

FAYETTEVILLE/DRAKE AR

Latitude = 36.00 N

WMO No. 723445

Longitude = 94.17 W

Elevation = 1250 feet

Period of Record = 1973 to 1996

Average Pressure = 28.68 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	98	75	97	9.8	S
0.4% Occurrence	95	75	105	9.8	S
1.0% Occurrence	92	75	110	9.8	S
2.0% Occurrence	90	75	110	9.9	S
Mean Daily Range	22	-	-	-	-
97.5% Occurrence	20	19	12	6.9	N
99.0% Occurrence	12	11	8	7.8	N
99.6% Occurrence	7	6	6	7.0	N
Median of Extreme Lows	-1	-1	4	5.9	S
	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	92	144	8.2	S
0.4% Occurrence	78	89	130	9.3	S
1.0% Occurrence	77	88	126	9.3	S
2.0% Occurrence	76	87	122	9.2	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	153	89	0.97	6.7	S
0.4% Occurrence	137	85	0.88	7.6	S
1.0% Occurrence	132	85	0.85	7.4	S
2.0% Occurrence	125	81	0.79	10.3	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		87	1041	768	2152

Other Site Data

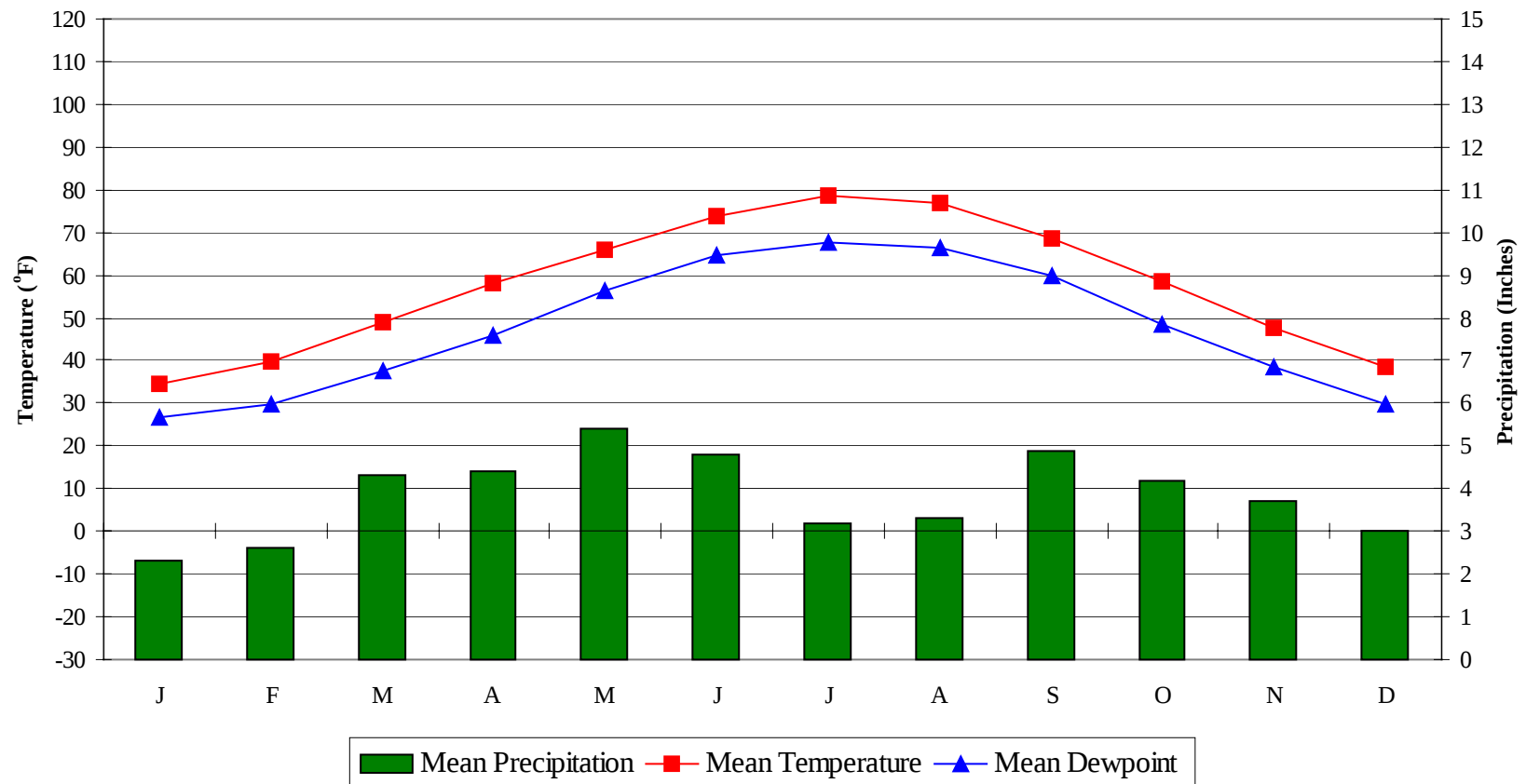
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
7	3.7	90	3.4 + 1.1
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
59.9	N/A	N/A	62

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

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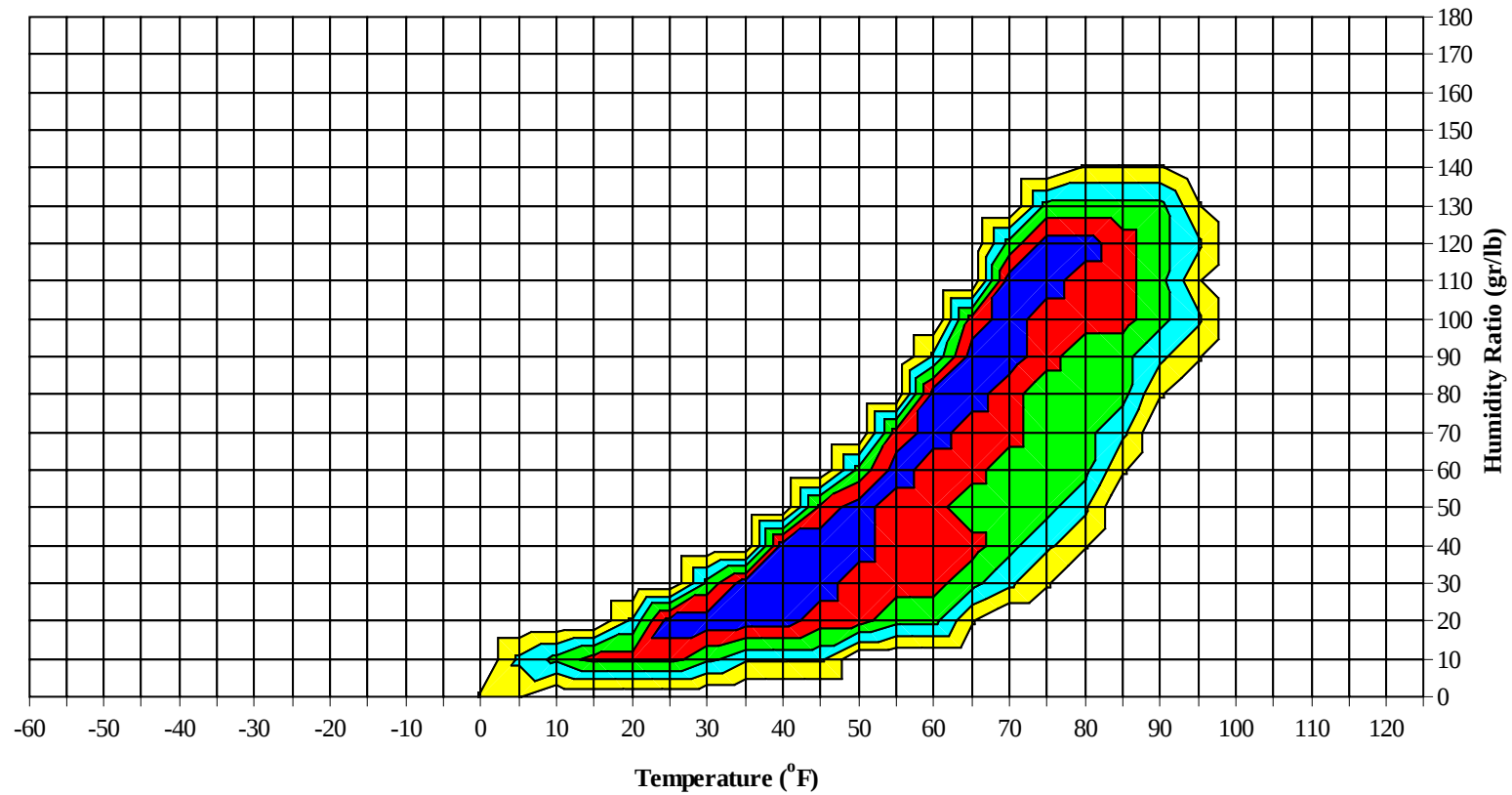
Average Annual Climate



FAYETTEVILLE/DRAKE AR

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Long Term Psychrometric Summary

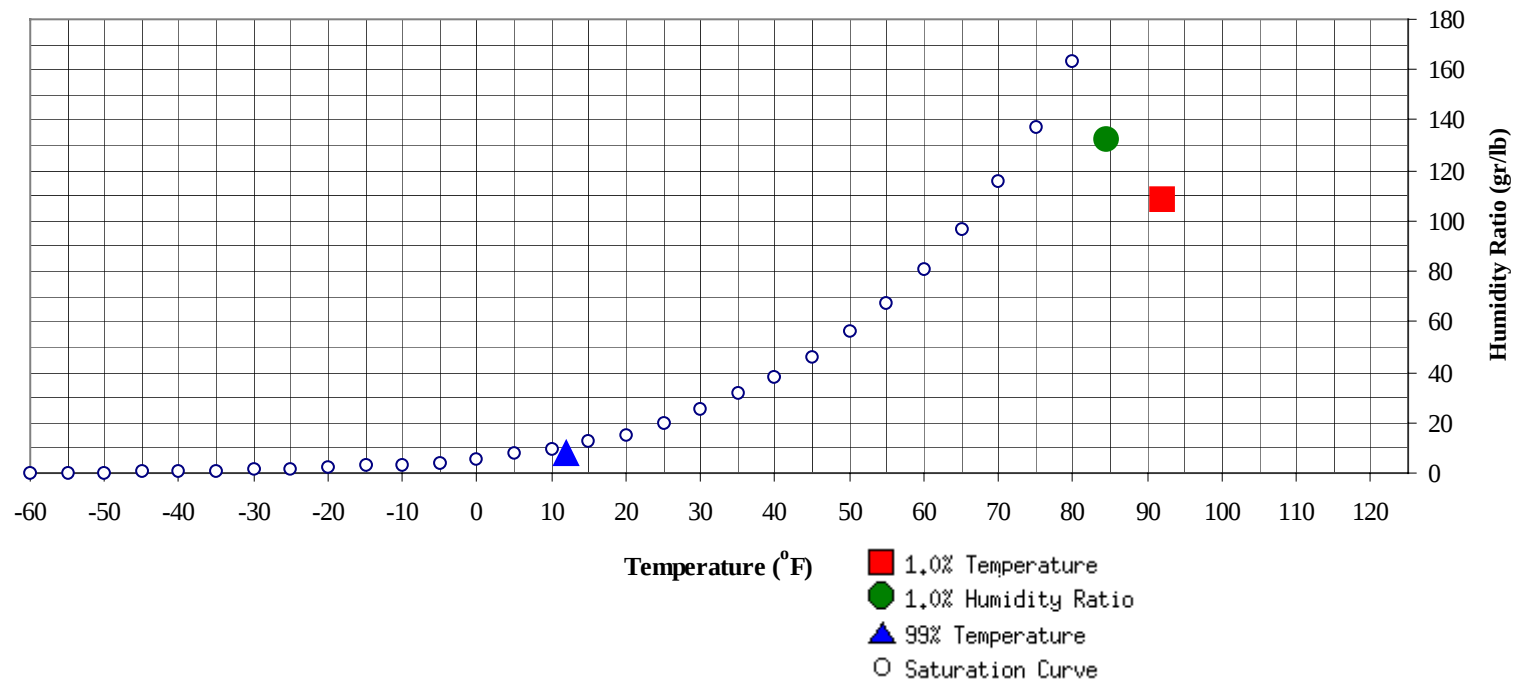


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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Psychrometric Summary of Peak Design Values



	(°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	12	7.7	4.1		132.3	84.5	76.8	74	41.0

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	92	108.8	75	39.2

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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		
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89							0		0	59.0		0	0	0	65.8
80 / 84							0	0	0	57.4		1	0	1	62.6
75 / 79							1	0	1	56.2	0	10	3	13	60.1
70 / 74		1	0	1	54.7		5	1	6	55.2	1	21	10	32	59.3
65 / 69	0	3	1	4	54.6	1	14	5	20	54.0	8	29	21	58	56.7
60 / 64	2	11	4	17	53.2	5	21	13	39	52.6	15	36	28	79	53.5
55 / 59	5	18	11	34	50.0	9	24	15	48	49.2	22	33	32	87	50.1
50 / 54	9	23	16	48	45.7	13	23	23	59	45.7	25	30	34	89	46.3
45 / 49	17	29	25	71	41.8	19	27	26	72	42.0	32	30	39	100	42.5
40 / 44	21	35	31	87	38.1	22	28	31	81	38.4	38	25	31	93	38.8
35 / 39	30	36	39	105	34.1	30	26	31	87	34.2	38	17	25	79	34.6
30 / 34	41	34	43	118	30.0	37	24	31	92	30.1	32	12	17	60	30.3
25 / 29	41	23	32	96	25.5	39	15	23	77	25.5	23	4	6	33	25.9
20 / 24	32	16	21	69	20.8	20	9	11	40	20.7	9	2	3	14	20.9
15 / 19	21	9	12	42	16.0	13	4	6	23	15.7	3	1	1	5	15.7
10 / 14	13	5	7	25	10.9	6	2	4	12	11.0	1	0	0	1	11.0
5 / 9	8	2	4	14	6.3	5	1	2	8	6.7	1	0		1	6.8
0 / 4	4	1	2	7	1.4	2	0	0	2	1.7					
-5 / -1	2	0	1	3	-3.2	1	0	0	1	-2.9					
-10 / -6	1	0	0	1	-7.4	1			1	-6.5					
-15 / -11	1			1	-11.5	0			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 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	09	17			01	09	17			01	09	17		
	To 08	To 16	To 00			To 08	To 16	To 00			To 08	To 16	To 00		
105 / 109															
100 / 104															
95 / 99											1 0 1 76.5				
90 / 94	0 0 63.4					0 0 74.5					14 4 18 75.1				
85 / 89	3 1 4 65.0					11 1 12 71.9					0 56 19 75 73.9				
80 / 84	14 3 17 64.4					0 40 13 53 68.9					4 71 38 113 71.8				
75 / 79	0 31 12 43 62.6					4 57 33 94 66.6					28 49 56 134 69.8				
70 / 74	6 41 28 75 60.8					25 53 49 127 64.5					55 29 59 142 67.7				
65 / 69	24 39 37 101 58.7					42 43 53 138 61.9					74 16 40 130 64.8				
60 / 64	30 34 41 106 55.0					57 27 44 128 58.5					42 4 18 63 60.5				
55 / 59	32 29 36 97 51.4					46 12 31 89 54.5					23 0 6 29 56.0				
50 / 54	36 22 32 90 47.4					33 4 17 54 50.1					11 1 12 51.5				
45 / 49	38 14 26 78 43.5					23 2 6 31 45.9					3 0 3 47.0				
40 / 44	30 8 15 53 39.5					12 1 13 41.6					0 0 43.7				
35 / 39	25 4 6 35 35.4					4 0 4 37.0									
30 / 34	11 1 2 14 31.2					0 0 33.6									
25 / 29	4 0 1 5 26.1														
20 / 24	1 1 22.7														
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															

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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		
105 / 109		0		0	74.5										
100 / 104		2	1	3	73.2		1	0	1	73.2					
95 / 99		13	3	16	75.7		16	4	20	74.3		2	0	2	73.4
90 / 94	0	54	17	71	75.5		42	13	56	74.9		13	3	16	73.0
85 / 89	1	80	35	116	74.2	0	67	25	92	73.6		32	8	40	72.0
80 / 84	13	56	50	119	72.8	7	58	45	111	72.0	1	50	20	71	70.2
75 / 79	52	27	67	147	71.5	33	36	59	128	70.9	13	46	38	97	68.5
70 / 74	91	13	52	156	69.4	85	20	59	165	68.9	42	36	50	128	66.8
65 / 69	60	3	17	81	65.9	69	7	29	105	65.5	52	29	45	126	63.6
60 / 64	22	0	4	26	61.0	32	1	10	43	60.9	41	17	33	91	59.4
55 / 59	7		1	8	56.4	15	0	2	17	56.4	36	9	22	67	54.7
50 / 54	1			1	52.7	5		0	5	51.3	26	5	14	45	50.5
45 / 49						1			1	47.9	14	1	6	21	46.0
40 / 44											10	0	2	12	41.7
35 / 39											3		1	4	37.2
30 / 34											0			0	32.5
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															

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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		
105 / 109															
100 / 104															
95 / 99															
90 / 94		0		0	68.0										
85 / 89		4	0	4	67.2										
80 / 84		14	2	16	66.7		1		1	60.5					
75 / 79	1	34	8	43	64.2		5	0	5	60.6		0		0	61.3
70 / 74	8	50	22	80	62.3	0	14	2	16	60.8	0	2	0	2	59.5
65 / 69	21	44	37	102	59.9	10	27	15	52	59.7	1	9	2	12	58.2
60 / 64	29	40	47	116	56.3	16	31	23	70	55.8	6	17	10	33	55.7
55 / 59	45	28	43	116	52.6	21	36	29	86	51.1	9	25	12	46	50.3
50 / 54	35	15	34	84	48.7	25	33	34	92	46.7	14	29	22	65	45.8
45 / 49	36	10	27	73	44.7	31	31	35	97	42.8	20	36	31	87	42.0
40 / 44	31	5	18	54	40.6	34	25	35	94	38.8	28	37	36	101	38.1
35 / 39	24	2	8	34	36.2	30	18	31	79	34.7	36	35	44	115	34.2
30 / 34	14	1	3	18	31.7	33	12	22	67	30.4	44	25	39	108	30.2
25 / 29	3	0	1	4	26.7	22	5	11	38	25.8	37	16	25	78	25.6
20 / 24	1			1	22.0	12	1	3	16	21.4	23	8	13	44	20.8
15 / 19						4	0	1	5	16.1	14	4	7	25	15.9
10 / 14						1	0	0	1	11.6	7	3	4	14	10.7
5 / 9						1		0	1	6.4	5	2	3	10	6.5
0 / 4											2	0	1	3	0.8
-5 / -1											1	1	0	2	-3.1
-10 / -6											1	0	0	1	-6.8
-15 / -11											0			0	-11.3

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AR

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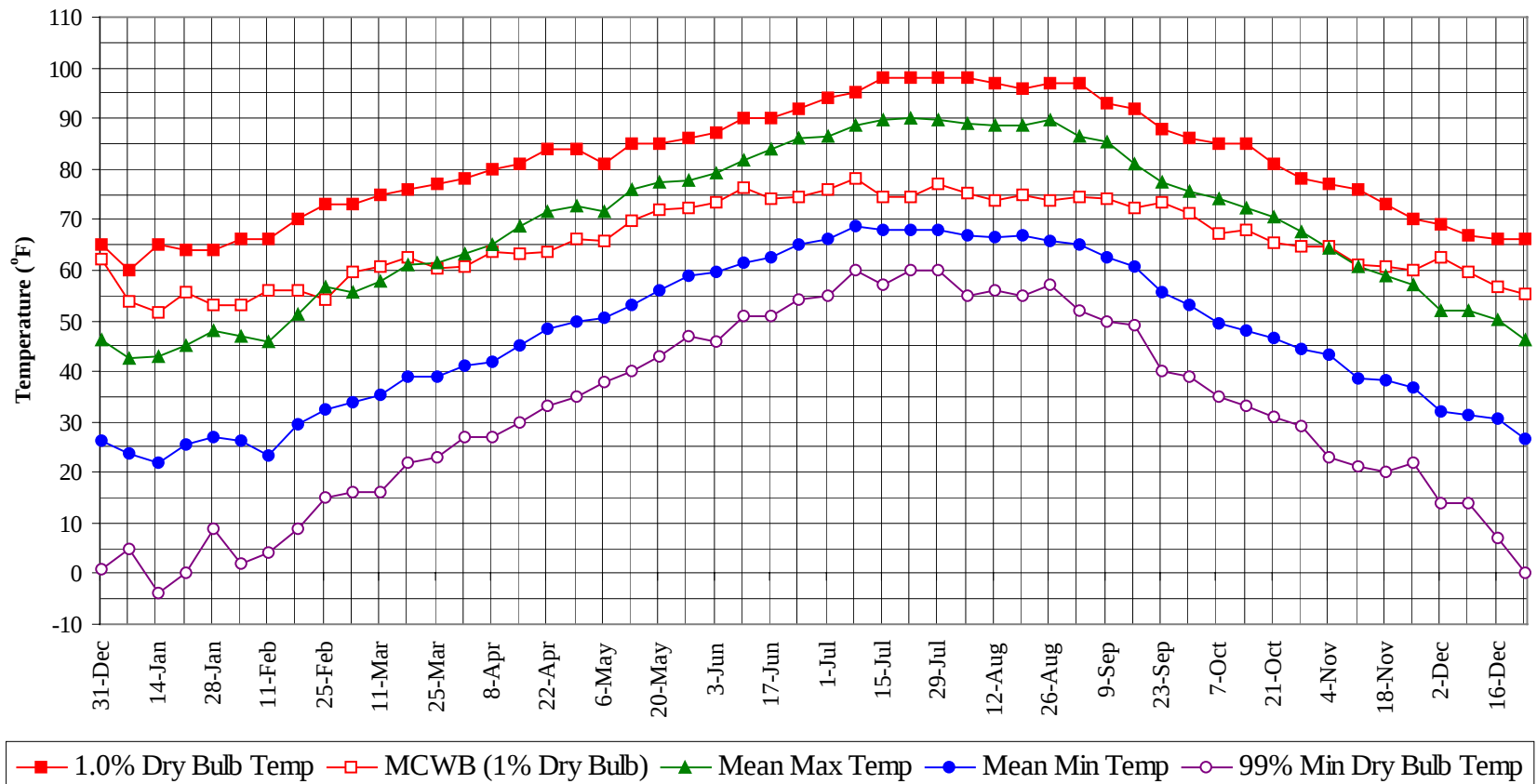
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

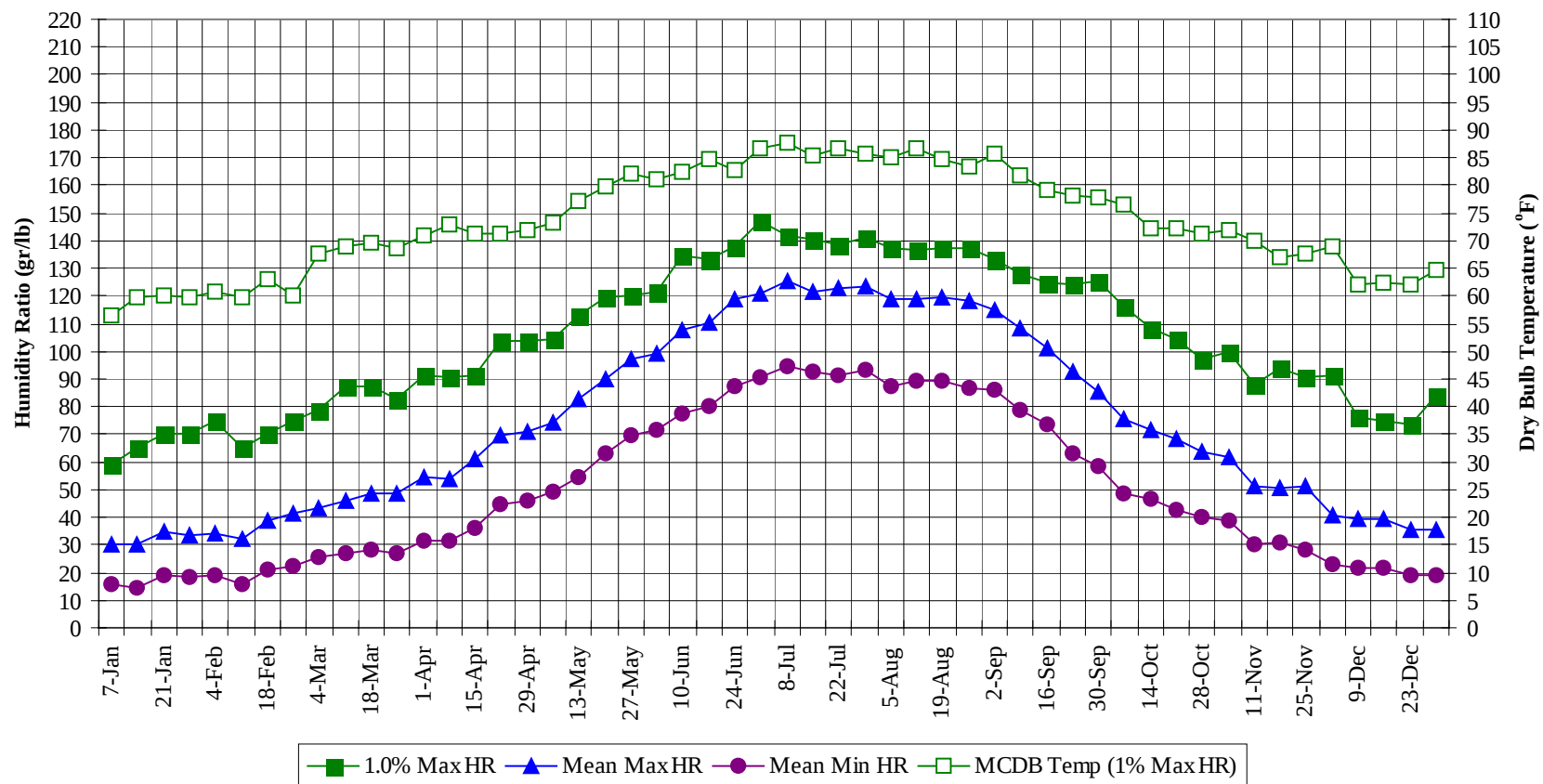
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
105 / 109	0			0	74.5
100 / 104	3			4	73.2
95 / 99	32			8	75.0
90 / 94	0	122	37	158	75.0
85 / 89	1	252	89	342	73.4
80 / 84	25	303	171	499	71.1
75 / 79	131	297	275	703	68.7
70 / 74	312	284	330	926	66.1
65 / 69	361	263	300	925	62.0
60 / 64	298	240	273	811	57.0
55 / 59	271	213	239	723	52.1
50 / 54	237	184	227	648	47.4
45 / 49	236	180	223	639	43.0
40 / 44	226	162	200	589	38.9
35 / 39	220	138	184	542	34.5
30 / 34	214	107	157	478	30.3
25 / 29	170	65	98	333	25.6
20 / 24	99	36	52	186	20.9
15 / 19	56	19	27	102	15.9
10 / 14	27	11	15	53	10.9
5 / 9	20	6	9	35	6.5
0 / 4	8	2	3	13	1.3
-5 / -1	4	1	1	6	-3.1
-10 / -6	2	0	0	2	-7.0
-15 / -11	1			1	-11.5

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary

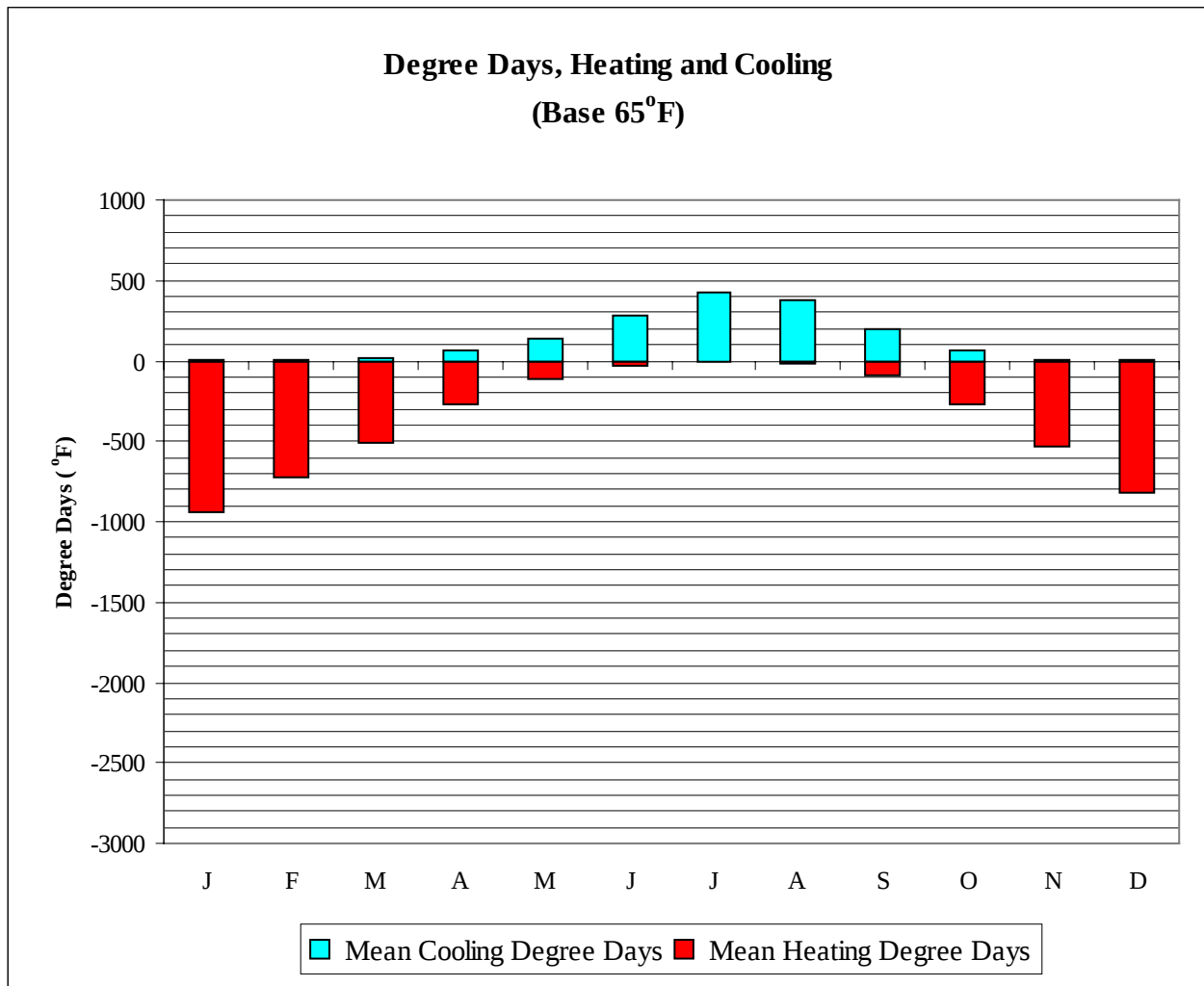


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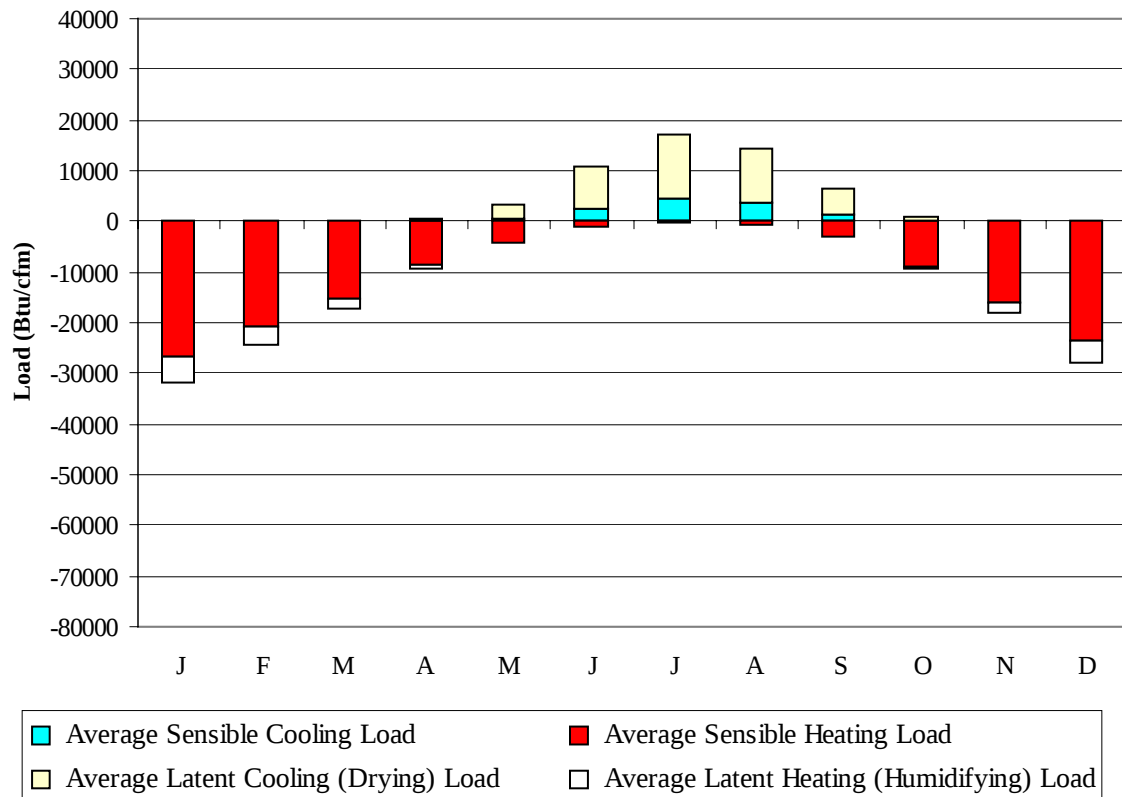
Long Term Dry Bulb Temperature and Humidity Summary

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	60.0	53.8	42.7	23.5	5.0	58.8	56.6	30.5	15.9
14-Jan	65.0	51.7	42.8	21.8	-4.0	65.1	59.6	30.0	14.6
21-Jan	64.0	55.5	45.0	25.5	0.0	70.0	60.2	34.5	19.3
28-Jan	64.0	53.1	48.0	26.8	9.0	70.0	59.7	33.5	18.1
4-Feb	66.0	53.1	47.0	26.3	2.0	74.9	60.8	34.2	18.8
11-Feb	66.0	56.1	45.7	23.5	4.0	65.1	59.9	32.0	16.0
18-Feb	70.0	56.1	51.3	29.6	9.0	70.0	62.9	38.7	21.0
25-Feb	73.0	54.3	56.7	32.4	15.0	74.9	60.3	41.1	22.4
4-Mar	73.0	59.7	55.5	34.0	16.0	79.1	67.7	43.1	25.4
11-Mar	75.0	60.7	57.9	35.3	16.0	87.5	68.9	46.1	26.8
18-Mar	76.0	62.5	60.9	38.9	22.0	87.5	69.5	48.7	28.3
25-Mar	77.0	60.4	61.2	39.0	23.0	82.6	68.8	48.5	27.0
1-Apr	78.0	60.7	63.4	41.3	27.0	91.0	71.0	54.4	31.8
8-Apr	80.0	63.6	65.1	41.8	27.0	90.3	72.8	53.6	31.6
15-Apr	81.0	63.3	68.5	45.3	30.0	91.0	71.3	61.4	36.3
22-Apr	84.0	63.7	71.4	48.5	33.0	103.6	71.3	69.5	44.5
29-Apr	84.0	66.1	72.6	49.6	35.0	103.6	72.1	70.9	46.0
6-May	81.0	65.7	71.7	50.6	38.0	104.3	73.2	74.3	49.4
13-May	85.0	69.9	75.9	53.1	40.0	112.7	77.0	82.9	54.3
20-May	85.0	72.0	77.5	56.1	43.0	119.7	79.8	90.1	63.1
27-May	86.0	72.3	77.9	58.8	47.0	120.4	81.9	97.0	69.9
3-Jun	87.0	73.3	79.1	59.5	46.0	121.8	81.1	99.5	71.8
10-Jun	90.0	76.2	81.7	61.5	51.0	134.4	82.6	107.7	77.7
17-Jun	90.0	74.3	83.9	62.6	51.0	133.0	84.7	110.2	80.0
24-Jun	92.0	74.7	86.1	65.0	54.0	137.9	82.6	118.7	87.2
1-Jul	94.0	76.0	86.6	66.0	55.0	147.0	86.7	120.7	90.7
8-Jul	95.0	78.0	88.7	68.5	60.0	142.1	87.7	125.5	94.9
15-Jul	98.0	74.4	89.6	67.8	57.0	140.7	85.5	121.7	92.6
22-Jul	98.0	74.6	89.9	67.8	60.0	138.6	86.7	122.5	91.3
29-Jul	98.0	77.0	89.7	68.0	60.0	141.4	85.8	123.6	93.3
5-Aug	98.0	75.3	88.9	66.9	55.0	137.2	85.2	118.9	87.6
12-Aug	97.0	73.8	88.5	66.3	56.0	136.5	86.6	118.9	89.6
19-Aug	96.0	74.8	88.7	66.7	55.0	137.2	84.7	119.8	89.6
26-Aug	97.0	73.7	89.8	65.7	57.0	137.2	83.3	118.0	86.8
2-Sep	97.0	74.6	86.5	64.9	52.0	133.0	85.7	114.9	85.8
9-Sep	93.0	74.2	85.2	62.7	50.0	128.1	81.6	108.5	79.0
16-Sep	92.0	72.3	81.1	60.6	49.0	124.6	79.3	101.2	73.5
23-Sep	88.0	73.4	77.5	55.6	40.0	123.9	78.2	92.7	63.4
30-Sep	86.0	71.3	75.5	53.1	39.0	125.3	78.0	85.3	58.3
7-Oct	85.0	67.3	74.2	49.3	35.0	116.2	76.6	75.2	48.4
14-Oct	85.0	67.8	72.1	48.0	33.0	108.5	72.4	71.5	46.7
21-Oct	81.0	65.4	70.3	46.4	31.0	104.3	72.3	68.3	42.6
28-Oct	78.0	64.5	67.7	44.5	29.0	97.3	71.4	63.7	39.9
4-Nov	77.0	64.6	64.4	43.3	23.0	100.1	72.0	61.6	38.4
11-Nov	76.0	60.9	60.5	38.5	21.0	88.2	70.0	50.9	30.0
18-Nov	73.0	60.8	58.9	38.2	20.0	93.8	67.1	50.8	30.6
25-Nov	70.0	60.1	57.0	36.9	22.0	90.3	67.5	50.9	28.0
2-Dec	69.0	62.6	52.1	32.0	14.0	91.0	69.1	40.9	22.9
9-Dec	67.0	59.6	51.9	31.2	14.0	76.3	62.1	39.3	21.9
16-Dec	66.0	56.7	50.1	30.5	7.0	74.9	62.4	39.2	21.6
23-Dec	66.0	55.4	46.3	26.5	0.0	73.5	62.1	35.6	18.7
31-Dec	65.0	62.2	46.3	26.1	1.0	84.0	64.8	35.1	19.0



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	943
FEB	4	720
MAR	20	512
APR	64	271
MAY	139	112
JUN	285	24
JUL	423	5
AUG	376	13
SEP	200	87
OCT	65	273
NOV	11	537
DEC	1	822
ANN	1589	4319

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	-26842	0	-5023
FEB	5	-20813	2	-3617
MAR	33	-15439	50	-1950
APR	233	-8732	326	-534
MAY	683	-4132	2529	-23
JUN	2322	-1117	8321	0
JUL	4402	-320	12635	0
AUG	3761	-639	10490	0
SEP	1496	-3174	4960	-14
OCT	236	-8838	775	-324
NOV	11	-16091	111	-1906
DEC	0	-23688	11	-4017
ANN	13182	-129825	40210	-17408

Average Annual Solar Radiation – Nearest Available Site

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

City: FORT SMITH
 State: AR
 WBAN No: 13964
 Lat(N): 35.33
 Long(W): 94.37
 Elev(ft): 463

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.402
 Vert Gap: 0.289

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	820	1070	1380	1700	1910	2060	2100	1890	1520	1230	870	730	1440
	Std Dev	68	68	106	119	130	111	134	108	112	116	80	52	37
	Minimum	680	900	1190	1500	1690	1820	1840	1600	1300	990	700	650	1380
	Maximum	940	1220	1640	1990	2190	2310	2430	2070	1770	1410	1010	860	1530
	Diffuse	360	460	600	720	800	820	760	710	630	470	380	330	590
Clear Day	Global	1110	1450	1890	2310	2550	2630	2560	2330	1970	1540	1150	1000	1880
NORTH	Global	240	300	380	460	560	640	600	490	400	320	250	210	400
	Diffuse	240	300	380	450	500	530	510	460	400	320	250	210	380
Clear Day	Global	210	270	340	430	580	690	630	480	360	290	230	200	390
EAST	Global	530	660	810	960	1030	1090	1150	1060	880	760	550	480	830
	Diffuse	290	360	460	540	600	630	610	570	490	390	300	260	460
Clear Day	Global	790	980	1190	1360	1430	1430	1400	1340	1200	1010	820	730	1140
SOUTH	Global	1210	1210	1120	950	770	700	750	910	1060	1260	1160	1140	1020
	Diffuse	390	450	510	540	550	550	540	550	530	470	400	360	490
Clear Day	Global	2010	1980	1720	1270	910	770	820	1090	1500	1840	1950	1960	1480
WEST	Global	550	670	830	990	1080	1150	1140	1070	910	780	580	500	860
	Diffuse	290	360	460	550	610	640	620	580	500	400	300	260	470
Clear Day	Global	790	980	1190	1360	1430	1430	1400	1340	1200	1010	820	730	1140

Average Annual Solar Heat and Illumination – Nearest Available Site

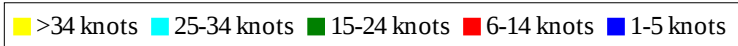
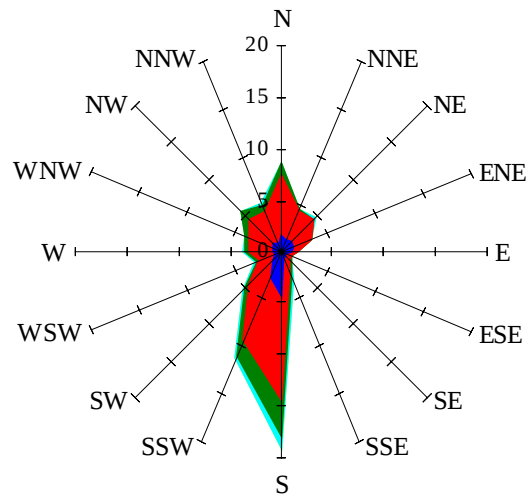
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	550	740	990	1230	1390	1500	1530	1380	1090	870	590	480	1030
NORTH	Unshaded	160	210	260	310	370	410	390	320	270	220	170	150	270
	Shaded	150	190	240	290	330	370	360	300	250	200	160	140	250
EAST	Unshaded	370	470	570	680	730	780	820	760	620	530	380	330	590
	Shaded	340	430	520	610	660	690	740	680	560	490	350	300	530
SOUTH	Unshaded	900	880	760	600	470	420	440	550	700	900	860	860	690
	Shaded	880	830	630	440	350	350	350	390	540	810	840	840	600
WEST	Unshaded	390	480	590	700	770	820	810	760	650	550	400	340	610
	Shaded	360	440	540	630	690	730	730	690	590	510	370	320	550

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	38	75	88	73	35	42	81	102	99	73
	M.Cloudy	21	47	57	46	22	27	57	73	75	54
NORTH	M.Clear	9	14	15	14	9	22	16	17	17	16
	M.Cloudy	9	16	18	16	9	15	18	19	19	17
EAST	M.Clear	77	63	15	14	9	74	76	38	17	16
	M.Cloudy	25	34	18	16	9	35	48	31	19	17
SOUTH	M.Clear	35	68	79	66	32	11	23	39	37	19
	M.Cloudy	15	36	45	36	16	11	21	32	32	19
WEST	M.Clear	9	14	17	65	74	11	16	17	47	77
	M.Cloudy	9	16	19	35	28	11	18	19	38	52
M.Clear	(% hrs)	35	34	35	35	36	39	40	39	37	45
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	24	66	89	84	54	16	47	56	40	7
	M.Cloudy	14	41	57	58	37	9	28	34	23	5
NORTH	M.Clear	8	14	16	16	13	6	10	12	9	3
	M.Cloudy	6	15	18	18	14	4	11	13	9	2
EAST	M.Clear	60	74	35	16	13	47	46	12	9	3
	M.Cloudy	19	36	26	18	14	12	20	13	9	2
SOUTH	M.Clear	16	50	70	66	40	39	82	93	74	19
	M.Cloudy	8	28	41	42	25	10	30	37	25	6
WEST	M.Clear	8	14	16	49	75	6	10	18	54	27
	M.Cloudy	6	15	18	34	39	4	11	15	20	7
M.Clear	(% hrs)	43	43	40	43	46	36	37	39	40	39

Wind Summary - December, January, and February

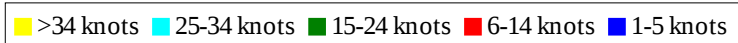
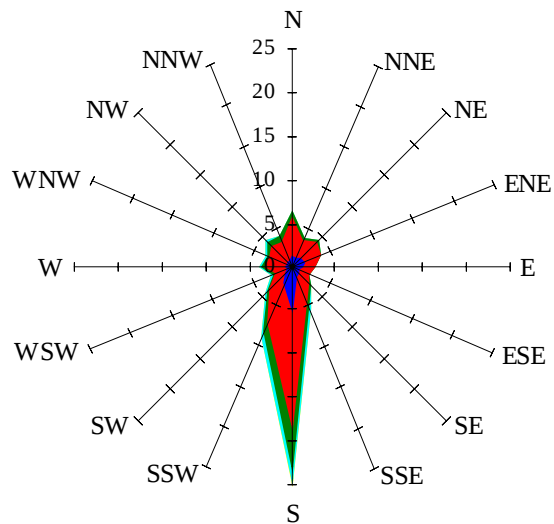
Labels of Percent Frequency on North Axis



Percent Calm = 16.19

Wind Summary - March, April, and May

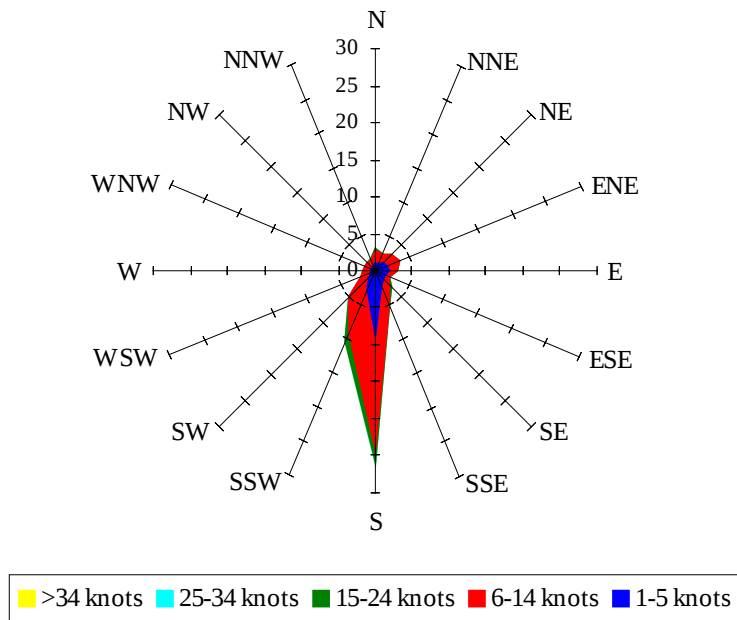
Labels of Percent Frequency on North Axis



Percent Calm = 15.37

Wind Summary - June, July, and August

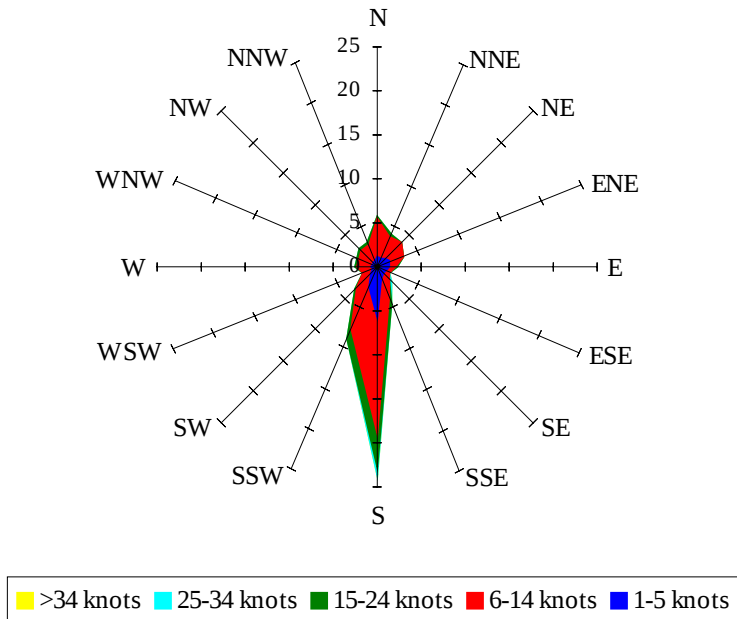
Labels of Percent Frequency on North Axis



Percent Calm = 25.23

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 24.00