

TAEJON KO	
Latitude = 36.33 N	WMO No. 471320
Longitude = 127.38 E	Elevation = 207 feet
Period of Record = 1973 to 1995	Average Pressure = 29.75 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	93	81	145	4.4	N
0.4% Occurrence	91	79	135	4.4	N
1.0% Occurrence	90	79	135	4.4	N
2.0% Occurrence	88	78	128	4.4	WSW
Mean Daily Range	16	-	-	-	-
97.5% Occurrence	18	17	10	1.6	NW
99.0% Occurrence	14	12	8	1.1	N
99.6% Occurrence	10	8	6	0.9	NW
Median of Extreme Lows	5	4	5	0.1	NNE
	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	82	90	151	4.3	SW
0.4% Occurrence	81	89	148	4.1	N
1.0% Occurrence	80	88	142	3.9	N
2.0% Occurrence	79	85	139	3.4	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	162	90	1.06	4.5	SW
0.4% Occurrence	152	87	0.99	3.6	SW
1.0% Occurrence	144	84	0.94	3.2	SSW
2.0% Occurrence	142	84	0.94	2.5	SSW
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		26	741	980	1942

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
8	N/A	N/A	2.0 + 0.6
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 (#)
56.4	N/A	N/A	54

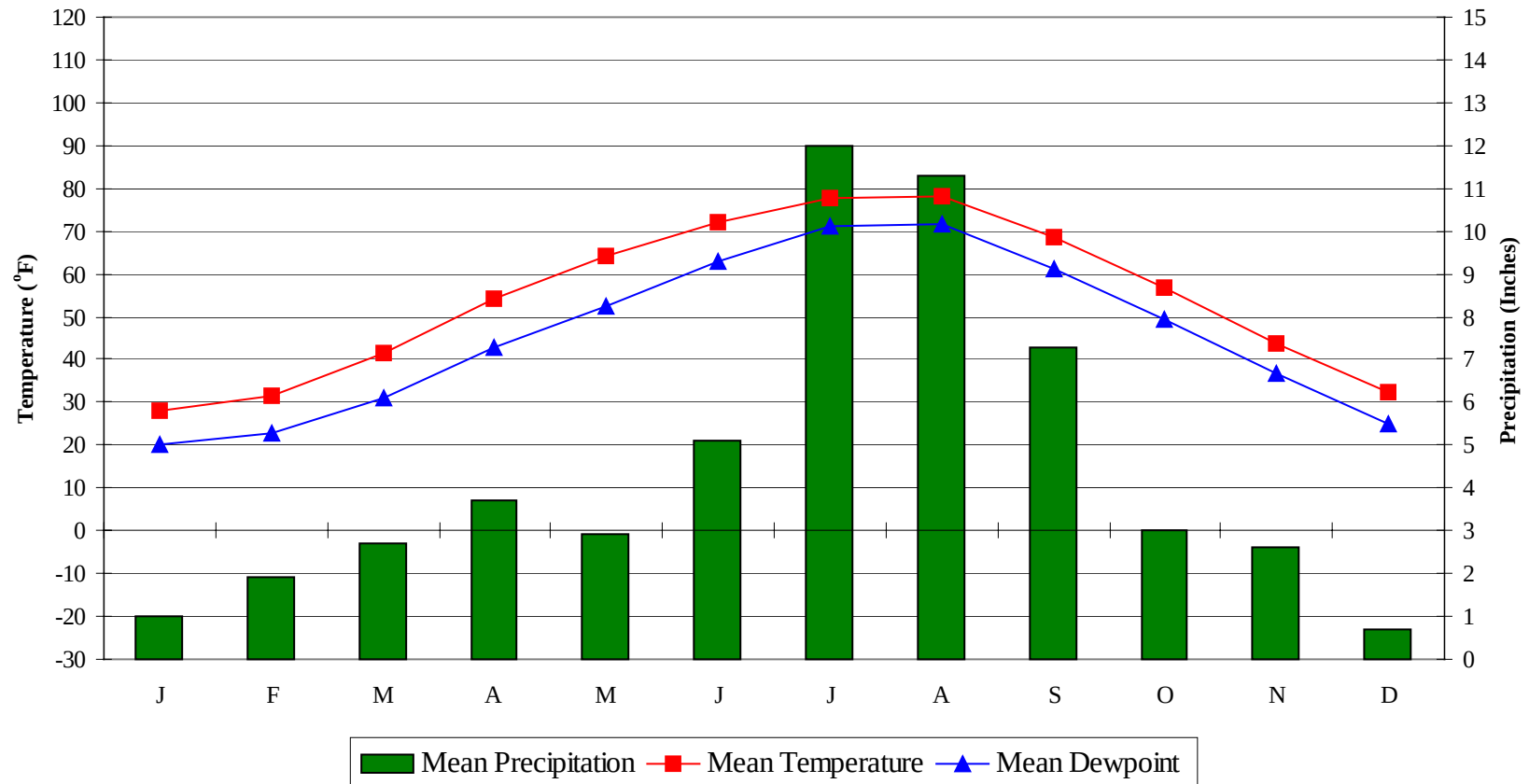
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

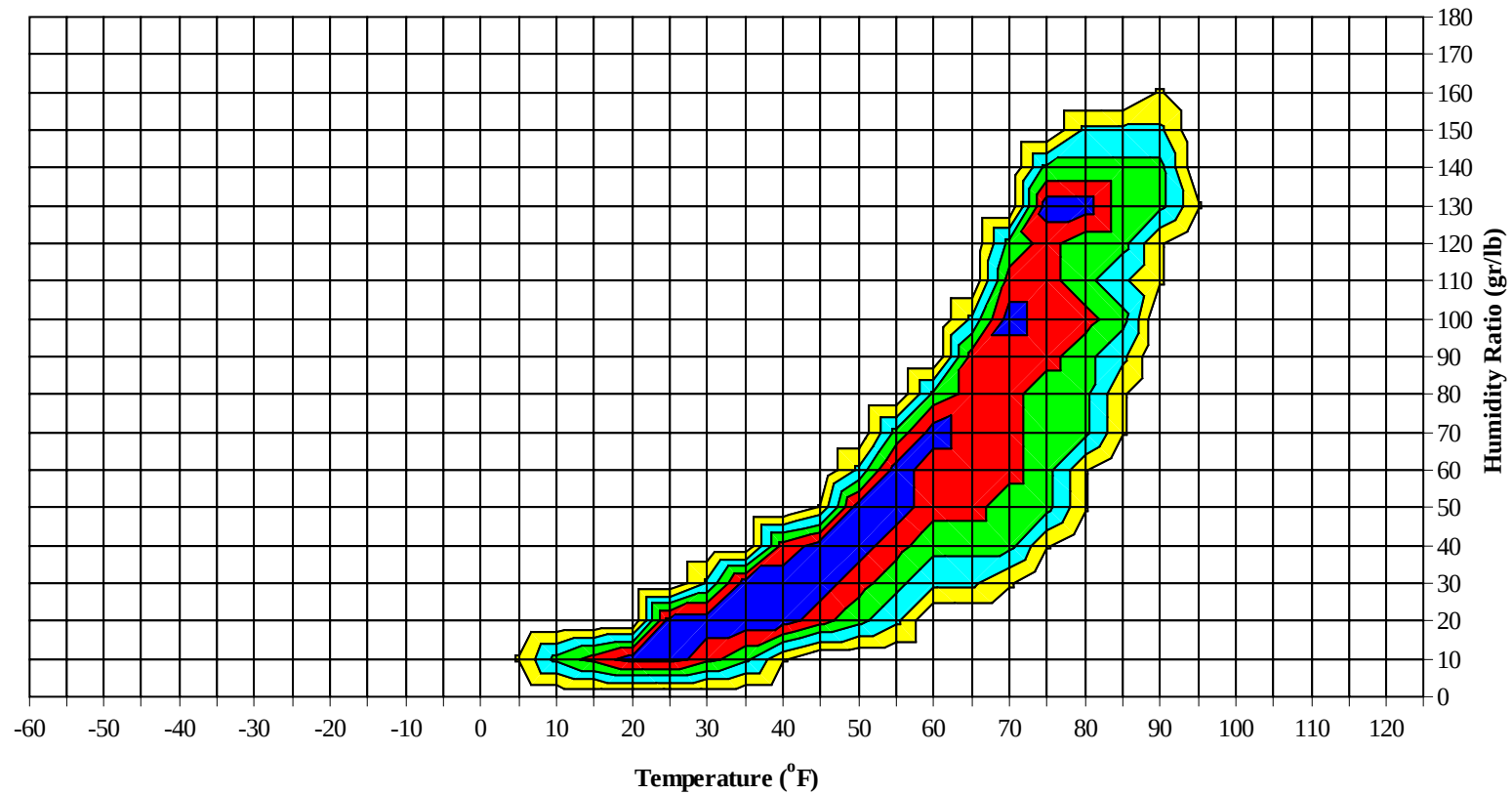


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Long Term Psychrometric Summary



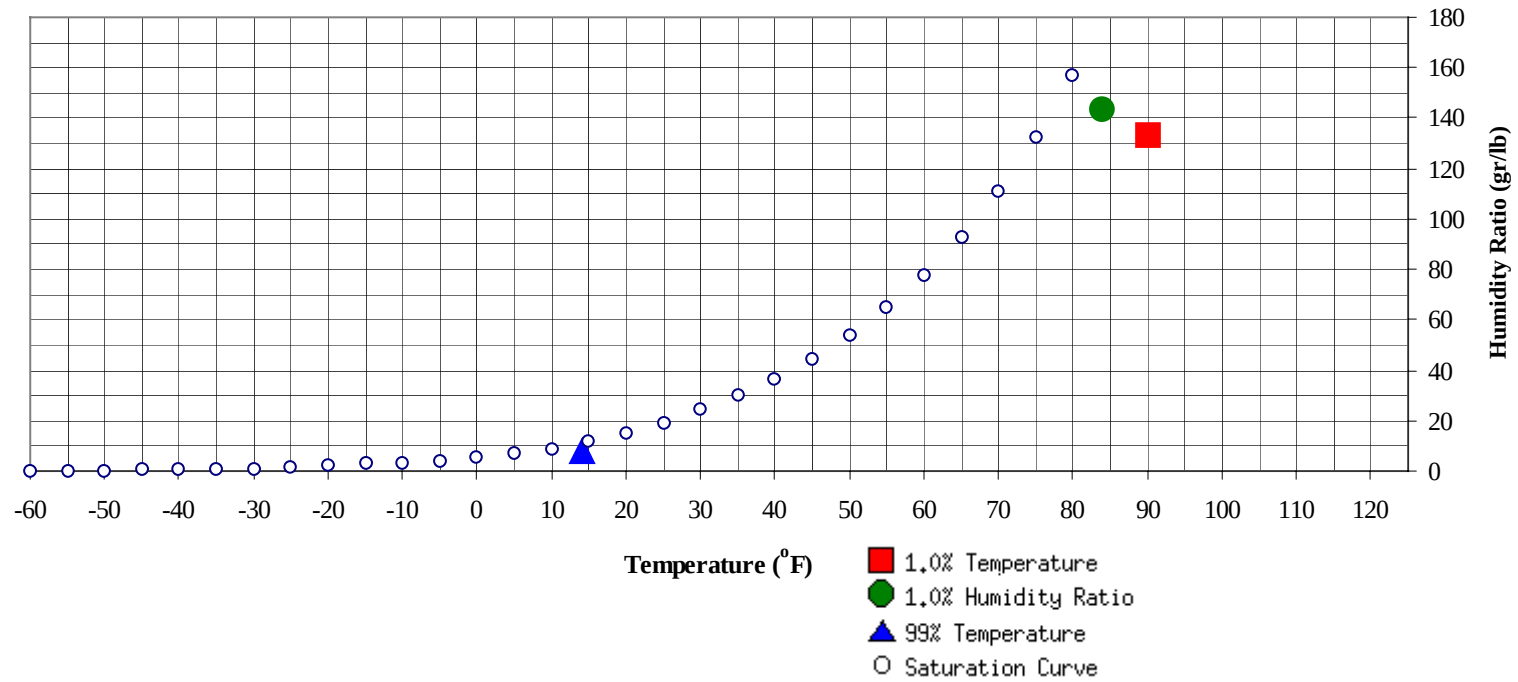
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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Psychrometric Summary of Peak Design Values



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)
	14	7.7	4.5		143.5	83.8	78.8	77	42.6

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	90	133.5	78.8	42.6

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

Period of Record = 1973 to 1995

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												1	0	1	57.1
65 / 69												4	1	5	55.4
60 / 64	0	0	0	0	49.5		1	0	1	52.1	0	11	6	17	51.4
55 / 59	0	1	0	1	48.5		1	1	2	49.2	1	30	17	48	48.1
50 / 54	0	2	1	3	45.6	1	10	6	17	45.3	4	49	37	90	44.7
45 / 49	0	14	5	19	40.9	2	28	17	47	40.8	20	59	56	135	41.3
40 / 44	3	22	14	38	38.1	6	30	27	63	37.7	30	35	43	108	38.2
35 / 39	18	51	44	113	34.1	24	51	51	126	34.0	61	38	52	151	34.3
30 / 34	31	62	61	154	29.3	42	47	49	138	29.3	71	18	28	116	29.8
25 / 29	60	49	61	170	24.5	58	33	41	132	24.3	48	4	7	59	25.1
20 / 24	43	24	28	95	20.2	31	13	16	60	20.0	8	1	1	10	20.6
15 / 19	45	16	25	86	16.1	35	9	12	56	16.1	4	0	0	4	16.7
10 / 14	30	6	8	44	11.0	21	3	4	28	11.0	0			0	12.0
5 / 9	16	2	1	19	6.1	4	0		4	6.4					
0 / 4	3	0		3	1.3	0			0	2.0					

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 1995

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	72.5
90 / 94												4	2	6	73.2
85 / 89				0	74.0		6	2	8	70.6	0	18	8	26	71.8
80 / 84		2	0	2	64.0	0	25	11	35	67.5	0	63	33	95	70.7
75 / 79		9	4	13	62.4	0	51	29	80	63.8	5	66	56	126	69.2
70 / 74	0	29	15	44	58.7	3	61	45	108	61.6	52	56	77	185	66.8
65 / 69	1	28	18	47	56.4	13	36	45	94	59.9	70	24	41	135	64.1
60 / 64	8	53	39	99	54.5	52	42	62	156	57.5	82	9	21	111	60.2
55 / 59	23	53	59	135	51.2	76	24	36	135	53.4	29	1	3	33	55.5
50 / 54	53	43	56	151	47.6	72	5	17	94	49.4	2	0		2	51.0
45 / 49	65	18	34	117	43.1	29		2	31	44.6					
40 / 44	39	6	13	58	39.2	3			3	40.4					
35 / 39	37	1	4	42	35.4	0			0	38.0					
30 / 34	12	0	0	12	30.7										
25 / 29	1			1	27.1										
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															

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 3 of 5)

Period of Record = 1973 to 1995

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		3	2	5	81.7		4	1	5	80.5					
90 / 94	0	31	13	44	80.0		40	15	55	79.8		1	0	1	78.9
85 / 89	0	38	21	59	77.8		48	22	70	77.8	0	6	1	7	75.6
80 / 84	10	69	62	141	75.7	8	79	64	151	75.6	0	41	13	54	71.8
75 / 79	91	66	89	246	73.6	108	53	93	255	73.8	6	73	42	121	68.9
70 / 74	100	34	50	184	69.9	93	21	47	161	69.9	35	65	68	168	66.5
65 / 69	38	6	10	54	66.0	30	3	6	39	66.0	37	28	53	117	63.8
60 / 64	8	1	1	10	61.4	8	0	0	8	61.8	76	20	46	141	60.4
55 / 59	1	0	0	1	56.7	0			0	56.0	53	6	16	75	55.6
50 / 54											27	1	2	30	51.3
45 / 49											6		0	6	46.4
40 / 44															
35 / 39															
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															

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

Period of Record = 1973 to 1995

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		2	0	2	69.3										
75 / 79	0	16	4	20	65.7										
70 / 74	1	47	18	66	62.0		2	1	3	61.5					
65 / 69	3	45	23	71	59.7		7	1	8	58.8					
60 / 64	16	50	57	124	57.5	1	20	7	28	55.3		1	0	1	54.5
55 / 59	51	44	68	164	53.9	3	37	22	62	51.4		3	1	4	50.5
50 / 54	59	25	44	128	49.5	22	46	45	113	48.1	1	17	6	24	46.3
45 / 49	59	12	23	94	44.9	36	48	50	134	43.4	6	37	18	61	42.2
40 / 44	28	4	7	39	40.4	32	27	36	96	39.3	8	29	24	62	38.1
35 / 39	22	2	5	28	36.1	54	31	43	128	35.2	31	54	56	141	34.5
30 / 34	7	0	0	7	31.7	50	17	25	92	30.5	55	49	61	165	29.8
25 / 29	1			1	27.0	32	4	9	45	25.6	63	33	46	141	24.8
20 / 24						8	1	1	10	20.5	30	14	18	62	20.2
15 / 19						2			2	17.5	37	9	14	60	16.3
10 / 14						0			0	12.0	14	3	4	21	11.2
5 / 9											3	0	0	3	6.3
0 / 4											0	0		0	2.3

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 1995

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		7	2	9	80.9
90 / 94	0	78	30	107	79.6
85 / 89	0	115	54	170	76.5
80 / 84	20	279	184	482	73.6
75 / 79	216	329	317	861	71.1
70 / 74	284	308	315	907	66.6
65 / 69	190	175	192	557	62.3
60 / 64	243	203	233	679	57.9
55 / 59	229	197	220	646	52.8
50 / 54	234	195	211	640	47.9
45 / 49	221	214	205	639	42.8
40 / 44	149	155	163	467	38.6
35 / 39	248	235	259	743	34.5
30 / 34	272	199	231	702	29.7
25 / 29	268	128	169	565	24.7
20 / 24	123	54	66	244	20.2
15 / 19	126	35	53	215	16.2
10 / 14	69	12	16	96	11.0
5 / 9	25	2	1	28	6.2
0 / 4	3	1		4	1.4

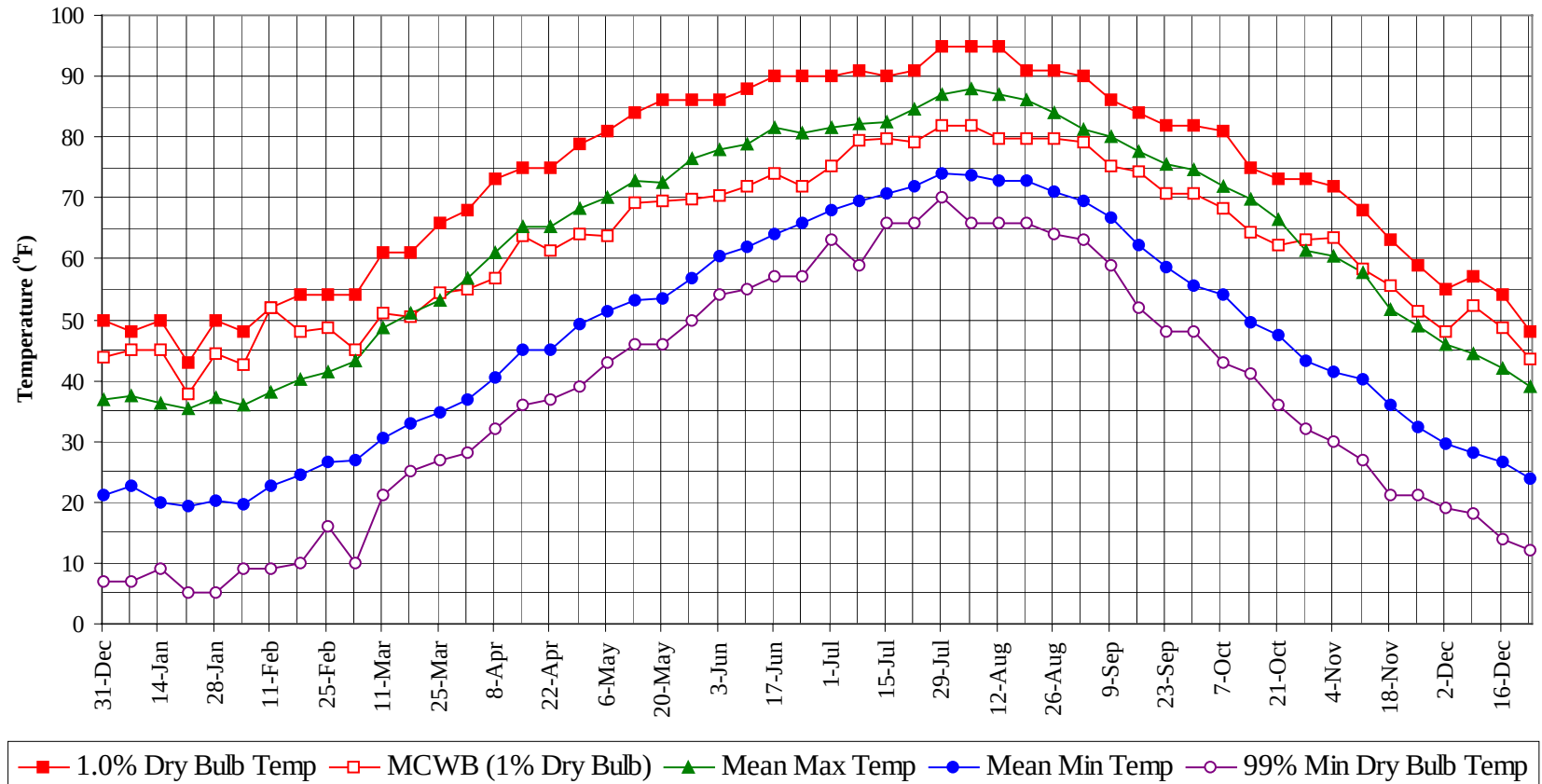
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

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Annual Summary of Temperatures

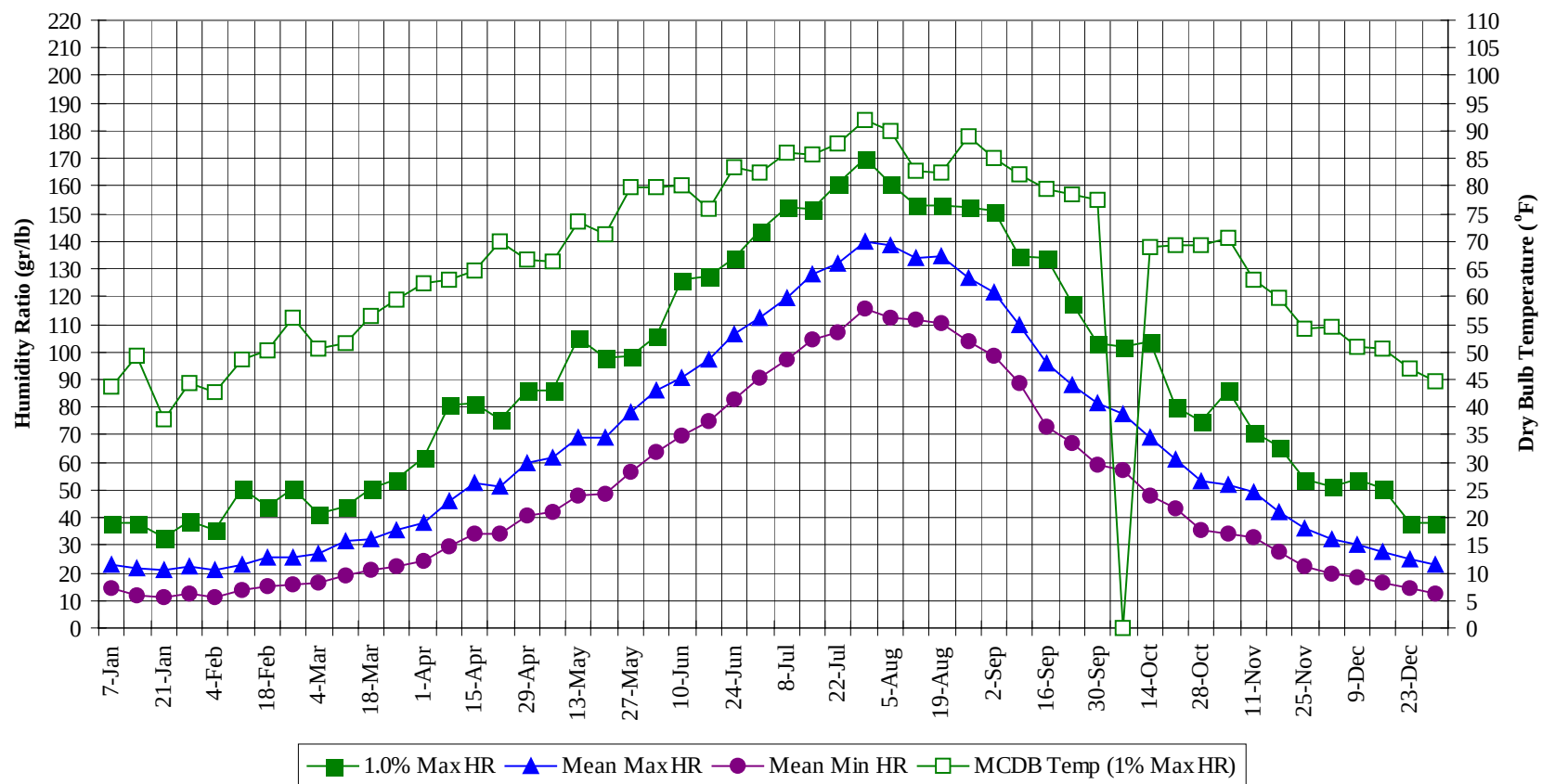


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Long Term Humidity and Dry Bulb Temperature Summary

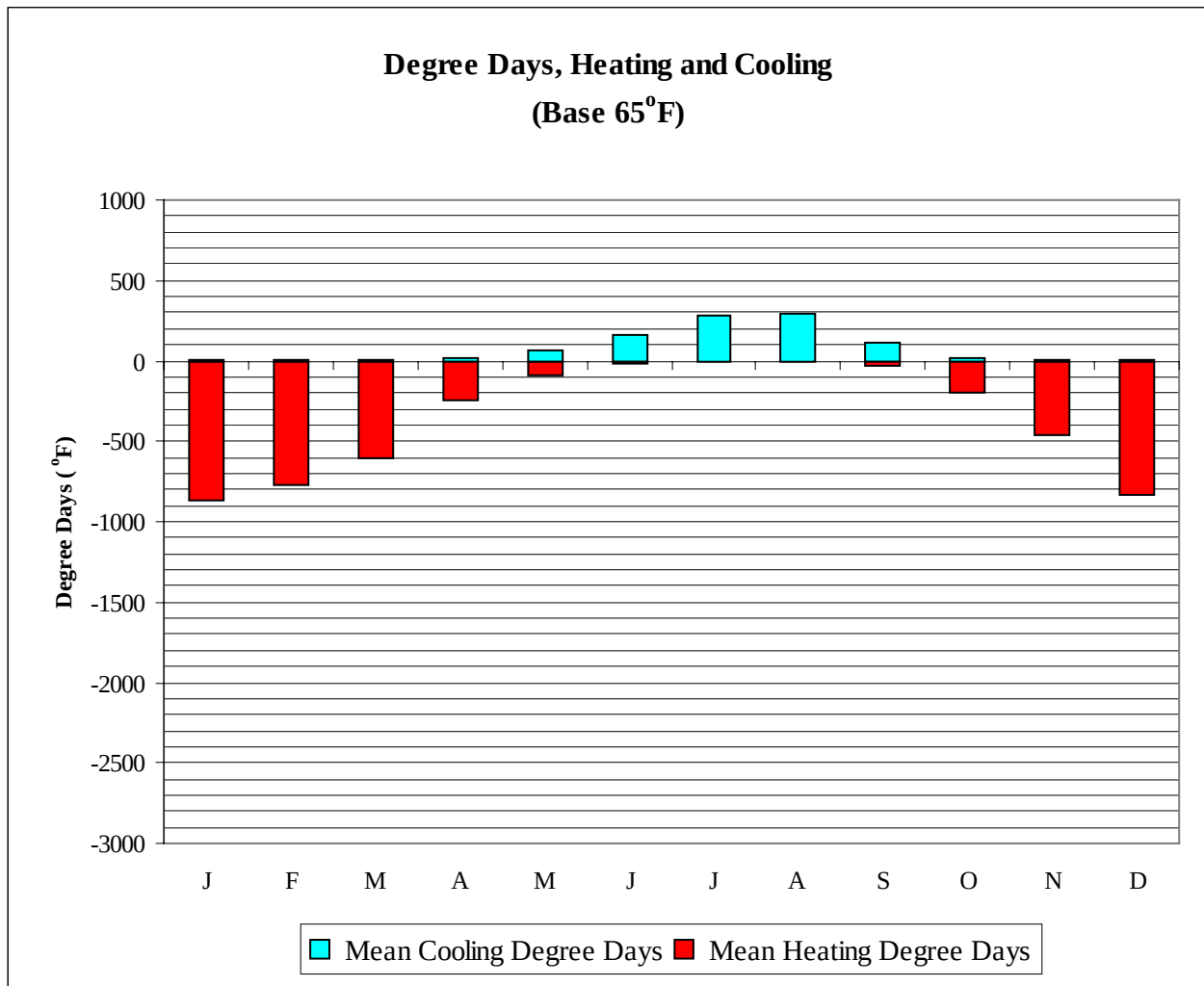


TAEJON**KO****WMO No. 471320****Long Term Dry Bulb Temperature and Humidity Summary**

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	45.0	37.5	22.7	7.0	37.8	43.7	23.2	14.2
14-Jan	50.0	45.0	36.3	19.8	9.0	37.8	49.2	21.9	12.0
21-Jan	43.0	37.6	35.4	19.4	5.0	32.9	37.8	20.7	11.4
28-Jan	50.0	44.5	37.0	20.3	5.0	38.5	44.3	22.3	12.4
4-Feb	48.0	42.7	36.1	19.6	9.0	35.7	42.7	21.1	11.3
11-Feb	52.0	51.9	38.0	22.7	9.0	50.4	48.7	23.1	13.8
18-Feb	54.0	48.2	40.3	24.4	10.0	44.1	50.3	25.3	15.0
25-Feb	54.0	48.8	41.3	26.5	16.0	50.4	56.0	25.9	16.0
4-Mar	54.0	44.9	43.2	27.0	10.0	41.3	50.6	26.6	16.6
11-Mar	61.0	51.0	48.6	30.5	21.0	44.1	51.6	31.5	19.2
18-Mar	61.0	50.5	51.1	32.9	25.0	50.4	56.5	32.4	21.2
25-Mar	66.0	54.3	53.2	34.8	27.0	53.9	59.3	35.5	22.4
1-Apr	68.0	55.1	56.8	36.8	28.0	61.6	62.2	38.2	24.5
8-Apr	73.0	56.7	61.1	40.6	32.0	80.5	62.9	45.9	29.4
15-Apr	75.0	63.8	65.2	45.1	36.0	81.2	64.7	52.7	34.1
22-Apr	75.0	61.4	65.4	45.0	37.0	75.6	70.0	51.3	34.1
29-Apr	79.0	63.9	68.2	49.2	39.0	86.1	66.6	59.9	40.8
6-May	81.0	63.8	70.1	51.4	43.0	86.1	66.3	61.5	41.9
13-May	84.0	69.1	72.9	53.3	46.0	105.0	73.5	69.0	48.3
20-May	86.0	69.6	72.5	53.5	46.0	98.0	71.4	68.9	48.4
27-May	86.0	69.9	76.4	56.9	50.0	98.7	79.9	78.3	56.3
3-Jun	86.0	70.5	78.0	60.4	54.0	105.7	79.9	86.0	63.5
10-Jun	88.0	71.9	78.8	62.0	55.0	126.0	80.0	90.4	69.9
17-Jun	90.0	73.9	81.6	64.1	57.0	127.4	75.8	97.4	74.8
24-Jun	90.0	72.0	80.8	66.0	57.0	133.7	83.5	106.1	83.1
1-Jul	90.0	75.3	81.5	68.1	63.0	143.5	82.6	112.6	90.9
8-Jul	91.0	79.4	82.2	69.6	59.0	152.6	85.9	119.8	97.1
15-Jul	90.0	79.7	82.5	70.7	66.0	151.9	85.6	128.2	104.1
22-Jul	91.0	79.2	84.5	71.9	66.0	161.0	87.6	131.9	107.2
29-Jul	95.0	82.0	87.1	73.9	70.0	170.1	92.1	140.0	115.3
5-Aug	95.0	81.9	87.8	73.8	66.0	161.0	89.9	138.3	112.6
12-Aug	95.0	79.9	87.1	72.7	66.0	153.3	82.7	133.9	111.9
19-Aug	91.0	79.9	86.0	72.9	66.0	153.3	82.4	134.7	110.3
26-Aug	91.0	79.7	84.0	71.0	64.0	152.6	88.9	126.7	103.7
2-Sep	90.0	79.3	81.2	69.5	63.0	151.2	85.2	121.7	98.5
9-Sep	86.0	75.2	80.1	66.7	59.0	134.4	82.1	110.0	88.4
16-Sep	84.0	74.4	77.6	62.2	52.0	133.7	79.3	95.7	72.9
23-Sep	82.0	70.6	75.6	58.7	48.0	117.6	78.5	88.2	67.0
30-Sep	82.0	70.8	74.8	55.6	48.0	102.9	77.6	81.2	58.9
7-Oct	81.0	68.2	71.8	54.0	43.0	101.5	.	77.6	56.9
14-Oct	75.0	64.3	69.7	49.7	41.0	103.6	68.8	68.8	48.3
21-Oct	73.0	62.2	66.4	47.6	36.0	79.8	69.2	61.2	43.3
28-Oct	73.0	63.0	61.4	43.1	32.0	74.9	69.2	53.1	35.7
4-Nov	72.0	63.3	60.4	41.5	30.0	86.1	70.5	51.6	34.2
11-Nov	68.0	58.2	57.7	40.3	27.0	70.7	62.9	49.5	32.6
18-Nov	63.0	55.5	51.5	35.9	21.0	65.8	59.9	42.3	27.5
25-Nov	59.0	51.3	48.9	32.2	21.0	53.9	54.1	36.2	22.1
2-Dec	55.0	48.1	45.8	29.5	19.0	51.1	54.5	32.2	19.7
9-Dec	57.0	52.3	44.4	28.0	18.0	53.9	50.8	30.4	18.3
16-Dec	54.0	48.7	42.0	26.7	14.0	50.4	50.6	27.7	16.7
23-Dec	48.0	43.6	38.9	23.9	12.0	37.8	46.9	25.2	14.6
31-Dec	50.0	43.9	36.8	21.1	7.0	37.8	44.8	23.0	12.8

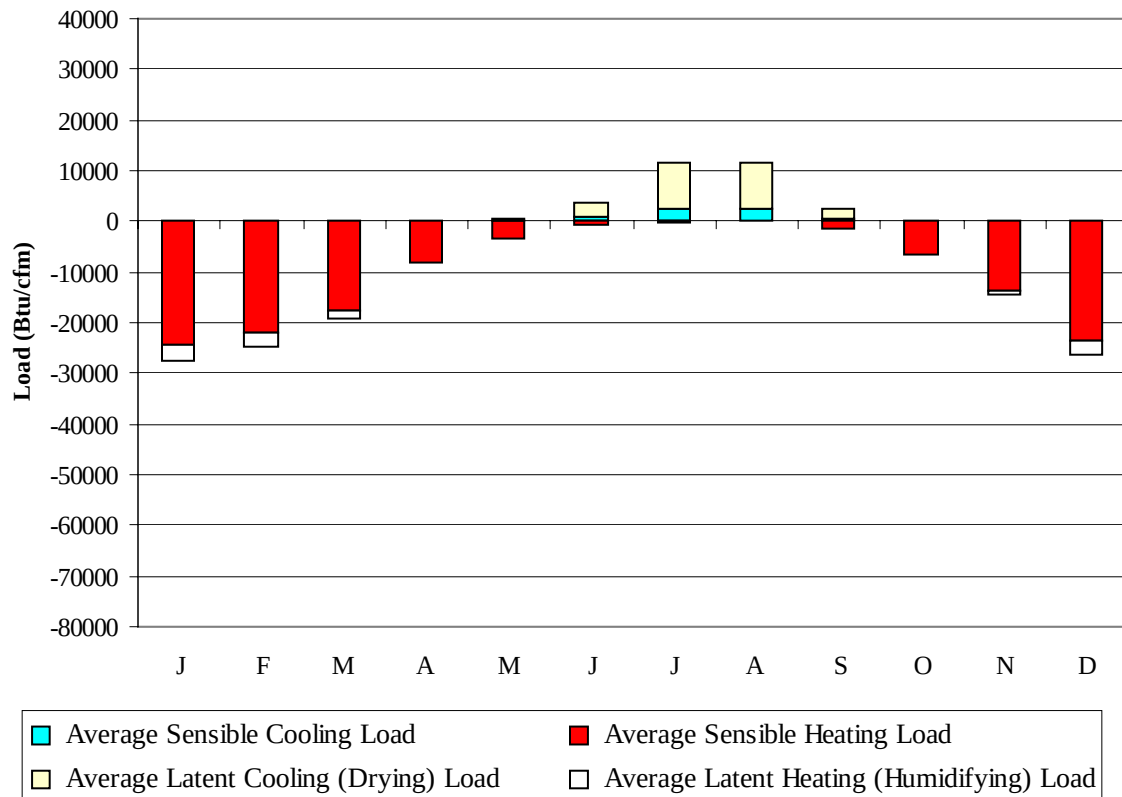
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	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	864
FEB	0	778
MAR	0	602
APR	15	248
MAY	68	90
JUN	165	12
JUL	277	1
AUG	299	0
SEP	112	32
OCT	18	194
NOV	1	460
DEC	0	827
ANN	955	4108

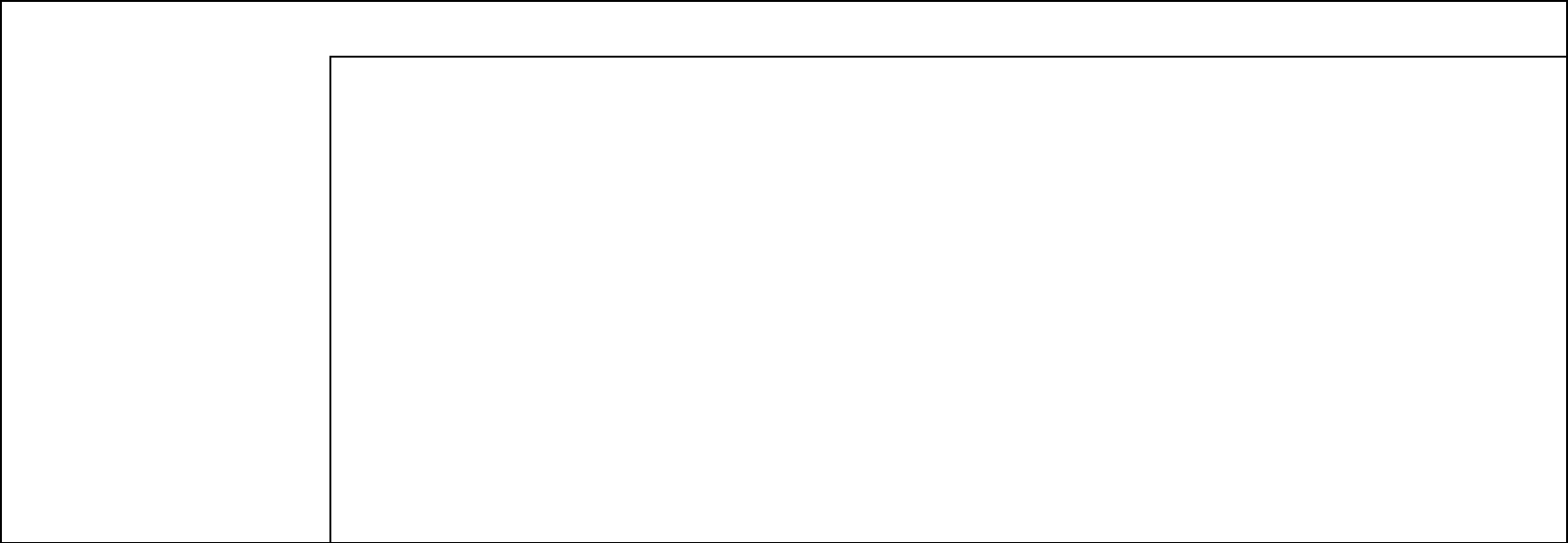
Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



	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	-24220	0	-3461
FEB	0	-21983	0	-2814
MAR	0	-17635	0	-1606
APR	35	-8002	19	-229
MAY	268	-3466	303	-8
JUN	924	-693	2693	0
JUL	2419	-85	9214	0
AUG	2614	-37	9059	0
SEP	425	-1447	2083	-1
OCT	20	-6486	146	-77
NOV	0	-13583	2	-808
DEC	0	-23394	0	-2754
ANN	6705	-121031	23519	-11758

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

No Solar Radiation
Data Available

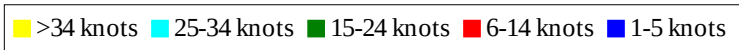
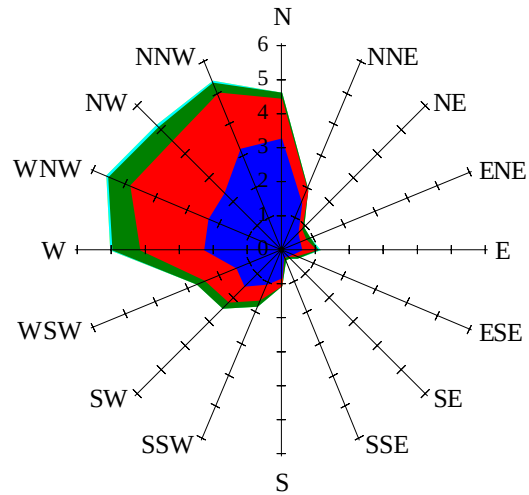


Average Annual Solar Heat and Illumination – Nearest Available Site

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

Wind Summary - December, January, and February

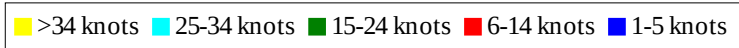
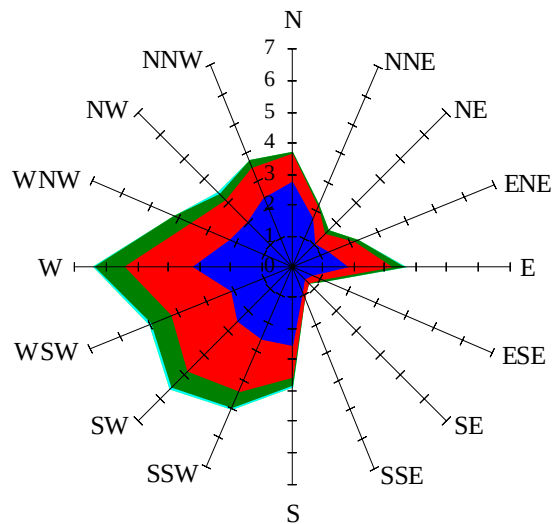
Labels of Percent Frequency on North Axis



Percent Calm = 61.01

Wind Summary - March, April, and May

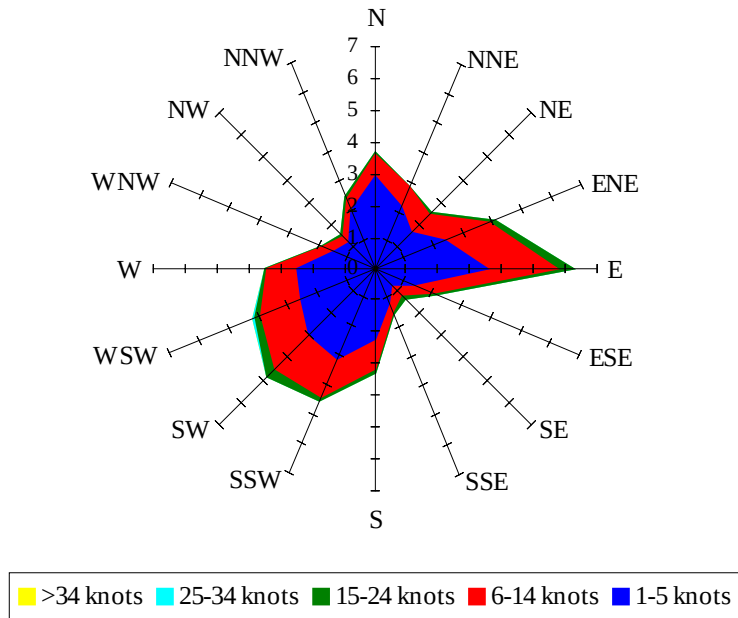
Labels of Percent Frequency on North Axis



Percent Calm = 47.07

Wind Summary - June, July, and August

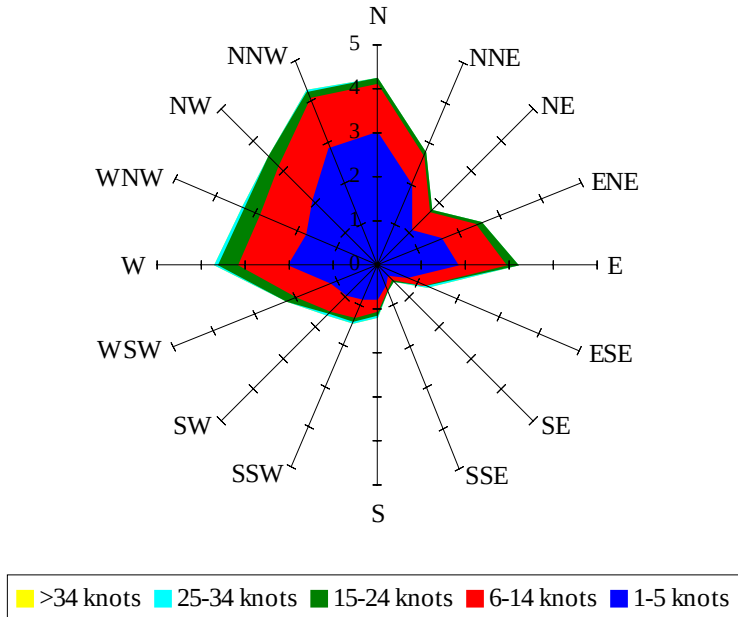
Labels of Percent Frequency on North Axis



Percent Calm = 49.72

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 62.06