

ABILENE TX	
Latitude = 32.42 N	WMO No. 722660
Longitude = 99.68 W	Elevation = 1791 feet
Period of Record = 1973 to 1996	Average Pressure = 28.11 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	103	70	67	12.6	S
0.4% Occurrence	99	71	75	12.2	S
1.0% Occurrence	97	71	78	12.2	S
2.0% Occurrence	95	71	81	12.5	S
Mean Daily Range	22	-	-	-	-
97.5% Occurrence	27	25	16	10.4	N
99.0% Occurrence	22	20	12	11.6	N
99.6% Occurrence	16	14	9	11.5	N
Median of Extreme Lows	10	9	6	12.3	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	77	91	122	13.8	S
0.4% Occurrence	75	89	113	12.9	S
1.0% Occurrence	74	88	108	12.6	S
2.0% Occurrence	73	87	105	12.4	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	136	85	0.85	11.2	SSE
0.4% Occurrence	123	80	0.77	12.2	S
1.0% Occurrence	118	79	0.74	11.4	S
2.0% Occurrence	115	79	0.72	12.1	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		319	1789	315	2345

Other Site Data

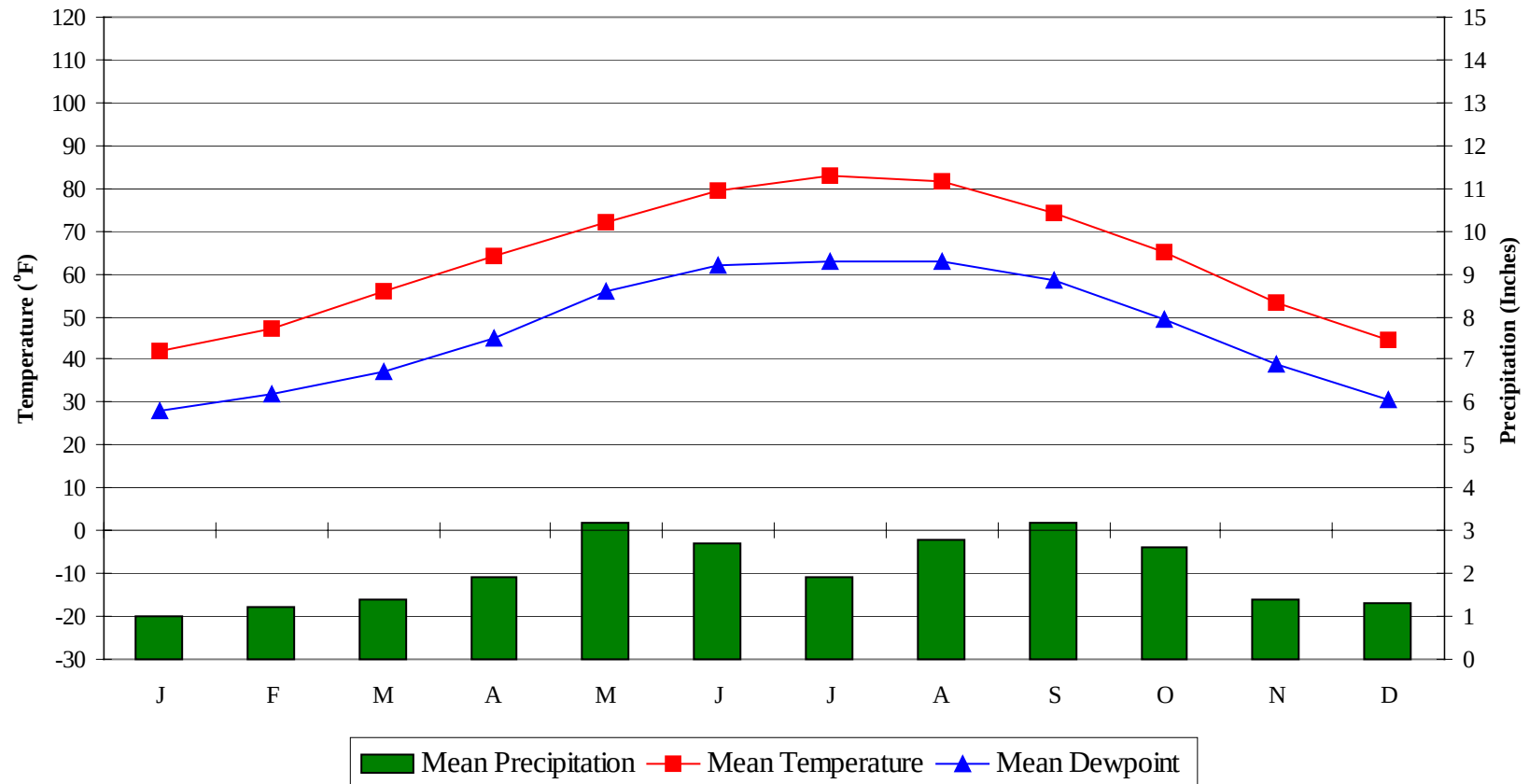
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
11	4.0	90	2.0 + 2.1
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
66.1	N/A	6	34

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

ABILENE TX

WMO No. 722660

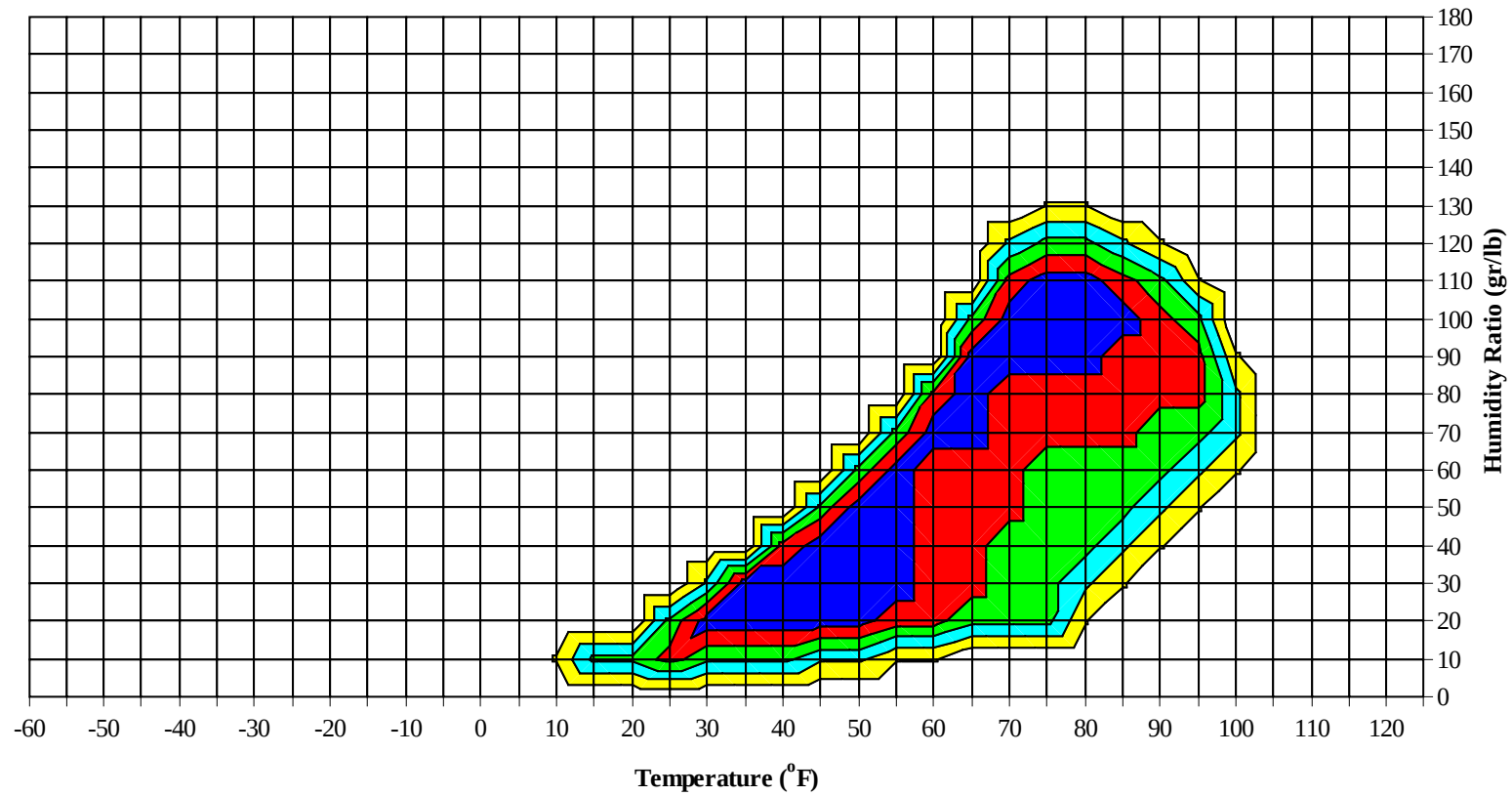
Average Annual Climate



ABILENE TX

WMO No. 722660

Long Term Psychrometric Summary

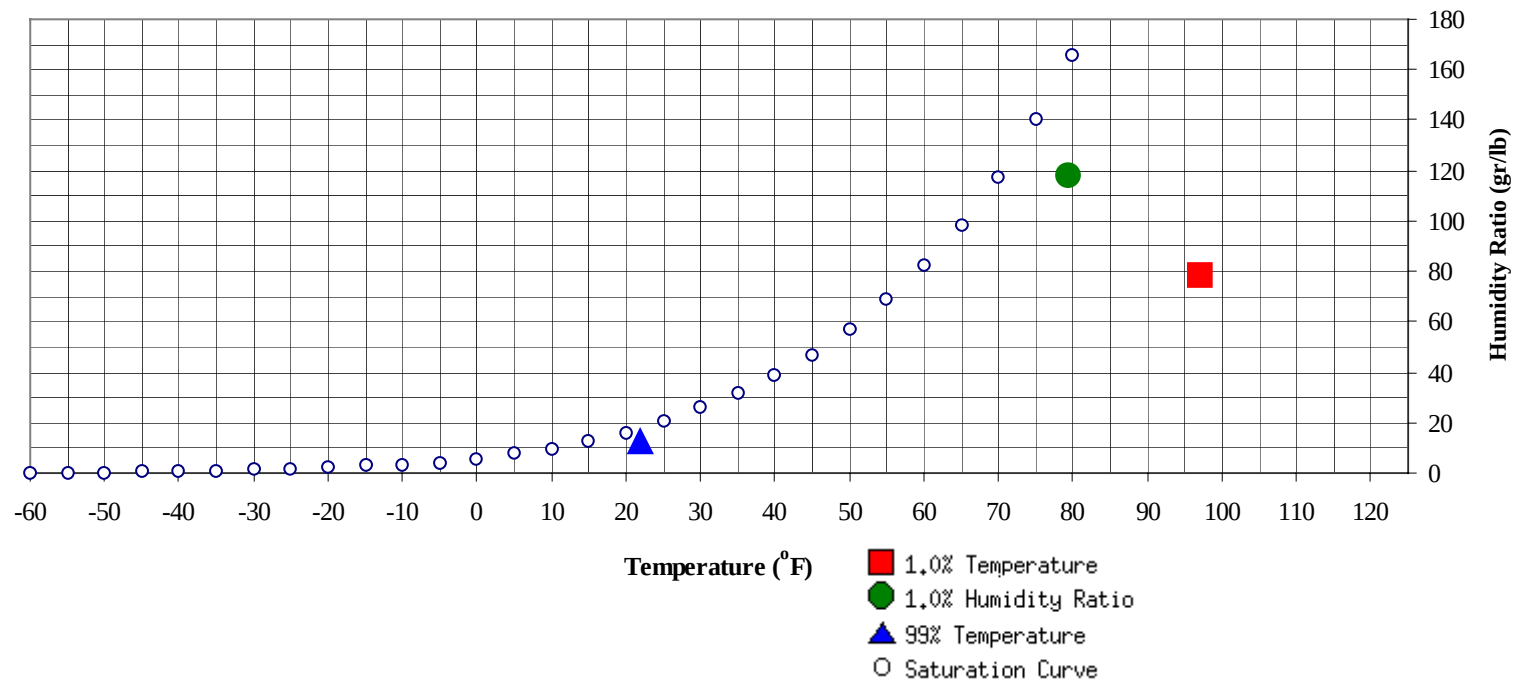


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

ABILENE TX

WMO No. 722660

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	22	12.3	7.2		118.3	79.3	72.6	70	37.6

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	97	78.2	70.8	35.6

ABILENE TX

WMO No. 722660

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													0	0	59.5
90 / 94							0	0	0	60.8		1	1	2	60.1
85 / 89							1	0	1	58.1		4	2	6	59.8
80 / 84		0	0	0	56.2		3	1	4	56.8		12	6	18	59.2
75 / 79		2	1	3	54.5		8	3	11	54.8		21	13	34	57.9
70 / 74		7	3	10	52.9		13	7	20	53.4	1	32	23	56	56.2
65 / 69		14	6	20	51.1	1	21	15	37	52.2	11	36	33	81	54.7
60 / 64	2	25	15	42	49.4	9	27	22	58	50.2	29	36	39	105	52.0
55 / 59	10	26	25	61	46.6	17	26	30	73	47.9	37	33	36	107	48.5
50 / 54	17	29	30	76	43.7	24	29	32	85	44.5	38	27	34	100	45.1
45 / 49	28	31	36	95	40.6	35	25	33	93	41.2	45	19	26	90	41.5
40 / 44	37	30	38	105	37.1	38	24	28	90	37.8	38	11	16	65	37.6
35 / 39	47	28	36	111	33.2	35	19	23	77	33.8	22	6	9	37	33.3
30 / 34	45	25	28	98	29.3	32	12	16	60	29.7	15	5	6	26	29.2
25 / 29	31	15	18	64	24.8	17	6	7	30	25.0	6	2	3	11	24.5
20 / 24	16	8	10	34	20.4	9	5	5	19	20.6	3	1	1	5	19.9
15 / 19	9	5	3	17	15.4	3	2	2	7	15.3	1	0	0	1	16.3
10 / 14	5	1	1	7	11.2	2	1	1	4	10.4	0			0	10.5
5 / 9	1	0	1	2	6.2	1	0	0	1	6.7					
0 / 4		0		0	2.0	0			0	1.5					
-5 / -1						0			0	-2.3					
-10 / -6						0			0	-5.0					

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.

ABILENE TX

WMO No. 722660

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		
105 / 109												1	0	1	71.2
100 / 104							1	0	1	66.9		4	2	6	70.4
95 / 99		0	0	0	61.7		5	3	8	68.4		15	10	25	71.3
90 / 94		4	2	6	62.0		17	9	26	68.4		47	30	76	71.4
85 / 89		16	8	24	62.9		33	20	53	68.1	1	63	43	107	70.4
80 / 84	0	28	16	44	62.2	1	52	35	88	66.5	14	59	56	129	69.0
75 / 79	0	39	28	67	60.8	16	52	47	115	65.2	66	32	48	146	68.2
70 / 74	11	43	42	96	59.3	50	41	49	140	63.7	83	12	33	128	66.2
65 / 69	40	40	43	123	57.3	66	24	42	132	60.9	52	6	15	73	63.0
60 / 64	48	27	40	115	54.0	58	13	27	98	57.4	17	1	4	22	59.0
55 / 59	46	19	27	92	49.9	33	5	9	47	52.9	5	0	0	5	54.3
50 / 54	41	12	18	71	46.1	16	4	4	24	48.5	1		0	1	49.8
45 / 49	27	8	10	45	42.2	6	1	2	9	44.8					
40 / 44	17	3	5	25	38.3	2	0	0	2	41.1					
35 / 39	8	0	2	10	34.2	0			0	36.7					
30 / 34	2	0	0	2	29.9										
25 / 29	0			0	26.7										
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															

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ABILENE TX

WMO No. 722660

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		1	0	1	71.7										
100 / 104		9	6	15	70.9		4	2	6	71.5		1	0	1	69.7
95 / 99	0	36	23	59	71.0		36	21	57	71.2		8	3	11	69.9
90 / 94	0	67	43	110	70.9		66	40	106	70.9		28	13	41	69.7
85 / 89	3	63	50	116	70.3	1	59	49	109	70.2	0	47	26	73	69.2
80 / 84	39	45	62	146	69.3	29	47	60	136	69.2	5	54	43	102	67.9
75 / 79	101	18	38	157	68.6	99	22	46	167	68.2	34	40	52	126	66.7
70 / 74	83	7	22	112	67.4	90	10	24	124	67.2	78	27	45	150	65.5
65 / 69	21	2	3	26	64.4	25	3	6	34	63.7	55	17	29	101	61.8
60 / 64	1	0		1	59.8	5	0	1	6	60.7	30	8	15	53	56.8
55 / 59	0			0	54.0	0			0	54.8	19	5	8	32	52.7
50 / 54						0			0	50.5	12	4	5	21	48.8
45 / 49											5	1	2	8	44.3
40 / 44											2		0	2	40.0
35 / 39											0			0	36.0
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															

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ABILENE TX

WMO No. 722660

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		0	0	0	66.6										
95 / 99		1	0	1	63.7										
90 / 94		3	1	4	64.7		0		0	59.2					
85 / 89		18	6	24	66.0		1	0	1	60.0					
80 / 84	0	35	15	50	64.6		5	1	6	60.6		0	0	0	54.9
75 / 79	3	44	28	75	63.0		17	4	21	60.7		4	1	5	54.9
70 / 74	21	46	44	111	61.1	1	29	13	43	59.5		12	3	15	55.3
65 / 69	44	40	50	134	58.7	13	34	28	75	57.3	1	19	9	29	53.7
60 / 64	55	27	42	124	55.7	26	33	34	93	53.8	7	27	20	54	51.4
55 / 59	47	16	30	93	51.6	31	32	36	99	49.6	13	31	28	72	48.0
50 / 54	37	9	19	65	47.1	33	29	38	100	45.8	24	36	35	95	44.4
45 / 49	24	4	8	36	43.1	40	22	33	95	41.6	32	33	41	107	40.8
40 / 44	12	2	4	18	39.2	36	16	25	77	37.5	41	26	39	106	37.3
35 / 39	4	1	1	6	34.9	30	11	17	58	33.7	46	23	32	101	33.4
30 / 34	1	1	1	3	30.4	20	5	8	33	29.3	43	18	21	82	29.1
25 / 29	0		0	0	25.5	8	2	4	14	24.6	23	8	11	42	24.6
20 / 24	0			0	22.5	2	1	1	4	19.9	9	3	5	17	19.7
15 / 19						1		0	1	15.9	5	2	2	9	15.3
10 / 14											3	3	2	8	10.7
5 / 9											2	1	1	4	6.2
0 / 4											0	0	0	0	1.3
-5 / -1											0		0	0	-3.0
-10 / -6											0			0	-6.5

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ABILENE TX

WMO No. 722660

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

Period of Record = 1973 to 1996

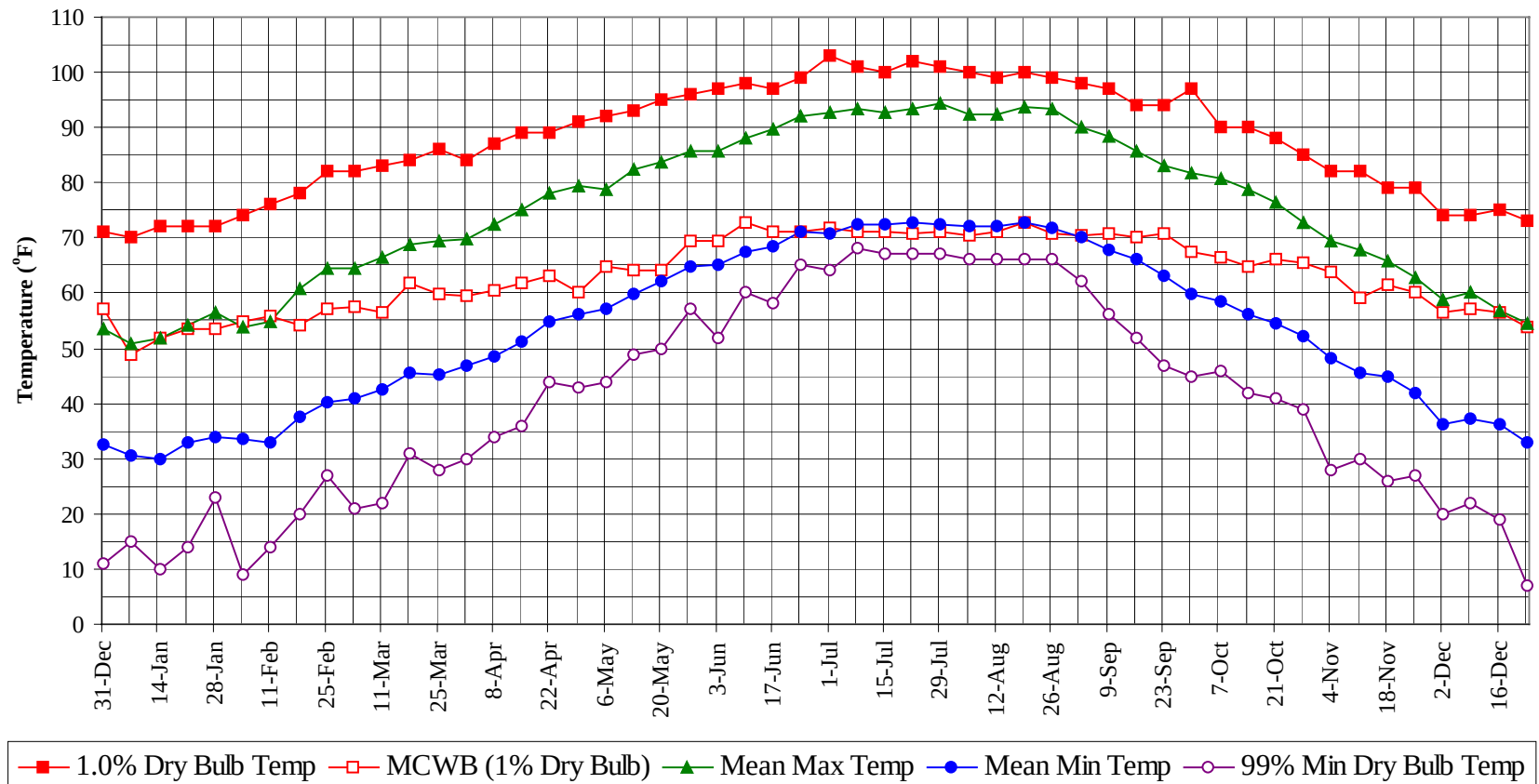
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
105 / 109		1	1	2	71.4
100 / 104		19	10	29	70.7
95 / 99	0	101	60	160	70.8
90 / 94	0	233	137	370	70.5
85 / 89	5	304	203	512	69.2
80 / 84	89	340	294	723	67.5
75 / 79	319	300	306	925	65.9
70 / 74	416	281	306	1002	63.4
65 / 69	325	257	277	859	58.8
60 / 64	287	227	257	771	54.1
55 / 59	258	196	229	684	49.5
50 / 54	243	180	216	640	45.4
45 / 49	242	145	191	578	41.4
40 / 44	222	113	154	489	37.6
35 / 39	193	90	121	404	33.5
30 / 34	159	66	81	306	29.3
25 / 29	87	34	43	164	24.8
20 / 24	40	19	20	79	20.2
15 / 19	19	8	8	35	15.4
10 / 14	11	5	5	21	10.8
5 / 9	4	1	2	7	6.3
0 / 4	1	0	0	1	1.3
-5 / -1	0		0	0	-2.8
-10 / -6	0			0	-6.0

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WMO No. 722660

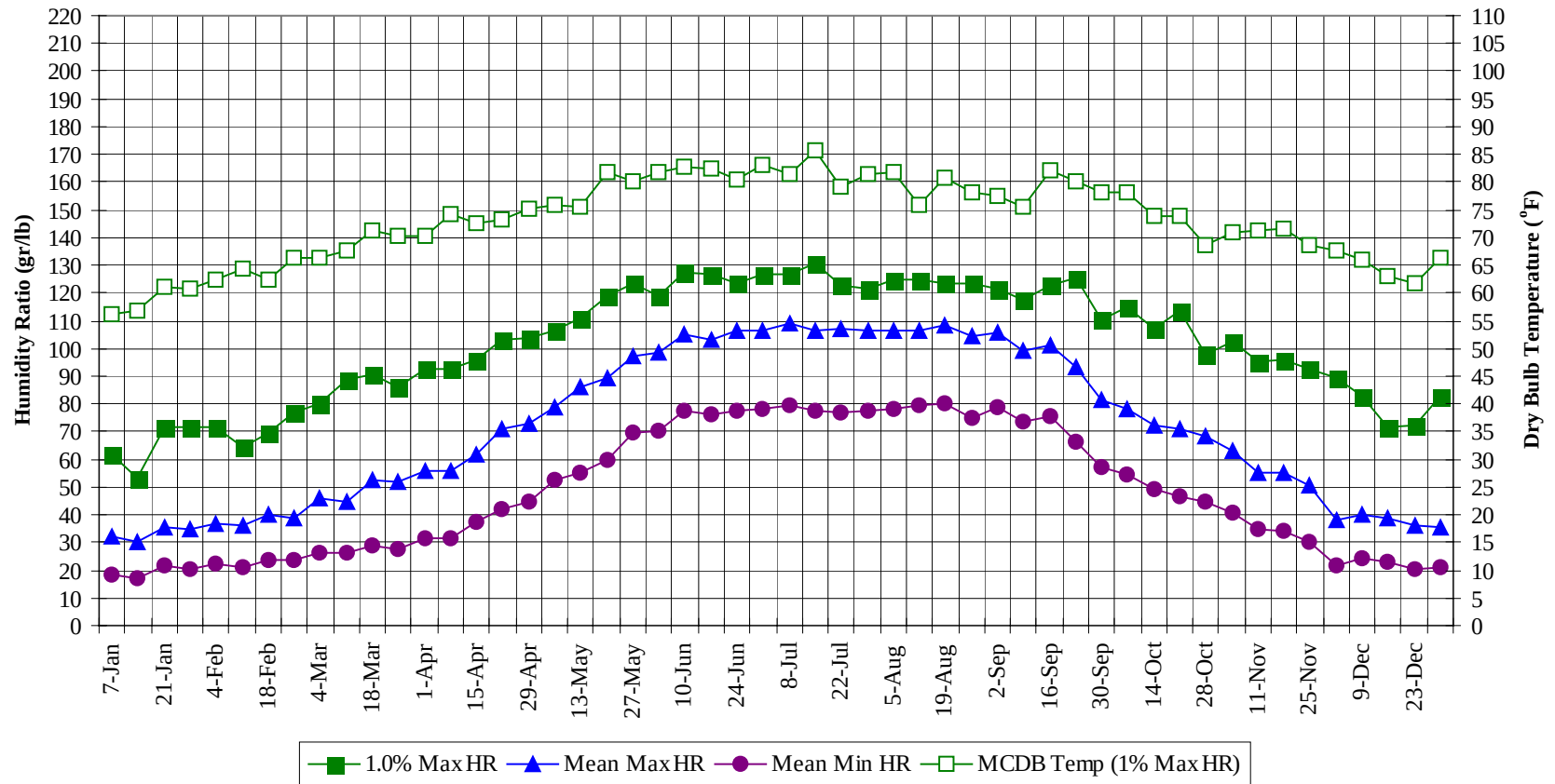
Annual Summary of Temperatures



ABILENE TX

WMO No. 722660

Long Term Humidity and Dry Bulb Temperature Summary

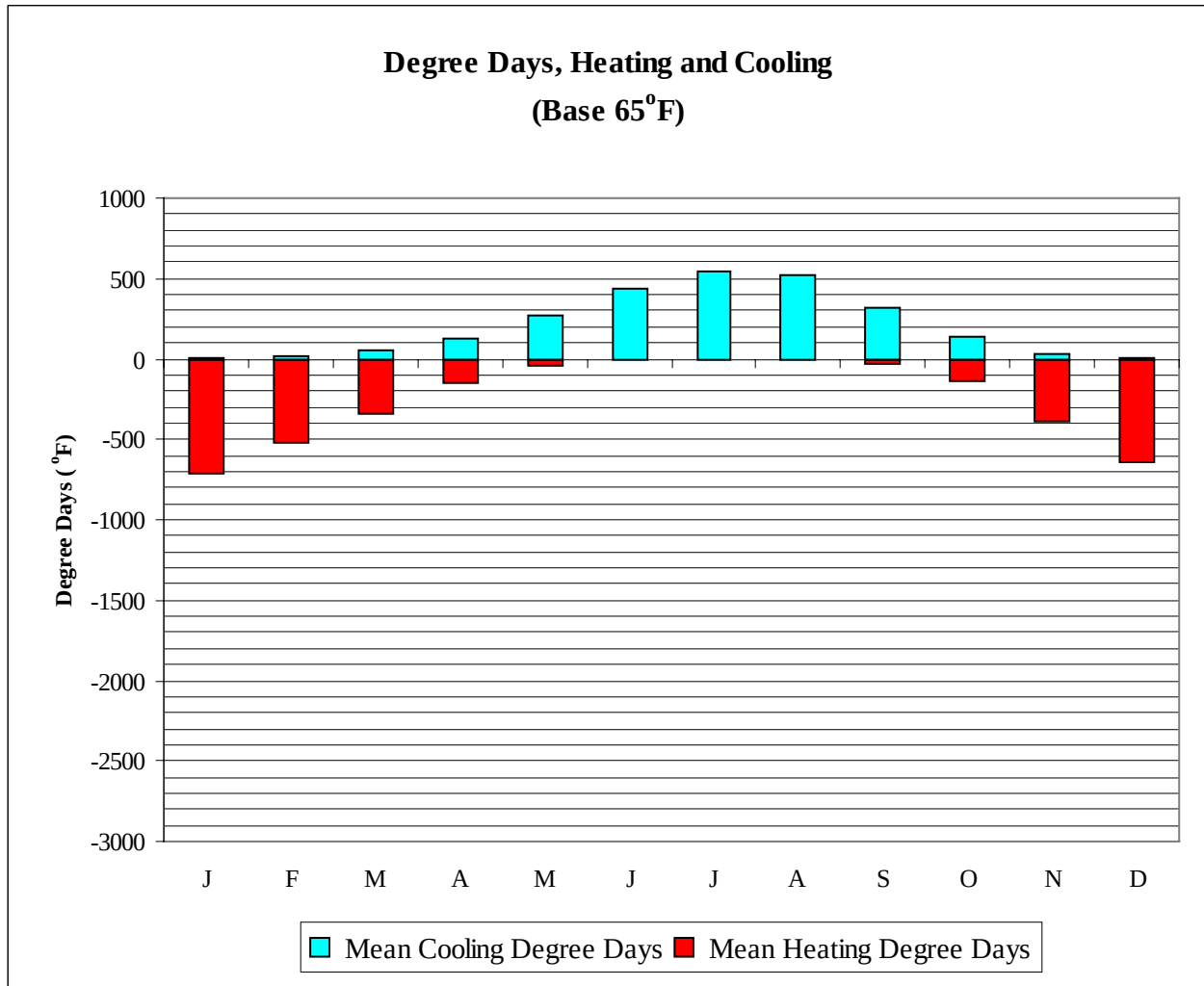


ABILENE**TX****WMO No. 722660****Long Term Dry Bulb Temperature and Humidity Summary**

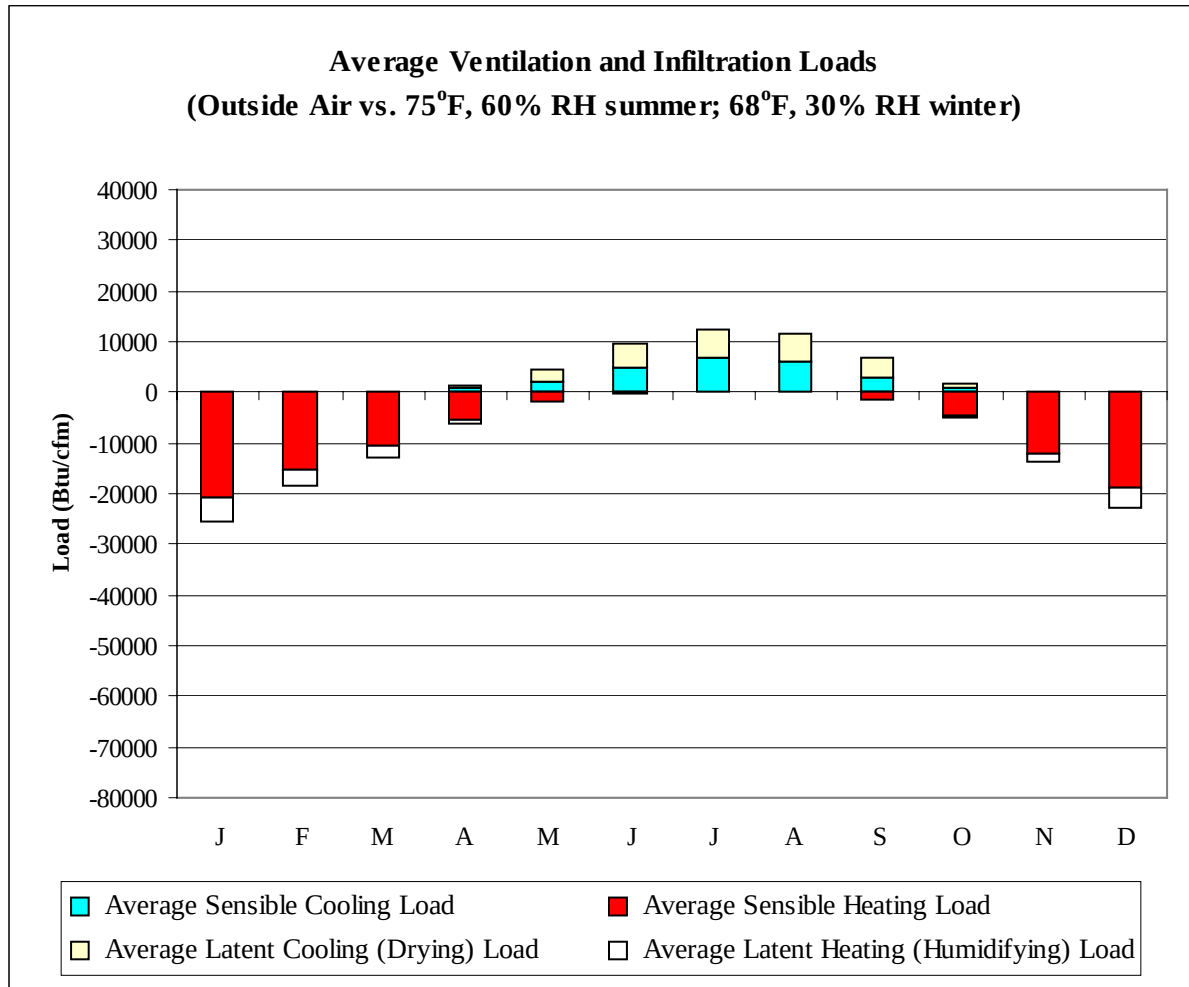
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	70.0	49.0	50.7	30.7	15.0	61.6	56.1	32.5	18.3
14-Jan	72.0	51.9	51.7	29.9	10.0	53.2	56.9	30.2	17.2
21-Jan	72.0	53.5	54.2	32.8	14.0	71.4	61.0	35.7	21.6
28-Jan	72.0	53.5	56.4	33.8	23.0	71.4	60.7	34.8	20.1
4-Feb	74.0	54.7	53.7	33.6	9.0	71.4	62.3	36.5	22.2
11-Feb	76.0	55.9	54.8	32.8	14.0	64.4	64.3	35.9	21.0
18-Feb	78.0	54.1	60.7	37.5	20.0	69.3	62.5	40.0	23.5
25-Feb	82.0	57.0	64.4	40.2	27.0	77.0	66.3	38.7	23.4
4-Mar	82.0	57.4	64.5	40.9	21.0	79.8	66.4	45.7	26.5
11-Mar	83.0	56.6	66.5	42.5	22.0	88.9	67.6	44.7	26.0
18-Mar	84.0	61.9	68.9	45.5	31.0	90.3	71.2	52.4	29.0
25-Mar	86.0	59.7	69.5	45.4	28.0	86.1	70.1	51.7	27.8
1-Apr	84.0	59.4	69.8	46.8	30.0	92.4	70.3	55.6	31.8
8-Apr	87.0	60.5	72.5	48.6	34.0	92.4	74.1	55.9	31.5
15-Apr	89.0	61.9	75.1	51.3	36.0	95.9	72.6	61.7	37.6
22-Apr	89.0	63.1	78.1	54.8	44.0	102.9	73.1	71.1	41.7
29-Apr	91.0	60.2	79.6	56.2	43.0	103.6	75.3	73.0	44.9
6-May	92.0	64.9	78.6	57.0	44.0	106.4	76.0	79.1	52.5
13-May	93.0	64.0	82.3	60.0	49.0	111.3	75.5	86.1	54.9
20-May	95.0	64.1	83.8	62.3	50.0	119.0	81.7	89.1	59.5
27-May	96.0	69.6	85.8	64.7	57.0	123.2	80.2	97.3	69.3
3-Jun	97.0	69.4	85.7	65.1	52.0	119.0	81.6	98.7	70.0
10-Jun	98.0	72.9	88.1	67.4	60.0	127.4	82.8	105.1	77.6
17-Jun	97.0	71.1	89.9	68.6	58.0	126.7	82.4	103.3	76.5
24-Jun	99.0	71.1	92.1	71.1	65.0	123.2	80.6	106.1	77.8
1-Jul	103.0	71.7	92.9	70.9	64.0	126.7	83.1	106.3	78.0
8-Jul	101.0	71.1	93.5	72.6	68.0	126.7	81.4	109.1	79.2
15-Jul	100.0	71.2	92.7	72.4	67.0	130.9	85.8	106.2	77.7
22-Jul	102.0	70.9	93.4	72.6	67.0	122.5	79.1	107.3	77.1
29-Jul	101.0	71.0	94.3	72.6	67.0	121.8	81.5	106.7	77.2
5-Aug	100.0	70.5	92.4	72.1	66.0	124.6	81.7	106.7	77.9
12-Aug	99.0	71.3	92.5	72.0	66.0	124.6	75.9	106.5	79.3
19-Aug	100.0	72.7	93.6	72.6	66.0	123.2	80.7	108.3	80.1
26-Aug	99.0	70.6	93.4	71.8	66.0	123.2	78.1	104.6	74.8
2-Sep	98.0	70.4	90.2	70.3	62.0	121.8	77.6	105.6	79.0
9-Sep	97.0	70.7	88.5	67.9	56.0	117.6	75.5	99.3	73.8
16-Sep	94.0	70.1	85.8	66.2	52.0	122.5	82.2	101.1	75.9
23-Sep	94.0	70.9	83.0	63.2	47.0	125.3	80.0	93.4	66.2
30-Sep	97.0	67.5	81.7	59.8	45.0	110.6	78.2	81.1	57.3
7-Oct	90.0	66.6	80.9	58.6	46.0	114.8	78.3	77.9	54.4
14-Oct	90.0	64.8	78.9	56.1	42.0	107.1	73.9	72.0	48.9
21-Oct	88.0	66.1	76.6	54.6	41.0	113.4	73.9	70.8	46.5
28-Oct	85.0	65.4	72.7	52.2	39.0	98.0	68.6	68.5	44.8
4-Nov	82.0	63.8	69.6	48.3	28.0	102.2	71.0	63.1	40.4
11-Nov	82.0	59.1	67.7	45.6	30.0	95.2	71.3	55.4	34.6
18-Nov	79.0	61.4	65.8	44.8	26.0	95.9	71.6	55.0	34.1
25-Nov	79.0	60.1	62.8	41.9	27.0	92.4	68.5	50.7	29.9
2-Dec	74.0	56.4	58.9	36.3	20.0	89.6	67.6	37.9	21.9
9-Dec	74.0	57.1	60.1	37.2	22.0	82.6	66.1	40.1	24.1
16-Dec	75.0	56.4	56.9	36.1	19.0	71.4	63.0	38.8	23.1
23-Dec	73.0	53.7	54.4	32.9	7.0	72.1	61.6	35.9	20.5
31-Dec	71.0	57.1	53.5	32.6	11.0	82.6	66.4	35.7	21.2

ABILENE TX

WMO No. 722660



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	5	718
FEB	18	518
MAR	57	340
APR	128	154
MAY	264	45
JUN	436	4
JUL	550	0
AUG	522	1
SEP	315	35
OCT	140	134
NOV	33	385
DEC	8	636
ANN	2477	2970



	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	6	-20958	0	-4539
FEB	71	-15441	0	-3069
MAR	277	-10703	50	-2140
APR	843	-5319	393	-948
MAY	2260	-1893	2275	-70
JUN	4777	-266	5000	-1
JUL	6741	-21	5641	0
AUG	6171	-62	5258	0
SEP	2956	-1388	3902	-28
OCT	881	-4785	766	-372
NOV	95	-11947	143	-1883
DEC	9	-18776	3	-3909
ANN	25087	-91559	23431	-16959

Average Annual Solar Radiation – Nearest Available Site

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

City: ABILENE
 State: TX
 WBAN No: 13962
 Lat(N): 32.43
 Long(W): 99.68
 Elev(ft): 1752

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.324
 Vert Gap: 0.258

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	980	1240	1620	1920	2070	2220	2200	2000	1660	1390	1060	900	1610
	Std Dev	88	97	131	135	122	102	140	110	122	115	81	74	31
	Minimum	800	1070	1390	1680	1810	2050	1900	1740	1470	1170	910	720	1540
	Maximum	1140	1440	1880	2130	2250	2500	2500	2240	1880	1560	1200	1050	1680
	Diffuse	350	440	550	650	740	730	710	680	610	450	370	320	550
Clear Day	Global	1240	1580	2000	2380	2590	2650	2600	2410	2070	1660	1300	1140	1970
NORTH	Global	250	310	380	460	570	660	630	500	410	330	270	230	420
	Diffuse	250	310	380	450	500	520	500	460	400	330	270	230	380
Clear Day	Global	230	280	350	430	590	700	650	480	370	300	240	210	400
EAST	Global	630	760	950	1070	1100	1160	1220	1160	960	830	670	580	920
	Diffuse	300	380	470	550	590	610	600	570	500	400	330	280	470
Clear Day	Global	860	1040	1240	1380	1420	1420	1410	1360	1230	1060	880	790	1180
SOUTH	Global	1400	1380	1270	990	740	640	690	870	1090	1370	1400	1400	1100
	Diffuse	410	460	520	530	530	520	520	530	520	470	420	380	480
Clear Day	Global	2070	1990	1670	1170	810	670	720	990	1430	1830	2010	2050	1450
WEST	Global	650	800	980	1110	1160	1220	1200	1100	980	880	700	610	950
	Diffuse	310	380	480	560	600	620	620	580	510	410	330	280	470
Clear Day	Global	860	1040	1240	1380	1420	1420	1410	1360	1230	1060	880	790	1180

Average Annual Solar Heat and Illumination – Nearest Available Site

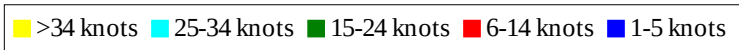
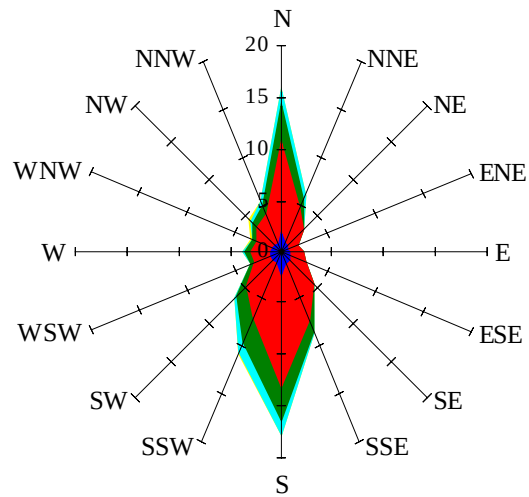
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	660	870	1160	1400	1520	1630	1620	1460	1200	990	720	600	1150
NORTH	Unshaded	170	210	270	310	370	410	390	330	280	230	190	160	280
	Shaded	160	200	250	300	350	380	370	310	260	220	170	150	260
EAST	Unshaded	430	530	670	760	780	830	870	830	690	590	470	400	650
	Shaded	410	500	630	700	720	760	800	760	640	550	440	380	610
SOUTH	Unshaded	1040	990	850	600	430	380	400	510	700	960	1030	1050	740
	Shaded	1030	940	720	450	350	340	340	380	560	880	1020	1030	670
WEST	Unshaded	450	560	700	800	830	870	850	790	700	620	490	420	670
	Shaded	430	530	650	730	760	800	790	730	650	590	460	400	630

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	74	93	83	46	33	77	103	104	80
	M.Cloudy	19	49	66	57	32	23	56	77	82	63
NORTH	M.Clear	8	14	16	15	10	24	16	17	17	16
	M.Cloudy	8	16	19	17	11	15	17	19	18	17
EAST	M.Clear	75	71	24	15	10	68	80	46	17	16
	M.Cloudy	27	41	23	17	11	34	54	38	18	17
SOUTH	M.Clear	27	62	77	69	39	10	16	32	33	19
	M.Cloudy	13	36	51	44	24	9	17	29	30	19
WEST	M.Clear	8	14	16	60	82	10	15	17	39	76
	M.Cloudy	8	16	19	39	42	9	17	19	34	57
M.Clear	(% hrs)	45	46	46	47	45	48	48	47	50	52
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	18	63	91	91	64	13	48	63	50	16
	M.Cloudy	11	41	61	65	45	8	31	41	32	11
NORTH	M.Clear	6	14	16	16	14	5	10	12	11	5
	M.Cloudy	5	14	18	19	15	4	11	14	11	5
EAST	M.Clear	53	79	45	16	14	46	54	14	11	5
	M.Cloudy	17	40	32	19	15	13	27	14	11	5
SOUTH	M.Clear	10	43	66	66	45	34	80	96	83	38
	M.Cloudy	6	26	41	45	30	10	36	47	39	15
WEST	M.Clear	6	14	16	42	76	5	10	12	53	50
	M.Cloudy	5	14	18	32	45	4	11	14	27	18
M.Clear	(% hrs)	50	50	46	44	48	44	44	46	46	45

Wind Summary - December, January, and February

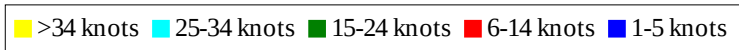
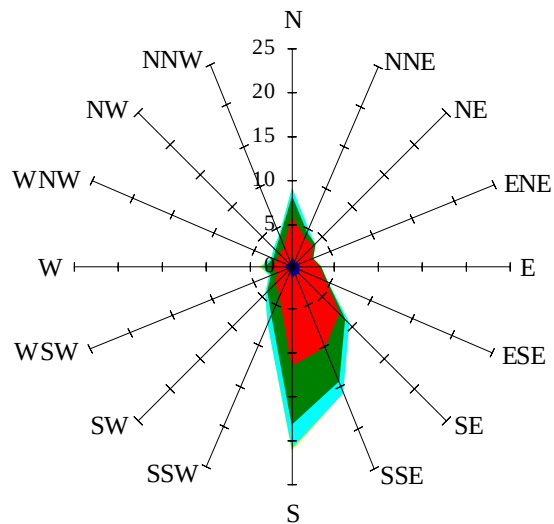
Labels of Percent Frequency on North Axis



Percent Calm = 2.16

Wind Summary - March, April, and May

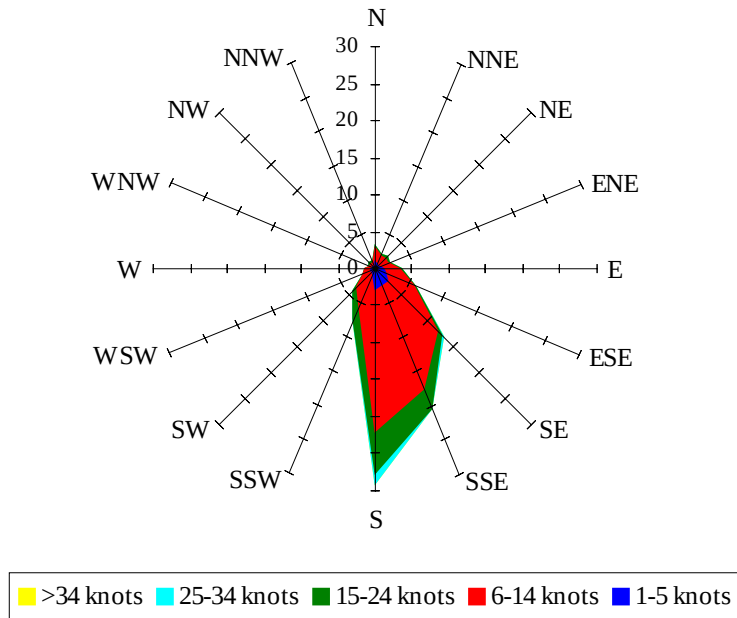
Labels of Percent Frequency on North Axis



Percent Calm = 0.99

Wind Summary - June, July, and August

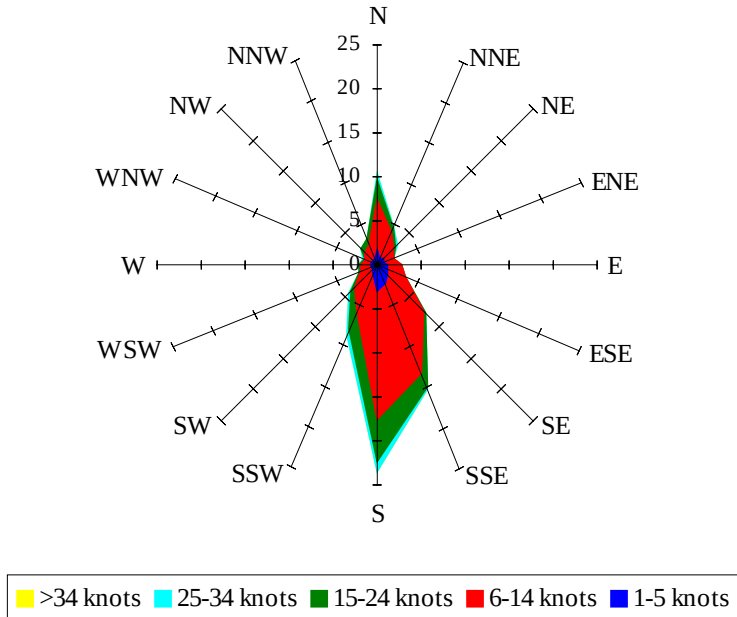
Labels of Percent Frequency on North Axis



Percent Calm = 1.02

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 2.24