

AQUADILLA PU

Latitude = 18.50 N

Longitude = 67.13 W

Period of Record = 1973 to 1995

WMO No. 785140

Elevation = 236 feet

Average Pressure = 29.73 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	91	79	136	14.7	E
0.4% Occurrence	89	79	134	16.1	E
1.0% Occurrence	88	78	133	15.7	E
2.0% Occurrence	87	78	133	15.2	E
Mean Daily Range	11	-	-	-	-
97.5% Occurrence	69	67	95	5.5	ESE
99.0% Occurrence	68	66	92	4.8	ESE
99.6% Occurrence	67	65	90	4.1	ESE
Median of Extreme Lows	64	62	81	3.6	ESE
	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	84	87	169	14.1	E
0.4% Occurrence	81	86	148	15.0	E
1.0% Occurrence	80	86	143	14.9	E
2.0% Occurrence	80	86	143	14.9	E
	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	173	87	1.14	11.8	E
0.4% Occurrence	152	85	1.00	14.3	E
1.0% Occurrence	147	85	0.97	13.9	E
2.0% Occurrence	143	84	0.94	12.2	E
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		1	3867	5041	7873

Other Site Data

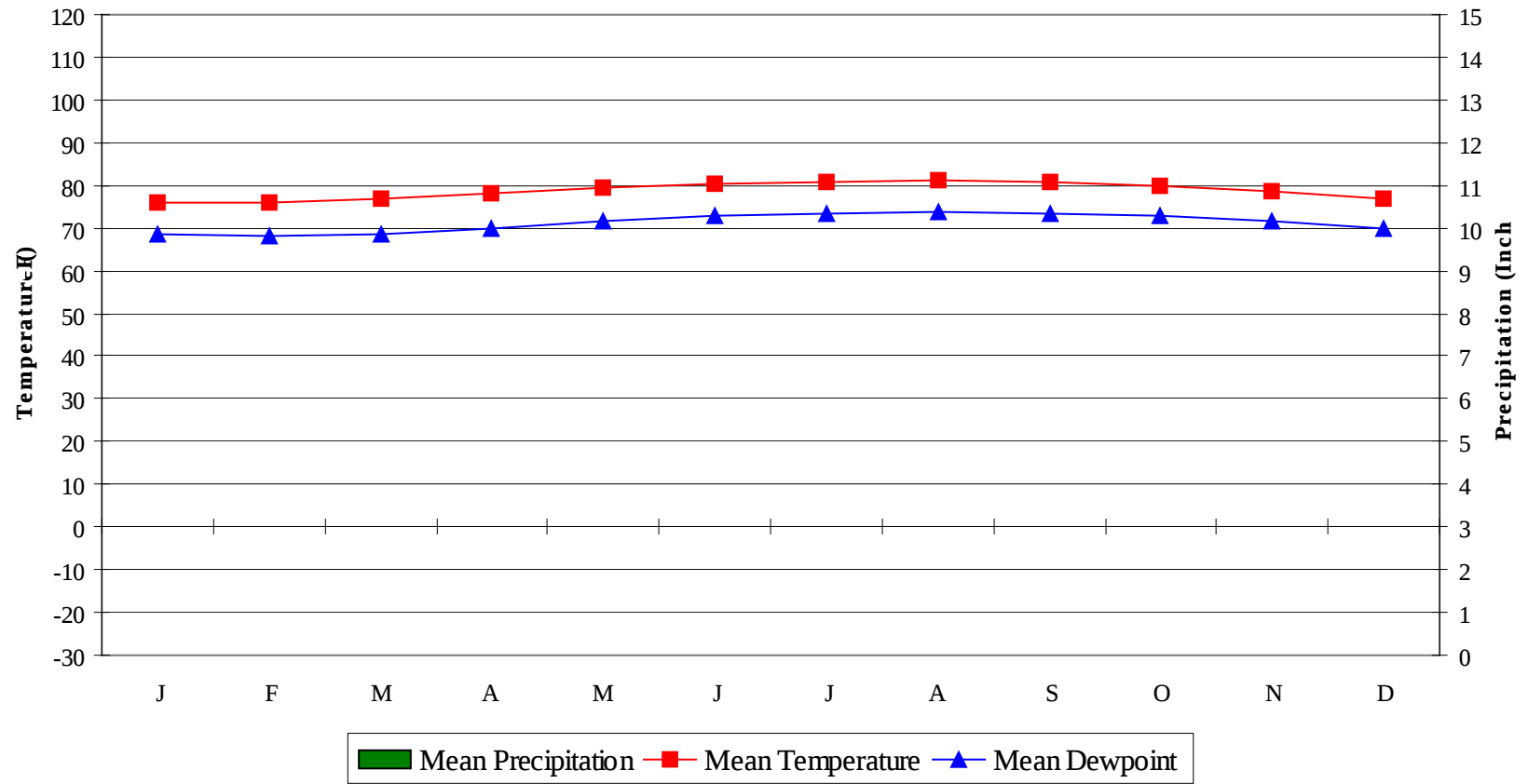
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
10	N/A	N/A	9.3 + 3.1
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
81.2	N/A	N/A	0

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

AQUADILLA PU

WMO No. 785140

Average Annual Climate

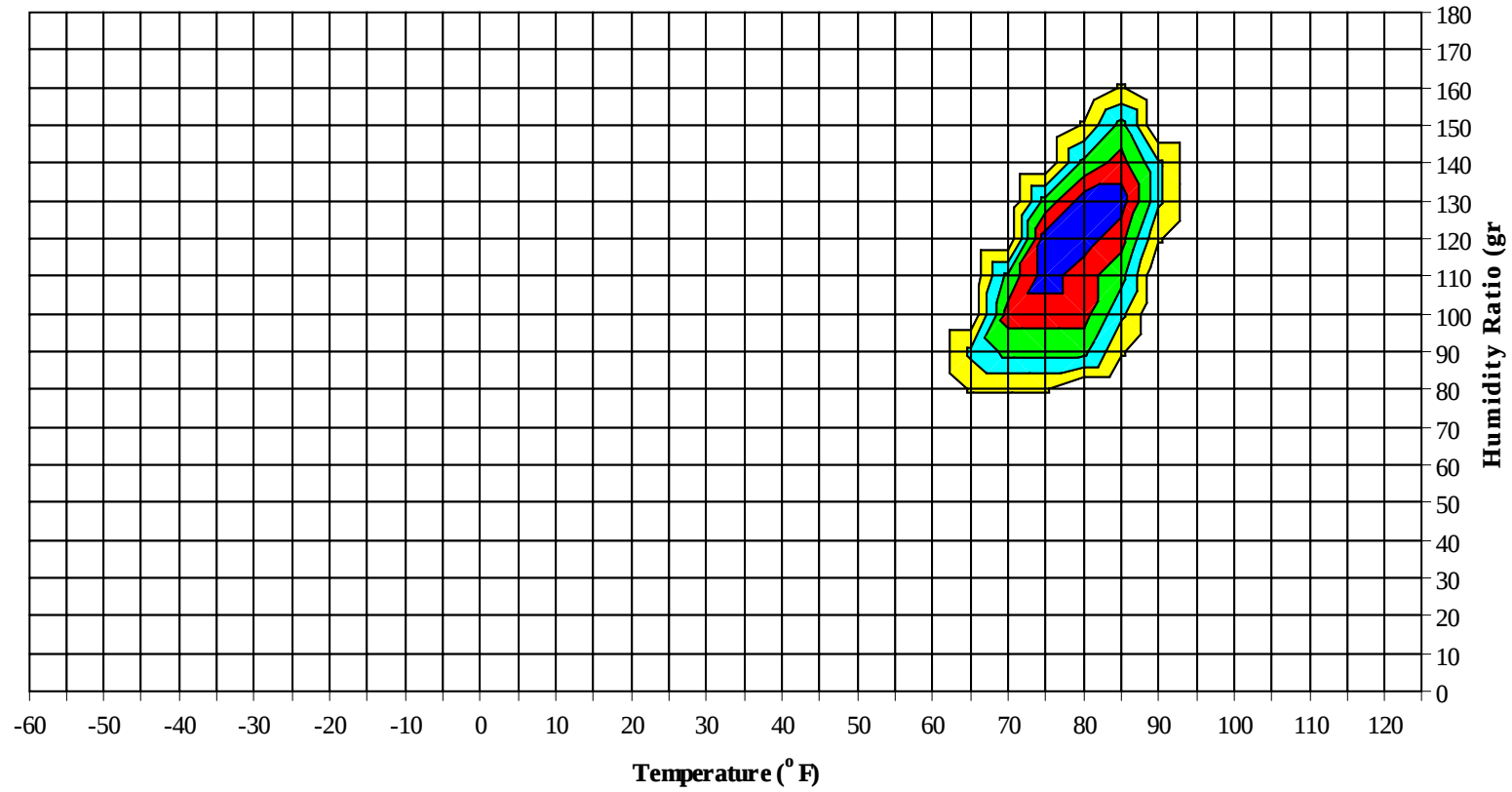


No Precipitation Data Available

AQUADILLA PU

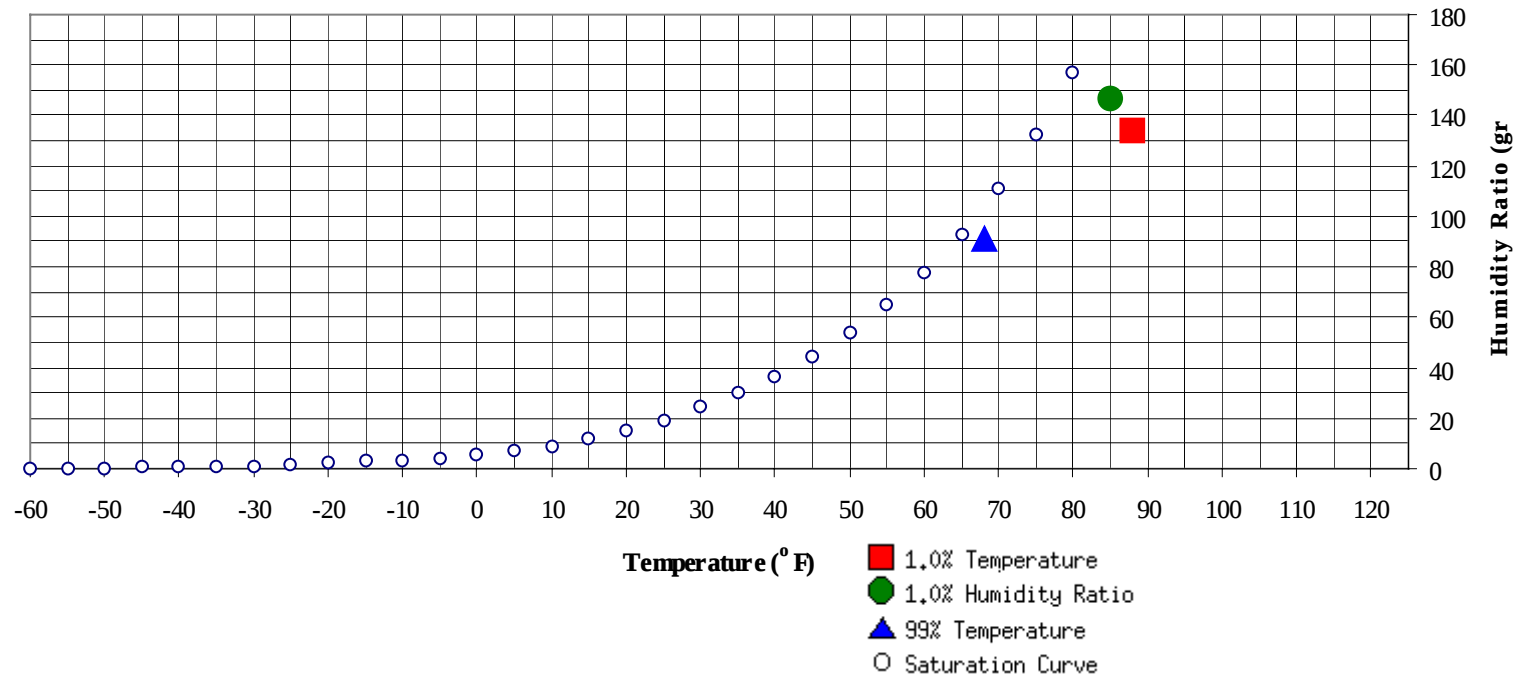
WMO No. 785140

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

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	68	91.2	30.5		147	84.9	79.7	78.1	43.4

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	88	133.9	78.7	42.2

AQUADILLA PU

WMO No. 785140

Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1973 to 1995

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		
95 / 99															
90 / 94		0		0	77.0	0	0		0	65.0		1		1	76.5
85 / 89	0	8	0	8	76.4	0	5	0	5	75.7		16	1	17	75.2
80 / 84	0	130	19	149	73.7	0	118	19	137	73.3	0	146	27	173	73.3
75 / 79	13	96	121	230	71.5	12	84	108	205	71.3	29	77	131	237	71.4
70 / 74	151	14	103	267	68.8	127	15	91	234	68.7	159	9	86	253	68.7
65 / 69	83	0	6	89	65.7	83	1	6	89	65.6	59	0	3	61	65.5
60 / 64	2			2	61.1	2	0	0	2	61.5	2			2	60.8

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.

AQUADILLA PU

WMO No. 785140

Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)**Period of Record = 1973 to 1995**

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		
95 / 99						0			0	80.0		0		0	80.0
90 / 94		1		1	79.3	1	0	1	79.1		2	0	2	80.0	
85 / 89	0	36	3	38	76.1	53	5	58	76.8		0	95	10	105	77.7
80 / 84	8	156	42	206	73.9	23	166	69	258	75.2	32	128	89	250	75.9
75 / 79	75	43	143	260	71.8	122	26	148	296	73.1	130	14	129	274	73.6
70 / 74	134	5	51	190	69.4	102	2	26	130	70.3	77	2	11	90	70.8
65 / 69	24		1	25	65.8	2	0	0	2	66.0	0		0	0	67.0
60 / 64	0			0	61.5										

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.

AQUADILLA PU

WMO No. 785140

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)**Period of Record = 1973 to 1995**

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		
95 / 99															
90 / 94		2	0	2	79.3		4	0	4	79.9		3	0	3	80.0
85 / 89	2	122	17	140	78.0	0	140	17	157	78.2	2	120	9	131	78.3
80 / 84	33	113	107	253	76.1	35	89	108	232	76.3	31	100	87	218	76.4
75 / 79	162	11	117	290	73.7	154	13	113	281	73.9	149	14	132	295	73.8
70 / 74	52	1	7	60	70.8	59	2	10	71	70.9	59	2	12	73	70.8
65 / 69		0	0	0	68.3							0		0	66.0
60 / 64															

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.

AQUADILLA PU

WMO No. 785140

Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)**Period of Record = 1973 to 1995**

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		
95 / 99															
90 / 94		1		1	79.1										
85 / 89		101	5	105	77.9		54	2	56	77.4		16	1	17	76.5
80 / 84	19	124	69	212	76.1	5	155	51	211	75.5	0	155	28	183	74.6
75 / 79	111	19	144	275	73.6	92	28	152	272	73.1	37	70	130	237	72.2
70 / 74	119	3	30	151	70.8	141	3	35	178	70.2	169	7	85	261	69.5
65 / 69	0			0	67.0	3		0	3	66.4	41	0	4	44	65.7
60 / 64											2			2	61.2

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.

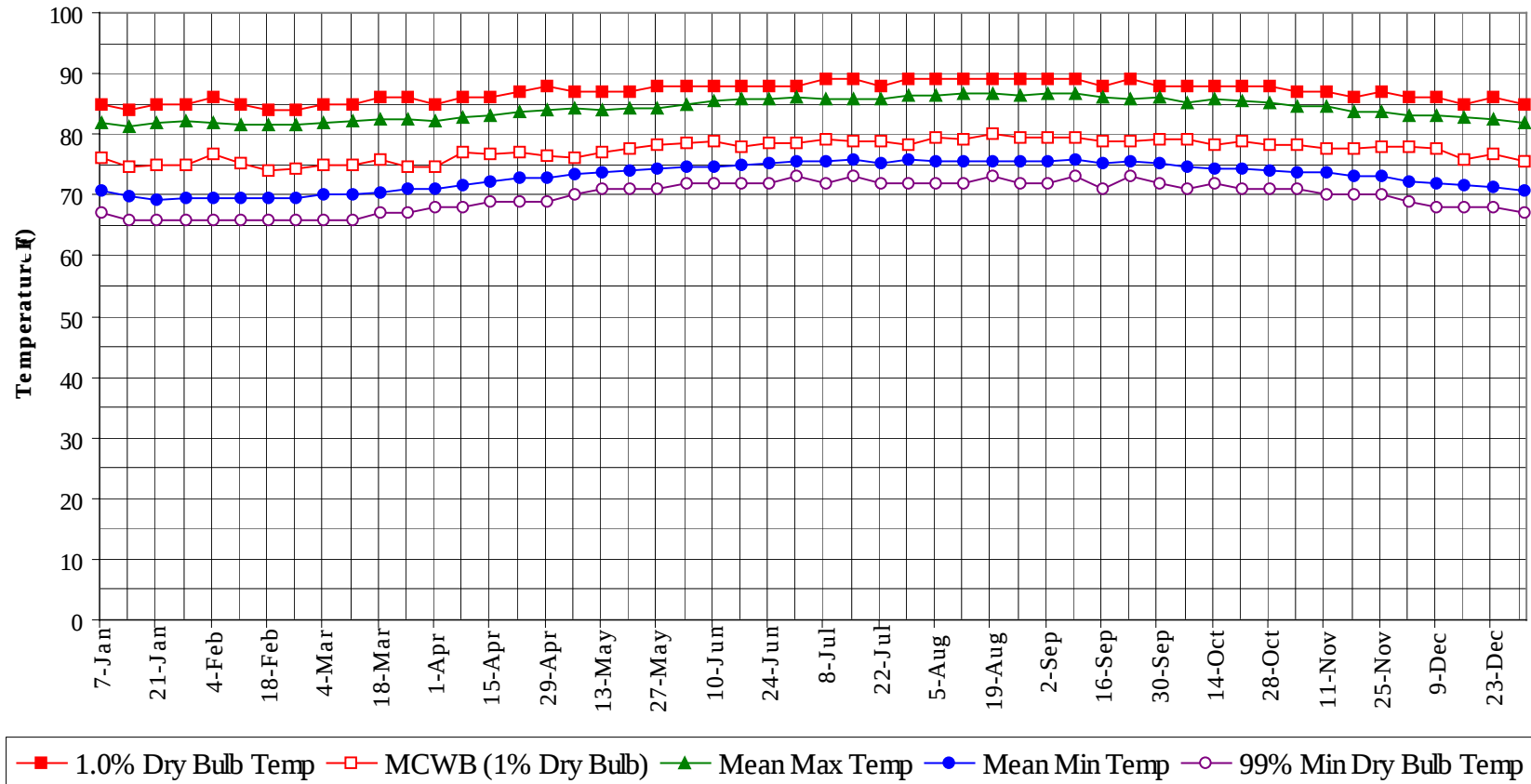
WMO No. 785140

Period of Record = 1973 to 1995

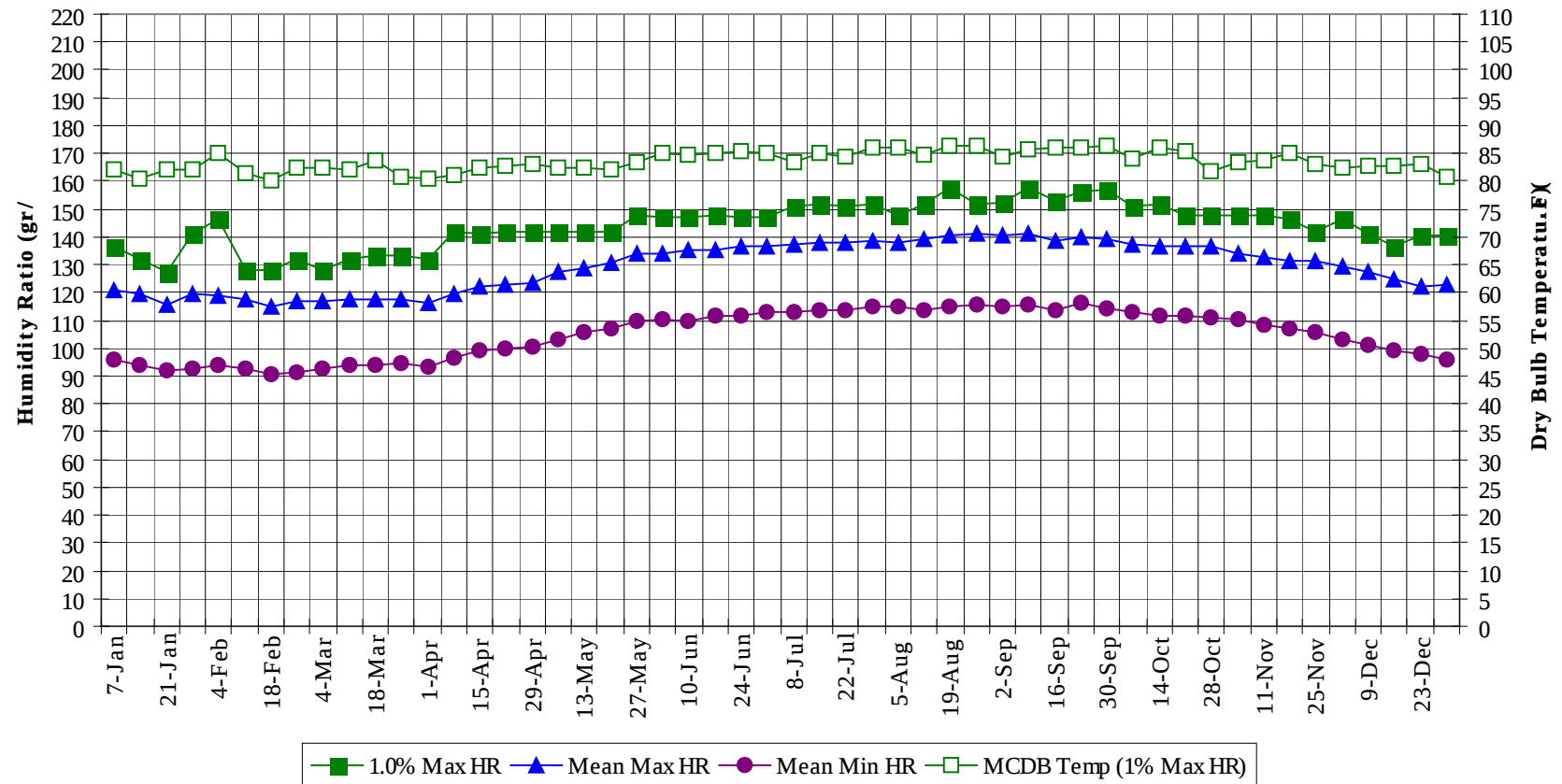
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
95 / 99	0			0	80.0
90 / 94	0	12	1	13	79.4
85 / 89	3	742	67	812	77.7
80 / 84	182	1590	704	2476	75.1
75 / 79	1059	507	1570	3137	72.7
70 / 74	1361	67	559	1987	69.5
65 / 69	308	2	20	329	65.6
60 / 64	6	0	0	6	61.2

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.

Annual Summary of Temperatures



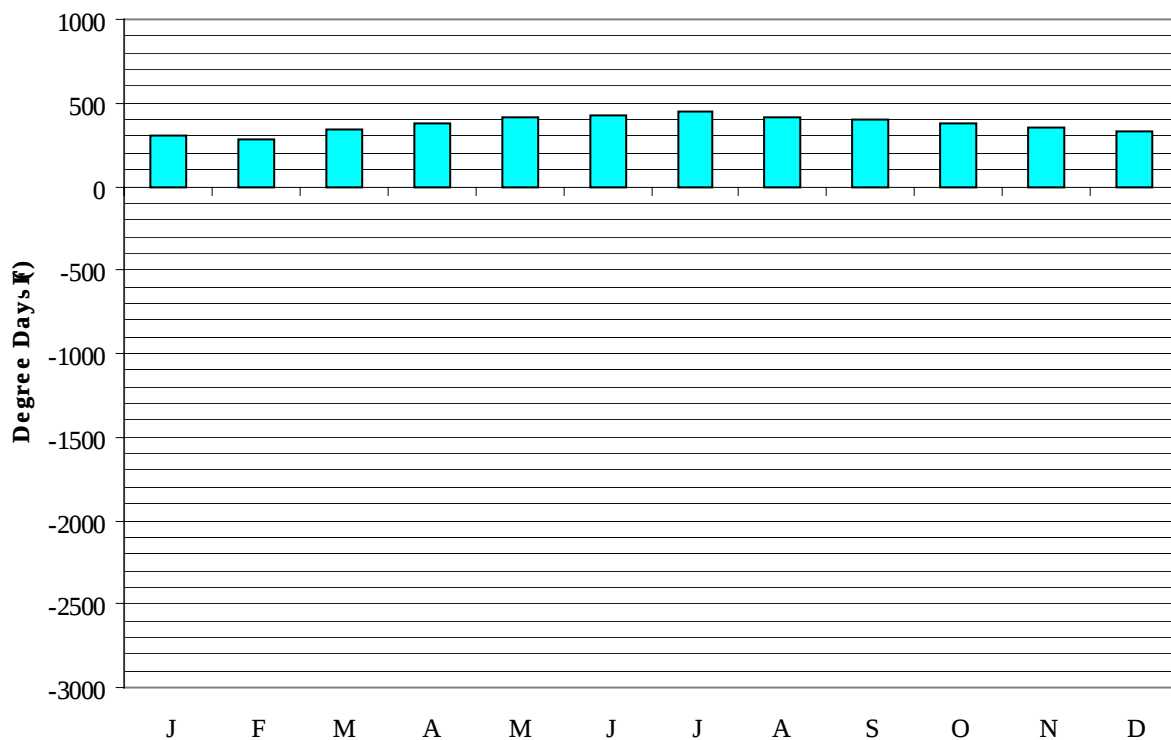
Long Term Humidity and Dry Bulb Temperature Summary



AQUADILLA PU**WMO No. 785140****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	85.0	76.3	81.8	70.7	67.0	136.5	82.2	121.0	95.8
14-Jan	84.0	74.8	81.4	69.7	66.0	132.3	80.6	119.5	93.7
21-Jan	85.0	75.1	81.8	69.3	66.0	127.4	82.2	115.3	91.7
28-Jan	85.0	74.9	82.2	69.6	66.0	141.4	82.2	119.3	92.6
4-Feb	86.0	76.9	81.7	69.6	66.0	146.3	85.1	118.6	93.7
11-Feb	85.0	75.3	81.4	69.3	66.0	128.1	81.3	117.7	92.8
18-Feb	84.0	74.0	81.6	69.4	66.0	128.1	80.0	114.9	90.4
25-Feb	84.0	74.3	81.6	69.5	66.0	132.3	82.5	116.8	91.2
4-Mar	85.0	74.9	82.0	70.1	66.0	128.1	82.3	117.2	92.8
11-Mar	85.0	74.9	82.3	70.2	66.0	132.3	82.0	117.8	93.8
18-Mar	86.0	75.9	82.3	70.5	67.0	133.0	83.6	117.5	93.9
25-Mar	86.0	74.7	82.4	71.0	67.0	133.0	80.9	117.4	94.9
1-Apr	85.0	74.7	82.2	70.9	68.0	132.3	80.5	116.5	93.2
8-Apr	86.0	77.0	82.7	71.6	68.0	142.1	81.2	119.8	96.6
15-Apr	86.0	76.7	83.1	72.1	69.0	141.4	82.4	122.5	98.9
22-Apr	87.0	77.2	83.8	72.9	69.0	142.1	82.8	122.8	99.6
29-Apr	88.0	76.6	84.1	72.8	69.0	142.1	83.1	123.4	100.4
6-May	87.0	76.2	84.4	73.4	70.0	142.1	82.3	127.3	103.4
13-May	87.0	77.0	84.1	73.7	71.0	142.1	82.3	128.7	105.8
20-May	87.0	77.6	84.4	73.9	71.0	142.1	82.1	130.6	107.3
27-May	88.0	78.2	84.3	74.4	71.0	147.7	83.3	133.9	109.9
3-Jun	88.0	78.7	84.8	74.8	72.0	147.0	84.9	134.1	110.7
10-Jun	88.0	78.7	85.6	74.7	72.0	147.0	84.8	135.1	110.0
17-Jun	88.0	78.1	85.8	75.1	72.0	147.7	85.0	135.2	111.4
24-Jun	88.0	78.6	85.8	75.3	72.0	147.0	85.4	136.6	111.7
1-Jul	88.0	78.5	86.1	75.6	73.0	147.0	85.1	136.8	113.0
8-Jul	89.0	79.2	85.8	75.6	72.0	151.2	83.5	137.0	113.1
15-Jul	89.0	78.9	85.9	75.8	73.0	151.9	85.0	137.8	113.6
22-Jul	88.0	78.9	86.0	75.2	72.0	151.2	84.5	137.8	113.9
29-Jul	89.0	78.1	86.3	75.9	72.0	151.9	85.9	138.8	114.8
5-Aug	89.0	79.4	86.4	75.5	72.0	147.7	86.2	137.9	114.8
12-Aug	89.0	79.1	86.7	75.6	72.0	151.9	84.8	139.4	113.7
19-Aug	89.0	80.0	86.6	75.5	73.0	157.5	86.2	140.2	115.0
26-Aug	89.0	79.4	86.5	75.5	72.0	151.9	86.3	141.0	115.4
2-Sep	89.0	79.4	86.6	75.4	72.0	152.6	84.4	140.5	115.0
9-Sep	89.0	79.4	86.6	75.8	73.0	157.5	85.6	141.3	115.7
16-Sep	88.0	79.0	86.0	75.3	71.0	153.3	86.0	138.5	113.9
23-Sep	89.0	78.8	85.8	75.7	73.0	156.1	86.1	139.7	116.2
30-Sep	88.0	79.2	86.0	75.2	72.0	156.8	86.4	139.2	114.0
7-Oct	88.0	79.3	85.3	74.5	71.0	151.2	84.2	137.5	112.7
14-Oct	88.0	78.3	85.9	74.4	72.0	151.9	85.9	136.7	111.6
21-Oct	88.0	78.8	85.5	74.2	71.0	147.7	85.4	136.6	112.0
28-Oct	88.0	78.2	85.1	74.0	71.0	147.7	81.8	136.4	110.7
4-Nov	87.0	78.2	84.7	73.6	71.0	147.7	83.5	134.0	110.6
11-Nov	87.0	77.7	84.6	73.7	70.0	147.7	83.7	132.4	108.6
18-Nov	86.0	77.7	83.8	73.1	70.0	146.3	85.0	131.2	107.4
25-Nov	87.0	77.8	83.6	73.0	70.0	142.1	83.0	131.0	105.5
2-Dec	86.0	77.9	83.2	72.3	69.0	146.3	82.5	129.1	103.2
9-Dec	86.0	77.6	83.0	71.8	68.0	141.4	82.8	127.5	100.8
16-Dec	85.0	75.8	82.7	71.5	68.0	136.5	82.8	124.7	99.4
23-Dec	86.0	76.8	82.5	71.3	68.0	140.7	82.9	122.2	97.8
31-Dec	85.0	75.7	82.0	70.6	67.0	140.7	80.7	122.5	95.7

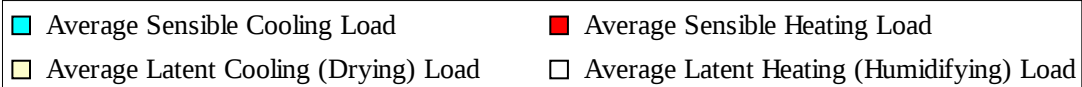
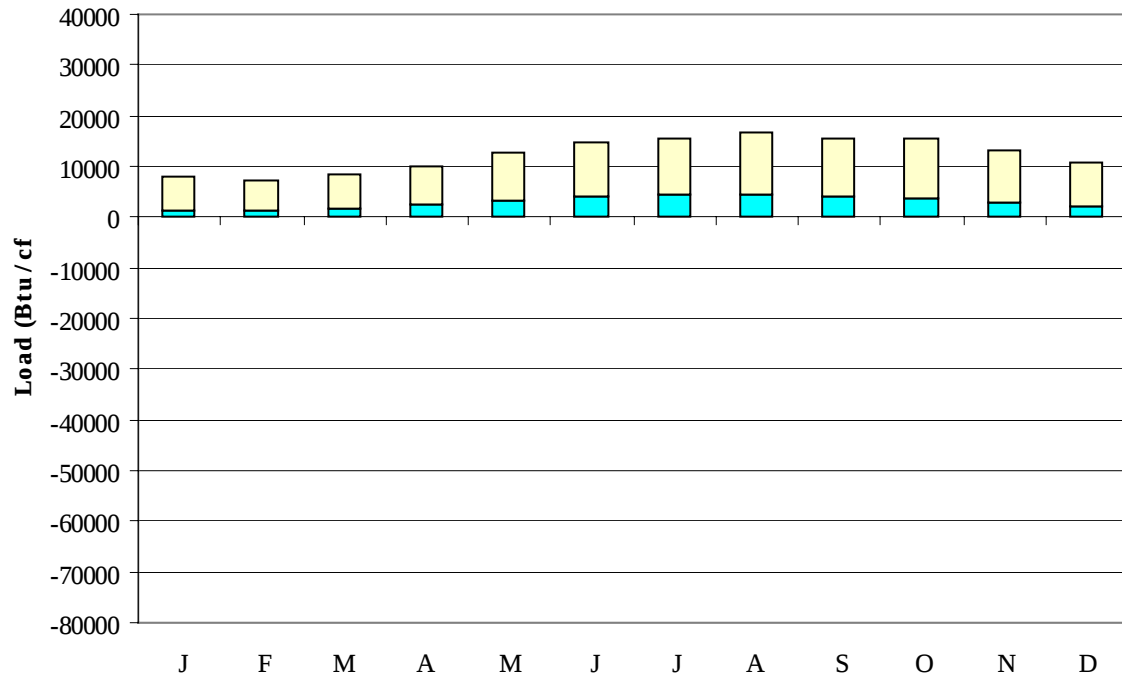
Degree Days, Heating and Cooling
(Base 65°F)



■ Mean Cooling Degree Days ■ Mean Heating Degree Days

	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	308	0
FEB	282	0
MAR	347	0
APR	379	0
MAY	416	0
JUN	430	0
JUL	447	0
AUG	419	0
SEP	398	0
OCT	380	0
NOV	358	0
DEC	333	0
ANN	4499	0

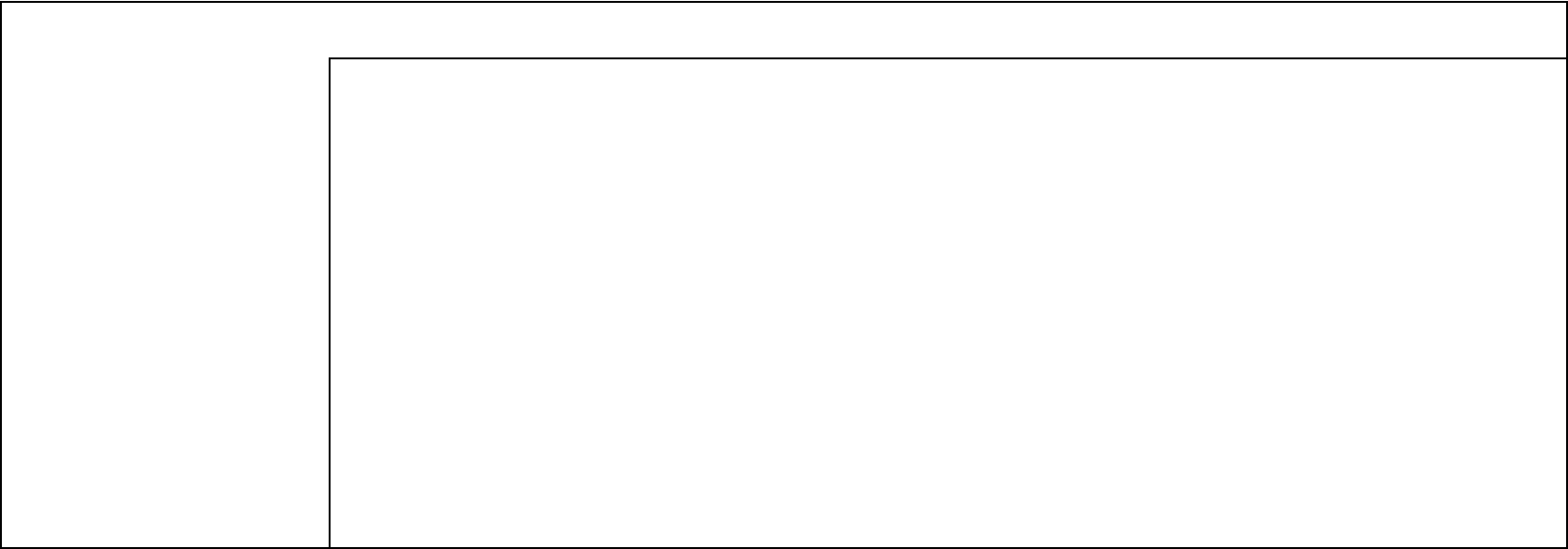
Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



	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	1511	-19	6629	0
FEB	1353	-24	5870	0
MAR	1900	-11	6586	0
APR	2623	-4	7437	0
MAY	3372	0	9540	0
JUN	4029	0	10571	0
JUL	4382	0	11242	0
AUG	4562	0	12284	0
SEP	4190	0	11239	0
OCT	3816	0	11707	0
NOV	2964	0	10223	0
DEC	2093	-8	8700	0
ANN	36795	-66	112028	0

Average Annual Solar Radiation – Nearest Available Site
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

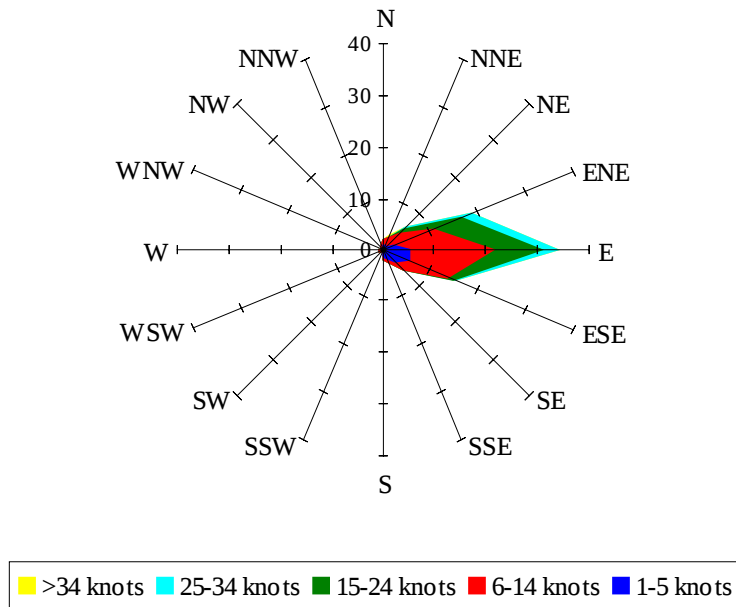
No Solar Radiation
Data Available



Average Annual Solar Heat and Illumination – Nearest Available Site

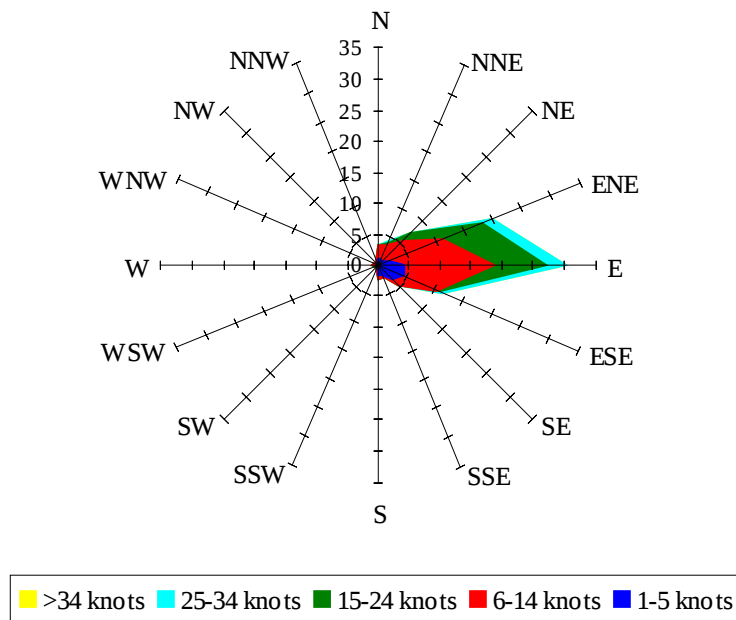
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

Wind Summary - December, January, and February **Labels of Percent Frequency on North Axis**



Percent Calm = 8.72

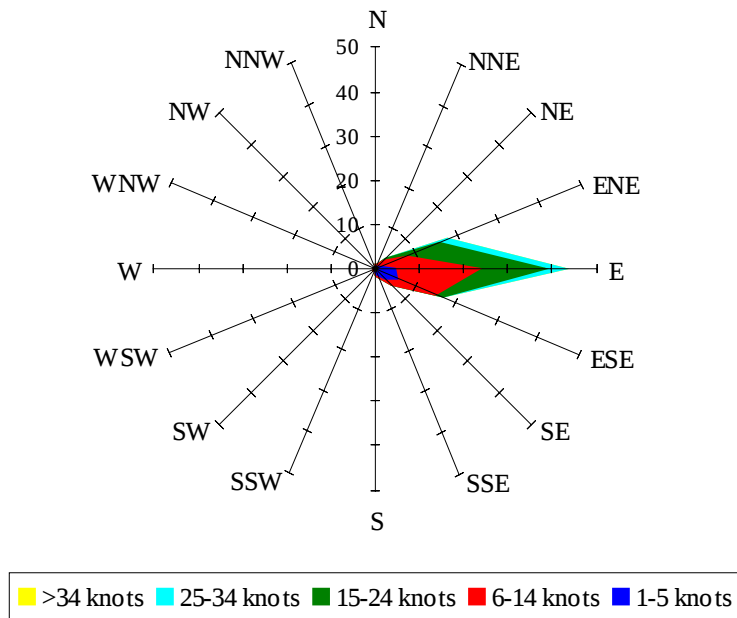
Wind Summary - March, April, and May **Labels of Percent Frequency on North Axis**



Percent Calm = 9.99

Wind Summary - June, July, and August

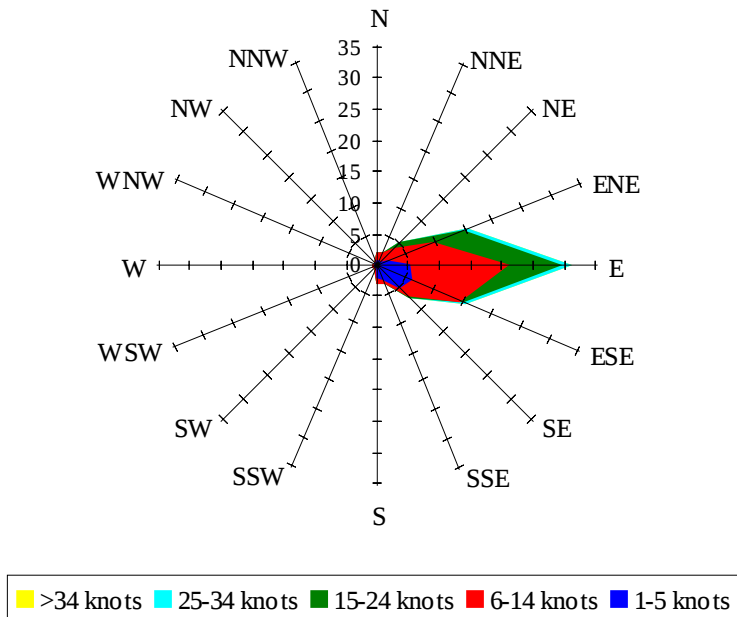
Labels of Percent Frequency on North Axis



Percent Calm = 6.86

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 12.17