

LUFKIN/ANGELINA TX

Latitude = 31.23 N

Longitude = 94.75 W

Period of Record = 1973 to 1996

WMO No. 722446

Elevation = 289 feet

Average Pressure = 29.70 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	99	77	105	7.3	S
0.4% Occurrence	96	77	109	7.7	S
1.0% Occurrence	94	77	112	7.9	S
2.0% Occurrence	93	77	113	8.0	S
Mean Daily Range	21	-	-	-	-
97.5% Occurrence	32	30	21	5.2	N
99.0% Occurrence	28	26	17	5.1	N
99.6% Occurrence	23	22	13	6.1	N
Median of Extreme Lows	16	15	9	6.9	NNW
	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	82	91	145	7.4	S
0.4% Occurrence	80	90	135	7.9	S
1.0% Occurrence	79	88	132	7.9	S
2.0% Occurrence	78	88	128	7.8	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	158	85	1.04	5.8	SE
0.4% Occurrence	142	83	0.94	6.9	S
1.0% Occurrence	137	83	0.90	7.1	S
2.0% Occurrence	137	83	0.90	6.9	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		178	1748	2035	3731

Other Site Data

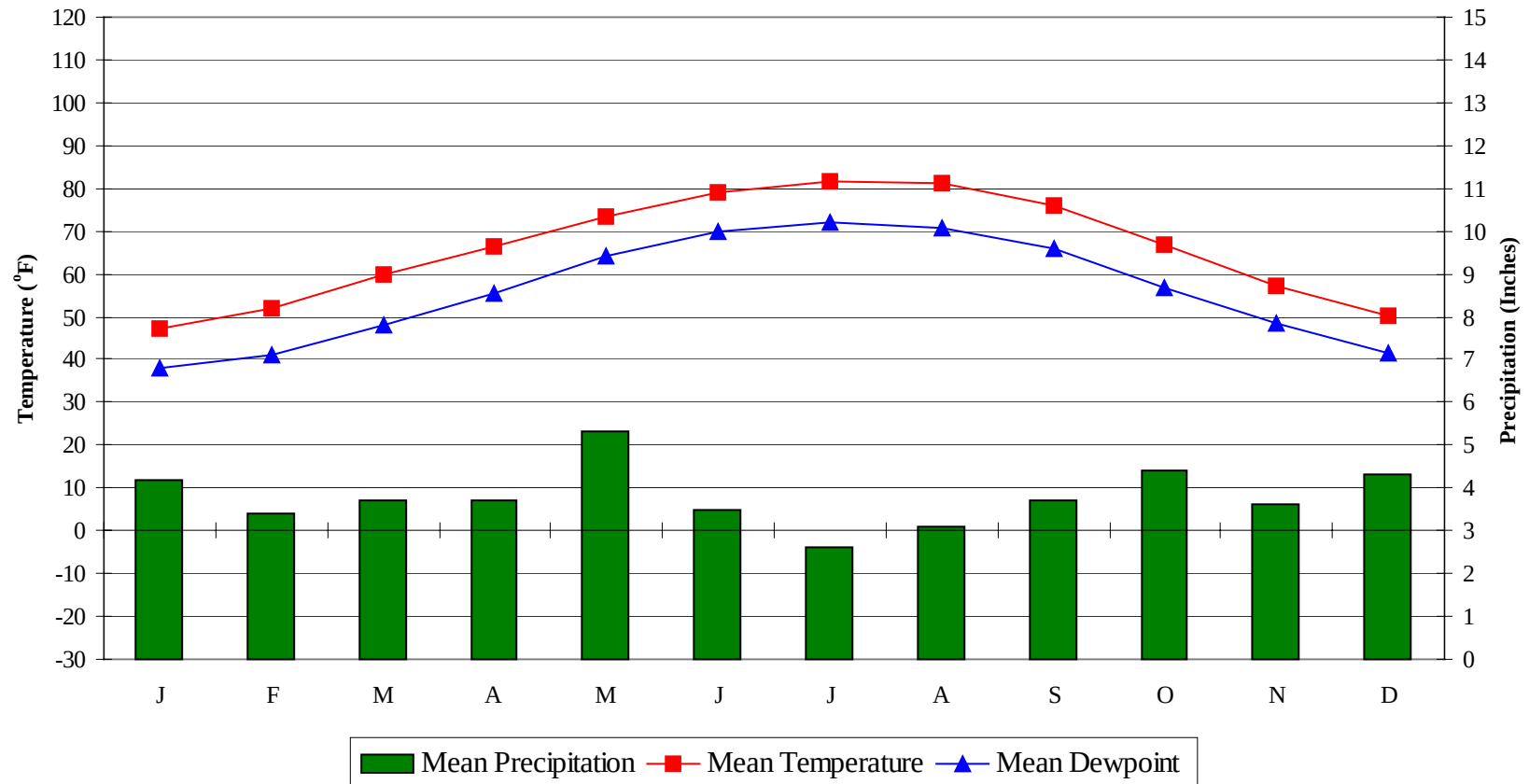
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
11	4.0	90	6.7 + 1.9
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
68.4	N/A	N/A	22

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

LUFKIN/ANGELINA TX

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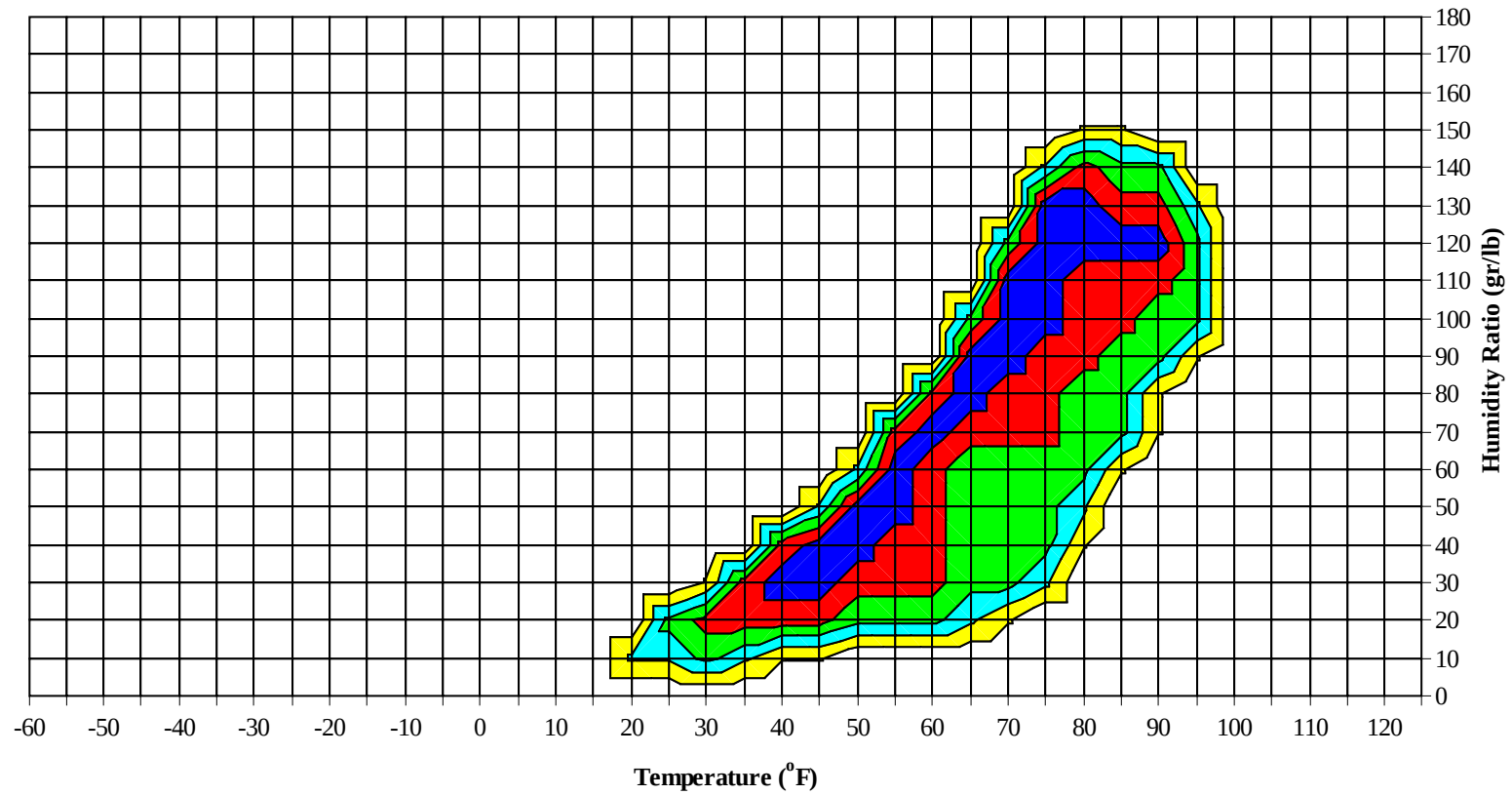
Average Annual Climate



LUFKIN/ANGELINA TX

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Long Term Psychrometric Summary

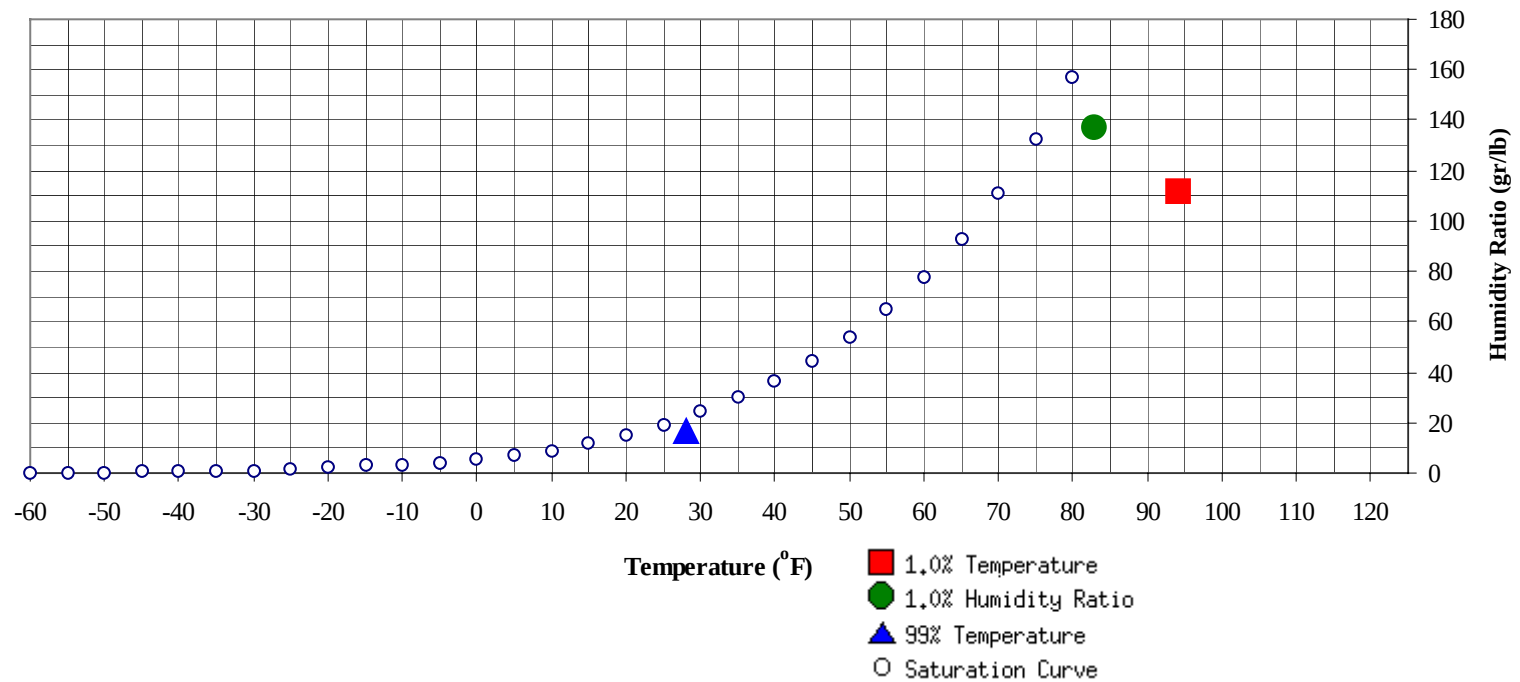


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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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)
	28	17	9.3		137.2	82.8	77.8	75.9	41.4

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	94	111.7	76.7	40.2

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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		
100 / 104															
95 / 99															
90 / 94							0	0	0	66.5		0		0	71.0
85 / 89							1	0	1	65.8		3	0	3	66.7
80 / 84		1	0	1	68.3		3	1	4	63.0		14	4	18	65.6
75 / 79		5	1	6	65.8		12	4	16	62.8	1	33	13	47	64.2
70 / 74	1	15	7	23	63.1	3	28	14	45	61.9	16	49	36	100	63.3
65 / 69	9	23	16	48	60.9	14	29	21	63	59.5	24	43	41	108	59.8
60 / 64	12	29	20	60	56.1	16	31	30	76	55.8	35	37	43	115	56.1
55 / 59	15	31	26	71	51.5	21	28	30	79	51.8	33	29	41	102	52.1
50 / 54	23	34	35	92	47.6	24	29	33	86	47.3	40	17	31	88	47.8
45 / 49	30	34	38	102	43.0	31	23	31	85	43.0	38	12	20	70	43.8
40 / 44	37	33	40	109	38.6	36	19	26	81	38.5	30	7	13	49	39.6
35 / 39	46	23	34	103	34.4	36	12	18	66	34.5	17	3	5	25	35.0
30 / 34	41	13	21	75	30.1	25	7	11	43	30.1	10	1	2	12	30.4
25 / 29	21	5	8	34	25.7	11	3	4	17	25.5	3	0	1	4	25.7
20 / 24	8	2	3	13	20.6	5	1	2	8	21.3	1	0	0	1	21.0
15 / 19	3	0	1	4	16.0	1			1	17.2	0			0	17.0
10 / 14	1	0		1	11.7										
5 / 9	0			0	6.3										
0 / 4															

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 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	0	76.2		3	1	4	77.8
90 / 94		1	0	1	67.0		9	2	11	75.7		55	16	72	76.7
85 / 89		10	2	13	70.2		53	17	71	73.6	0	87	35	121	75.4
80 / 84		42	13	55	67.9	1	72	34	107	71.5	13	56	50	119	74.4
75 / 79	3	62	30	95	66.2	26	56	57	139	70.2	71	28	75	174	73.4
70 / 74	30	50	54	133	65.0	68	35	66	170	68.1	101	10	51	163	70.3
65 / 69	46	34	51	131	62.1	73	15	44	132	64.5	38	1	10	49	65.5
60 / 64	46	22	38	106	57.7	45	6	20	71	59.9	11		2	13	60.3
55 / 59	39	12	25	76	53.2	21	1	7	29	55.2	4		0	4	56.0
50 / 54	34	6	15	55	48.9	11	0	1	12	50.9	0			0	50.2
45 / 49	24	1	8	33	44.8	3		0	3	46.4					
40 / 44	13	0	3	16	40.8	0			0	42.8					
35 / 39	5		0	5	36.4										
30 / 34	0			0	32.6										
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															

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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		2	1	3	75.4		1	0	1	75.9		0	0	0	73.9
95 / 99	0	20	6	26	77.0		27	6	33	76.8		8	1	9	75.9
90 / 94	0	89	29	119	77.1		83	26	109	76.4		36	7	43	75.3
85 / 89	0	83	36	119	76.7	0	75	35	110	75.9	0	69	19	88	74.5
80 / 84	23	38	63	124	75.8	15	41	56	111	75.1	3	58	35	97	72.6
75 / 79	108	12	83	203	74.1	89	17	85	192	73.5	40	37	71	148	71.7
70 / 74	107	3	28	138	71.0	121	4	36	161	70.6	101	20	61	182	69.1
65 / 69	9	0	1	10	66.6	19	0	3	22	65.7	41	8	22	71	63.6
60 / 64	1		0	1	60.6	3		1	4	60.6	27	4	14	45	58.6
55 / 59	0			0	58.0	1			1	56.6	17	1	7	25	54.1
50 / 54						0			0	53.0	9	0	2	11	49.7
45 / 49											2		0	2	46.0
40 / 44											0		0	0	42.0
35 / 39															
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															

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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		0	0	0	77.7										
90 / 94		5	0	5	73.3										
85 / 89		27	4	31	71.5		1		1	70.9					
80 / 84	1	54	13	68	69.0		14	1	15	69.2		0		0	68.8
75 / 79	8	52	31	92	67.5	2	34	8	44	67.7	0	11	2	13	67.6
70 / 74	33	45	50	128	65.9	19	36	29	83	65.8	4	24	11	39	65.3
65 / 69	40	33	50	123	62.3	24	36	31	91	61.6	17	29	24	69	61.7
60 / 64	44	18	36	99	58.2	21	36	32	88	56.6	21	34	25	80	56.5
55 / 59	38	10	30	78	53.9	32	30	36	97	52.7	19	34	27	80	51.8
50 / 54	36	4	20	60	49.4	31	27	36	93	48.0	21	35	34	91	47.4
45 / 49	28	1	10	39	45.4	32	15	31	78	43.8	32	31	40	104	43.1
40 / 44	12	0	3	15	41.0	32	8	20	59	39.5	37	25	37	99	39.1
35 / 39	5	0	0	5	36.6	24	4	13	41	35.4	37	12	25	74	34.6
30 / 34	1		0	1	32.0	15	1	5	21	31.1	31	6	14	51	30.3
25 / 29	0			0	25.9	5	0	1	6	26.5	17	3	6	26	25.6
20 / 24						2		0	2	22.0	6	2	2	10	20.5
15 / 19						0			0	16.7	3	1	1	5	15.8
10 / 14						0			0		1	0	1	2	10.6
5 / 9											0		0	0	6.9
0 / 4											0			0	2.7

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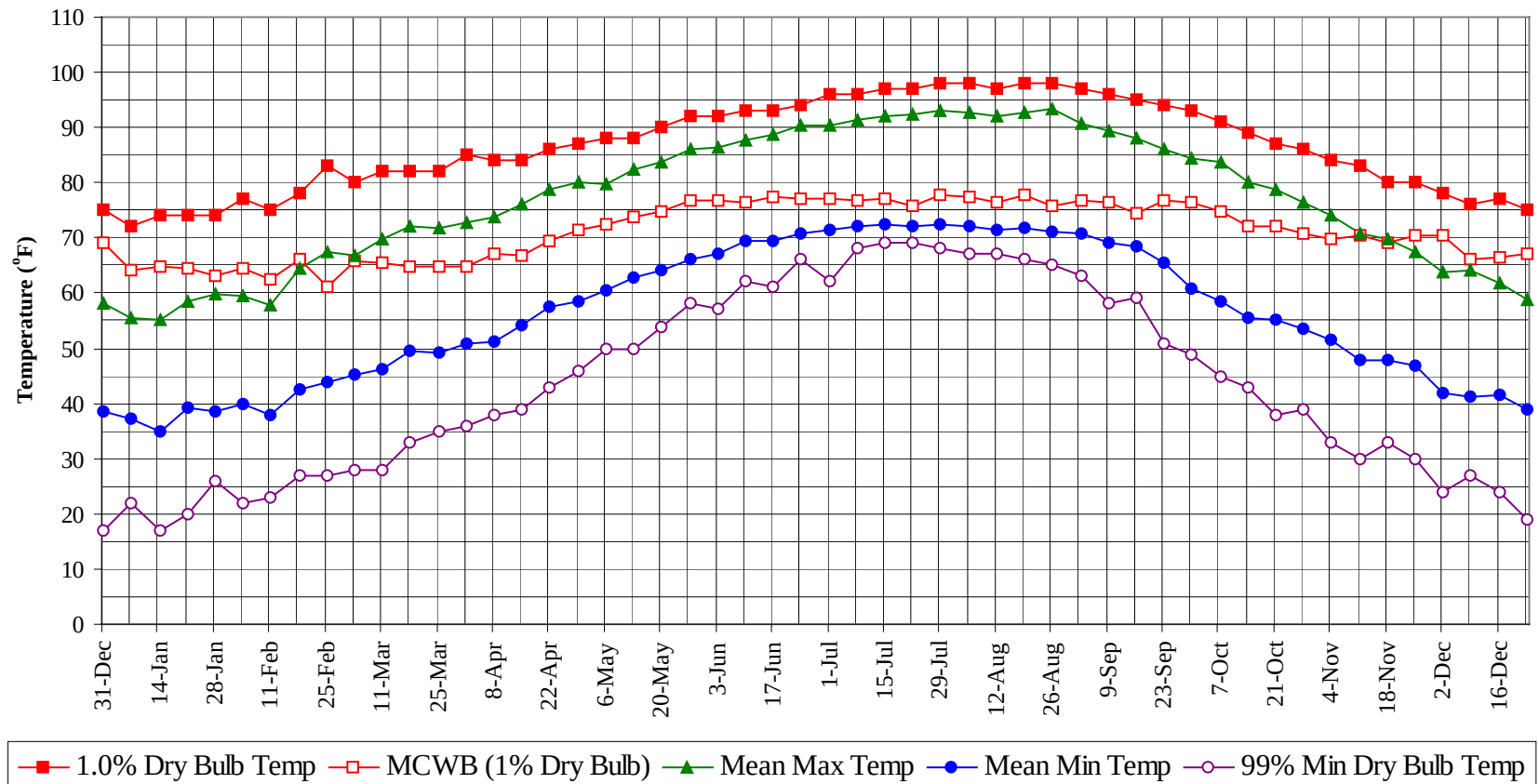
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

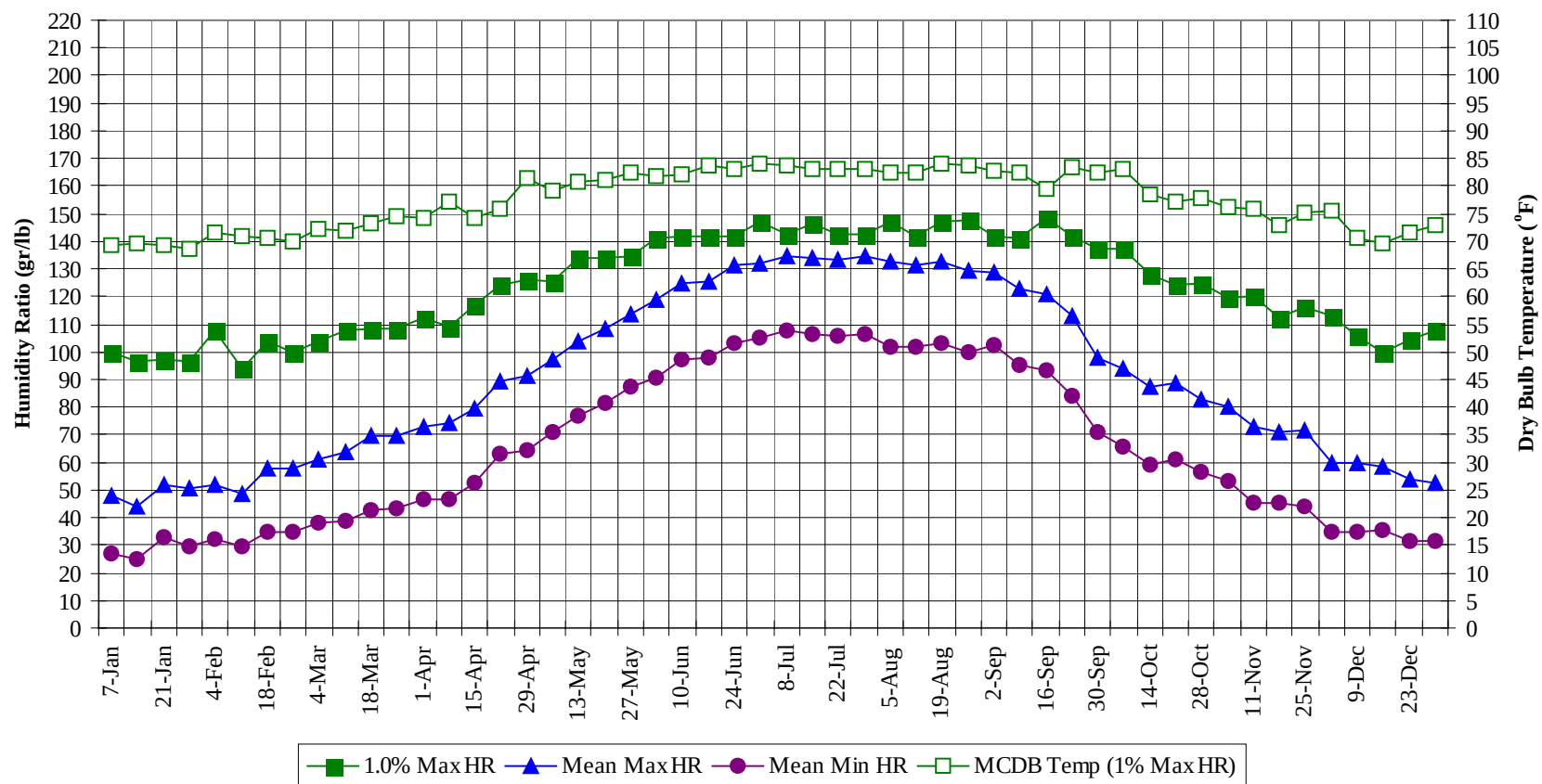
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104		3	1	4	75.5
95 / 99	0	57	14	71	76.8
90 / 94	0	278	81	359	76.4
85 / 89	1	408	146	555	75.0
80 / 84	57	394	268	718	72.6
75 / 79	351	360	455	1166	71.0
70 / 74	611	318	438	1367	67.6
65 / 69	358	249	313	920	62.3
60 / 64	284	217	262	762	57.3
55 / 59	238	175	231	643	52.6
50 / 54	231	154	207	593	48.0
45 / 49	218	120	179	517	43.6
40 / 44	195	91	145	431	39.1
35 / 39	166	54	96	317	34.7
30 / 34	121	27	53	201	30.3
25 / 29	57	11	20	87	25.7
20 / 24	23	5	8	36	20.8
15 / 19	7	1	1	9	16.0
10 / 14	2	0	1	3	11.2
5 / 9	0		0	0	6.7
0 / 4	0			0	2.7

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



LUFKIN/ANGELINA TX

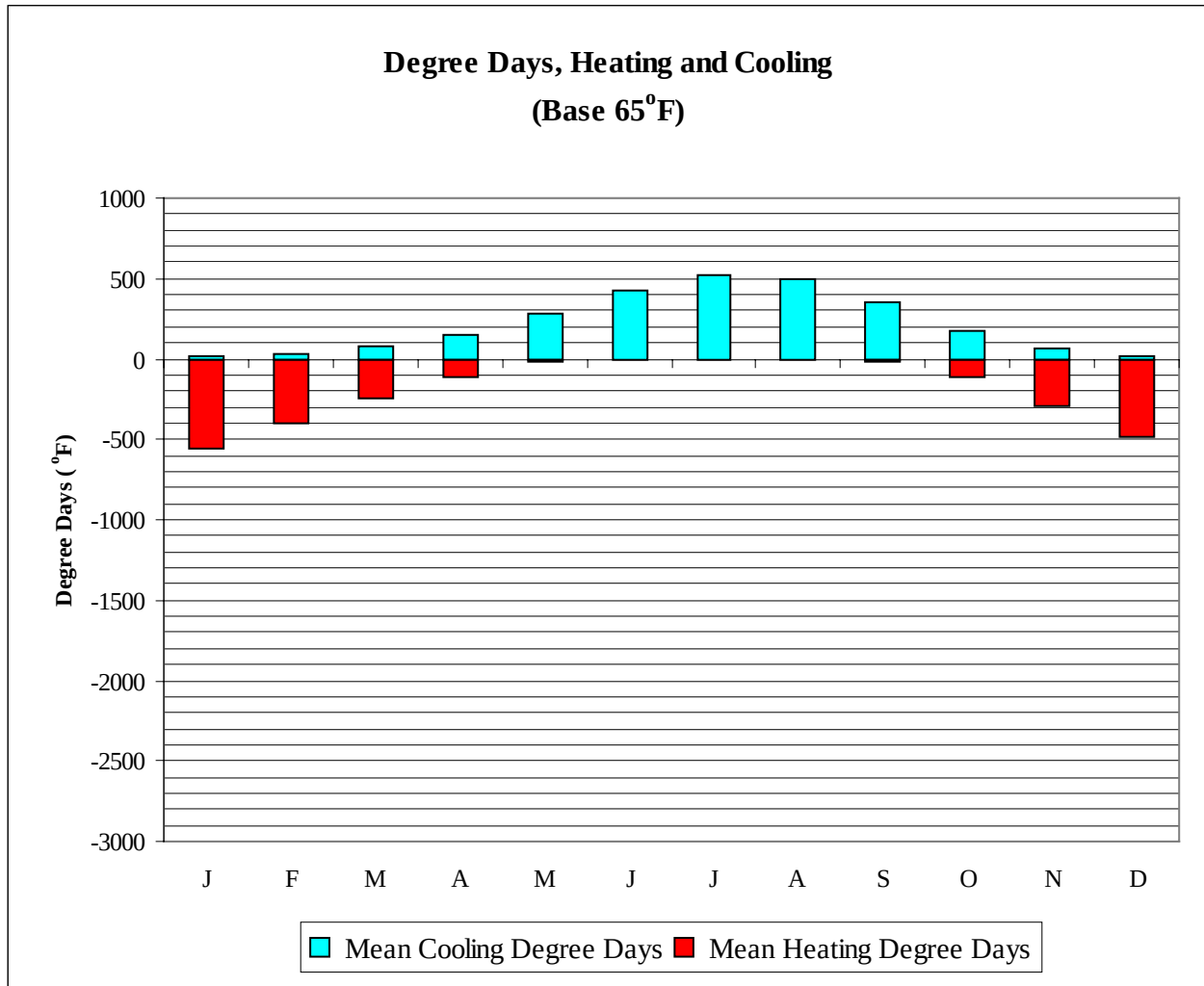
WMO No. 722446

Long Term Dry Bulb Temperature and Humidity Summary

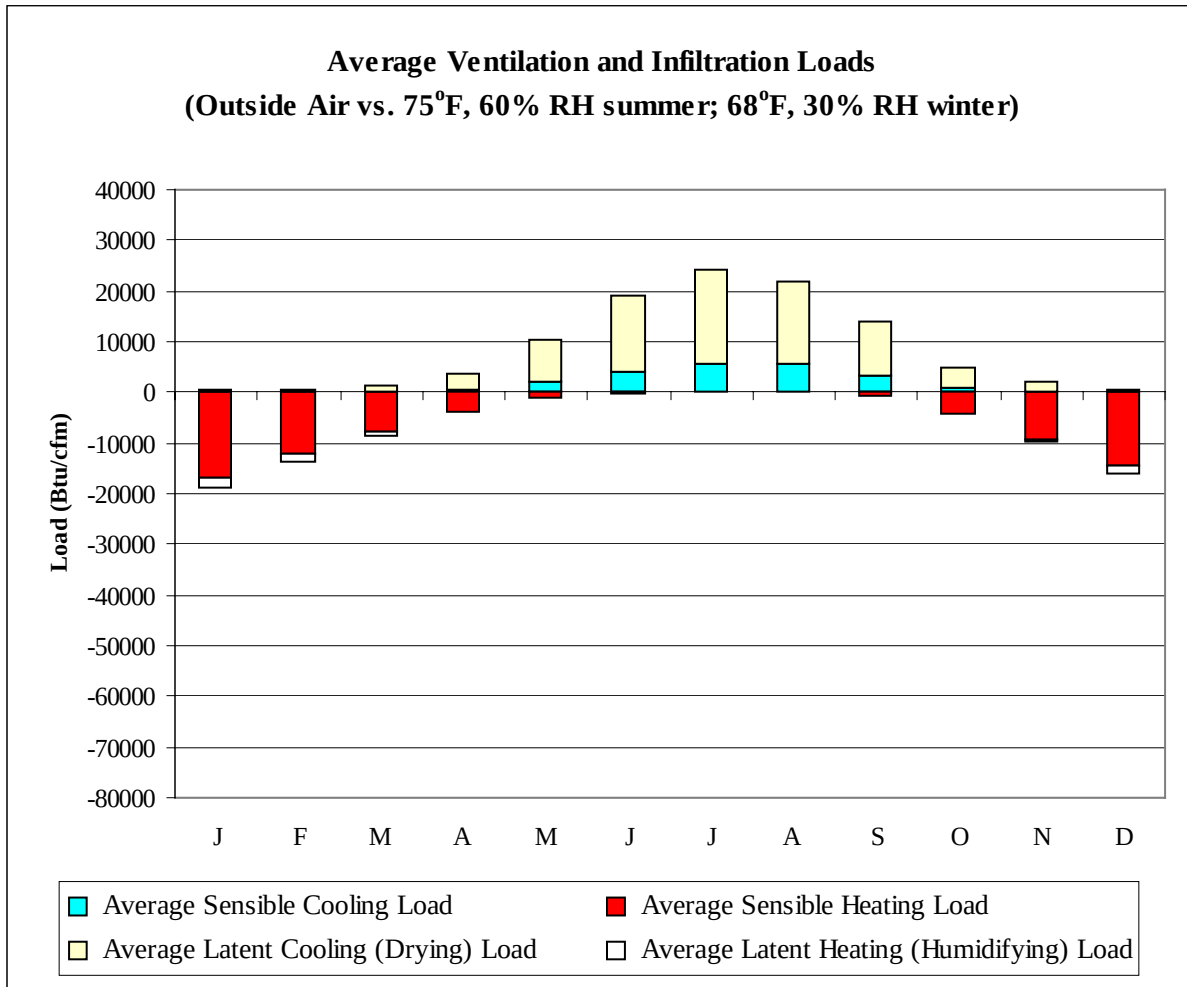
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	72.0	64.0	55.4	37.2	22.0	100.1	69.3	48.1	27.2
14-Jan	74.0	65.0	55.0	34.9	17.0	96.6	69.5	44.2	25.2
21-Jan	74.0	64.5	58.4	39.4	20.0	97.3	69.4	52.0	32.8
28-Jan	74.0	63.1	59.9	38.4	26.0	96.6	68.5	50.8	29.3
4-Feb	77.0	64.6	59.5	39.8	22.0	107.8	71.4	52.0	32.1
11-Feb	75.0	62.4	57.7	37.9	23.0	93.8	70.8	48.6	29.4
18-Feb	78.0	66.2	64.4	42.7	27.0	103.6	70.5	57.9	35.1
25-Feb	83.0	61.0	67.6	43.9	27.0	100.1	70.0	58.0	34.7
4-Mar	80.0	65.8	66.9	45.1	28.0	103.6	72.2	61.3	38.0
11-Mar	82.0	65.5	69.7	46.3	28.0	107.8	71.8	63.7	38.9
18-Mar	82.0	64.8	72.0	49.4	33.0	108.5	73.2	69.3	42.8
25-Mar	82.0	64.9	71.7	49.0	35.0	108.5	74.6	69.6	43.4
1-Apr	85.0	64.8	72.9	50.8	36.0	112.0	74.3	72.7	46.5
8-Apr	84.0	67.3	73.8	51.1	38.0	109.2	77.1	74.2	46.5
15-Apr	84.0	66.7	76.0	54.1	39.0	116.9	74.1	79.5	52.8
22-Apr	86.0	69.4	78.7	57.5	43.0	123.9	75.9	89.1	62.7
29-Apr	87.0	71.4	80.3	58.4	46.0	126.0	81.5	91.5	64.5
6-May	88.0	72.6	79.8	60.5	50.0	125.3	79.2	97.5	70.7
13-May	88.0	73.7	82.4	62.7	50.0	133.7	80.9	103.7	76.7
20-May	90.0	74.8	83.9	64.1	54.0	133.7	81.2	108.7	81.4
27-May	92.0	76.8	86.0	66.1	58.0	134.4	82.3	113.8	87.3
3-Jun	92.0	76.8	86.5	67.1	57.0	141.4	81.9	118.9	90.5
10-Jun	93.0	76.6	87.8	69.5	62.0	142.1	82.2	124.5	96.9
17-Jun	93.0	77.4	88.8	69.3	61.0	142.1	83.8	125.4	97.8
24-Jun	94.0	77.1	90.2	70.8	66.0	142.1	82.9	131.4	103.1
1-Jul	96.0	77.1	90.3	71.3	62.0	147.0	84.0	132.2	105.0
8-Jul	96.0	76.7	91.5	72.3	68.0	142.8	83.7	134.5	107.4
15-Jul	97.0	77.0	92.1	72.4	69.0	146.3	83.1	133.9	106.3
22-Jul	97.0	75.7	92.5	72.3	69.0	142.8	83.1	133.4	105.5
29-Jul	98.0	77.8	92.9	72.4	68.0	142.8	83.0	134.4	106.1
5-Aug	98.0	77.5	92.8	72.1	67.0	147.0	82.3	132.5	101.8
12-Aug	97.0	76.5	92.0	71.5	67.0	142.1	82.6	131.0	101.7
19-Aug	98.0	77.7	92.7	71.7	66.0	147.0	84.2	132.5	103.0
26-Aug	98.0	75.9	93.2	71.2	65.0	147.7	83.7	129.7	100.0
2-Sep	97.0	76.8	90.9	70.9	63.0	142.1	82.8	128.9	102.2
9-Sep	96.0	76.5	89.4	69.2	58.0	141.4	82.5	123.0	94.9
16-Sep	95.0	74.3	88.0	68.5	59.0	148.4	79.6	120.6	93.2
23-Sep	94.0	76.6	86.2	65.5	51.0	142.1	83.4	113.1	84.3
30-Sep	93.0	76.6	84.3	60.9	49.0	137.2	82.5	98.1	71.2
7-Oct	91.0	74.6	83.8	58.6	45.0	137.2	83.1	93.6	65.9
14-Oct	89.0	72.0	80.0	55.6	43.0	128.1	78.4	87.1	59.4
21-Oct	87.0	72.0	78.8	55.2	38.0	123.9	77.0	88.8	60.9
28-Oct	86.0	70.8	76.4	53.5	39.0	124.6	77.9	82.8	56.5
4-Nov	84.0	69.7	74.0	51.5	33.0	119.7	76.1	80.3	53.2
11-Nov	83.0	70.4	71.0	47.9	30.0	120.4	75.8	72.9	45.0
18-Nov	80.0	69.1	69.8	47.9	33.0	112.0	72.9	71.2	45.6
25-Nov	80.0	70.3	67.5	47.0	30.0	116.2	75.2	71.3	44.0
2-Dec	78.0	70.6	63.7	41.7	24.0	112.7	75.6	59.8	34.9
9-Dec	76.0	66.2	64.2	41.1	27.0	105.7	70.6	59.7	34.6
16-Dec	77.0	66.5	61.8	41.5	24.0	100.1	69.7	58.4	35.2
23-Dec	75.0	67.2	58.8	39.0	19.0	104.3	71.6	53.9	31.9
31-Dec	75.0	69.0	58.3	38.5	17.0	107.8	73.0	52.6	31.3

LUFKIN/ANGELINA TX

WMO No. 722446



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	13	562
FEB	29	398
MAR	75	243
APR	147	108
MAY	285	23
JUN	424	2
JUL	518	0
AUG	501	1
SEP	349	19
OCT	171	116
NOV	64	288
DEC	23	482
ANN	2599	2242



	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	12	-16794	353	-1977
FEB	65	-12182	402	-1327
MAR	240	-7954	1157	-516
APR	720	-3891	2850	-76
MAY	2135	-1094	8264	0
JUN	4177	-146	15054	0
JUL	5791	-15	18610	0
AUG	5541	-46	16459	0
SEP	3169	-810	10788	-1
OCT	1115	-4115	3897	-43
NOV	194	-9151	1789	-551
DEC	22	-14602	694	-1496
ANN	23181	-70800	80317	-5987

Average Annual Solar Radiation – Nearest Available Site

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

City: LUFKIN
 State: TX
 WBAN No: 93987
 Lat(N): 31.23
 Long(W): 94.75
 Elev(ft): 315

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.926
 Vert Gap: 0.655

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	860	1110	1410	1680	1880	2030	2030	1910	1600	1350	990	800	1470
	Std Dev	76	89	103	137	128	140	112	84	81	119	88	52	29
	Minimum	720	910	1210	1410	1640	1660	1770	1710	1380	1070	770	720	1400
	Maximum	1020	1280	1670	2070	2140	2260	2280	2100	1760	1560	1130	940	1530
	Diffuse	410	500	630	760	850	870	860	780	680	510	410	370	640
Clear Day	Global	1260	1580	1980	2330	2530	2580	2520	2340	2040	1640	1290	1150	1940
NORTH	Global	260	310	390	460	560	640	600	500	420	340	270	240	420
	Diffuse	260	310	390	450	510	530	520	470	420	340	270	240	390
Clear Day	Global	240	290	350	440	590	690	640	490	390	320	250	220	410
EAST	Global	510	650	780	880	950	1040	1080	1070	910	780	580	490	810
	Diffuse	310	370	460	550	600	630	630	600	520	420	330	280	480
Clear Day	Global	840	1010	1190	1330	1370	1370	1340	1290	1190	1020	850	780	1130
SOUTH	Global	1070	1130	1030	850	680	620	660	820	1030	1260	1200	1100	950
	Diffuse	400	460	510	540	540	530	540	550	550	510	430	380	500
Clear Day	Global	2000	1910	1600	1120	780	650	700	960	1380	1740	1920	1960	1390
WEST	Global	550	700	850	980	1050	1100	1060	1020	920	830	640	530	850
	Diffuse	310	380	470	560	620	640	640	600	530	430	330	290	480
Clear Day	Global	840	1010	1190	1330	1370	1370	1340	1290	1190	1020	850	780	1130

Average Annual Solar Heat and Illumination – Nearest Available Site

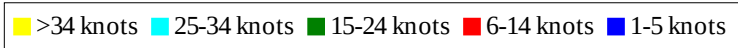
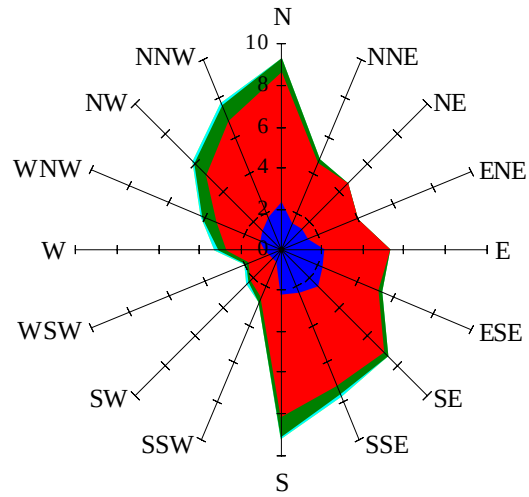
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	590	780	1010	1220	1370	1480	1480	1390	1160	960	680	540	1060
NORTH	Unshaded	180	220	270	320	370	410	390	340	290	240	190	160	280
	Shaded	150	190	230	270	310	350	340	300	250	210	160	140	240
EAST	Unshaded	360	450	550	620	670	730	760	760	640	550	400	340	570
	Shaded	300	380	450	500	540	590	620	620	530	460	340	290	470
SOUTH	Unshaded	790	810	690	530	420	380	400	490	660	880	880	820	640
	Shaded	740	650	390	320	320	330	330	340	340	610	800	780	500
WEST	Unshaded	390	490	600	700	740	780	750	720	650	590	440	360	600
	Shaded	330	420	500	570	600	630	610	590	540	490	380	310	500

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	39	78	92	77	37	38	79	101	99	71
	M.Cloudy	21	46	56	47	23	25	58	79	77	52
NORTH	M.Clear	10	15	16	15	10	23	17	18	18	18
	M.Cloudy	9	17	19	16	9	15	18	19	19	18
EAST	M.Clear	77	64	16	15	10	66	74	39	18	17
	M.Cloudy	21	32	19	16	9	30	50	33	19	17
SOUTH	M.Clear	32	63	74	62	31	11	19	32	30	17
	M.Cloudy	13	32	40	33	16	10	19	29	28	17
WEST	M.Clear	10	15	17	65	74	11	17	18	47	75
	M.Cloudy	9	17	19	34	28	10	18	19	39	48
M.Clear	(% hrs)	33	35	35	37	40	40	37	37	39	50
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	24	68	91	86	55	20	52	63	46	10
	M.Cloudy	14	46	67	64	40	11	29	36	25	6
NORTH	M.Clear	8	15	18	17	14	6	11	12	10	4
	M.Cloudy	7	16	19	19	14	5	12	14	10	3
EAST	M.Clear	56	74	37	17	14	51	48	12	10	4
	M.Cloudy	19	41	31	19	14	12	21	14	10	3
SOUTH	M.Clear	14	46	65	61	38	41	80	92	74	24
	M.Cloudy	8	29	46	44	25	10	29	36	25	7
WEST	M.Clear	8	15	18	49	73	6	11	19	55	34
	M.Cloudy	7	16	19	37	42	5	12	15	21	9
M.Clear	(% hrs)	48	46	38	41	46	32	34	37	39	42

Wind Summary - December, January, and February

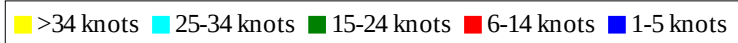
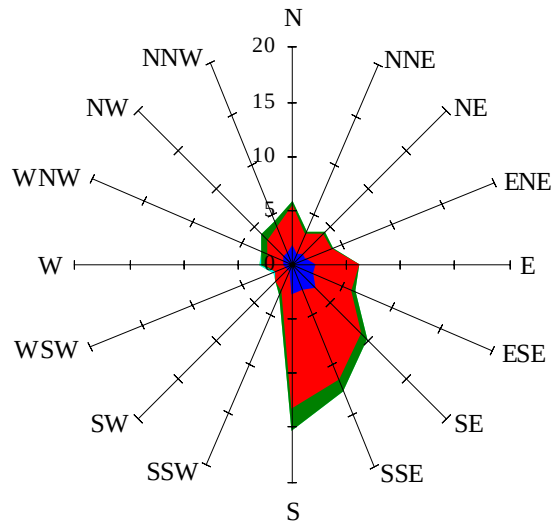
Labels of Percent Frequency on North Axis



Percent Calm = 14.91

Wind Summary - March, April, and May

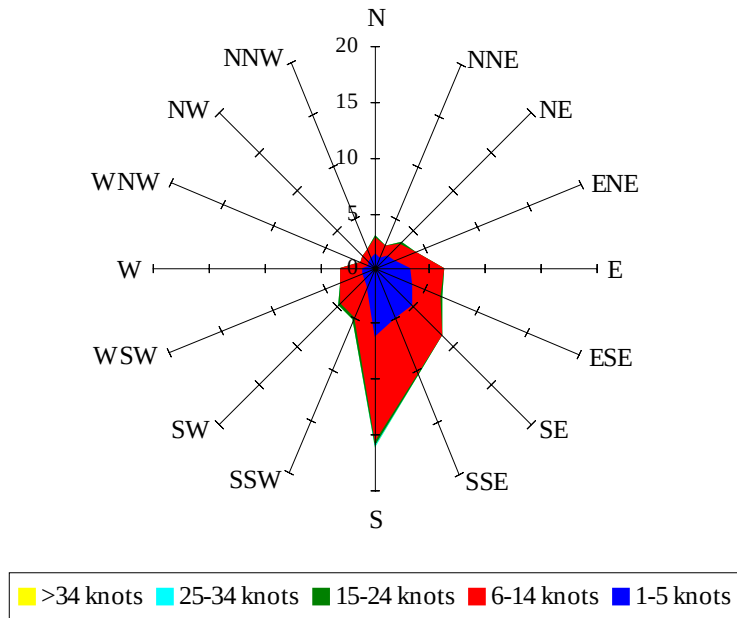
Labels of Percent Frequency on North Axis



Percent Calm = 12.46

Wind Summary - June, July, and August

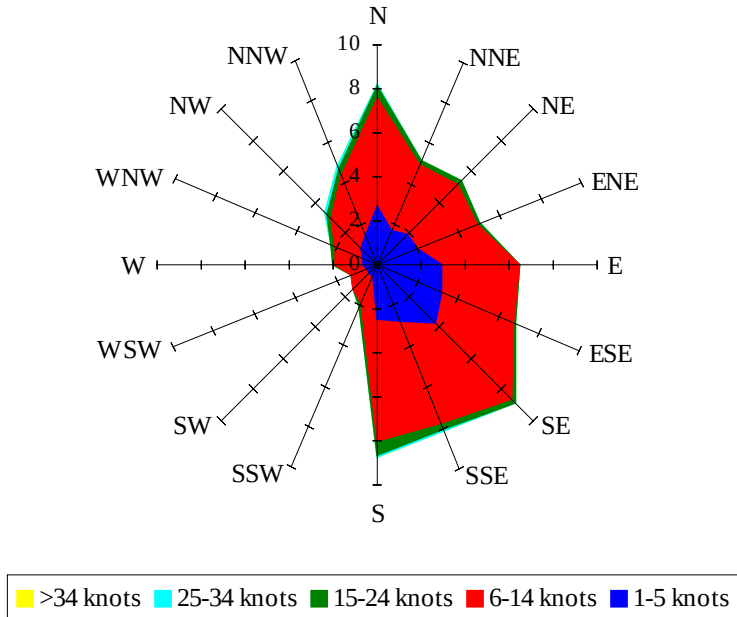
Labels of Percent Frequency on North Axis



Percent Calm = 20.19

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 19.91