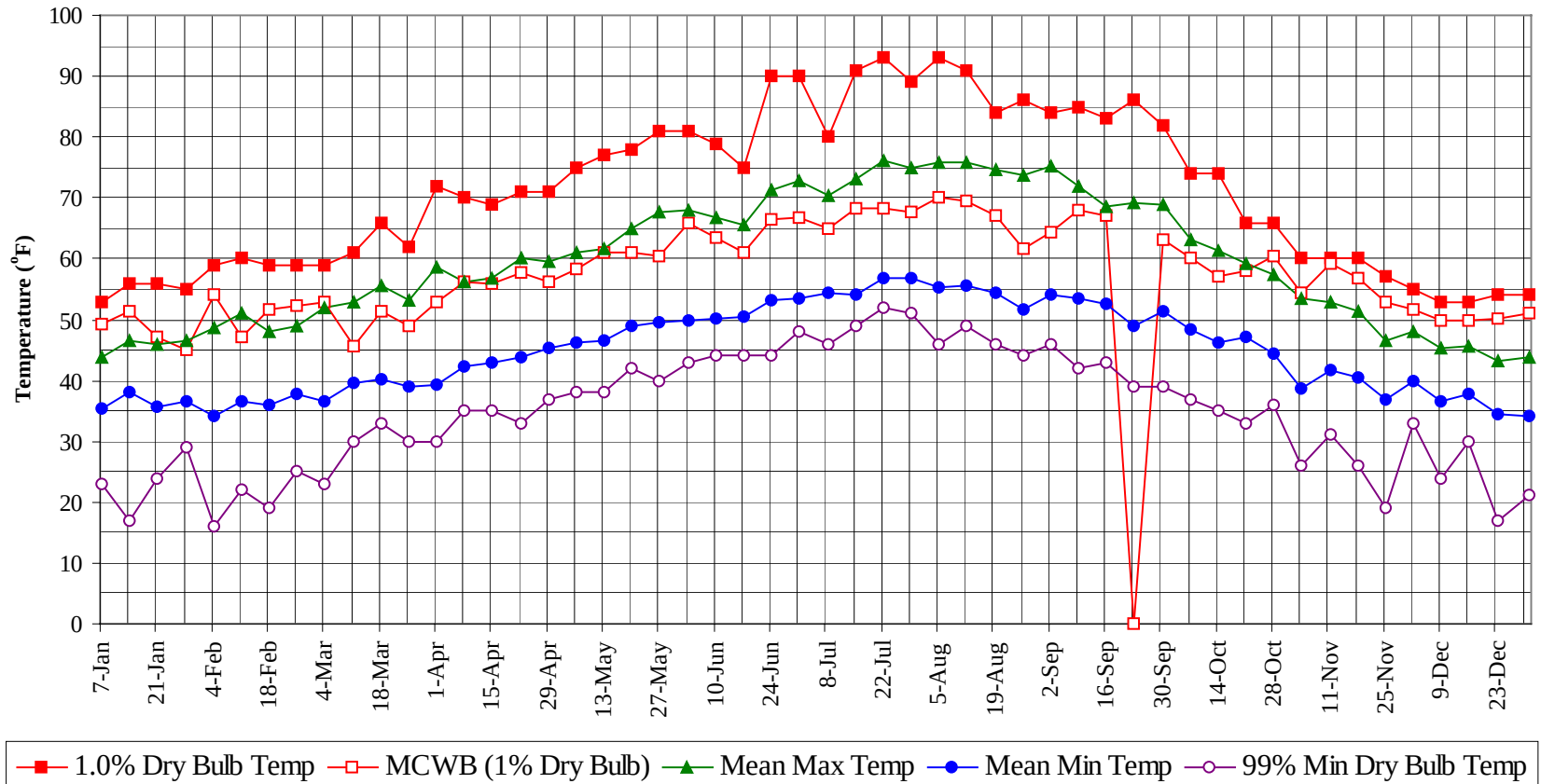
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

KELSO-LONGVEIW WA**WMO No. 727924****Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)****Period of Record = 1990 to 1996**

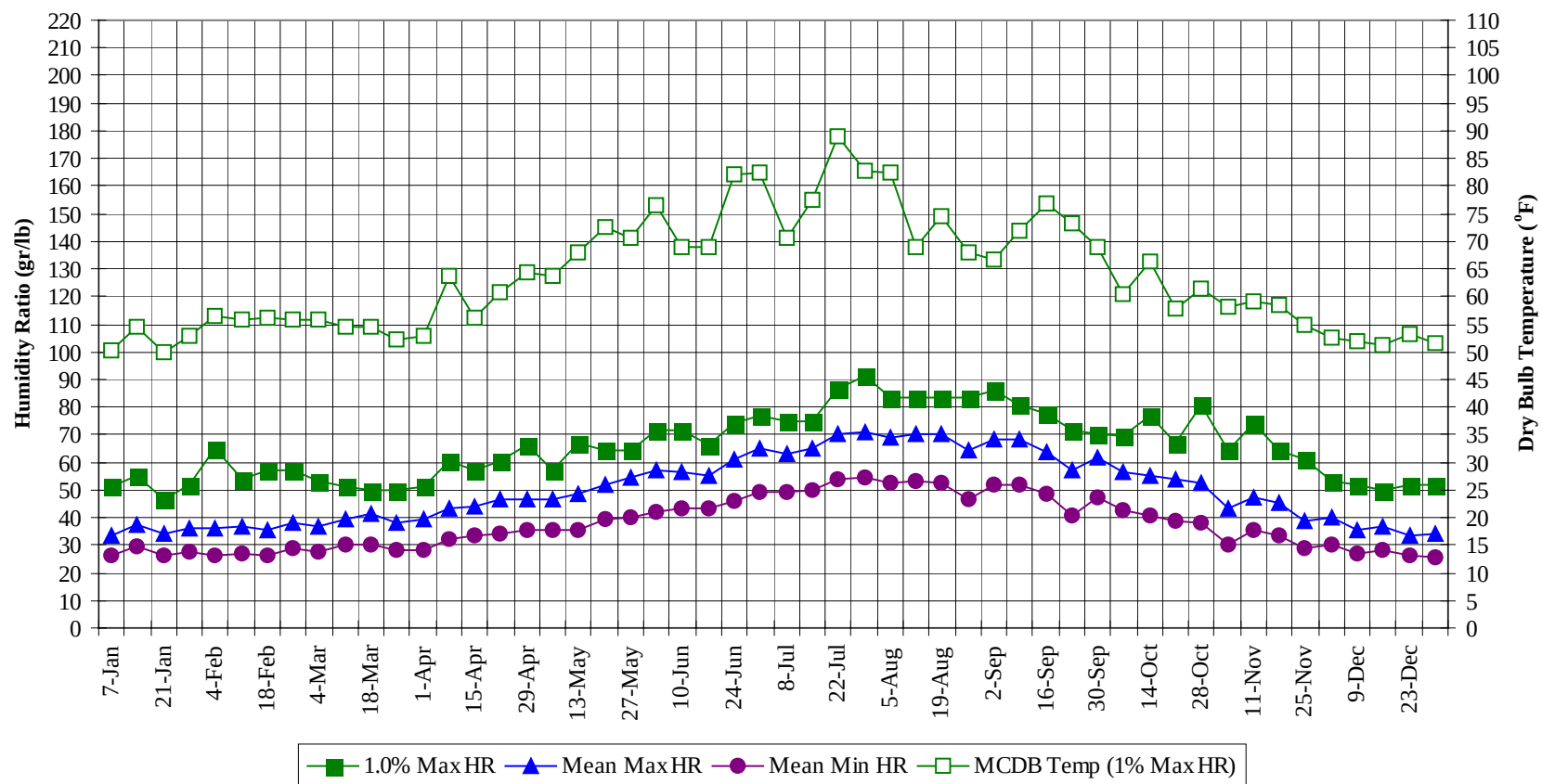
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104	0			0	69.0
95 / 99	2			2	69.0
90 / 94	16			21	69.0
85 / 89	25			33	67.3
80 / 84	64			87	65.0
75 / 79	1	130	47	178	62.7
70 / 74	3	205	91	298	60.1
65 / 69	19	290	154	463	58.0
60 / 64	207	390	346	943	55.8
55 / 59	457	418	464	1339	52.3
50 / 54	547	433	512	1493	48.4
45 / 49	584	425	498	1507	44.2
40 / 44	464	269	369	1101	39.8
35 / 39	341	162	242	744	35.2
30 / 34	181	67	110	359	30.4
25 / 29	71	14	41	126	25.3
20 / 24	28	8	9	45	20.5
15 / 19	16	2	1	20	15.9
10 / 14	1			1	11.3
5 / 9	0			0	7.0

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

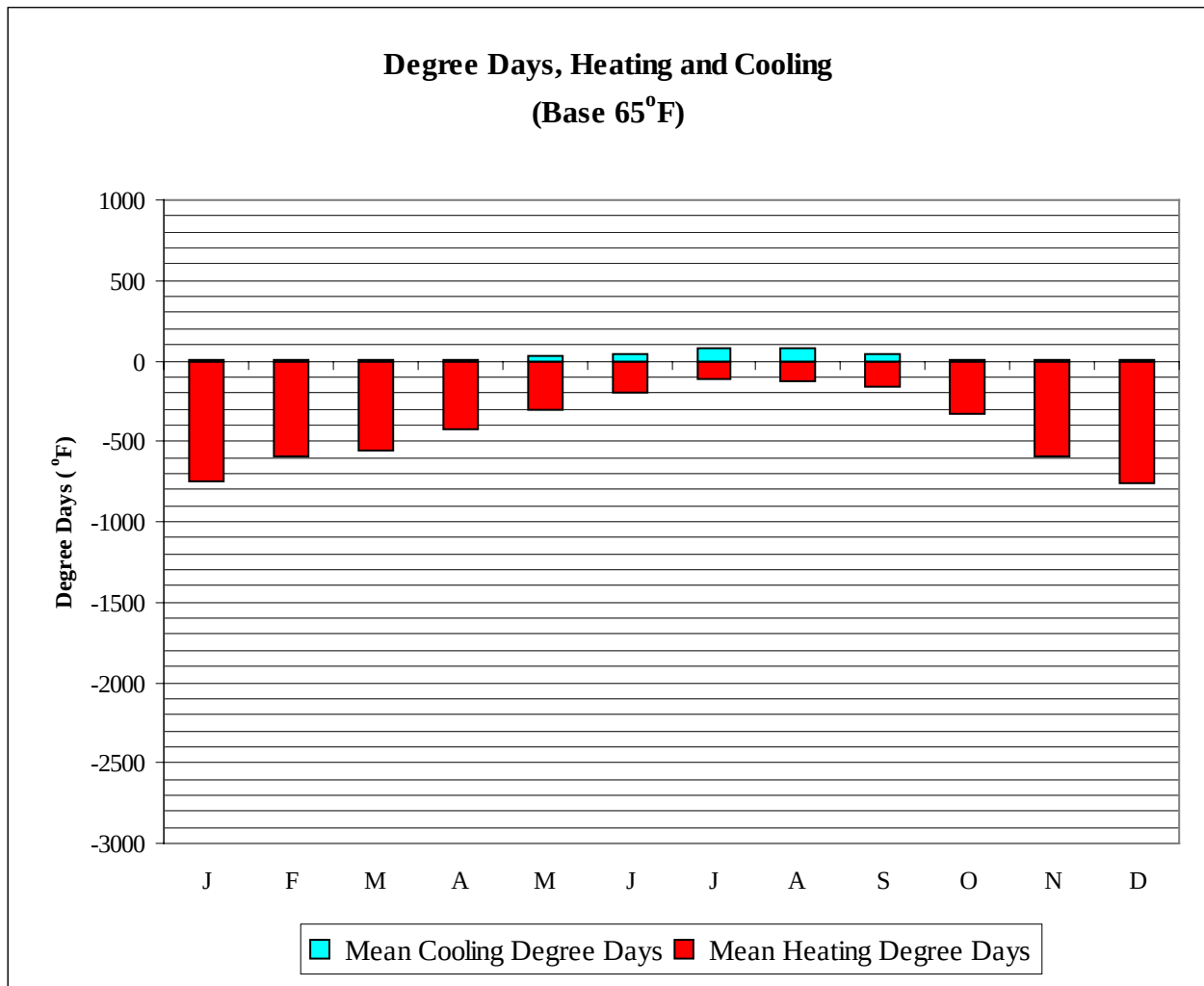


Long Term Humidity and Dry Bulb Temperature Summary



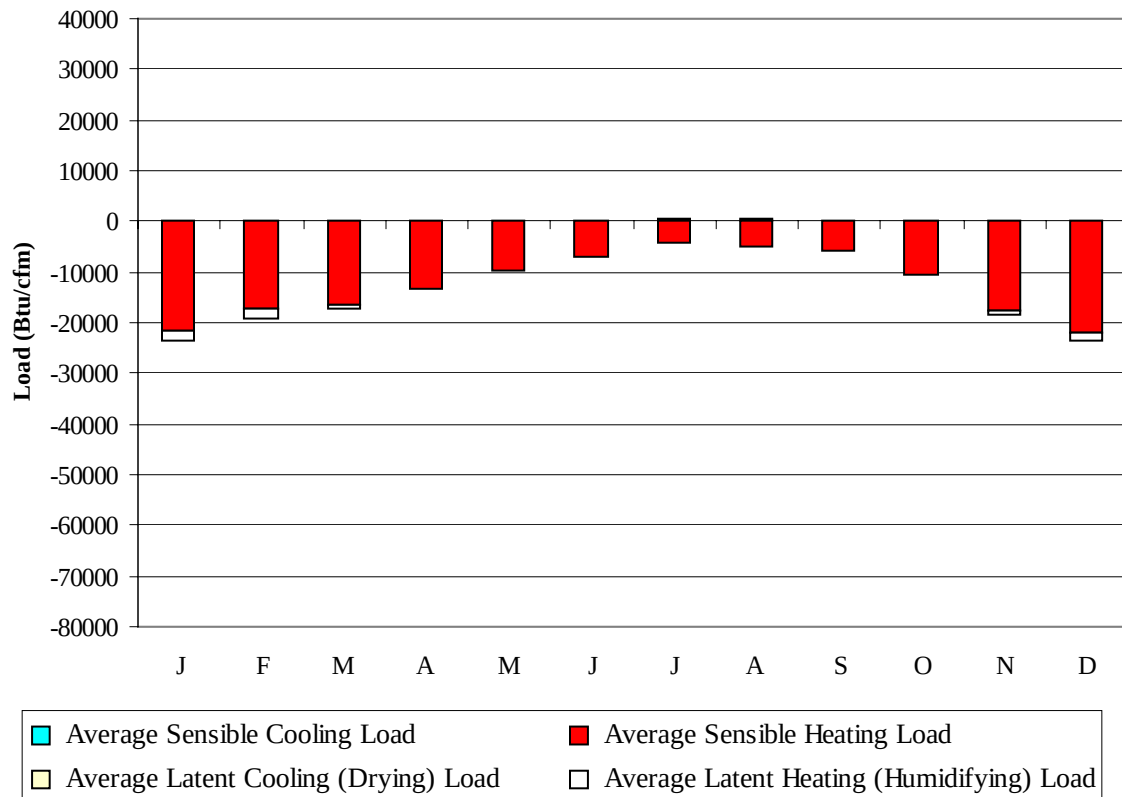
KELSO-LONGVEIW WA**WMO No. 727924****Long Term Dry Bulb Temperature and Humidity Summary**

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	49.2	43.9	35.3	23.0	51.1	50.2	33.4	26.5
14-Jan	56.0	51.3	46.4	38.0	17.0	55.3	54.4	37.6	29.3
21-Jan	56.0	47.0	46.0	35.6	24.0	46.9	50.0	34.4	26.0
28-Jan	55.0	45.0	46.6	36.5	29.0	51.8	52.7	36.1	27.3
4-Feb	59.0	54.0	48.7	34.1	16.0	65.1	56.5	35.9	26.3
11-Feb	60.0	47.0	51.0	36.7	22.0	53.9	55.8	37.1	26.7
18-Feb	59.0	51.7	48.1	35.8	19.0	57.4	56.1	35.6	26.0
25-Feb	59.0	52.3	48.9	37.8	25.0	57.4	55.9	38.2	29.0
4-Mar	59.0	53.0	51.9	36.7	23.0	53.2	55.9	37.1	27.3
11-Mar	61.0	45.5	52.8	39.6	30.0	51.1	54.4	39.6	30.1
18-Mar	66.0	51.3	55.6	40.1	33.0	49.7	54.4	41.5	30.0
25-Mar	62.0	49.0	53.1	38.9	30.0	49.7	52.2	38.1	28.4
1-Apr	72.0	53.0	58.7	39.3	30.0	51.1	53.0	39.5	28.5
8-Apr	70.0	56.2	56.2	42.2	35.0	60.2	63.8	43.3	32.3
15-Apr	69.0	56.0	56.8	43.0	35.0	57.4	56.0	43.7	33.3
22-Apr	71.0	57.7	60.1	43.7	33.0	60.2	60.7	46.6	34.3
29-Apr	71.0	56.1	59.6	45.2	37.0	66.5	64.2	46.5	35.5
6-May	75.0	58.3	61.1	46.1	38.0	57.4	63.6	46.6	35.6
13-May	77.0	61.0	61.8	46.4	38.0	67.2	68.0	48.9	35.7
20-May	78.0	61.0	64.9	48.8	42.0	64.4	72.5	51.9	39.6
27-May	81.0	60.5	67.8	49.7	40.0	64.4	70.6	54.8	40.2
3-Jun	81.0	66.0	67.8	50.0	43.0	71.4	76.5	57.0	42.1
10-Jun	79.0	63.4	66.8	50.1	44.0	71.4	68.8	56.6	43.3
17-Jun	75.0	61.0	65.5	50.6	44.0	66.5	68.8	55.5	43.5
24-Jun	90.0	66.5	71.4	53.3	44.0	74.2	82.0	61.2	46.0
1-Jul	90.0	66.8	72.8	53.5	48.0	77.0	82.4	64.8	49.4
8-Jul	80.0	65.0	70.4	54.4	46.0	74.6	70.6	63.1	49.3
15-Jul	91.0	68.3	73.2	54.2	49.0	74.9	77.3	64.7	49.6
22-Jul	93.0	68.3	76.3	56.8	52.0	86.8	88.9	70.5	53.6
29-Jul	89.0	67.8	75.0	56.7	51.0	91.0	82.7	71.1	54.5
5-Aug	93.0	70.0	75.9	55.3	46.0	83.3	82.4	69.2	52.3
12-Aug	91.0	69.5	75.9	55.5	49.0	83.3	69.0	70.2	53.1
19-Aug	84.0	67.1	74.5	54.4	46.0	83.3	74.6	70.6	52.6
26-Aug	86.0	61.6	73.7	51.7	44.0	83.3	67.9	64.5	46.8
2-Sep	84.0	64.3	75.3	54.1	46.0	86.1	66.5	68.2	51.9
9-Sep	85.0	68.0	71.9	53.5	42.0	80.5	71.9	68.3	51.6
16-Sep	83.0	67.0	68.7	52.6	43.0	77.7	76.8	63.6	48.7
23-Sep	86.0	.	69.2	48.8	39.0	71.4	73.2	57.3	40.7
30-Sep	82.0	63.0	69.0	51.3	39.0	70.0	68.8	62.0	47.4
7-Oct	74.0	60.0	63.1	48.5	37.0	69.3	60.5	56.5	42.7
14-Oct	74.0	57.0	61.2	46.2	35.0	77.0	66.3	54.9	40.5
21-Oct	66.0	58.0	59.3	47.1	33.0	67.2	57.9	53.6	38.4
28-Oct	66.0	60.5	57.4	44.4	36.0	80.5	61.3	52.4	37.9
4-Nov	60.0	54.3	53.5	38.7	26.0	64.4	58.0	43.6	30.3
11-Nov	60.0	59.1	52.8	41.6	31.0	74.2	59.0	47.6	35.5
18-Nov	60.0	56.7	51.4	40.6	26.0	64.4	58.4	45.3	33.4
25-Nov	57.0	53.0	46.5	37.0	19.0	60.9	55.0	38.6	28.9
2-Dec	55.0	51.6	48.1	39.8	33.0	53.2	52.4	40.2	30.0
9-Dec	53.0	49.8	45.4	36.4	24.0	51.8	51.9	35.2	26.9
16-Dec	53.0	50.0	45.7	37.9	30.0	49.7	51.3	36.7	28.3
23-Dec	54.0	50.1	43.3	34.5	17.0	51.8	53.3	33.3	26.1
31-Dec	54.0	51.0	43.8	34.2	21.0	51.8	51.6	34.4	25.6



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	746
FEB	0	593
MAR	2	554
APR	5	428
MAY	25	302
JUN	47	198
JUL	80	108
AUG	80	128
SEP	44	166
OCT	4	331
NOV	0	597
DEC	0	761
ANN	286	4912

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	-21712	0	-1703
FEB	0	-17383	0	-1678
MAR	3	-16593	0	-783
APR	2	-13258	0	-129
MAY	79	-9838	0	-38
JUN	264	-6987	2	-3
JUL	550	-4296	66	0
AUG	451	-4905	58	-2
SEP	199	-5928	10	-8
OCT	5	-10442	4	-82
NOV	0	-17754	0	-645
DEC	0	-22147	0	-1595
ANN	1553	-151243	140	-6666

Average Annual Solar Radiation – Nearest Available Site

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

City: PORTLAND
 State: OR
 WBAN No: 24229
 Lat(N): 45.6
 Long(W): 122.6
 Elev(ft): 39

Stn Type: Primary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.695
 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	370	590	940	1330	1670	1870	1990	1720	1310	810	430	310	1110
	Std Dev	52	75	108	109	154	184	177	148	116	94	53	38	51
	Minimum	280	430	760	1070	1370	1540	1590	1470	1020	580	290	230	990
	Maximum	460	750	1210	1520	1940	2180	2270	2010	1550	1000	530	420	1200
	Diffuse	260	380	550	750	860	890	780	670	530	410	290	220	550
Clear Day	Global	640	980	1500	2080	2480	2640	2550	2200	1690	1130	710	540	1600
NORTH	Global	140	210	310	430	540	620	600	470	350	250	160	120	350
	Diffuse	140	210	310	420	500	540	520	440	350	250	160	120	330
Clear Day	Global	140	200	290	410	580	690	640	470	330	230	160	120	360
EAST	Global	240	360	560	750	900	980	1040	920	760	470	260	200	620
	Diffuse	170	250	370	510	600	630	610	530	430	300	190	150	390
Clear Day	Global	530	750	1050	1330	1490	1540	1510	1370	1140	830	580	470	1050
SOUTH	Global	550	720	890	920	900	870	970	1070	1170	960	590	470	840
	Diffuse	250	340	450	550	590	600	580	550	490	390	270	220	440
Clear Day	Global	1660	1840	1850	1580	1290	1140	1200	1430	1730	1830	1690	1560	1570
WEST	Global	250	390	590	800	1000	1110	1230	1100	880	560	290	210	700
	Diffuse	170	250	380	520	610	640	630	550	440	310	190	150	400
Clear Day	Global	530	750	1050	1330	1490	1540	1510	1370	1140	830	580	470	1050

Average Annual Solar Heat and Illumination – Nearest Available Site

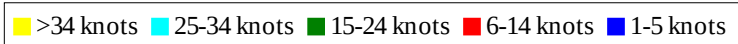
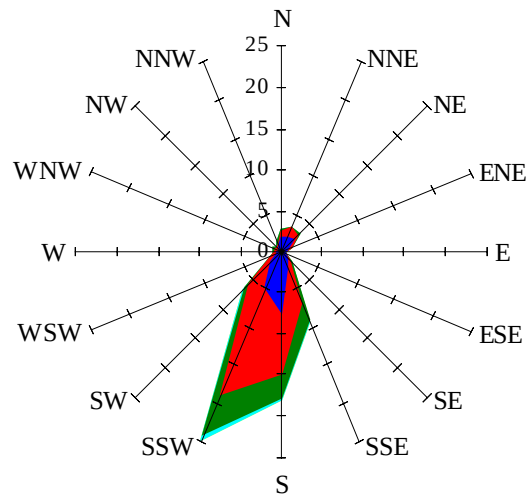
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	240	400	660	940	1200	1350	1440	1240	930	550	280	200	790
NORTH	Unshaded	99	150	220	290	360	410	390	310	240	170	110	85	240
	Shaded	79	120	180	240	300	340	330	270	210	140	89	67	200
EAST	Unshaded	160	250	390	530	640	690	740	650	530	320	180	130	440
	Shaded	130	210	320	420	500	540	580	520	430	270	150	110	350
SOUTH	Unshaded	410	530	630	630	580	550	610	700	810	700	440	350	580
	Shaded	390	470	470	380	340	340	340	360	530	580	410	330	410
WEST	Unshaded	170	270	420	570	710	790	880	790	620	390	200	140	500
	Shaded	140	220	340	450	560	630	700	630	510	330	160	120	400

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	32	62	72	58	25	46	80	98	95	71
	M.Cloudy	17	36	41	34	14	26	48	62	61	44
NORTH	M.Clear	9	13	14	12	8	15	15	16	16	14
	M.Cloudy	7	13	15	13	6	12	17	20	19	15
EAST	M.Clear	66	55	14	12	8	79	73	34	16	14
	M.Cloudy	19	25	15	13	6	27	36	27	19	15
SOUTH	M.Clear	36	73	87	69	28	11	38	56	52	28
	M.Cloudy	13	31	38	30	11	11	24	36	35	21
WEST	M.Clear	9	13	19	61	60	11	15	16	49	80
	M.Cloudy	7	13	16	27	19	11	17	20	33	39
M.Clear	(% hrs)	15	17	18	17	18	24	28	31	34	37
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	23	59	77	73	46	6	28	34	20	0
	M.Cloudy	13	34	49	46	28	4	15	18	11	0
NORTH	M.Clear	8	13	15	14	11	3	8	9	7	0
	M.Cloudy	6	13	16	16	11	2	7	8	5	0
EAST	M.Clear	59	69	30	14	11	20	34	9	7	0
	M.Cloudy	16	29	22	16	11	4	11	8	5	0
SOUTH	M.Clear	19	59	80	75	44	18	68	78	51	0
	M.Cloudy	8	26	42	39	22	4	16	19	13	0
WEST	M.Clear	8	13	15	49	74	3	8	16	37	0
	M.Cloudy	6	13	16	29	32	2	7	9	10	0
M.Clear	(% hrs)	33	39	46	49	48	10	12	14	13	16

Wind Summary - December, January, and February

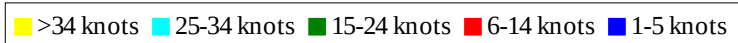
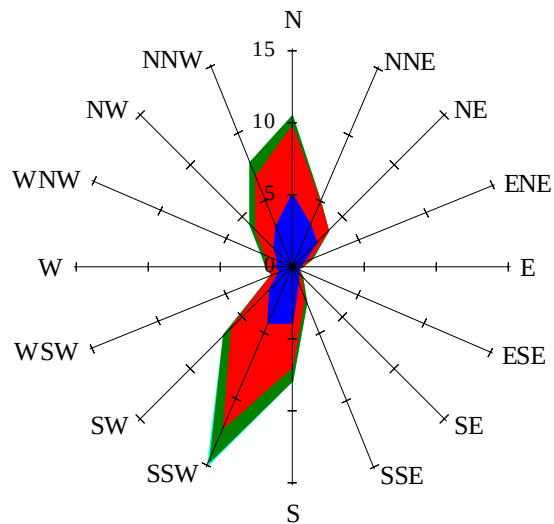
Labels of Percent Frequency on North Axis



Percent Calm = 23.71

Wind Summary - March, April, and May

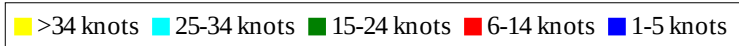
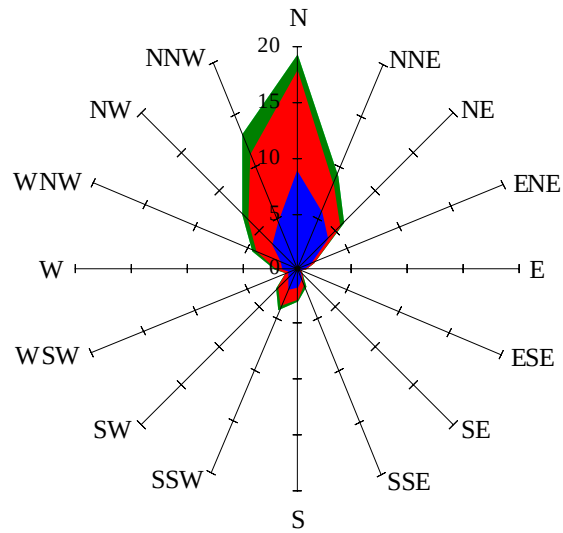
Labels of Percent Frequency on North Axis



Percent Calm = 28.29

Wind Summary - June, July, and August

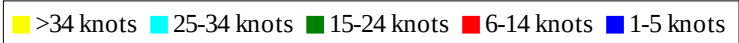
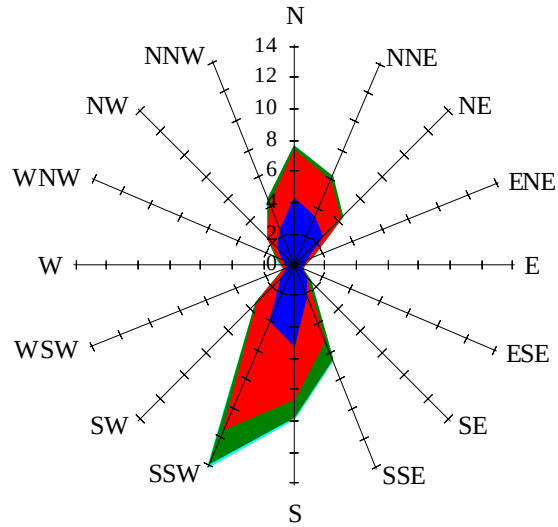
Labels of Percent Frequency on North Axis



Percent Calm = 24.87

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 34.52