

NELLIS AFB	NV	
Latitude = 36.23 N		WMO No. 723865
Longitude = 115.00 W		Elevation = 1870 feet
Period of Record = 1967 to 1996		Average Pressure = 27.95 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	113	69	43	10.0	SW
0.4% Occurrence	109	68	44	9.5	SSW
1.0% Occurrence	107	68	45	9.4	SSW
2.0% Occurrence	105	67	44	9.4	SSW
Mean Daily Range	25	-	-	-	-
97.5% Occurrence	34	28	16	2.1	N
99.0% Occurrence	30	25	12	1.8	NE
99.6% Occurrence	27	22	10	1.5	NE
Median of Extreme Lows	22	18	7	1.9	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	74	96	100	7.2	S
0.4% Occurrence	72	97	86	7.5	S
1.0% Occurrence	71	96	81	7.2	S
2.0% Occurrence	70	95	76	7.1	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	112	78	0.70	2.1	E
0.4% Occurrence	99	81	0.62	4.9	ENE
1.0% Occurrence	91	88	0.57	8.1	E
2.0% Occurrence	83	84	0.52	5.2	E
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		1111	2709	26	634

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
11	1.5	90	0.1 + 4.1
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 (#)
70.4	7	3	30

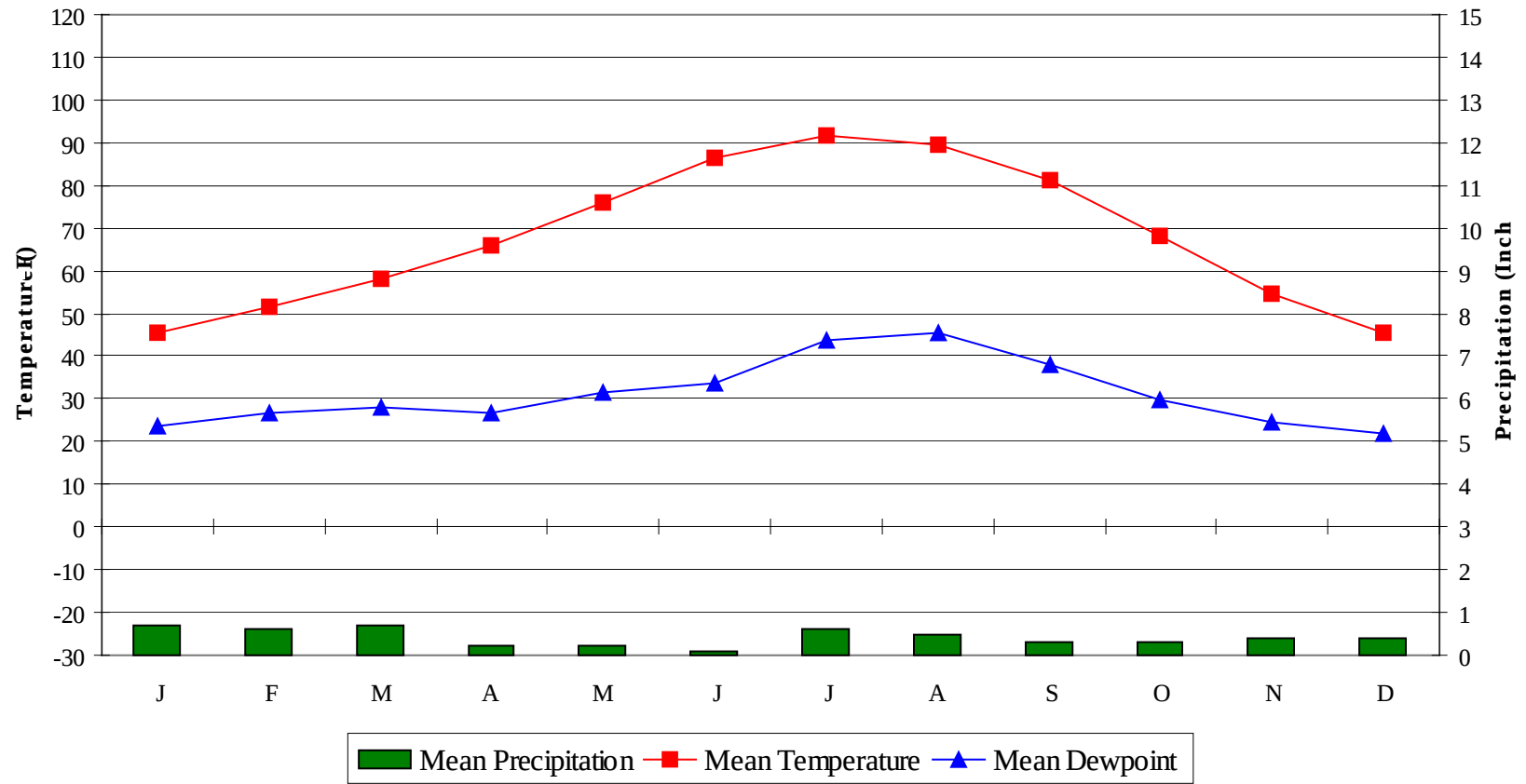
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

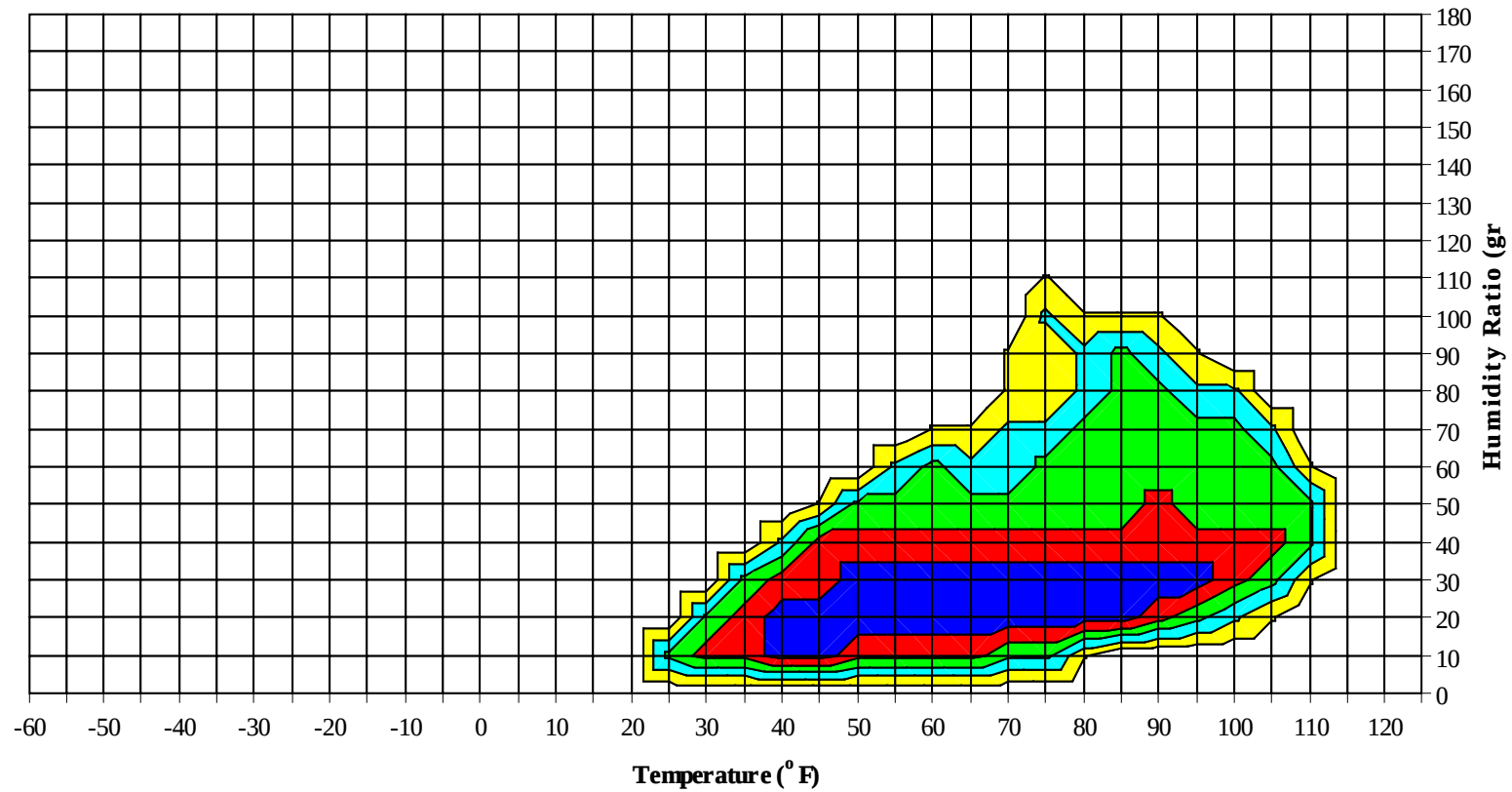


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Long Term Psychrometric Summary

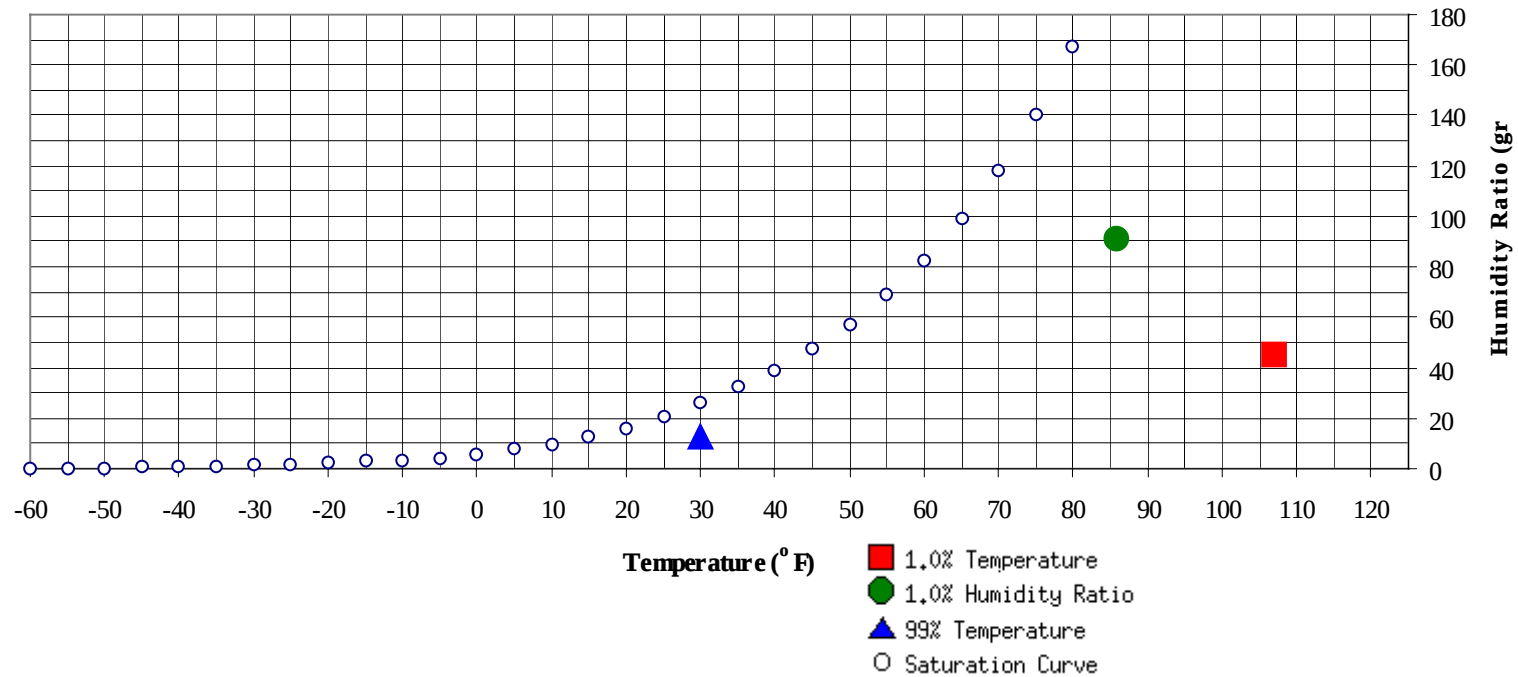


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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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)
	30	12.4	9.1		91	85.9	69.8	62.4	34.9

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	107	45.4	67.8	32.9

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Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)**Period of Record = 1967 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		
115 / 119															
110 / 114															
105 / 109															
100 / 104															
95 / 99															
90 / 94												0		0	59.0
85 / 89							0		0	57.7		2	0	3	56.6
80 / 84							1	0	1	55.3		10	3	13	54.6
75 / 79		0		0	53.8		6	1	7	52.8	0	22	8	30	52.8
70 / 74		2	0	2	49.4		17	5	21	50.6	1	36	20	57	50.6
65 / 69	0	14	2	16	47.5	1	32	13	46	48.5	5	51	33	89	48.6
60 / 64	1	30	7	38	46.0	3	47	28	78	46.6	20	55	48	122	46.5
55 / 59	4	52	24	80	44.0	15	50	44	109	44.6	35	41	55	131	44.5
50 / 54	13	60	48	121	41.5	35	37	54	126	42.2	69	22	47	138	42.4
45 / 49	34	48	63	145	38.6	50	21	43	114	39.0	68	8	26	102	39.1
40 / 44	58	27	58	143	35.1	57	9	24	90	35.4	37	2	7	45	35.4
35 / 39	63	11	30	104	31.1	39	3	9	52	31.2	12		1	13	30.8
30 / 34	51	4	13	68	27.4	18	1	2	21	27.4	1			1	27.6
25 / 29	19	1	2	22	22.8	4	0	1	5	22.7					
20 / 24	3	0	1	4	18.0	1			1	18.6					
15 / 19	1	0	0	1	14.3										
10 / 14	0			0	10.6										

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.

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Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)**Period of Record = 1967 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		
115 / 119												0	0	1	68.7
110 / 114							0		0	67.5		4	1	6	67.9
105 / 109							2	0	2	65.6		23	8	32	66.5
100 / 104							7	3	10	63.8	0	44	20	64	64.2
95 / 99		2	0	2	60.4	0	21	8	29	61.7	1	54	33	88	62.1
90 / 94		9	3	11	59.1	1	43	21	64	59.7	9	50	45	104	60.2
85 / 89			20	8	57.0	3	50	32	85	57.6	26	33	47	105	58.2
80 / 84	0	36	17	54	54.7	12	45	45	102	55.7	46	18	40	104	56.2
75 / 79	4	45	30	79	52.5	32	33	46	111	53.7	60	9	25	94	54.1
70 / 74	12	45	40	96	50.4	51	24	40	115	51.8	52	4	13	69	51.8
65 / 69	28	38	45	111	48.1	54	14	25	93	49.7	29	1	5	35	49.4
60 / 64	48	27	42	118	46.0	46	6	18	70	47.5	13	0	2	15	47.4
55 / 59	61	14	31	105	43.8	32	2	8	43	45.1	4		0	4	45.1
50 / 54	50	4	18	72	41.0	13	0	2	16	42.9	1		0	1	45.5
45 / 49	28	1	5	33	38.2	3		0	3	39.6					
40 / 44	8		1	9	34.8	0			0	36.5					
35 / 39	1			1	31.1										
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															

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 = 1967 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		
115 / 119		1	0	1	71.2		0		0	71.8					
110 / 114		11	3	14	68.9		7	1	8	69.0		0		0	70.0
105 / 109		46	21	67	67.6		33	12	45	68.4		5	1	6	66.9
100 / 104	0	72	39	112	66.5	0	64	29	92	67.0		24	6	31	65.6
95 / 99	5	62	54	120	65.3	3	66	47	117	65.8	0	47	16	62	63.7
90 / 94	31	35	58	124	64.2	21	43	55	119	64.6	2	56	31	89	61.9
85 / 89	62	13	42	116	62.4	49	21	52	122	63.3	9	48	43	100	60.4
80 / 84	68	5	21	95	60.8	65	9	31	105	61.7	27	34	50	110	58.7
75 / 79	49	2	8	58	58.3	56	3	15	74	59.6	50	16	43	109	56.7
70 / 74	25	1	3	29	55.3	35	2	5	41	55.9	61	8	29	98	54.0
65 / 69	6	0	0	7	51.0	16	0	1	17	50.8	50	3	15	69	51.0
60 / 64	1	0		1	47.8	3		0	3	45.6	29	0	5	34	47.5
55 / 59	0			0	45.0	0			0	42.4	10		1	11	43.8
50 / 54											2		0	2	39.6
45 / 49											0			0	35.2
40 / 44															
35 / 39															
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															

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 = 1967 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		
115 / 119															
110 / 114															
105 / 109															
100 / 104		0	0	1	62.4										
95 / 99		8	1	8	60.9										
90 / 94		18	4	22	59.5										
85 / 89	0	31	8	39	57.5		0		0	57.6					
80 / 84	1	47	20	68	56.0		5	0	5	55.7					
75 / 79	5	47	31	83	54.1	0	19	2	21	53.1					
70 / 74	16	42	46	104	52.1	1	33	9	43	51.1		2		2	50.8
65 / 69	36	29	48	113	49.9	3	44	21	67	48.7		11	1	12	48.0
60 / 64	56	17	43	116	47.4	10	47	35	92	46.3	1	36	5	42	45.6
55 / 59	60	7	30	97	44.4	23	45	46	115	43.7	3	58	20	81	43.4
50 / 54	43	2	14	58	40.9	43	28	54	125	40.9	13	58	46	117	41.0
45 / 49	23	0	4	26	36.8	63	13	41	118	37.8	29	43	62	134	38.0
40 / 44	7		1	8	32.6	49	4	22	75	33.8	50	25	57	132	34.4
35 / 39	2		0	2	28.3	31	1	8	40	30.1	68	11	36	114	30.7
30 / 34	0			0	24.9	13		1	15	26.5	55	4	16	75	26.9
25 / 29						3		0	3	22.3	24	0	3	27	22.8
20 / 24						0			0	18.1	3	0	1	4	18.1
15 / 19											1	0	0	2	13.3
10 / 14											0			0	9.6

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.

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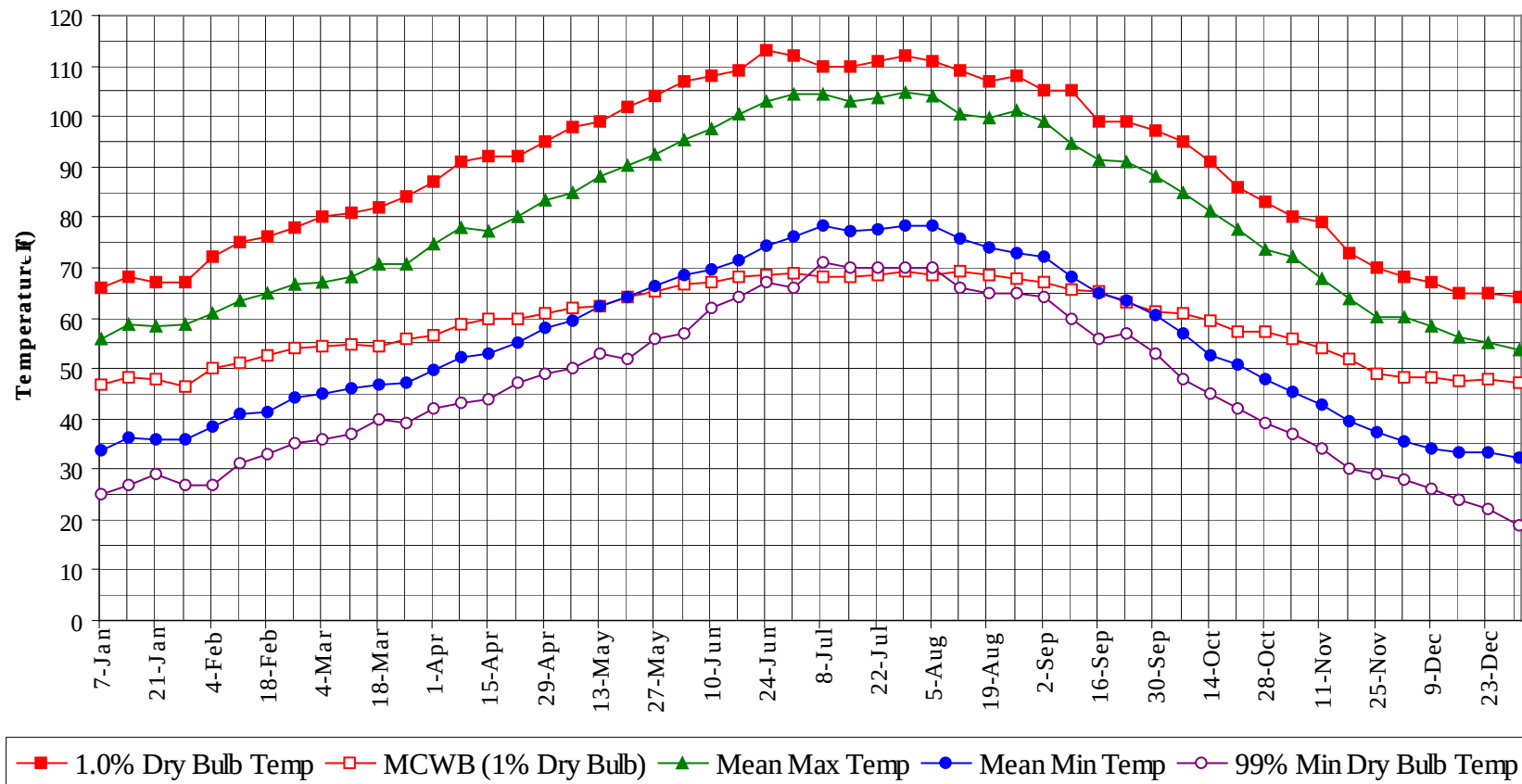
WMO No. 723865

Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)**Period of Record = 1967 to 1996**

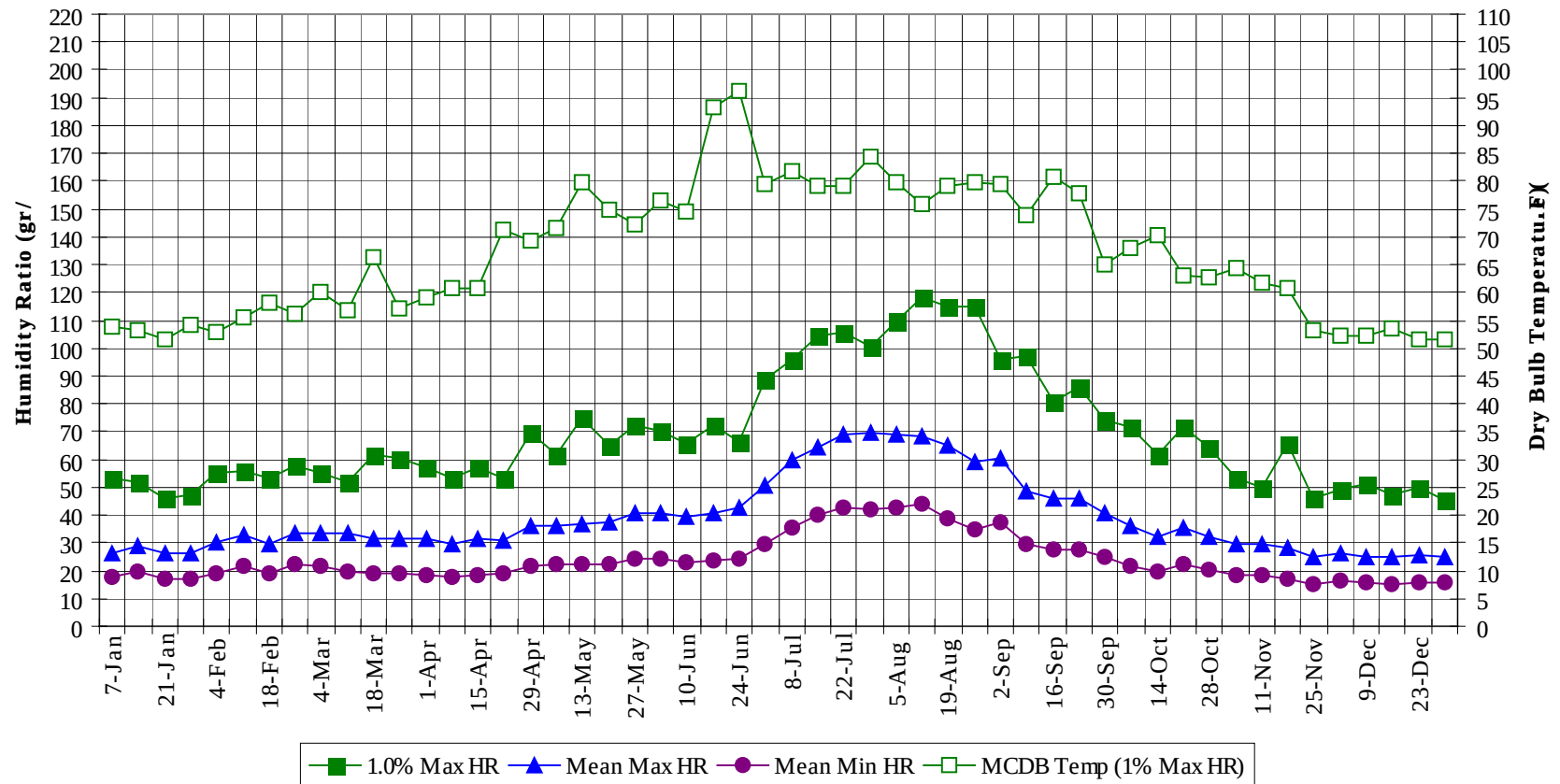
Temperature Range (°F)	Annual Totals				
	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
115 / 119		2	0	2	70.6
110 / 114		23	6	29	68.7
105 / 109		109	43	152	67.5
100 / 104	0	212	97	310	66.0
95 / 99	10	259	159	428	64.2
90 / 94	63	255	216	534	62.3
85 / 89	149	219	232	599	60.2
80 / 84	220	211	227	658	57.9
75 / 79	256	202	210	667	55.2
70 / 74	253	214	210	677	52.2
65 / 69	229	237	208	674	49.2
60 / 64	232	265	233	730	46.6
55 / 59	247	269	259	776	44.1
50 / 54	280	210	284	775	41.5
45 / 49	298	133	244	675	38.4
40 / 44	266	67	168	501	34.7
35 / 39	216	26	84	326	30.8
30 / 34	139	8	32	180	27.1
25 / 29	50	1	6	57	22.8
20 / 24	7	0	1	9	18.1
15 / 19	3	0	0	3	13.8
10 / 14	1			1	10.2

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

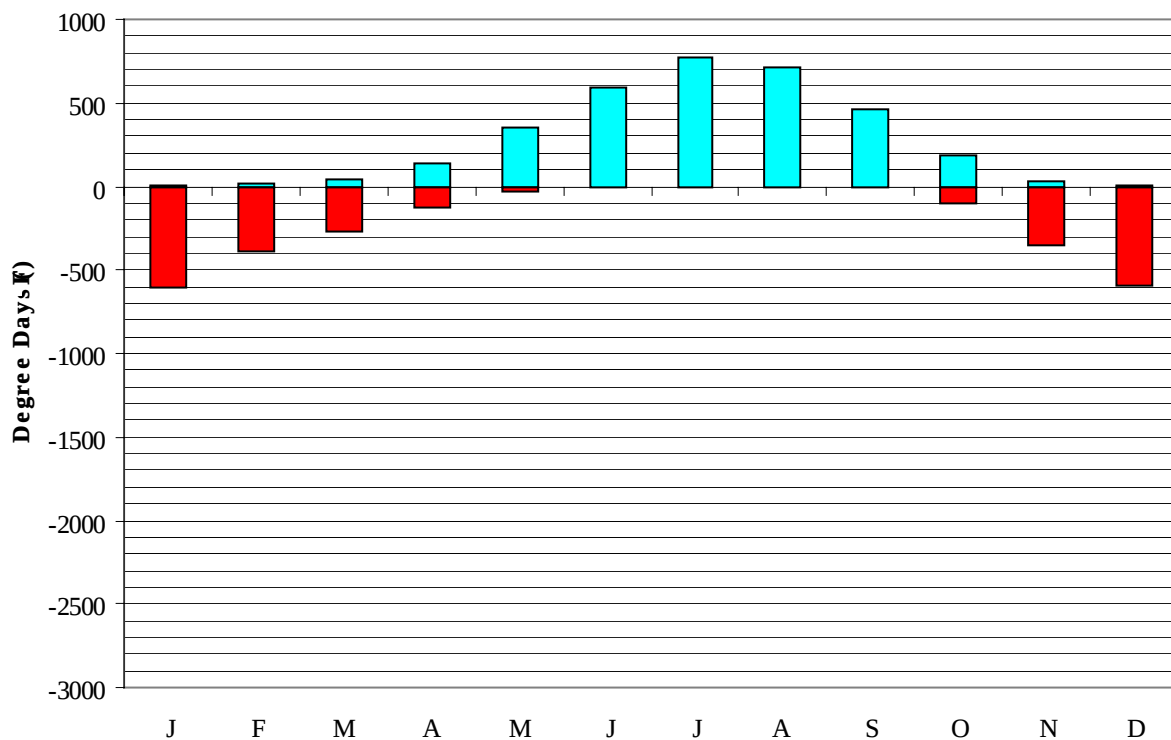
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	66.0	46.7	55.9	33.9	25.0	53.2	54.0	26.2	17.4
14-Jan	68.0	48.3	58.9	36.4	27.0	51.8	53.1	29.2	19.4
21-Jan	67.0	47.7	58.4	35.7	29.0	46.2	51.6	26.4	17.0
28-Jan	67.0	46.4	58.6	36.0	27.0	47.6	54.3	26.4	17.2
4-Feb	72.0	49.9	60.9	38.5	27.0	55.3	52.9	30.0	19.2
11-Feb	75.0	51.1	63.3	40.8	31.0	56.0	55.6	32.6	21.7
18-Feb	76.0	52.6	64.9	41.5	33.0	53.2	58.2	29.6	19.0
25-Feb	78.0	54.1	66.8	44.1	35.0	58.1	56.2	33.4	22.1
4-Mar	80.0	54.4	67.2	44.9	36.0	55.3	60.2	33.6	21.7
11-Mar	81.0	54.9	68.2	45.9	37.0	51.8	57.0	33.4	20.0
18-Mar	82.0	54.3	70.8	46.7	40.0	61.6	66.4	31.2	19.2
25-Mar	84.0	55.7	70.7	47.2	39.0	60.2	57.1	31.4	18.9
1-Apr	87.0	56.4	74.6	49.8	42.0	57.4	59.1	31.5	18.4
8-Apr	91.0	58.9	77.8	52.2	43.0	53.2	60.6	29.7	17.8
15-Apr	92.0	59.9	77.3	53.0	44.0	57.4	60.7	31.7	18.7
22-Apr	92.0	59.8	80.3	55.1	47.0	53.2	71.2	30.9	18.9
29-Apr	95.0	61.0	83.2	58.2	49.0	69.3	69.3	36.1	21.5
6-May	98.0	62.1	84.8	59.5	50.0	61.6	71.4	36.2	22.1
13-May	99.0	62.5	88.2	62.3	53.0	74.9	79.8	37.0	22.4
20-May	102.0	64.2	90.2	64.2	52.0	65.1	74.8	37.4	22.6
27-May	104.0	65.1	92.6	66.4	56.0	72.1	72.3	40.8	24.5
3-Jun	107.0	66.7	95.3	68.7	57.0	70.0	76.5	40.5	24.5
10-Jun	108.0	67.1	97.4	69.4	62.0	65.8	74.7	39.6	23.2
17-Jun	109.0	68.2	100.5	71.4	64.0	72.1	93.3	41.0	23.8
24-Jun	113.0	68.4	103.0	74.5	67.0	66.5	96.2	42.8	24.5
1-Jul	112.0	68.9	104.3	76.1	66.0	88.9	79.5	50.3	29.3
8-Jul	110.0	68.3	104.4	78.2	71.0	95.9	81.8	59.5	35.8
15-Jul	110.0	68.3	102.9	77.3	70.0	104.3	79.2	64.5	39.7
22-Jul	111.0	68.5	103.6	77.7	70.0	105.7	79.0	69.0	43.0
29-Jul	112.0	69.4	104.9	78.5	70.0	100.8	84.3	69.5	42.1
5-Aug	111.0	68.5	104.1	78.2	70.0	109.9	79.8	68.6	42.5
12-Aug	109.0	69.2	100.5	75.7	66.0	118.3	75.7	68.1	43.7
19-Aug	107.0	68.4	99.8	73.9	65.0	114.8	79.2	64.8	39.0
26-Aug	108.0	67.7	101.0	73.0	65.0	114.8	79.9	59.2	34.7
2-Sep	105.0	67.3	98.9	72.1	64.0	95.9	79.6	60.2	37.4
9-Sep	105.0	65.6	94.6	68.2	60.0	97.3	73.9	48.8	29.6
16-Sep	99.0	65.4	91.4	64.9	56.0	80.5	80.9	45.8	27.6
23-Sep	99.0	63.2	91.1	63.6	57.0	86.1	77.8	45.7	27.6
30-Sep	97.0	61.3	88.1	60.6	53.0	74.2	64.9	41.0	25.2
7-Oct	95.0	60.8	84.7	56.8	48.0	71.4	67.9	35.8	21.9
14-Oct	91.0	59.4	81.3	52.7	45.0	61.6	70.3	32.4	19.7
21-Oct	86.0	57.2	77.6	50.9	42.0	71.4	63.1	35.8	22.3
28-Oct	83.0	57.1	73.5	47.9	39.0	64.4	62.7	32.4	20.5
4-Nov	80.0	55.7	72.2	45.4	37.0	53.2	64.5	29.5	18.6
11-Nov	79.0	54.1	67.9	42.6	34.0	49.7	61.8	29.3	18.2
18-Nov	73.0	52.0	63.7	39.6	30.0	65.8	60.7	28.3	17.3
25-Nov	70.0	48.9	60.2	37.3	29.0	46.2	53.3	25.1	15.2
2-Dec	68.0	48.4	60.2	35.4	28.0	49.0	52.2	26.5	16.7
9-Dec	67.0	48.4	58.3	34.2	26.0	51.1	52.3	25.1	15.5
16-Dec	65.0	47.6	56.1	33.3	24.0	47.6	53.5	24.8	15.0
23-Dec	65.0	47.8	55.1	33.3	22.0	49.7	51.6	25.4	15.7
31-Dec	64.0	47.0	53.6	32.4	19.0	45.5	51.5	25.1	15.7

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WMO No. 723865

Degree Days, Heating and Cooling **(Base 65°F)**



■ Mean Cooling Degree Days ■ Mean Heating Degree Days

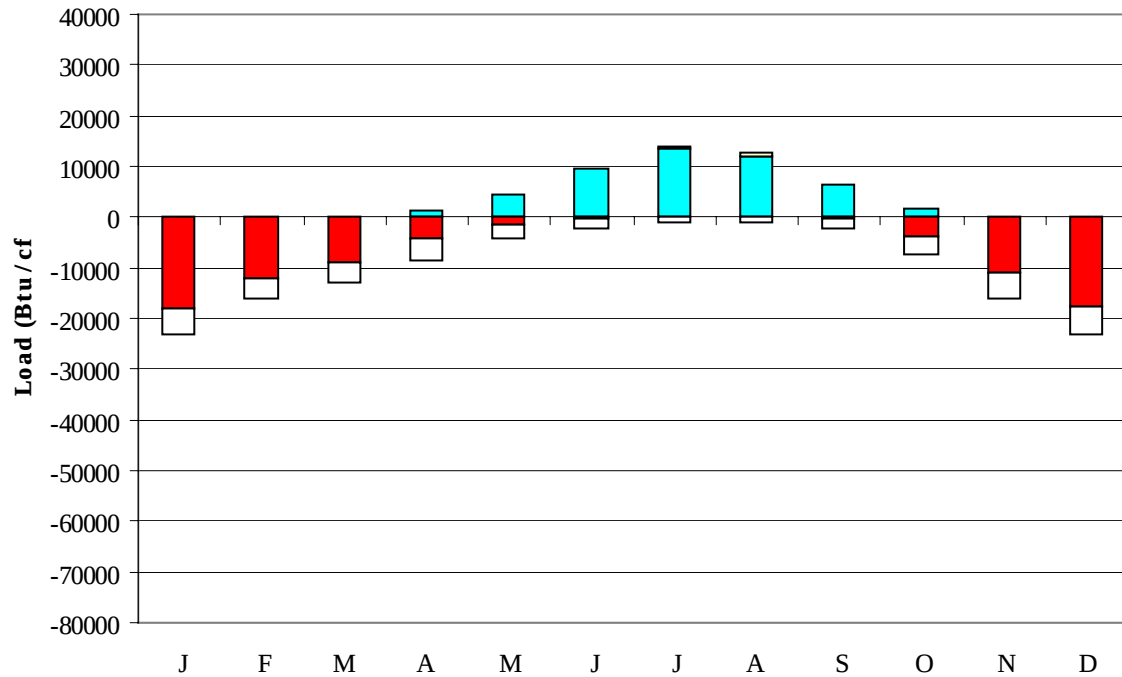
	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	1	601
FEB	12	389
MAR	45	269
APR	143	122
MAY	350	33
JUN	597	3
JUL	775	0
AUG	713	0
SEP	464	8
OCT	184	106
NOV	29	348
DEC	1	588
ANN	3315	2467

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WMO No. 723865

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 (Btu/cfm)	Average Sensible Heating Load (Btu/cfm)	Average Latent Cooling Load (Btu/cfm)	Average Latent Heating Load (Btu/cfm)
JAN	0	-17938	0	-5356
FEB	19	-12110	0	-4075
MAR	177	-8881	0	-4009
APR	1157	-4405	0	-4261
MAY	4288	-1396	3	-2953
JUN	9510	-181	10	-2147
JUL	13629	-13	298	-871
AUG	12062	-33	592	-894
SEP	6494	-439	76	-1688
OCT	1740	-3885	1	-3556
NOV	72	-10989	0	-4981
DEC	0	-17520	0	-5728
ANN	49148	-77790	980	-40519

Average Annual Solar Radiation – Nearest Available Site

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

City: LAS VEGAS
 State: NV
 WBAN No: 23169
 Lat(N): 36.08
 Long(W): 115.17
 Elev(ft): 2179

Stn Type: Primary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 1.123
 Vert Gap: 0.659

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	950	1270	1710	2190	2480	2650	2490	2280	1950	1500	1070	870	1790
	Std Dev	79	88	103	109	82	83	118	131	102	68	58	61	48
	Minimum	730	1090	1510	1920	2280	2490	2090	1900	1700	1280	950	690	1660
	Maximum	1080	1420	1910	2340	2630	2820	2650	2480	2110	1620	1170	960	1840
	Diffuse	300	400	520	590	640	610	650	570	450	360	310	260	470
Clear Day	Global	1100	1470	1950	2420	2700	2800	2710	2460	2070	1590	1180	1000	1960
NORTH	Global	230	300	380	480	620	740	670	510	390	310	250	210	420
	Diffuse	230	300	380	450	510	530	520	460	390	310	250	210	380
Clear Day	Global	210	260	340	440	610	740	670	480	360	290	220	190	400
EAST	Global	660	830	1080	1310	1420	1480	1400	1340	1200	970	730	610	1090
	Diffuse	280	370	470	570	610	620	610	570	480	380	310	260	460
Clear Day	Global	810	1010	1260	1450	1540	1560	1530	1440	1290	1060	840	730	1210
SOUTH	Global	1600	1610	1490	1230	940	810	840	1070	1430	1690	1650	1580	1330
	Diffuse	400	470	540	560	550	540	540	530	510	460	420	370	490
Clear Day	Global	2070	2060	1810	1340	960	810	860	1150	1600	1950	2060	2030	1550
WEST	Global	660	830	1040	1260	1370	1450	1370	1280	1170	960	710	600	1060
	Diffuse	290	370	490	580	630	630	630	570	490	390	310	260	470
Clear Day	Global	810	1010	1260	1450	1540	1560	1530	1440	1290	1060	840	730	1210

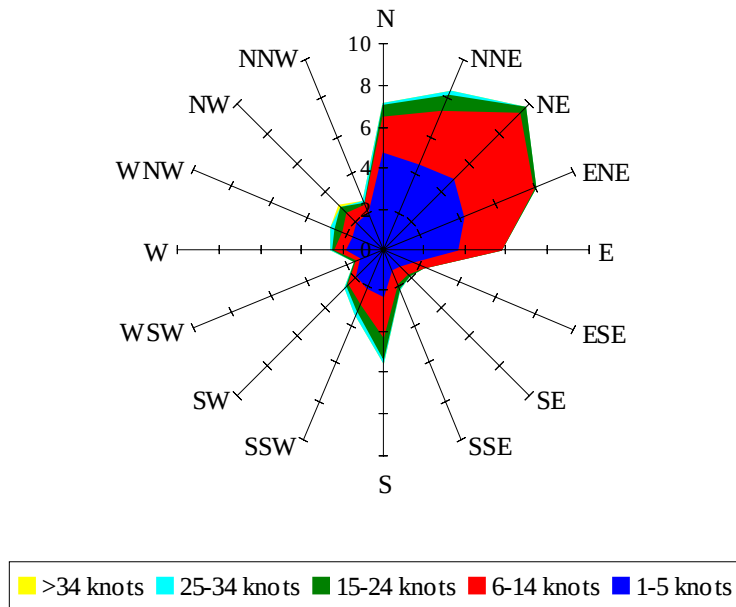
Average Annual Solar Heat and Illumination – Nearest Available Site

(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	620	880	1220	1600	1820	1960	1830	1670	1410	1050	720	560	1280
NORTH	Unshaded	160	210	260	320	390	450	420	330	270	220	170	140	280
	Shaded	140	180	230	280	340	390	360	290	240	190	150	120	240
EAST	Unshaded	460	580	770	940	1020	1060	1000	960	860	690	510	420	770
	Shaded	380	470	610	720	770	800	760	740	670	560	430	350	610
SOUTH	Unshaded	1200	1170	1010	760	540	450	480	640	930	1200	1230	1190	900
	Shaded	1140	920	460	330	340	330	330	320	330	790	1110	1160	630
WEST	Unshaded	450	580	740	910	980	1040	980	920	840	680	500	410	750
	Shaded	380	470	590	710	750	790	750	710	660	550	420	350	590

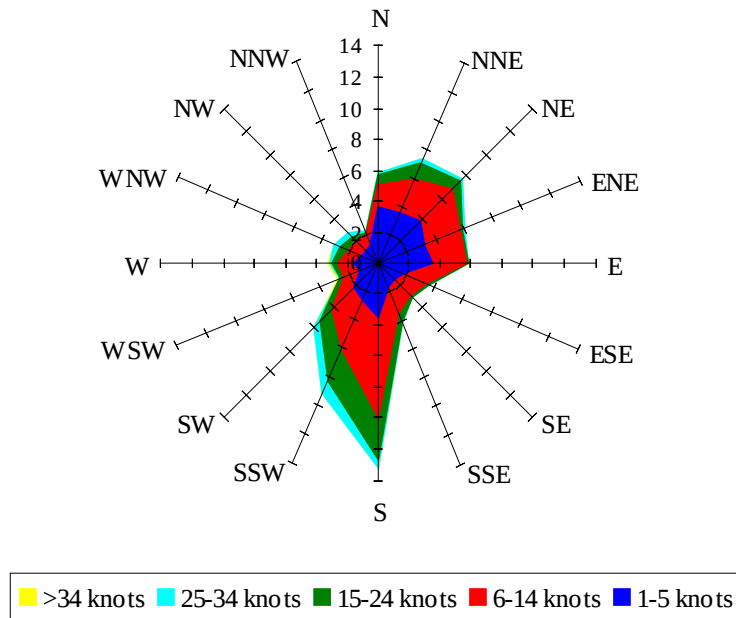
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	53	83	90	67	22	58	94	110	100	67
	M.Cloudy	40	67	70	51	16	46	81	97	84	52
NORTH	M.Clear	11	15	15	13	7	18	16	16	16	16
	M.Cloudy	12	17	18	15	7	18	18	19	19	16
EAST	M.Clear	82	51	15	13	7	87	68	21	16	13
	M.Cloudy	51	41	18	15	7	59	59	23	19	15
SOUTH	M.Clear	49	76	82	61	21	12	30	42	34	13
	M.Cloudy	33	57	60	42	12	14	30	41	33	15
WEST	M.Clear	11	15	35	78	65	12	16	16	63	87
	M.Cloudy	12	17	30	52	31	14	18	19	54	60
M.Clear	(% hrs)	55	54	49	45	48	80	78	76	72	72
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	40	79	94	82	45	26	52	54	30	0
	M.Cloudy	29	62	76	63	32	19	39	41	23	0
NORTH	M.Clear	10	14	16	15	10	7	11	11	8	0
	M.Cloudy	10	17	19	17	11	7	12	13	8	0
EAST	M.Clear	81	68	19	15	10	56	36	11	8	0
	M.Cloudy	44	51	21	17	11	29	26	13	8	0
SOUTH	M.Clear	29	61	75	64	32	58	91	94	64	0
	M.Cloudy	20	47	59	47	22	30	55	57	34	0
WEST	M.Clear	10	14	16	64	82	7	11	32	58	1
	M.Cloudy	10	17	19	47	44	7	12	24	31	0
M.Clear	(% hrs)	79	80	78	74	73	55	55	53	52	54

Wind Summary - December, January, and February **Labels of Percent Frequency on North Axis**



Percent Calm = 31.32

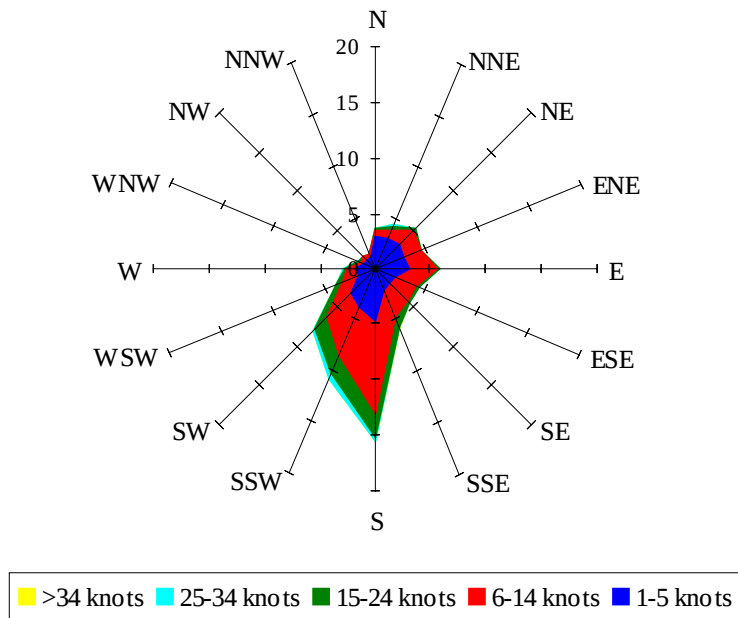
Wind Summary - March, April, and May **Labels of Percent Frequency on North Axis**



Percent Calm = 15.09

Wind Summary - June, July, and August

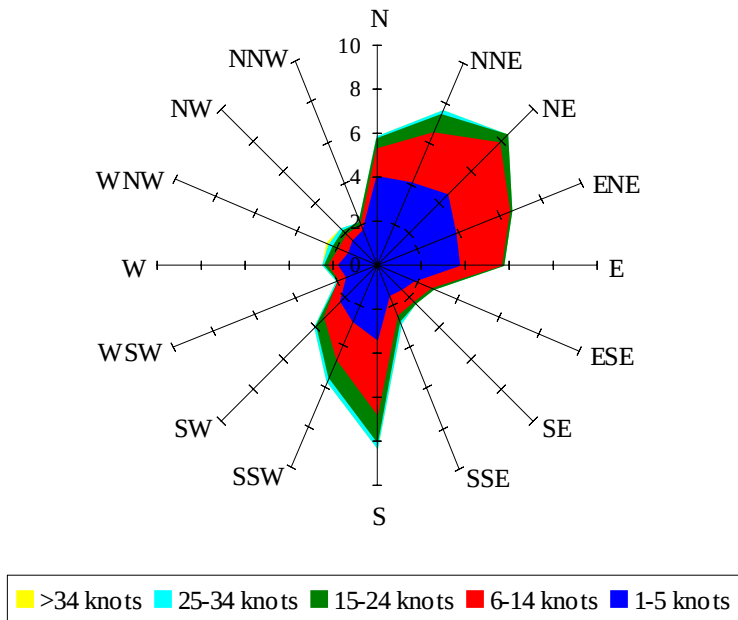
Labels of Percent Frequency on North Axis



Percent Calm = 16.90

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 28.61