

FORT KNOX/GODMAN KY

Latitude = 37.90 N

WMO No. 724240

Longitude = 85.97 W

Elevation = 755 feet

Period of Record = 1967 to 1996

Average Pressure = 29.21 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	95	77	114	6.2	W
0.4% Occurrence	92	76	112	6.0	WSW
1.0% Occurrence	90	75	111	6.5	W
2.0% Occurrence	88	74	108	6.2	SW
Mean Daily Range	18	-	-	-	-
97.5% Occurrence	19	17	9	6.0	W
99.0% Occurrence	12	10	7	5.8	W
99.6% Occurrence	5	4	4	5.6	W
Median of Extreme Lows	-2	-3	3	5.2	W
	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	81	91	146	6.0	WSW
0.4% Occurrence	78	88	131	6.0	W
1.0% Occurrence	77	87	127	5.9	W
2.0% Occurrence	76	86	123	5.5	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	154	87	1.00	2.3	SW
0.4% Occurrence	136	85	0.88	7.3	W
1.0% Occurrence	130	83	0.85	4.8	SW
2.0% Occurrence	126	83	0.82	4.6	SW
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		32	880	598	1807

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	3.3	90	2.3 + 0.8
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 (#)
58.7	32	12	46

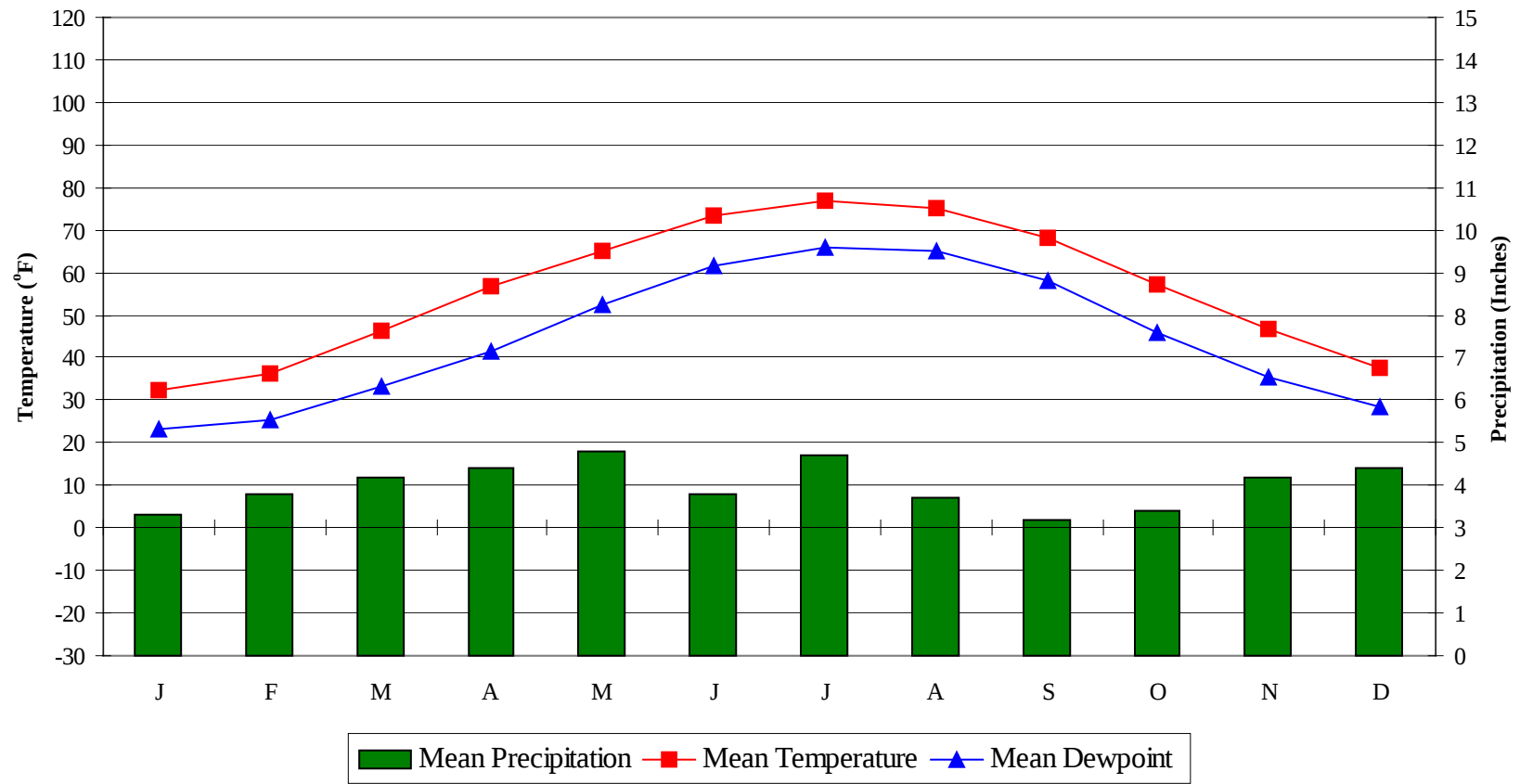
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

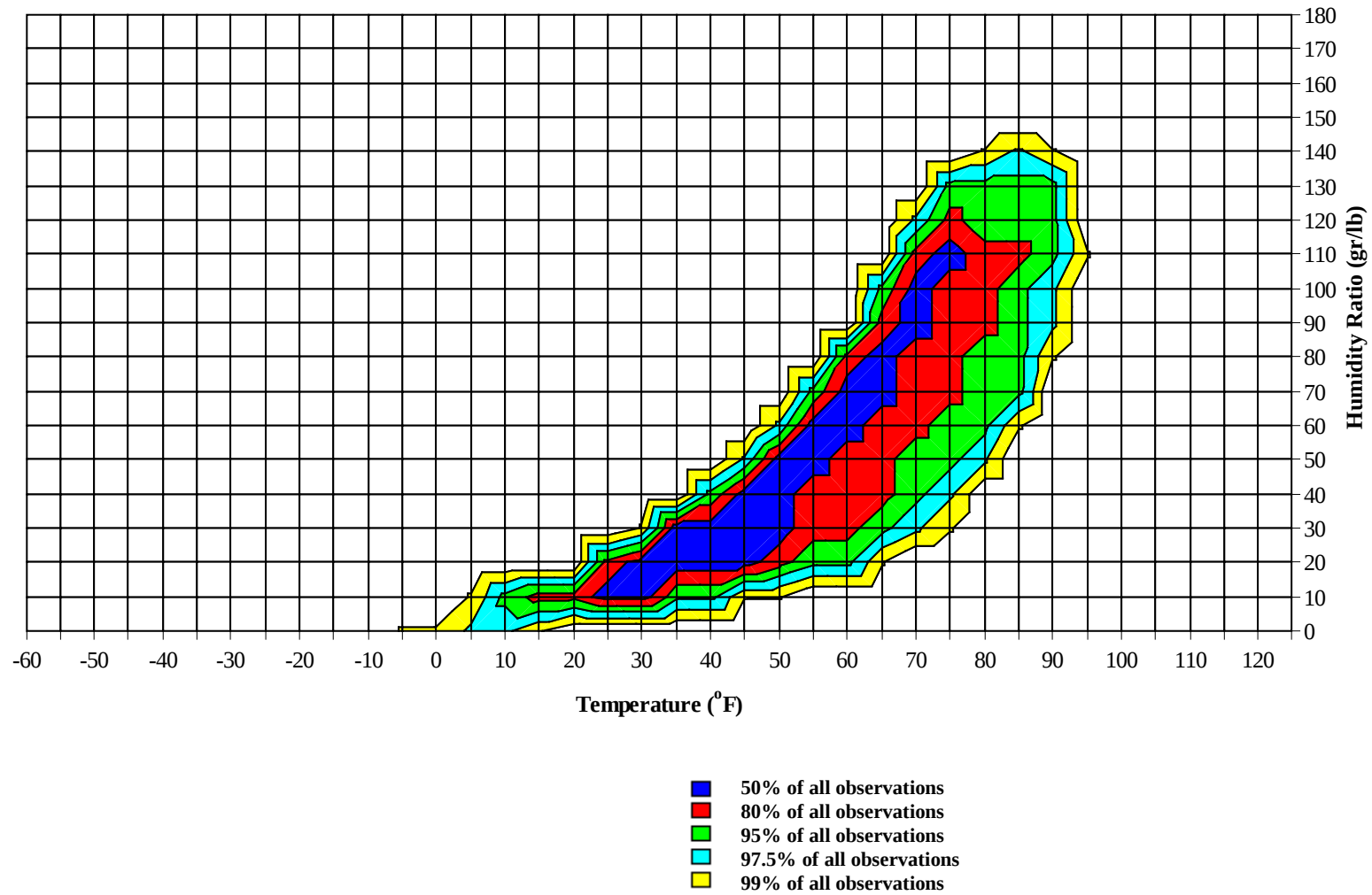


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Long Term Psychrometric Summary

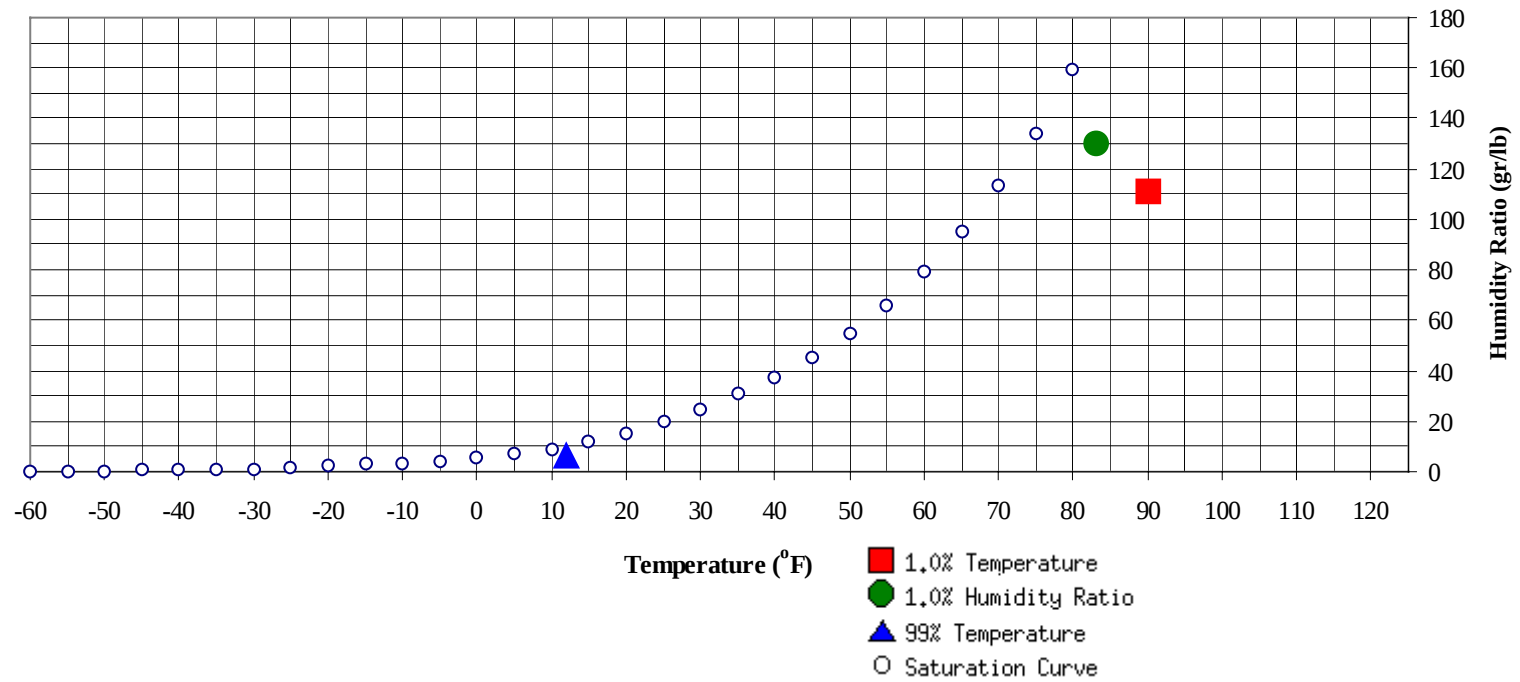


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Psychrometric Summary of Peak Design Values



	(°F)	MCHR	Enthalpy	1.0% Humidity	(gr/lb)	MCDB	MCWB	MC Dewpt	Enthalpy
		(gr/lb)	(btu/lb)			(°F)	(°F)	(°F)	(btu/lb)
99% Dry Bulb	12	6.6	3.9	Ratio	130.2	83.1	76.5	74	40.4

1.0% Dry Bulb	(°F)	MCHR	MCWB	Enthalpy
		(gr/lb)	(°F)	(btu/lb)
	90	111.1	75.2	39.1

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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		
100 / 104															
95 / 99															
90 / 94															
85 / 89												0		0	62.0
80 / 84												1	0	1	62.5
75 / 79							0		0	62.0		6	3	9	60.9
70 / 74		0	0	0	61.2		1	1	2	58.3		1	12	8	21
65 / 69	0	2	1	3	58.9		4	2	6	55.3		3	16	14	33
60 / 64	1	4	3	8	55.6	2	9	7	18	53.4	10	23	23	56	53.2
55 / 59	4	8	8	21	51.8	8	15	14	37	50.5	20	28	29	77	50.1
50 / 54	9	15	14	38	46.8	10	18	17	45	45.7	25	32	33	90	45.8
45 / 49	11	20	20	50	42.3	14	23	22	60	41.6	27	34	35	97	41.3
40 / 44	22	32	27	80	37.9	22	30	33	86	37.5	37	33	36	106	37.3
35 / 39	33	42	43	117	33.5	37	34	35	106	33.1	41	29	31	101	33.1
30 / 34	49	39	44	132	29.2	45	33	35	113	28.8	40	22	22	84	29.0
25 / 29	42	36	38	116	24.2	32	25	26	83	24.1	25	9	12	46	24.5
20 / 24	26	21	22	69	19.7	17	14	16	46	19.4	13	2	2	17	20.1
15 / 19	21	12	15	48	15.3	14	10	10	35	15.0	4	1	1	6	15.6
10 / 14	14	7	6	28	10.5	11	5	4	20	10.5	1	0	0	1	11.1
5 / 9	7	6	4	16	5.6	7	3	2	11	5.9	0	0		0	5.7
0 / 4	4	3	3	10	1.0	3	0	1	4	1.3	0			0	1.3
-5 / -1	3	1	1	5	-3.0	1	0	0	1	-2.8					
-10 / -6	2	1	1	4	-7.3	0	0		0	-6.1					
-15 / -11	0	0	0	0	-12.4										
-20 / -16	0	0	0	0	-17.7										
-25 / -21	0		0	0	-21.1										

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		
100 / 104												0	0	0	74.6
95 / 99							0	0	0	76.3		1	0	1	74.7
90 / 94		0	0	0	74.6		0	0	0	74.5		10	4	14	74.6
85 / 89		2	1	3	67.7		9	3	12	70.7		37	19	56	72.8
80 / 84		12	5	17	64.1		30	15	45	68.2	1	64	40	105	70.6
75 / 79		18	12	30	62.0	2	42	28	73	65.6	15	57	55	127	68.2
70 / 74	2	27	22	50	59.5	15	50	47	112	62.8	62	41	59	161	66.0
65 / 69	15	36	35	86	56.8	42	48	53	143	60.2	76	20	40	136	62.9
60 / 64	35	38	41	114	53.9	58	33	47	138	56.5	50	8	17	75	58.6
55 / 59	34	34	35	103	49.8	47	21	26	95	52.0	25	2	5	32	53.8
50 / 54	36	30	35	102	45.7	38	11	19	68	48.1	10	0	1	11	49.5
45 / 49	41	22	26	89	41.8	29	4	7	40	43.9	2		0	2	44.5
40 / 44	38	14	17	69	37.8	13	0	2	15	39.9	0			0	43.2
35 / 39	24	6	9	38	33.7	3	0	0	3	35.0					
30 / 34	12	2	2	16	29.4	0			0	32.4					
25 / 29	3	0	0	3	25.4										
20 / 24	0			0	22.0										
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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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		
100 / 104		1	0	1	75.3		0	0	0	78.7					
95 / 99		4	1	5	77.5		3	1	4	77.3		0	0	0	76.9
90 / 94		26	11	37	76.1		21	6	27	76.1		5	1	6	74.3
85 / 89	0	58	29	87	74.4		49	24	74	74.1		22	8	30	72.6
80 / 84	6	71	54	131	72.2	1	66	45	112	71.4	0	39	20	59	70.1
75 / 79	40	51	66	158	70.4	28	59	69	156	69.9	6	49	38	94	67.8
70 / 74	96	28	58	182	68.2	93	37	64	194	67.9	46	48	55	149	66.0
65 / 69	66	7	22	95	64.1	71	11	28	110	63.7	48	37	45	130	61.9
60 / 64	29	1	6	36	59.4	37	2	8	47	59.2	43	25	34	102	57.6
55 / 59	10	0	1	11	55.4	15	0	2	17	55.0	42	10	22	75	53.4
50 / 54	1			1	50.9	3		0	3	50.2	33	5	12	50	49.3
45 / 49											15	1	3	19	44.8
40 / 44											5	0	1	6	40.3
35 / 39											1			1	37.2
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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FORT KNOX/GODMAN

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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		
100 / 104															
95 / 99															
90 / 94															
85 / 89		1	0	1	69.5										
80 / 84		9	2	11	67.2		0		0	63.3					
75 / 79	0	22	8	30	64.6		4	0	4	63.0		0		0	65.5
70 / 74	4	35	22	62	61.8	1	9	4	14	60.8	0	1	1	2	63.5
65 / 69	15	42	36	93	59.2	5	19	14	38	58.6	1	4	3	8	59.9
60 / 64	34	42	45	121	55.8	15	22	23	59	55.6	7	10	8	25	56.9
55 / 59	38	38	42	118	51.5	23	29	24	76	50.9	13	16	14	44	52.4
50 / 54	44	32	39	116	47.2	27	36	33	96	46.4	13	22	18	53	47.0
45 / 49	43	19	28	90	42.9	32	36	37	105	41.9	16	30	27	74	42.0
40 / 44	36	7	17	60	38.9	37	36	38	111	37.7	26	39	38	103	37.9
35 / 39	24	2	6	32	34.7	38	29	34	101	33.1	44	44	47	134	33.5
30 / 34	8	0	1	9	30.8	30	14	22	66	29.0	44	37	41	122	28.9
25 / 29	1			1	26.3	22	5	8	34	24.7	39	22	26	87	24.3
20 / 24						8	1	2	10	20.4	23	10	12	45	19.8
15 / 19						2	1	1	4	15.8	11	6	6	23	15.4
10 / 14						0	0	0	0	11.2	5	4	3	12	10.4
5 / 9						0			0	6.1	3	2	2	7	5.8
0 / 4											1	1	1	3	0.7
-5 / -1											1	0	0	1	-3.3
-10 / -6											1	0	0	1	-7.5
-15 / -11											0	0		0	-13.2
-20 / -16															
-25 / -21															

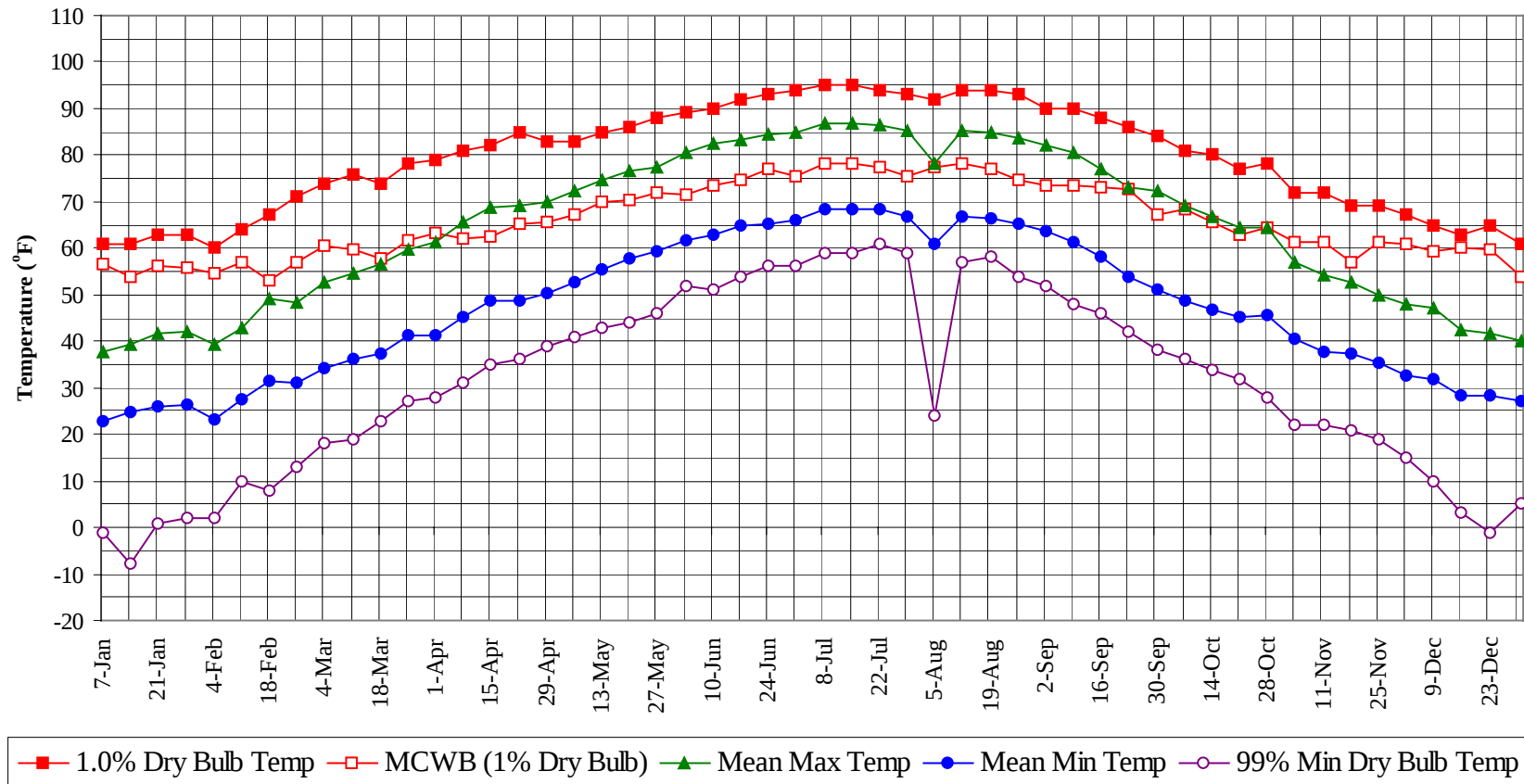
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FORT KNOX/GODMAN KY WMO No. 724240
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1967 to 1996

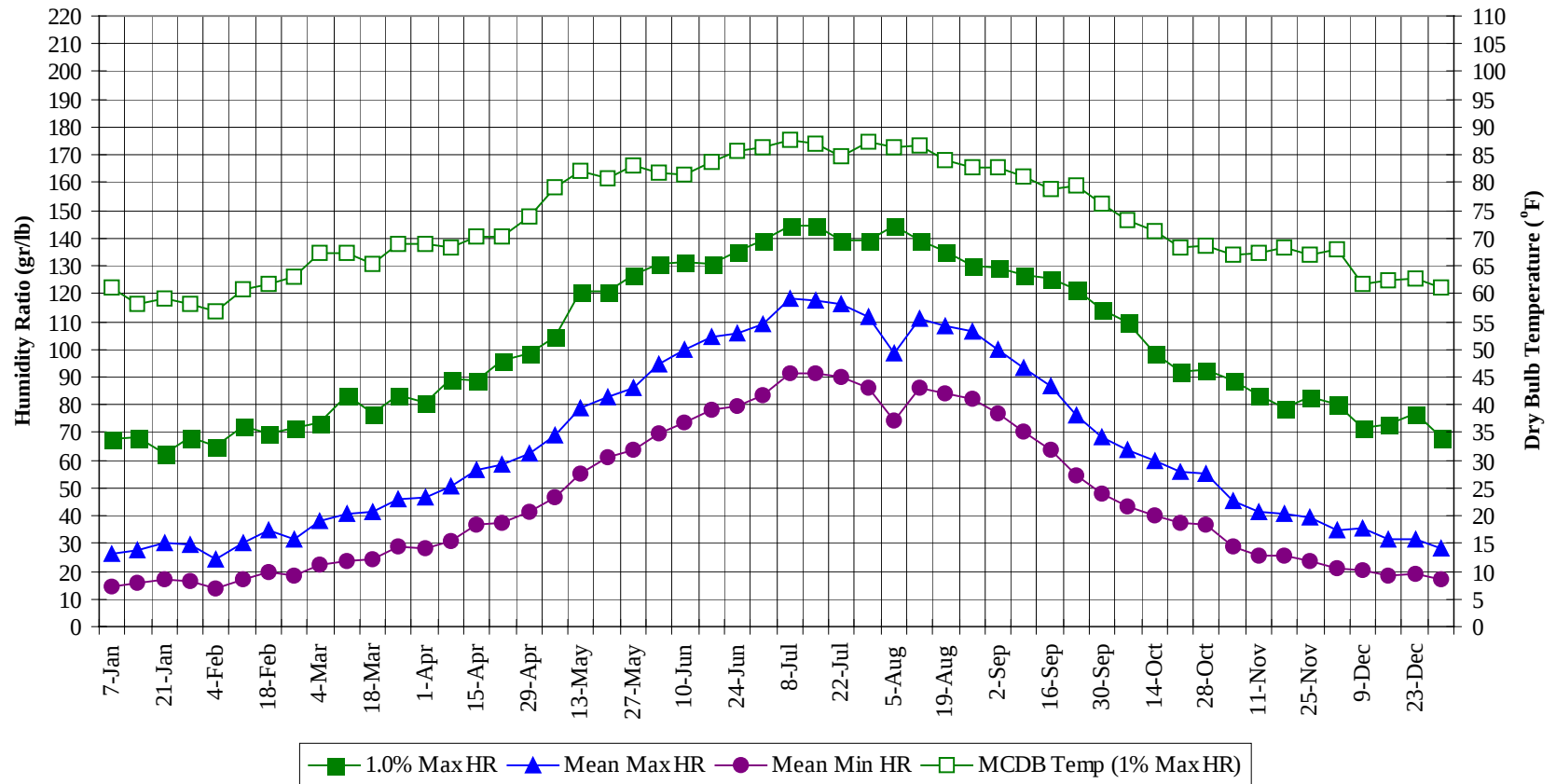
Temperature Range (°F)	Annual Totals				
	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104		1	0	1	76.0
95 / 99		8	3	11	77.0
90 / 94		62	22	84	75.7
85 / 89	0	180	85	265	73.5
80 / 84	9	291	179	479	70.6
75 / 79	95	310	279	684	68.2
70 / 74	327	289	337	953	65.5
65 / 69	347	246	291	884	61.0
60 / 64	325	217	265	807	56.3
55 / 59	281	203	224	708	51.5
50 / 54	248	200	224	672	46.8
45 / 49	229	187	206	623	42.2
40 / 44	233	189	209	631	37.9
35 / 39	239	183	204	627	33.4
30 / 34	225	148	165	538	29.0
25 / 29	161	96	109	366	24.3
20 / 24	83	47	54	185	19.7
15 / 19	52	30	34	116	15.2
10 / 14	30	17	14	61	10.5
5 / 9	17	9	8	35	5.7
0 / 4	10	4	4	17	1.0
-5 / -1	4	2	1	7	-3.0
-10 / -6	2	1	1	4	-7.2
-15 / -11	1	0	0	1	-12.7
-20 / -16	0	0	0	0	-17.7
-25 / -21	0		0	0	-21.1

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



FORT KNOX/GODMAN**KY****WMO No. 724240****Long Term Dry Bulb Temperature and Humidity Summary**

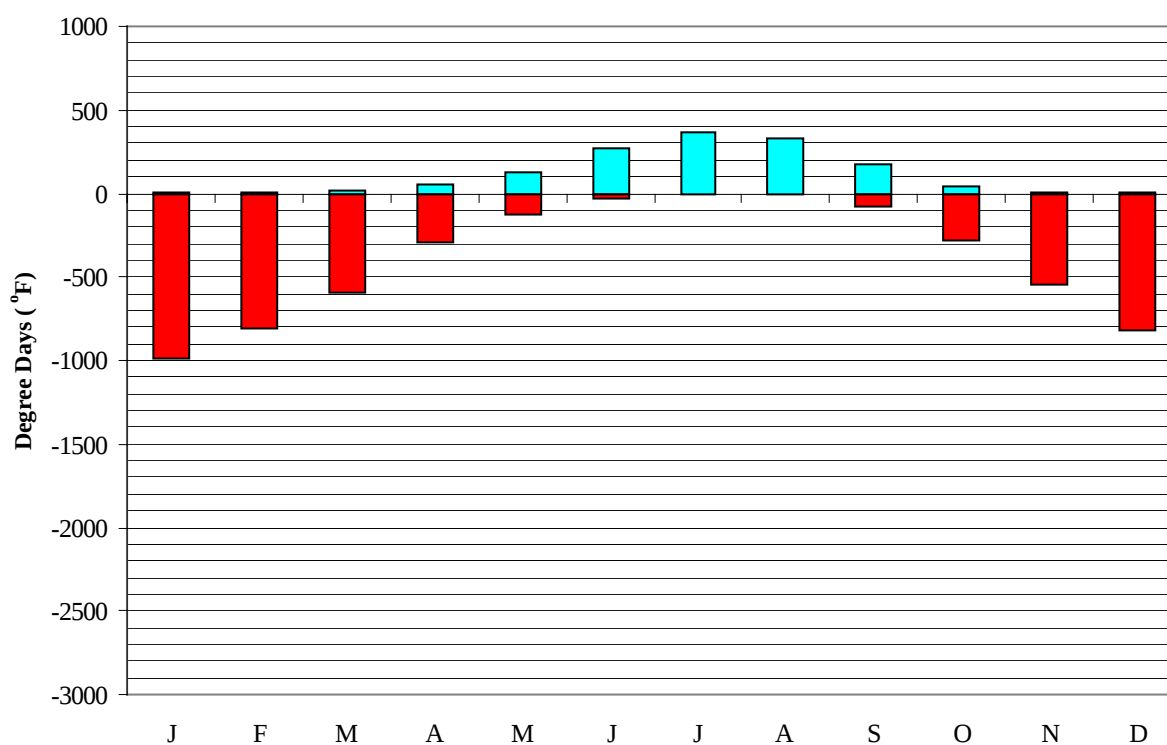
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	61.0	56.7	37.7	22.9	-1.0	67.9	61.2	26.2	14.4
14-Jan	61.0	53.9	39.1	24.6	-8.0	68.6	58.0	27.6	16.0
21-Jan	63.0	56.1	41.8	26.1	1.0	62.3	59.1	30.0	16.9
28-Jan	63.0	55.9	42.2	26.4	2.0	68.6	58.1	29.9	16.4
4-Feb	60.0	54.6	39.3	23.1	2.0	65.1	56.7	24.6	13.9
11-Feb	64.0	56.8	43.0	27.7	10.0	72.1	60.8	30.0	17.3
18-Feb	67.0	53.2	49.2	31.6	8.0	69.3	61.6	34.9	20.0
25-Feb	71.0	56.9	48.4	31.1	13.0	71.4	62.9	31.4	18.2
4-Mar	74.0	60.3	52.7	34.3	18.0	73.5	67.2	37.8	22.1
11-Mar	76.0	59.9	54.8	36.2	19.0	83.3	67.3	40.4	23.9
18-Mar	74.0	57.6	56.4	37.3	23.0	77.0	65.5	41.4	24.1
25-Mar	78.0	61.6	59.6	41.4	27.0	83.3	69.0	45.7	29.1
1-Apr	79.0	63.4	61.5	41.2	28.0	80.5	68.9	46.5	28.1
8-Apr	81.0	61.9	65.7	45.1	31.0	89.6	68.3	50.4	30.9
15-Apr	82.0	62.4	68.7	48.7	35.0	88.9	70.3	56.8	36.7
22-Apr	85.0	65.3	69.2	48.7	36.0	95.9	70.3	58.2	37.5
29-Apr	83.0	65.5	70.0	50.3	39.0	98.7	73.9	62.3	41.5
6-May	83.0	67.3	72.4	52.8	41.0	104.3	79.1	68.9	46.6
13-May	85.0	69.9	74.5	55.5	43.0	121.1	82.0	78.8	55.2
20-May	86.0	70.3	76.6	57.9	44.0	121.1	80.8	82.6	60.8
27-May	88.0	71.8	77.6	59.5	46.0	126.7	83.2	86.3	63.8
3-Jun	89.0	71.6	80.5	61.5	52.0	130.9	81.8	94.8	69.8
10-Jun	90.0	73.3	82.6	63.0	51.0	131.6	81.6	99.6	73.6
17-Jun	92.0	74.5	83.3	64.7	54.0	130.9	83.6	104.3	78.4
24-Jun	93.0	76.9	84.4	65.1	56.0	135.1	85.6	105.7	79.3
1-Jul	94.0	75.3	84.8	66.1	56.0	139.3	86.4	108.8	83.3
8-Jul	95.0	78.0	86.8	68.3	59.0	144.2	87.7	118.5	91.2
15-Jul	95.0	78.1	86.8	68.2	59.0	144.2	86.9	117.8	91.4
22-Jul	94.0	77.4	86.3	68.3	61.0	139.3	84.8	116.3	90.3
29-Jul	93.0	75.6	85.2	66.8	59.0	139.3	87.3	111.7	85.7
5-Aug	92.0	77.5	78.2	60.7	24.0	144.2	86.2	98.3	74.5
12-Aug	94.0	78.1	85.3	66.6	57.0	139.3	86.7	110.8	86.2
19-Aug	94.0	77.0	84.9	66.3	58.0	135.1	84.1	108.6	83.8
26-Aug	93.0	74.7	83.8	65.1	54.0	130.2	82.8	106.2	81.9
2-Sep	90.0	73.4	82.1	63.7	52.0	129.5	82.9	100.1	77.1
9-Sep	90.0	73.6	80.6	61.2	48.0	126.7	81.1	93.4	70.3
16-Sep	88.0	73.1	77.0	58.1	46.0	125.3	78.8	86.6	63.8
23-Sep	86.0	72.7	73.0	53.7	42.0	121.8	79.4	76.1	54.5
30-Sep	84.0	67.2	72.2	51.2	38.0	114.1	76.2	68.5	47.7
7-Oct	81.0	68.5	69.0	48.6	36.0	109.9	73.3	63.9	43.6
14-Oct	80.0	65.5	66.7	46.7	34.0	98.7	71.4	59.6	39.8
21-Oct	77.0	62.8	64.3	45.3	32.0	91.7	68.3	56.0	37.2
28-Oct	78.0	64.4	64.3	45.6	28.0	92.4	68.8	54.9	36.5
4-Nov	72.0	61.1	57.1	40.6	22.0	88.9	66.9	45.2	28.8
11-Nov	72.0	61.3	54.3	37.8	22.0	83.3	67.3	41.3	25.4
18-Nov	69.0	57.0	52.7	37.4	21.0	79.1	68.4	40.4	25.3
25-Nov	69.0	61.1	50.1	35.3	19.0	82.6	67.1	39.5	23.6
2-Dec	67.0	61.0	47.9	32.7	15.0	79.8	68.1	34.8	20.8
9-Dec	65.0	59.2	47.0	31.7	10.0	71.4	61.6	35.4	20.5
16-Dec	63.0	60.1	42.6	28.1	3.0	72.8	62.2	31.7	18.2
23-Dec	65.0	59.6	41.7	28.4	-1.0	77.0	62.6	31.5	18.8
31-Dec	61.0	53.9	40.0	27.0	5.0	68.6	60.9	28.4	17.3

FORT KNOX/GODMAN

KY

WMO No. 724240

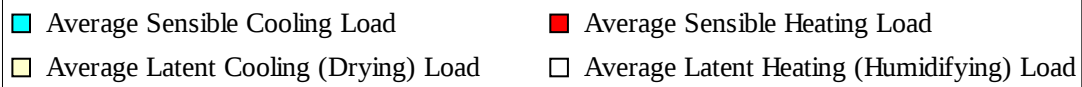
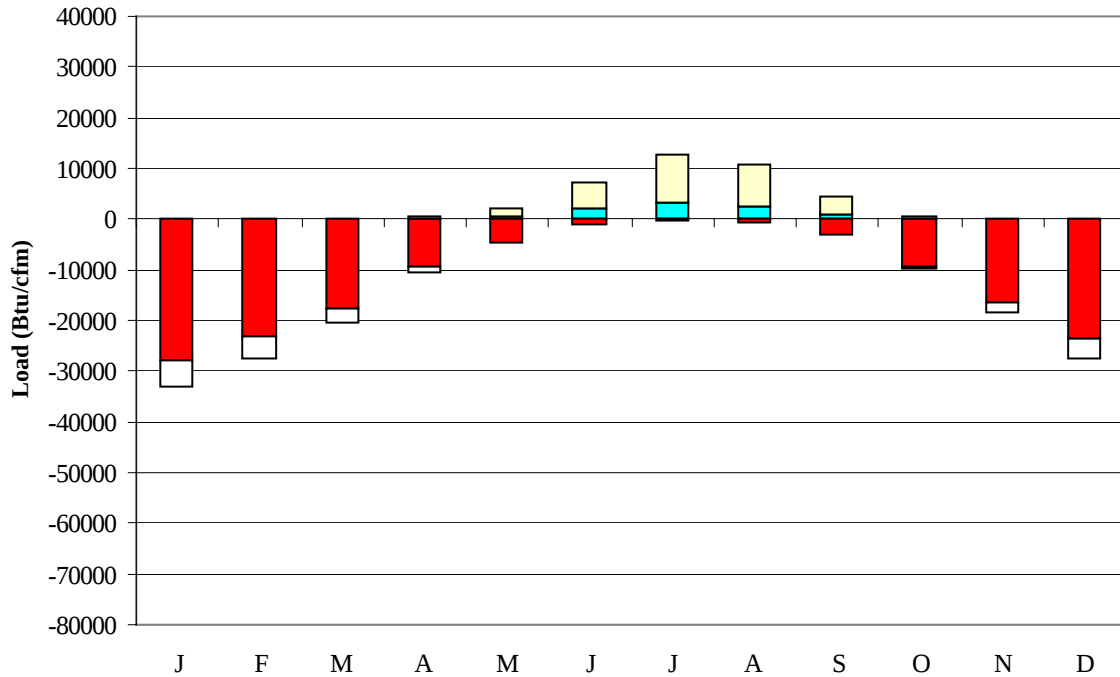
Degree Days, Heating and Cooling
(Base 65°F)



■ Mean Cooling Degree Days ■ Mean Heating Degree Days

	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	989
FEB	1	812
MAR	13	592
APR	49	296
MAY	123	123
JUN	268	24
JUL	368	7
AUG	330	11
SEP	178	77
OCT	47	283
NOV	8	543
DEC	1	823
ANN	1386	4580

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



	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	-27985	1	-5111
FEB	0	-23210	1	-4151
MAR	22	-17581	19	-2645
APR	198	-9512	133	-1047
MAY	604	-4505	1390	-114
JUN	2019	-1135	5136	-5
JUL	3261	-401	9321	-1
AUG	2647	-577	8150	0
SEP	1101	-2926	3552	-15
OCT	138	-9229	442	-479
NOV	7	-16275	41	-2110
DEC	0	-23694	3	-3720
ANN	9997	-137030	28189	-19398

Average Annual Solar Radiation – Nearest Available Site

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

City: LOUISVILLE
 State: KY
 WBAN No: 93821
 Lat(N): 38.18
 Long(W): 85.73
 Elev(ft): 489

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.482
 Vert Gap: 0.311

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	640	900	1200	1570	1840	2000	1940	1770	1440	1090	700	550	1300
	Std Dev	49	72	105	138	133	125	110	95	87	76	68	52	41
	Minimum	550	790	980	1330	1610	1800	1610	1610	1270	900	570	460	1230
	Maximum	730	1080	1390	1820	2150	2460	2120	1940	1600	1280	840	670	1440
	Diffuse	360	460	600	720	830	880	870	780	630	460	370	320	610
Clear Day	Global	970	1310	1780	2240	2520	2620	2530	2280	1870	1400	1010	850	1780
NORTH	Global	210	280	360	440	550	630	590	490	390	300	220	190	390
	Diffuse	210	280	360	430	500	540	520	470	390	300	220	190	370
Clear Day	Global	190	250	330	430	570	680	630	480	370	280	210	170	380
EAST	Global	410	560	710	910	1030	1090	1070	1010	850	680	440	360	760
	Diffuse	260	330	430	530	600	640	630	580	480	370	270	220	450
Clear Day	Global	720	910	1150	1340	1420	1440	1410	1320	1150	930	710	630	1090
SOUTH	Global	910	1030	1010	940	820	760	790	930	1070	1180	930	820	930
	Diffuse	360	430	500	540	570	580	580	540	460	370	320	220	480
Clear Day	Global	1930	1950	1760	1360	1020	870	930	1190	1550	1810	1850	1840	1500
WEST	Global	420	560	720	890	1000	1090	1060	1000	860	680	450	360	760
	Diffuse	260	340	440	530	610	660	640	590	490	380	270	220	450
Clear Day	Global	720	910	1150	1340	1420	1440	1410	1320	1150	930	710	630	1090

Average Annual Solar Heat and Illumination – Nearest Available Site

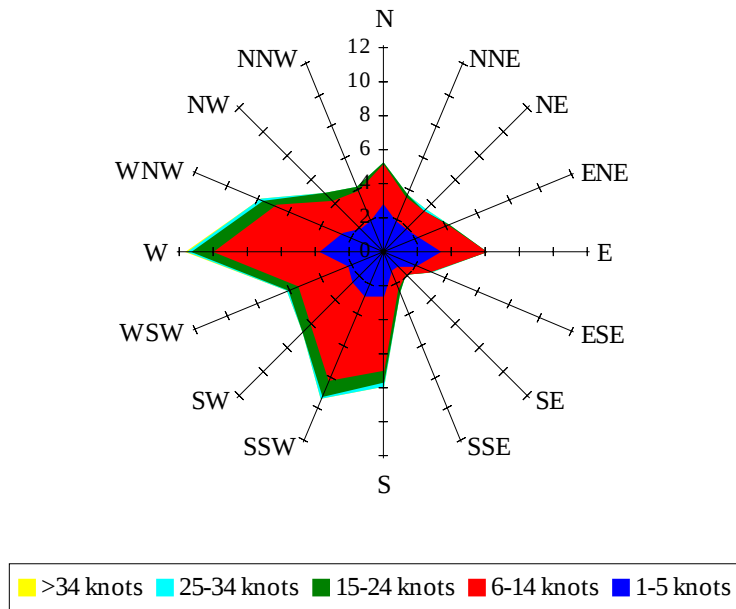
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	430	620	850	1130	1330	1450	1410	1280	1030	760	470	360	930
NORTH	Unshaded	150	190	250	300	360	410	390	330	270	210	160	130	260
	Shaded	130	170	220	270	330	370	350	300	250	190	140	110	240
EAST	Unshaded	280	390	500	640	740	770	760	720	600	480	300	240	540
	Shaded	260	350	450	560	640	670	660	630	530	430	270	220	470
SOUTH	Unshaded	680	750	700	610	500	460	480	590	720	840	690	620	640
	Shaded	660	700	560	420	350	360	360	400	540	750	660	600	530
WEST	Unshaded	290	390	510	630	710	780	750	710	610	480	310	250	540
	Shaded	260	350	450	560	620	670	650	630	540	430	280	220	470

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	64	82	73	41	32	74	98	99	78
	M.Cloudy	15	38	50	46	25	22	49	72	76	58
NORTH	M.Clear	8	13	15	14	10	21	16	17	17	17
	M.Cloudy	6	14	17	16	10	13	16	19	19	17
EAST	M.Clear	65	67	25	14	10	63	79	48	17	17
	M.Cloudy	20	31	20	16	10	31	45	37	19	17
SOUTH	M.Clear	25	62	80	72	40	10	22	42	43	27
	M.Cloudy	10	30	41	37	19	9	19	33	36	23
WEST	M.Clear	8	13	15	54	73	10	16	17	37	73
	M.Cloudy	6	14	17	31	30	9	16	19	32	49
M.Clear	(% hrs)	25	25	25	23	22	36	39	31	28	31
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	14	56	83	84	59	6	35	49	38	10
	M.Cloudy	9	33	55	58	40	4	20	27	22	6
NORTH	M.Clear	6	13	16	16	14	3	9	11	9	4
	M.Cloudy	4	13	18	18	14	2	8	11	9	3
EAST	M.Clear	41	75	45	16	14	22	46	14	9	4
	M.Cloudy	14	32	31	18	14	5	17	12	9	3
SOUTH	M.Clear	9	45	70	71	48	16	69	88	74	25
	M.Cloudy	5	22	42	45	29	4	22	29	25	7
WEST	M.Clear	6	13	16	38	70	3	9	11	44	31
	M.Cloudy	4	13	18	29	39	2	8	11	18	8
M.Clear	(% hrs)	39	45	37	34	40	23	23	25	23	23

Wind Summary - December, January, and February

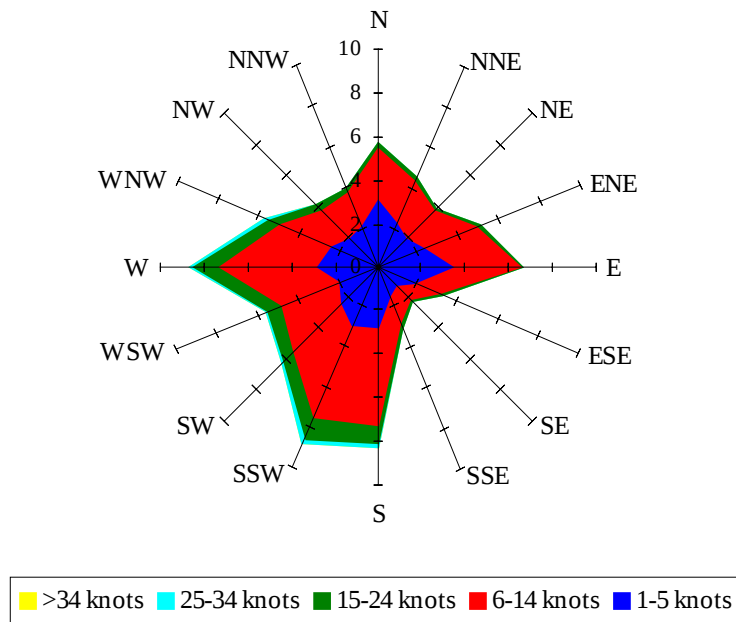
Labels of Percent Frequency on North Axis



Percent Calm = 12.94

Wind Summary - March, April, and May

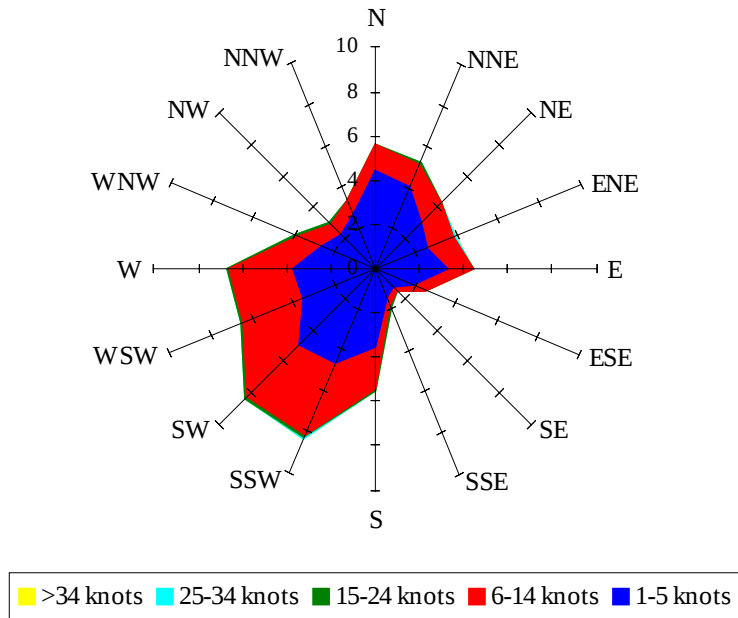
Labels of Percent Frequency on North Axis



Percent Calm = 14.89

Wind Summary - June, July, and August

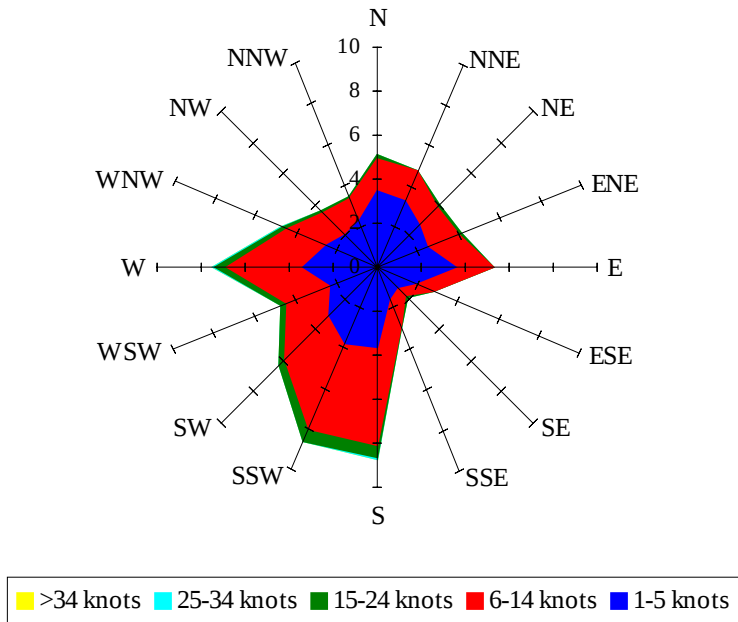
Labels of Percent Frequency on North Axis



Percent Calm = 25.56

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 21.68