

BRISTOL/TRI-CITY TN

Latitude = 36.48 N

Longitude = 82.40 W

Period of Record = 1973 to 1996

WMO No. 723181

Elevation = 1519 feet

Average Pressure = 28.44 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	73	97	7.4	W
0.4% Occurrence	90	73	100	7.5	W
1.0% Occurrence	87	72	101	7.2	W
2.0% Occurrence	85	71	99	7.0	W
Mean Daily Range	20	-	-	-	-
97.5% Occurrence	21	19	11	5.7	W
99.0% Occurrence	14	12	8	6.2	W
99.6% Occurrence	9	8	6	6.0	W
Median of Extreme Lows	1	0	4	7.6	WSW
	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	77	87	126	6.8	W
0.4% Occurrence	75	85	118	6.6	W
1.0% Occurrence	74	84	115	6.4	W
2.0% Occurrence	73	82	112	6.1	W
	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	138	84	0.88	5.6	W
0.4% Occurrence	125	80	0.79	5.4	W
1.0% Occurrence	120	79	0.77	4.7	W
2.0% Occurrence	116	77	0.74	4.7	W
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		11	619	229	1519

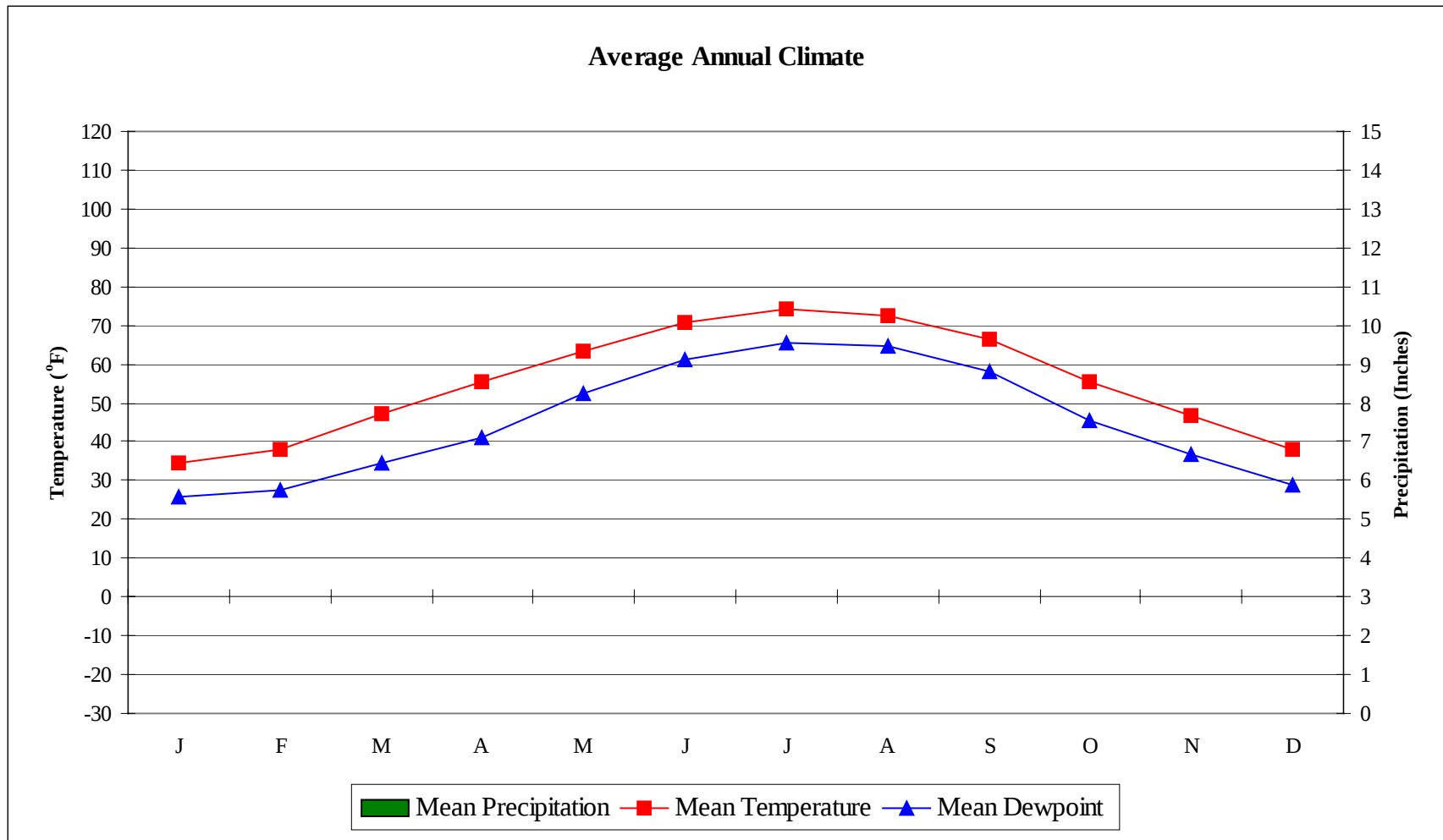
Other Site Data

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	N/A	N/A	2.1 + 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 (#)
57.8	N/A	N/A	59

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

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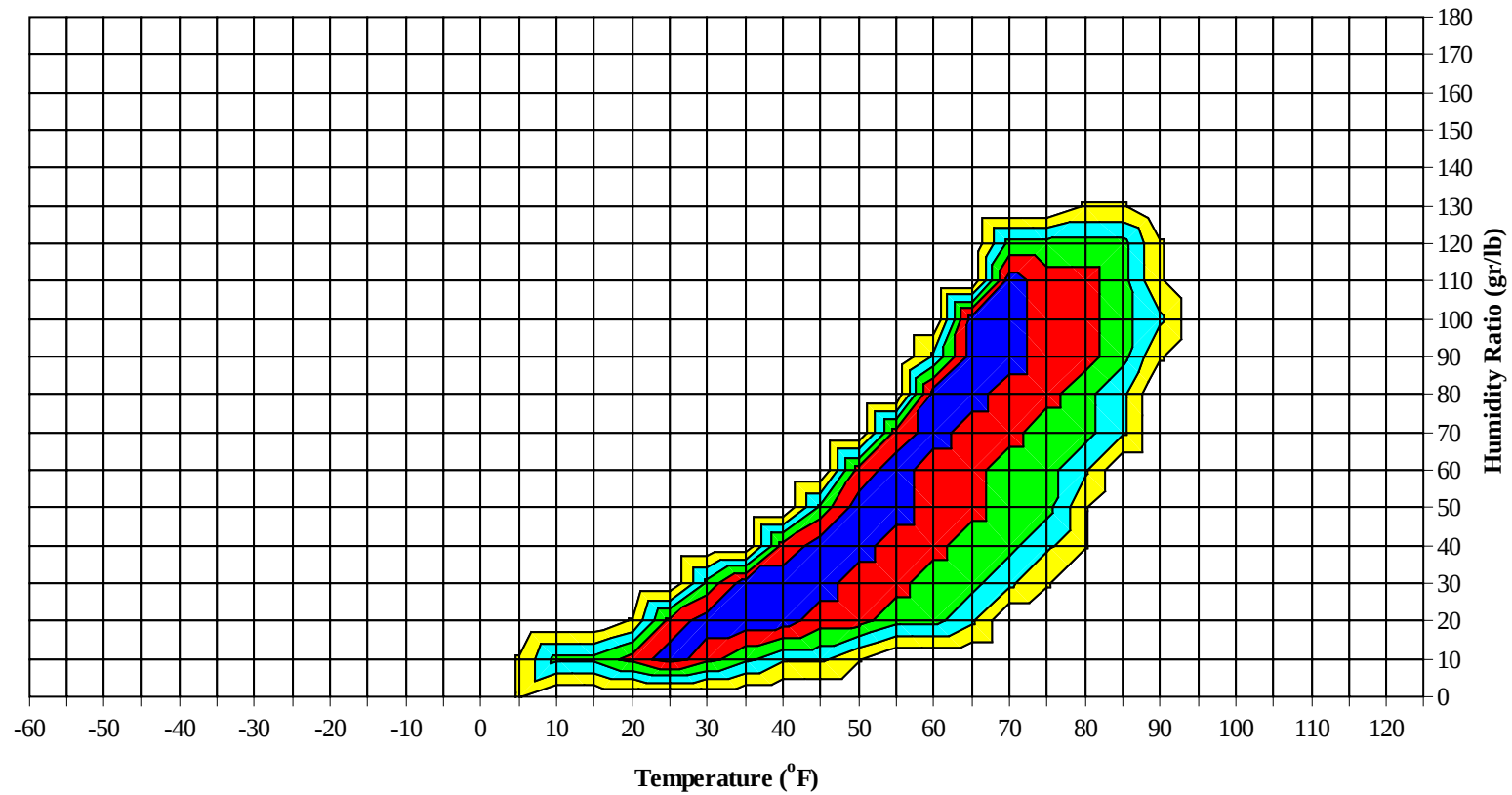


No Precipitation Data Available

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Long Term Psychrometric Summary

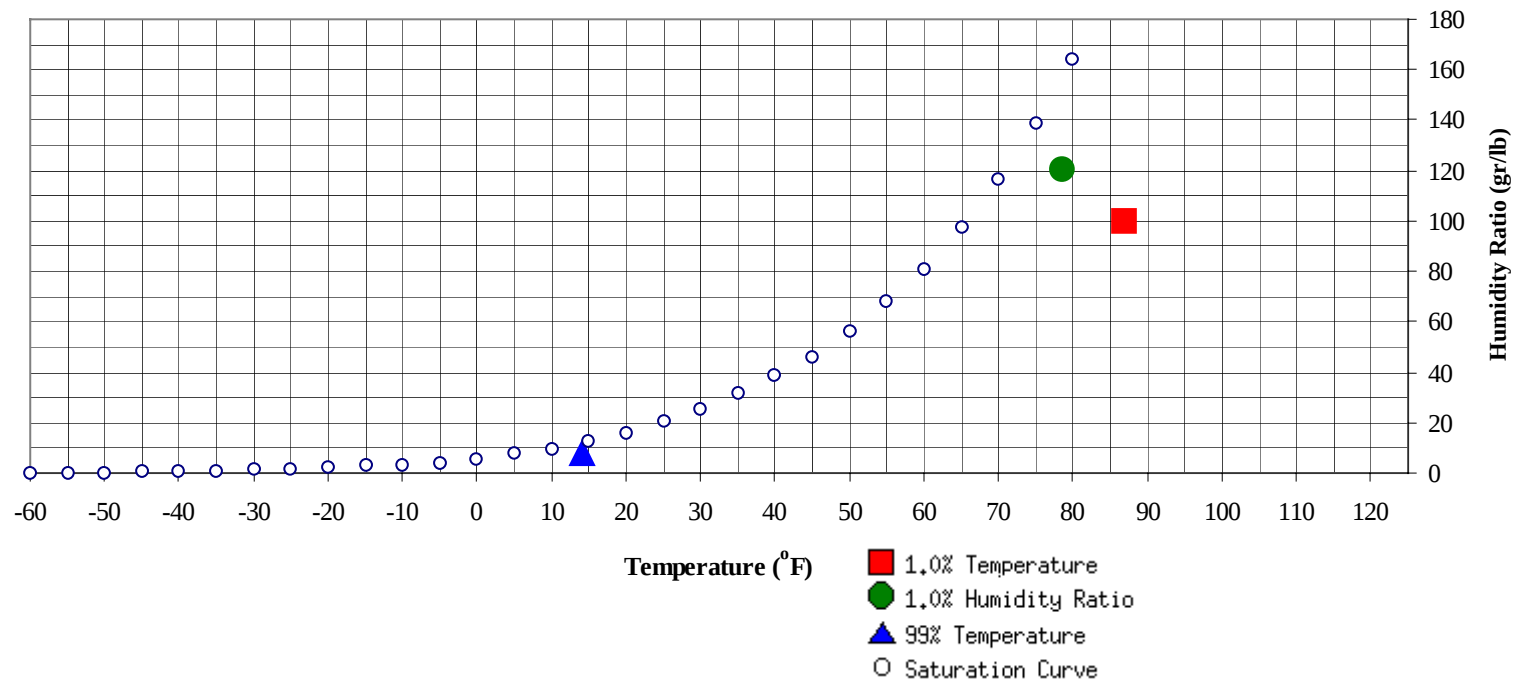


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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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	7.9	4.6		120.4	78.5	73.1	71	37.7

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	87	100	72.1	36.6

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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		
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84												1	0	1	61.3
75 / 79							0	0	0	59.0		4	2	6	58.8
70 / 74		0		0	57.0		2	0	2	57.6	0	16	7	23	57.3
65 / 69	0	2	0	2	56.6	0	6	3	9	54.0	2	23	14	39	54.7
60 / 64	1	6	3	10	53.7	1	11	7	19	51.4	6	31	28	65	52.4
55 / 59	3	10	8	21	50.2	5	19	16	40	49.5	17	33	36	86	49.6
50 / 54	8	24	18	50	46.7	14	27	26	67	46.1	34	37	40	111	46.3
45 / 49	18	29	29	76	42.7	19	28	29	76	41.9	33	33	37	103	42.1
40 / 44	26	38	38	102	38.4	24	31	29	84	37.9	38	28	32	98	37.8
35 / 39	34	38	41	113	33.6	32	31	35	98	33.5	41	22	25	88	33.4
30 / 34	45	40	45	130	29.3	40	29	34	103	29.1	38	12	18	68	29.3
25 / 29	41	25	29	95	24.6	36	19	21	76	24.4	24	4	6	34	24.7
20 / 24	30	16	17	63	20.0	27	11	13	51	19.8	11	2	2	15	20.2
15 / 19	17	8	11	36	15.3	12	5	6	23	15.2	3	1	1	5	15.3
10 / 14	13	5	6	24	10.5	9	2	3	14	10.9	1	0	0	1	10.7
5 / 9	7	3	3	13	6.2	4	1	1	6	6.3	0	0	0	0	5.9
0 / 4	3	1	1	5	1.2	2	0	0	2	1.7	1			1	2.1
-5 / -1	1	1	1	3	-3.5	0	0	0	0	-3.0	0			0	-2.0
-10 / -6	1	0	0	1	-7.0	0	0		0	-7.4					
-15 / -11	0	0	0	0	-13.2	0			0	-11.2					
-20 / -16	0	0	0	0	-17.6										
-25 / -21	0			0	-20.0										

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.

BRISTOL/TRI-CITY TN

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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 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												0		0	71.7
90 / 94												2	1	3	72.1
85 / 89		1	0	1	62.5		3	1	4	68.9		27	10	37	70.7
80 / 84		9	3	12	62.3		26	9	35	67.1	0	62	28	90	69.3
75 / 79		22	10	32	60.4	0	46	22	68	64.6	2	65	45	112	67.4
70 / 74	0	32	20	52	58.3	2	55	40	97	62.0	25	52	65	141	66.1
65 / 69	5	36	33	74	56.0	24	48	56	128	60.5	96	24	59	179	64.0
60 / 64	20	40	43	103	53.7	67	36	56	160	57.8	69	7	25	101	59.7
55 / 59	39	32	39	110	50.7	59	19	33	111	53.5	32	1	6	39	54.8
50 / 54	42	27	35	104	46.5	44	10	20	74	48.7	12	0	2	14	50.5
45 / 49	41	21	25	87	42.2	30	3	10	43	44.4	4		0	4	45.9
40 / 44	40	13	19	72	38.2	17	0	2	19	40.4	1			1	42.3
35 / 39	30	5	9	44	34.0	5	0	0	5	35.5					
30 / 34	17	2	3	22	29.9	1		0	1	31.3					
25 / 29	4	0	1	5	25.7										
20 / 24	1			1	21.1										
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 = 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		
100 / 104						0			0	72.5					
95 / 99		1	0	1	71.2	1	0		1	73.8					
90 / 94		12	5	17	73.1	9	2		11	73.3		1	0	1	73.0
85 / 89		47	19	66	72.8	34	11		45	72.5		14	3	17	71.1
80 / 84		77	39	115	71.2	74	33		107	70.9		38	12	50	68.9
75 / 79	7	63	53	122	69.7	2	64	48	114	69.2	0	51	25	76	66.7
70 / 74	71	39	83	193	68.5	42	49	82	173	68.0	7	56	53	116	65.4
65 / 69	114	8	41	162	65.5	125	15	58	199	65.2	66	40	64	170	63.5
60 / 64	45	1	8	54	60.7	58	2	12	72	61.1	65	23	42	130	59.4
55 / 59	11		1	12	55.7	16	0	2	18	55.9	44	11	24	79	54.5
50 / 54	1			1	51.7	3		0	3	51.0	34	4	13	51	50.1
45 / 49	0			0	46.0	1		0	1	46.2	17	1	4	22	45.5
40 / 44						0			0	43.0	7	0	1	8	41.1
35 / 39											1		0	1	36.8
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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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		
100 / 104															
95 / 99															
90 / 94															
85 / 89		0		0	66.0										
80 / 84		5	1	6	66.2		0		0	65.0					
75 / 79	0	22	5	27	63.0		3	0	3	61.7		0		0	62.5
70 / 74	1	35	15	51	60.3		12	2	14	59.0	0	1	1	2	61.3
65 / 69	7	44	30	80	58.5	2	22	11	35	57.0	0	3	1	4	57.6
60 / 64	22	45	44	110	56.1	10	29	22	61	55.1	2	12	5	19	55.0
55 / 59	34	40	48	122	52.2	18	32	33	83	51.5	8	19	13	40	51.6
50 / 54	43	28	43	114	48.1	29	37	35	101	47.1	13	32	23	68	47.2
45 / 49	45	19	34	98	43.9	30	34	38	102	42.5	23	37	33	93	42.6
40 / 44	44	7	19	70	39.9	36	30	36	102	38.1	28	37	41	106	38.1
35 / 39	34	2	8	44	35.8	35	22	32	89	33.8	36	37	43	116	33.5
30 / 34	15	0	2	17	31.5	41	12	21	74	29.6	45	34	38	117	29.3
25 / 29	4			4	26.8	29	3	8	40	25.3	39	19	27	85	24.6
20 / 24	0			0	23.0	10	1	1	12	21.1	30	9	13	52	20.2
15 / 19						1	0	1	2	16.4	12	4	6	22	15.5
10 / 14						0	0		0	11.6	8	2	2	12	11.1
5 / 9											3	1	1	5	6.3
0 / 4											1	0	1	2	1.2
-5 / -1											1	0	0	1	-3.1
-10 / -6											0			0	-6.8
-15 / -11															
-20 / -16															
-25 / -21															

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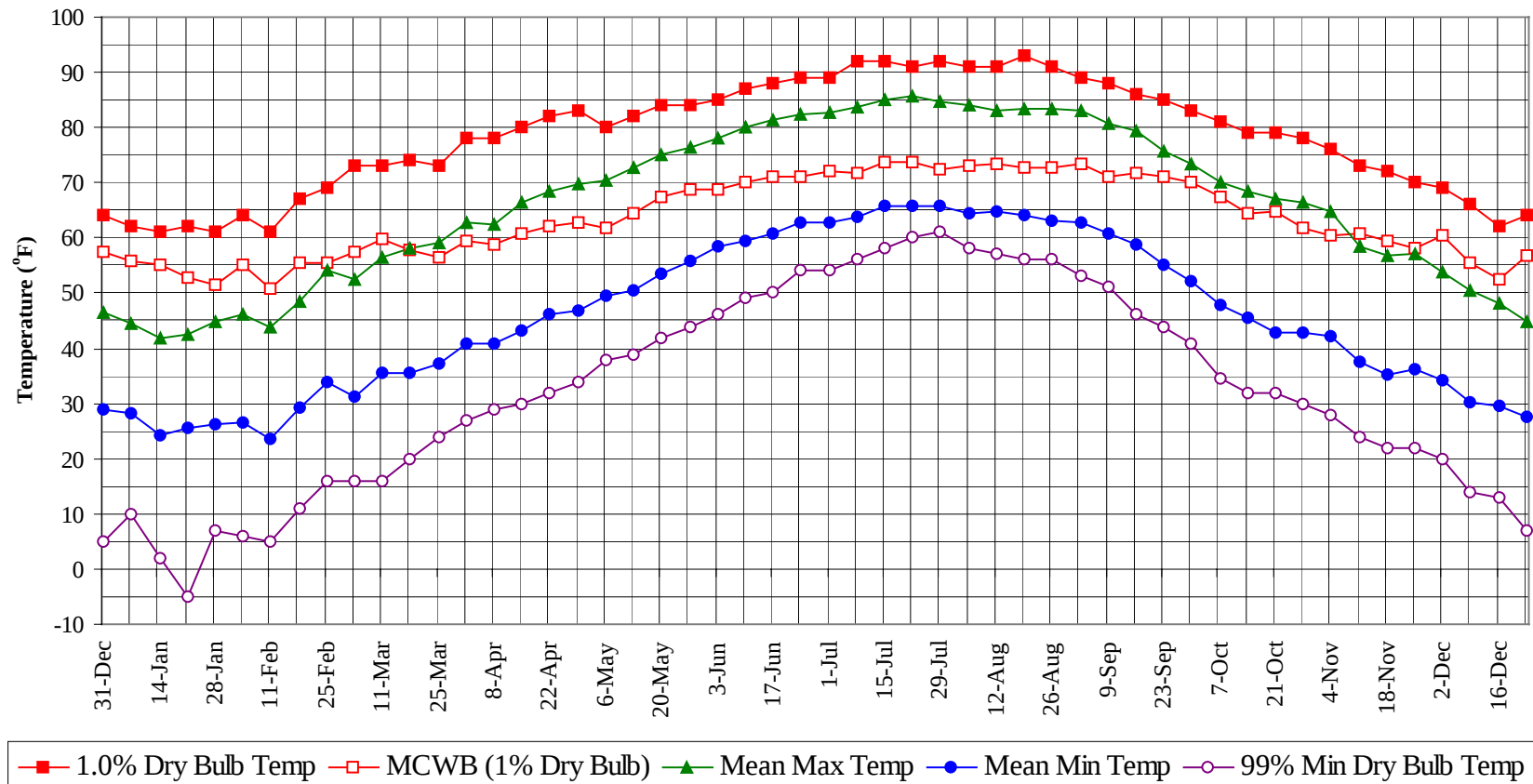
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

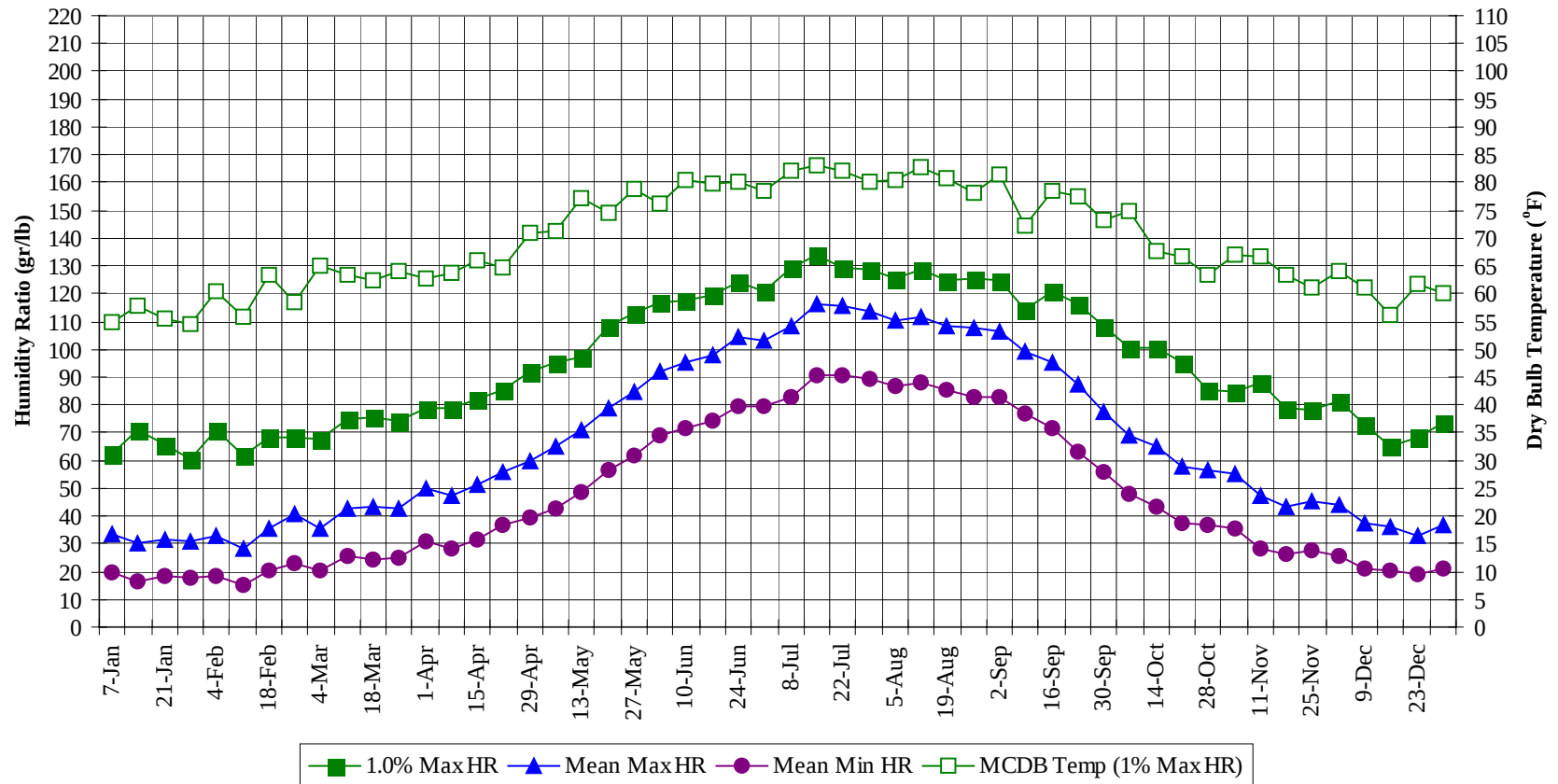
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104		0		0	72.5
95 / 99		3	1	4	72.3
90 / 94		25	8	33	73.1
85 / 89		127	44	171	71.9
80 / 84	0	292	125	416	69.7
75 / 79	11	338	209	557	67.1
70 / 74	149	348	366	864	65.3
65 / 69	442	270	368	1081	62.3
60 / 64	368	242	293	903	57.2
55 / 59	281	217	257	755	52.1
50 / 54	274	226	255	755	47.4
45 / 49	261	207	240	708	42.8
40 / 44	259	186	216	661	38.4
35 / 39	247	159	194	600	33.8
30 / 34	243	131	163	537	29.4
25 / 29	176	72	93	342	24.7
20 / 24	109	39	46	194	20.1
15 / 19	46	19	25	90	15.3
10 / 14	31	10	11	52	10.8
5 / 9	14	5	5	24	6.2
0 / 4	6	2	2	10	1.3
-5 / -1	2	1	1	4	-3.3
-10 / -6	1	0	0	1	-7.1
-15 / -11	0	0	0	0	-12.3
-20 / -16	0	0	0	0	-17.6
-25 / -21	0			0	-20.0

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary

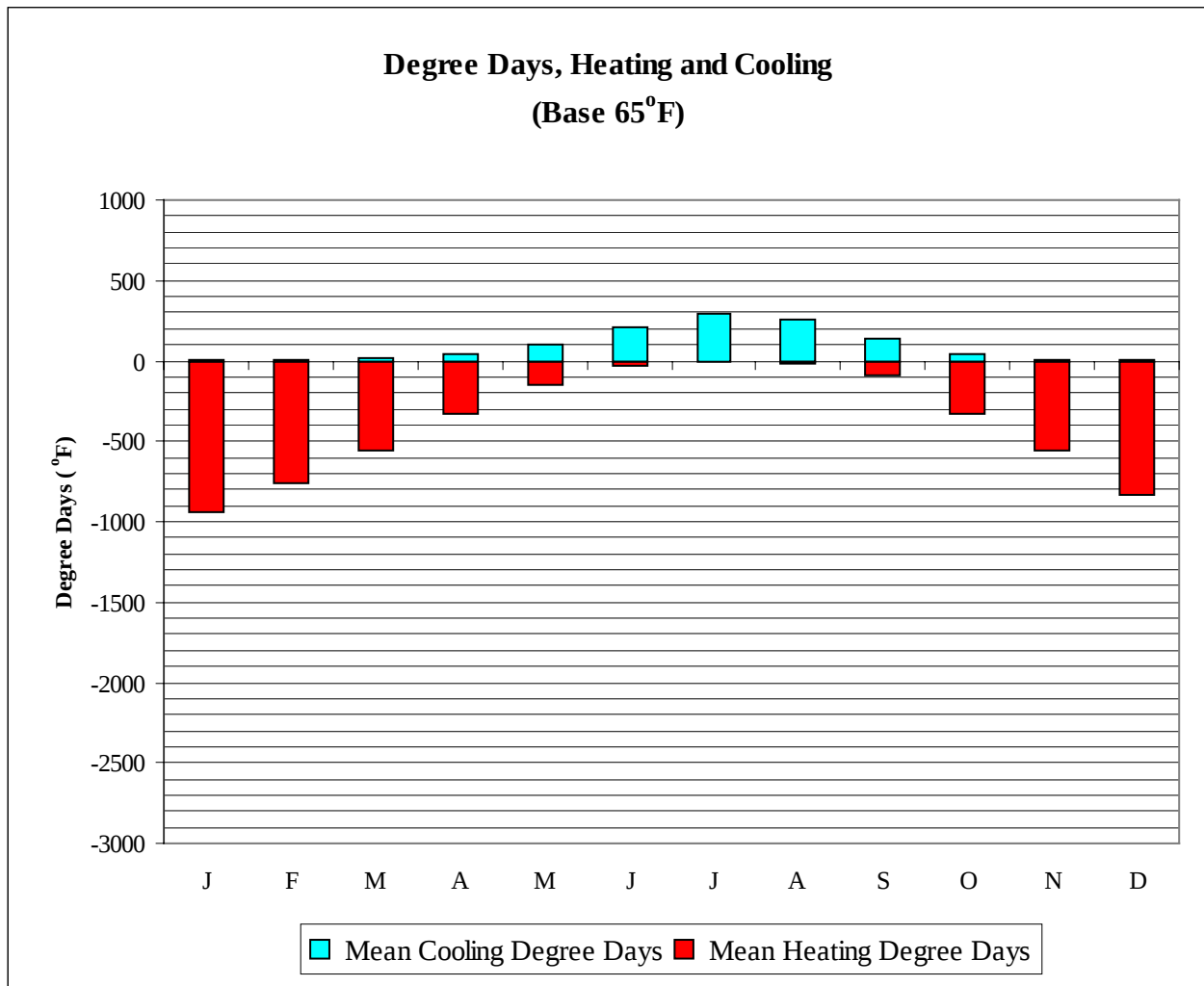


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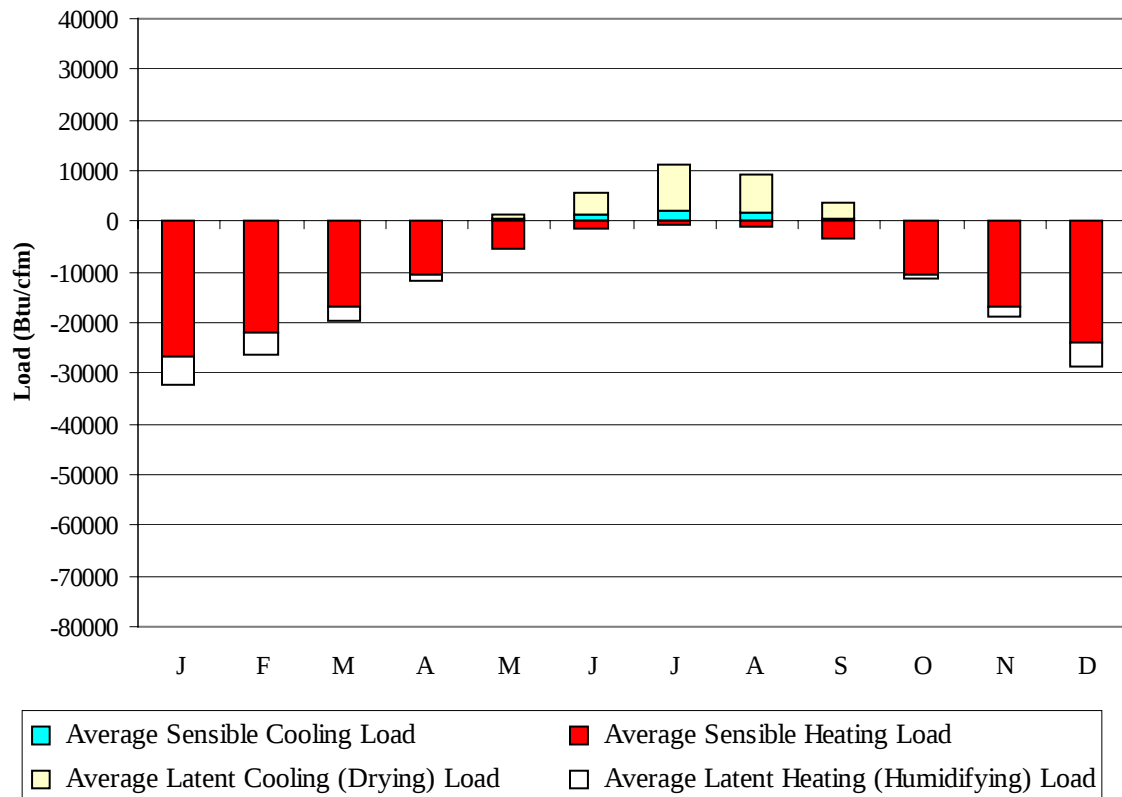
Long Term Dry Bulb Temperature and Humidity Summary

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	62.0	55.7	44.6	28.3	10.0	62.3	55.0	33.7	19.6
14-Jan	61.0	55.1	41.7	24.2	2.0	70.7	57.9	30.3	16.4
21-Jan	62.0	52.9	42.6	25.5	-5.0	65.8	55.4	31.5	18.5
28-Jan	61.0	51.3	44.9	26.3	7.0	60.2	54.6	30.7	17.6
4-Feb	64.0	55.2	46.0	26.4	6.0	70.7	60.3	32.9	18.1
11-Feb	61.0	50.9	43.8	23.5	5.0	61.6	55.7	28.5	15.3
18-Feb	67.0	55.5	48.4	29.4	11.0	68.6	63.3	35.3	20.2
25-Feb	69.0	55.6	54.2	33.8	16.0	68.6	58.3	41.0	23.1
4-Mar	73.0	57.4	52.5	31.3	16.0	67.9	64.9	35.2	20.5
11-Mar	73.0	59.9	56.5	35.4	16.0	74.9	63.4	42.9	25.5
18-Mar	74.0	57.9	58.2	35.6	20.0	75.6	62.5	43.6	24.4
25-Mar	73.0	56.5	59.2	37.4	24.0	74.2	63.9	42.9	25.1
1-Apr	78.0	59.4	62.6	41.0	27.0	79.1	62.6	49.8	31.1
8-Apr	78.0	58.9	62.4	40.8	29.0	79.1	63.8	47.1	28.5
15-Apr	80.0	60.9	66.3	43.0	30.0	81.9	66.0	51.1	31.7
22-Apr	82.0	62.1	68.5	46.0	32.0	85.4	64.8	55.8	36.8
29-Apr	83.0	62.7	69.8	47.0	34.0	91.7	71.0	59.9	39.7
6-May	80.0	61.7	70.5	49.5	38.0	95.2	71.2	65.0	43.0
13-May	82.0	64.6	72.7	50.5	39.0	97.3	77.2	70.9	48.3
20-May	84.0	67.6	75.0	53.4	42.0	108.5	74.4	78.9	56.5
27-May	84.0	68.6	76.3	55.7	44.0	112.7	78.9	85.0	61.9
3-Jun	85.0	68.8	78.2	58.6	46.0	116.9	76.3	91.8	69.0
10-Jun	87.0	70.2	80.1	59.6	49.0	117.6	80.3	95.0	71.3
17-Jun	88.0	70.9	81.4	60.7	50.0	119.7	79.9	98.1	74.5
24-Jun	89.0	71.2	82.4	62.9	54.0	123.9	80.2	104.6	79.3
1-Jul	89.0	71.9	82.7	62.6	54.0	121.1	78.6	103.1	79.2
8-Jul	92.0	71.7	83.7	63.8	56.0	129.5	82.2	108.5	82.8
15-Jul	92.0	73.9	85.2	65.7	58.0	133.7	83.2	116.5	90.5
22-Jul	91.0	73.6	85.6	65.9	60.0	129.5	82.1	115.6	90.6
29-Jul	92.0	72.4	84.6	65.8	61.0	128.8	80.1	113.4	89.2
5-Aug	91.0	73.0	84.1	64.6	58.0	125.3	80.5	110.3	86.4
12-Aug	91.0	73.5	83.2	64.6	57.0	128.8	82.9	111.8	88.1
19-Aug	93.0	72.8	83.5	64.0	56.0	124.6	80.9	108.3	85.4
26-Aug	91.0	72.8	83.5	63.0	56.0	125.3	78.2	107.4	82.6
2-Sep	89.0	73.3	83.0	62.9	53.0	124.6	81.3	106.5	82.9
9-Sep	88.0	71.0	80.7	60.7	51.0	114.1	72.1	99.5	76.7
16-Sep	86.0	71.7	79.5	58.8	46.0	121.1	78.5	95.4	71.7
23-Sep	85.0	71.2	75.7	55.3	44.0	116.2	77.3	87.2	63.3
30-Sep	83.0	69.9	73.4	52.3	41.0	108.5	73.1	77.7	56.1
7-Oct	81.0	67.6	70.2	48.0	34.5	100.8	74.7	69.3	47.6
14-Oct	79.0	64.6	68.5	45.5	32.0	100.8	67.6	65.1	43.3
21-Oct	79.0	64.6	67.1	42.8	32.0	95.2	66.8	57.7	37.1
28-Oct	78.0	61.7	66.3	42.8	30.0	85.4	63.4	56.3	36.6
4-Nov	76.0	60.3	64.9	42.2	28.0	84.7	67.0	55.2	35.6
11-Nov	73.0	60.9	58.6	37.4	24.0	88.2	66.8	47.4	28.4
18-Nov	72.0	59.5	56.8	35.1	22.0	79.1	63.3	43.1	26.6
25-Nov	70.0	58.2	57.1	36.3	22.0	78.4	61.2	45.3	27.3
2-Dec	69.0	60.4	54.0	34.1	20.0	81.2	63.9	44.2	25.5
9-Dec	66.0	55.6	50.4	30.1	14.0	72.8	61.1	37.3	20.9
16-Dec	62.0	52.4	48.0	29.6	13.0	65.1	56.2	36.2	20.5
23-Dec	64.0	56.7	44.9	27.5	7.0	68.6	61.7	32.7	19.0
31-Dec	64.0	57.6	46.4	28.9	5.0	73.5	60.0	37.0	21.1



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	945
FEB	2	760
MAR	12	560
APR	44	328
MAY	97	148
JUN	206	34
JUL	292	9
AUG	254	14
SEP	134	90
OCT	36	335
NOV	8	558
DEC	1	838
ANN	1086	4619

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	-26894	0	-5342
FEB	1	-21877	0	-4487
MAR	12	-16775	1	-2780
APR	144	-10380	57	-1222
MAY	402	-5317	1025	-135
JUN	1322	-1600	4389	0
JUL	2230	-598	8920	-1
AUG	1790	-884	7500	0
SEP	713	-3492	3166	-9
OCT	84	-10707	242	-527
NOV	5	-16677	17	-2321
DEC	0	-24129	2	-4451
ANN	6703	-139330	25319	-21275

Average Annual Solar Radiation – Nearest Available Site

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

City: BRISTOL
 State: TN
 WBAN No: 13877
 Lat(N): 36.48
 Long(W): 82.4
 Elev(ft): 1506

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.434
 Vert Gap: 0.299

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	690	920	1260	1600	1800	1940	1850	1710	1420	1130	760	610	1310
	Std Dev	53	74	98	147	129	131	135	84	101	103	69	49	39
	Minimum	560	750	1130	1320	1580	1690	1630	1520	1260	1000	590	530	1240
	Maximum	780	1080	1490	1970	2050	2290	2100	1870	1670	1380	890	730	1400
	Diffuse	360	450	570	680	790	860	850	770	630	460	360	310	590
Clear Day	Global	1050	1400	1840	2270	2520	2600	2520	2280	1910	1460	1080	930	1830
NORTH	Global	220	280	350	430	530	600	560	470	390	300	230	190	380
	Diffuse	220	280	350	430	480	520	510	460	390	300	230	190	360
Clear Day	Global	200	260	330	430	570	680	620	490	370	290	220	190	390
EAST	Global	440	560	740	900	970	1010	960	910	800	690	480	390	740
	Diffuse	260	330	430	520	580	620	600	560	480	370	280	230	440
Clear Day	Global	760	960	1170	1330	1400	1410	1370	1290	1150	950	760	680	1100
SOUTH	Global	960	1020	1040	920	770	710	730	870	1020	1190	1020	930	930
	Diffuse	350	410	480	520	540	550	550	560	520	460	370	320	470
Clear Day	Global	1990	1980	1730	1300	960	820	870	1130	1510	1790	1880	1900	1490
WEST	Global	450	590	760	910	970	1040	1010	970	840	710	500	410	760
	Diffuse	260	340	430	520	590	630	620	570	490	380	280	230	440
Clear Day	Global	760	960	1170	1330	1400	1410	1370	1290	1150	950	760	680	1100

Average Annual Solar Heat and Illumination – Nearest Available Site

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

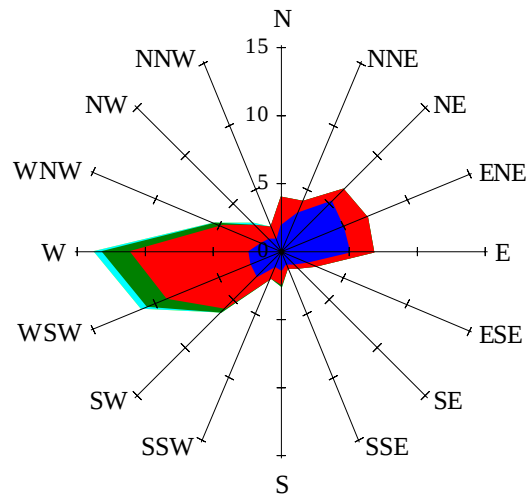
AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	460	630	890	1160	1310	1410	1350	1240	1020	800	520	400	930
NORTH	Unshaded	150	190	240	300	350	390	370	320	270	210	160	130	260
	Shaded	130	170	220	270	320	350	340	290	250	190	140	120	230
EAST	Unshaded	300	400	520	640	690	720	680	640	570	480	330	270	520
	Shaded	280	360	470	570	610	630	600	570	510	440	300	250	460
SOUTH	Unshaded	710	740	710	590	470	430	450	540	680	850	760	700	640
	Shaded	690	690	580	410	340	350	350	380	520	760	730	680	540
WEST	Unshaded	310	410	540	650	690	740	720	690	600	500	350	280	540
	Shaded	290	370	480	580	610	650	630	610	530	460	320	260	480

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	69	85	73	38	35	77	98	97	74
	M.Cloudy	18	41	51	45	23	22	48	71	72	51
NORTH	M.Clear	9	13	15	14	9	21	16	17	17	16
	M.Cloudy	7	14	17	15	9	12	16	19	19	16
EAST	M.Clear	71	65	19	14	9	65	76	42	17	16
	M.Cloudy	22	32	18	15	9	26	41	33	19	16
SOUTH	M.Clear	30	64	79	68	36	11	23	39	39	23
	M.Cloudy	12	32	40	35	17	9	19	32	32	19
WEST	M.Clear	9	13	15	60	75	11	16	17	42	74
	M.Cloudy	7	14	17	32	28	9	16	19	34	46
M.Clear	(% hrs)	30	31	31	30	30	38	39	35	35	36

		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	18	61	84	82	56	11	41	53	39	8
	M.Cloudy	11	35	56	55	35	6	23	29	22	5
NORTH	M.Clear	7	14	16	16	14	4	10	11	9	4
	M.Cloudy	5	13	18	17	13	3	9	11	9	3
EAST	M.Clear	47	74	40	16	14	36	47	11	9	4
	M.Cloudy	14	31	28	17	13	8	18	11	9	3
SOUTH	M.Clear	12	47	69	67	43	28	76	90	74	22
	M.Cloudy	6	23	41	41	24	7	25	32	26	6
WEST	M.Clear	7	14	16	43	72	4	10	13	49	29
	M.Cloudy	5	13	18	30	36	3	9	12	19	8
M.Clear	(% hrs)	38	42	39	39	42	29	28	28	29	32

Wind Summary - December, January, and February

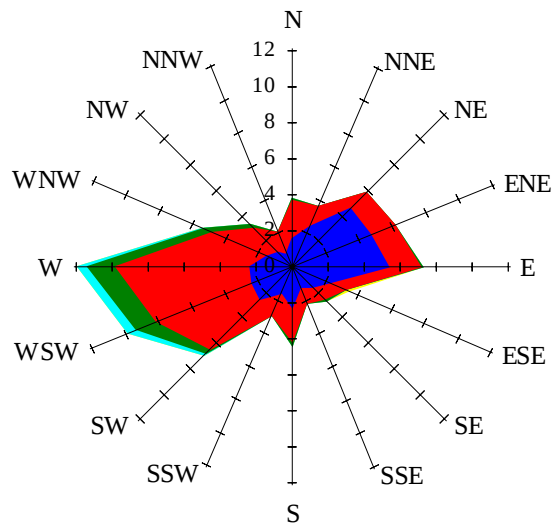
Labels of Percent Frequency on North Axis



Percent Calm = 21.13

Wind Summary - March, April, and May

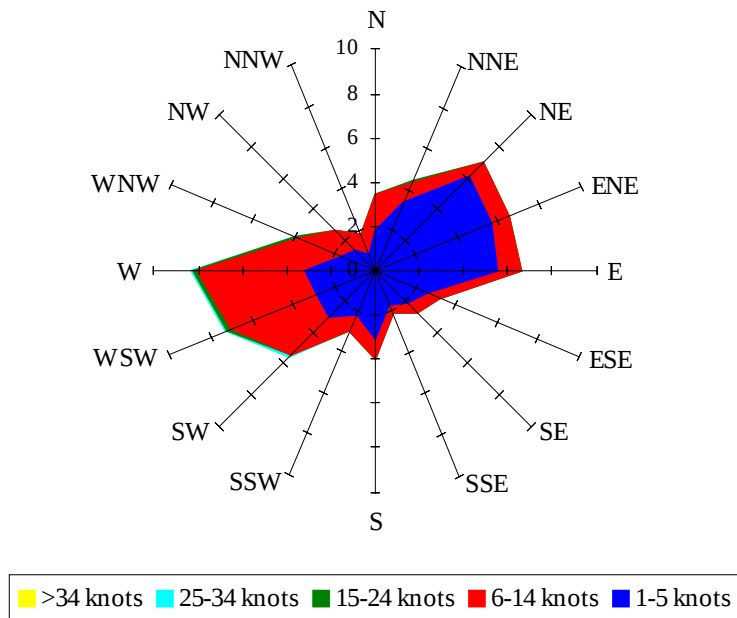
Labels of Percent Frequency on North Axis



Percent Calm = 19.36

Wind Summary - June, July, and August

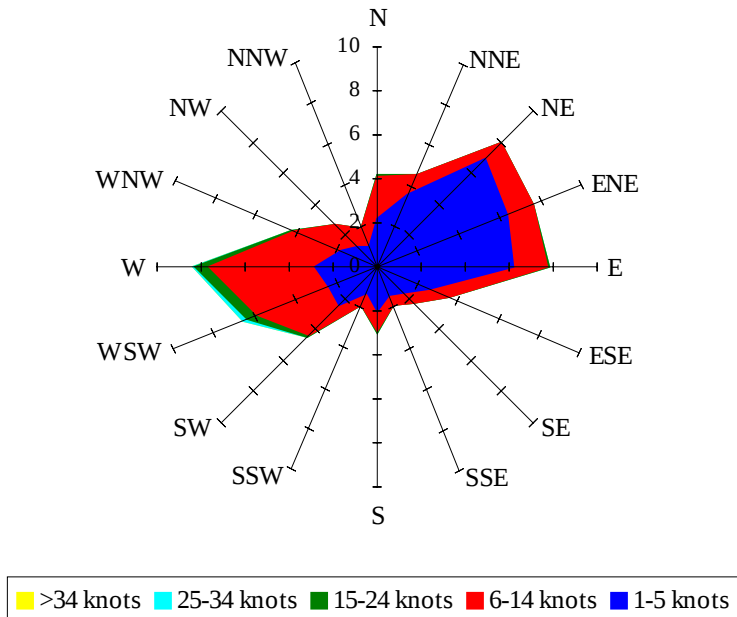
Labels of Percent Frequency on North Axis



Percent Calm = 28.48

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 26.73