

CAYENNE/ROCHAMBEAU FG

Latitude = 4.83 N

WMO No. 814050

Longitude = 52.37 W

Elevation = 30 feet

Period of Record = 1973 to 1996

Average Pressure = 29.82 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	78	123	11.4	E
0.4% Occurrence	90	78	124	11.3	E
1.0% Occurrence	89	77	125	11.8	E
2.0% Occurrence	88	77	125	11.8	E
Mean Daily Range	11	-	-	-	-
97.5% Occurrence	72	72	119	0.8	VARIABLE
99.0% Occurrence	71	71	114	0.4	VARIABLE
99.6% Occurrence	70	70	109	0.3	WSW
Median of Extreme Lows	68	68	102	0.5	MISSING
	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	87	153	11.4	E
0.4% Occurrence	80	86	140	10.4	E
1.0% Occurrence	79	84	137	9.3	E
2.0% Occurrence	79	84	137	9.3	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	169	87	1.12	13.2	E
0.4% Occurrence	150	83	0.99	8.4	E
1.0% Occurrence	142	81	0.94	7.1	E
2.0% Occurrence	141	81	0.94	6.8	E
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		0	3714	7660	8505

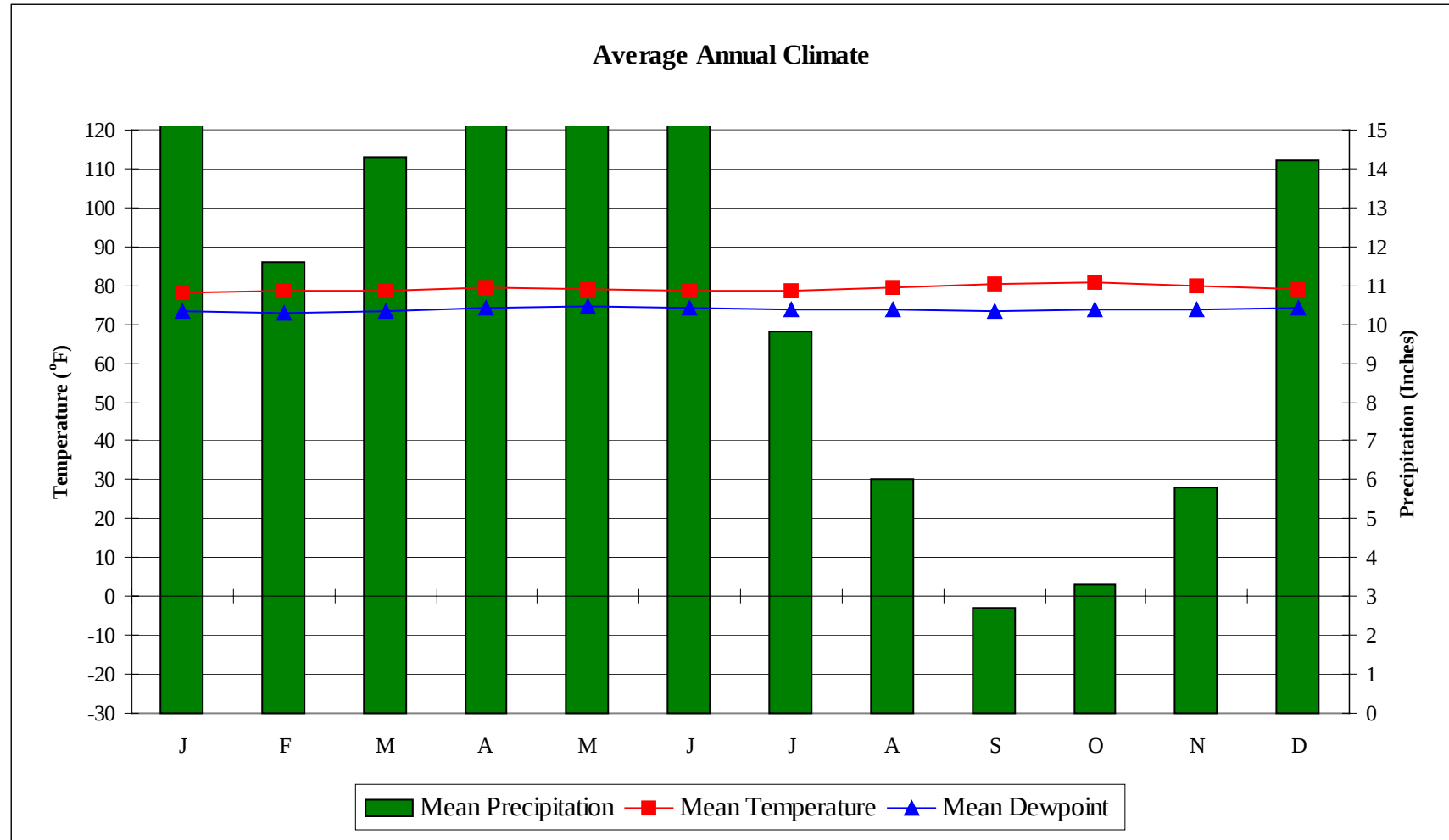
Other Site Data

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	11.6 + 3.3
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 (#)
81.6	N/A	N/A	0

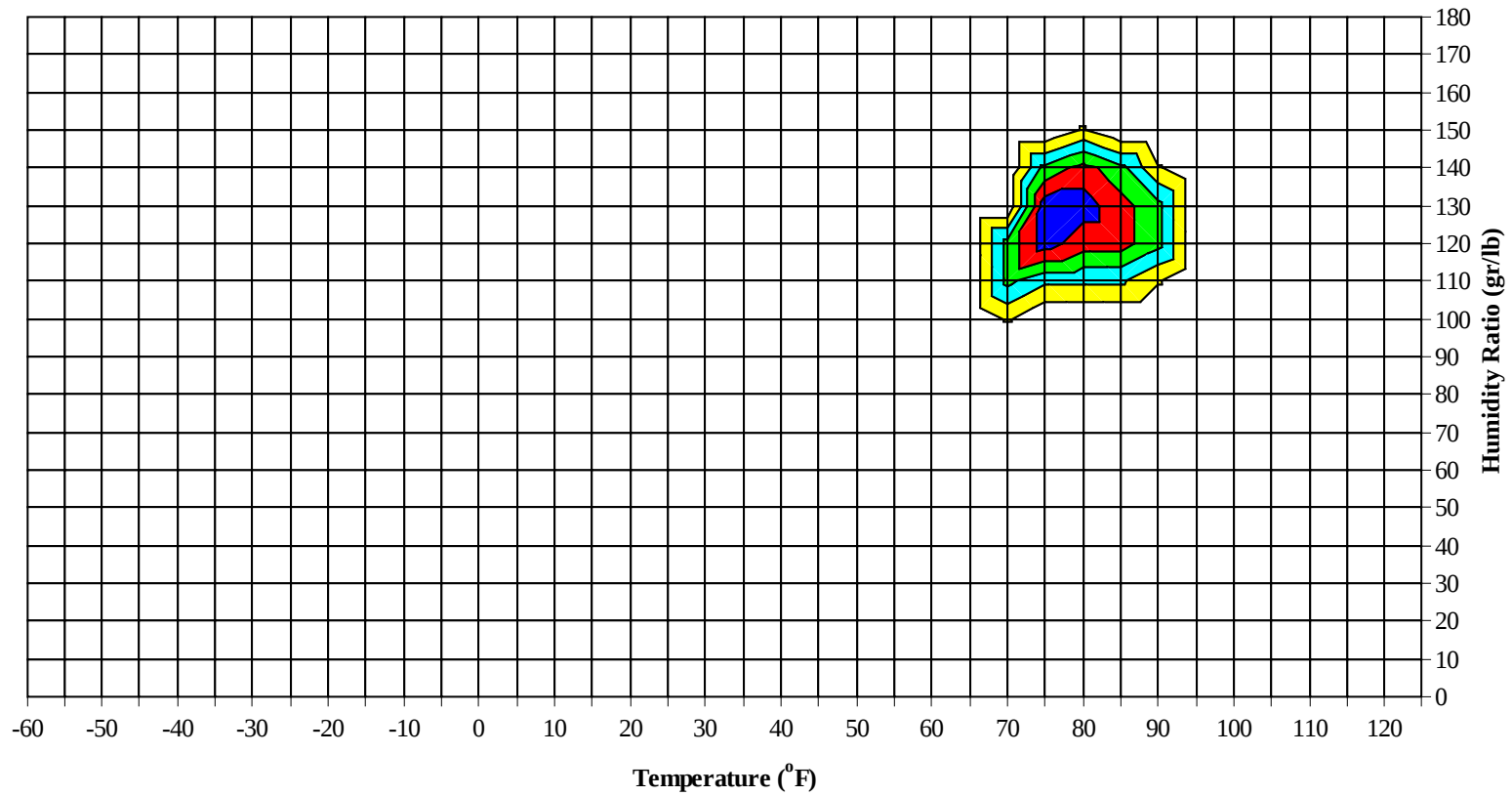
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

CAYENNE/ROCHAMBEAU FG

WMO No. 814050

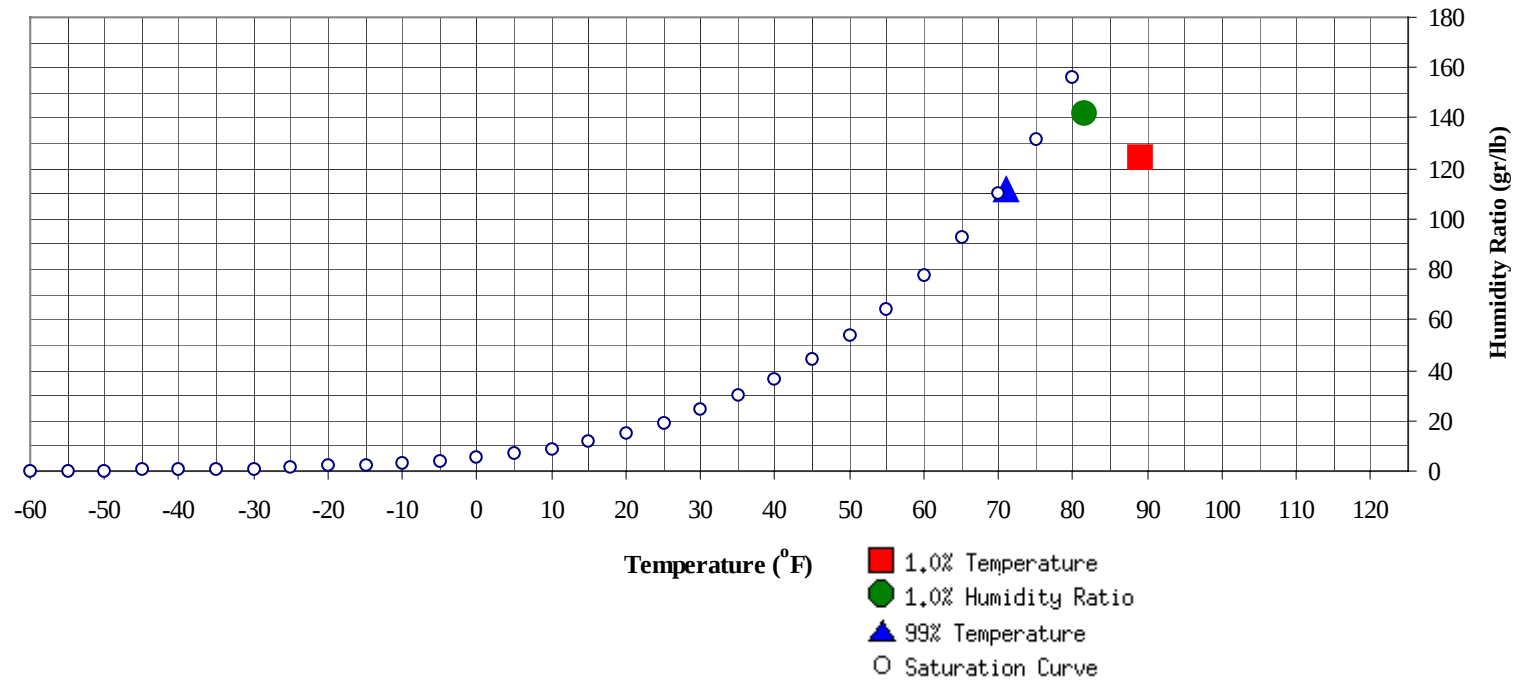


Long Term Psychrometric Summary



- 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



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)
	71	111.7	34.5		142.1	81.5	78.2	77	41.8

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	89	124.5	77.6	40.9

FG

WMO No. 814050

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

Period of Record = 1973 to 1996

[illegible]

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.

FG

WMO No. 814050

Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1973 to 1996

[illegible]

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.

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		
95 / 99															
90 / 94		2	0	2	77.8	0	8		8	78.2			0	0	81.5
85 / 89	0	83	11	94	77.3	0	112	17	129	77.5	0	130	20	151	77.2
80 / 84	0	102	71	173	76.6	0	85	82	167	76.7	0	68	90	157	76.7
75 / 79	55	57	135	247	74.9	69	40	129	239	74.9	75	18	116	209	74.9
70 / 74	193	4	31	228	72.3	177	2	21	200	72.1	163	1	13	177	71.9
65 / 69	0			0	67.0	1			1	68.3	3	0		3	68.1

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.

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		
95 / 99		0		0	80.5										
90 / 94		26		26	77.6		9		9	77.5		0		0	77.5
85 / 89	0	138	15	153	77.3	0	115	6	121	77.2		55	1	56	77.3
80 / 84	1	71	97	170	76.8	2	91	89	183	76.9	4	144	72	220	76.7
75 / 79	85	12	120	218	75.0	98	23	128	249	75.1	120	46	154	320	75.2
70 / 74	159	1	15	175	71.8	137	2	17	156	72.1	123	3	20	146	72.3
65 / 69	3	0	0	3	67.7	2			2	67.9	1	0		1	67.9

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.

FG

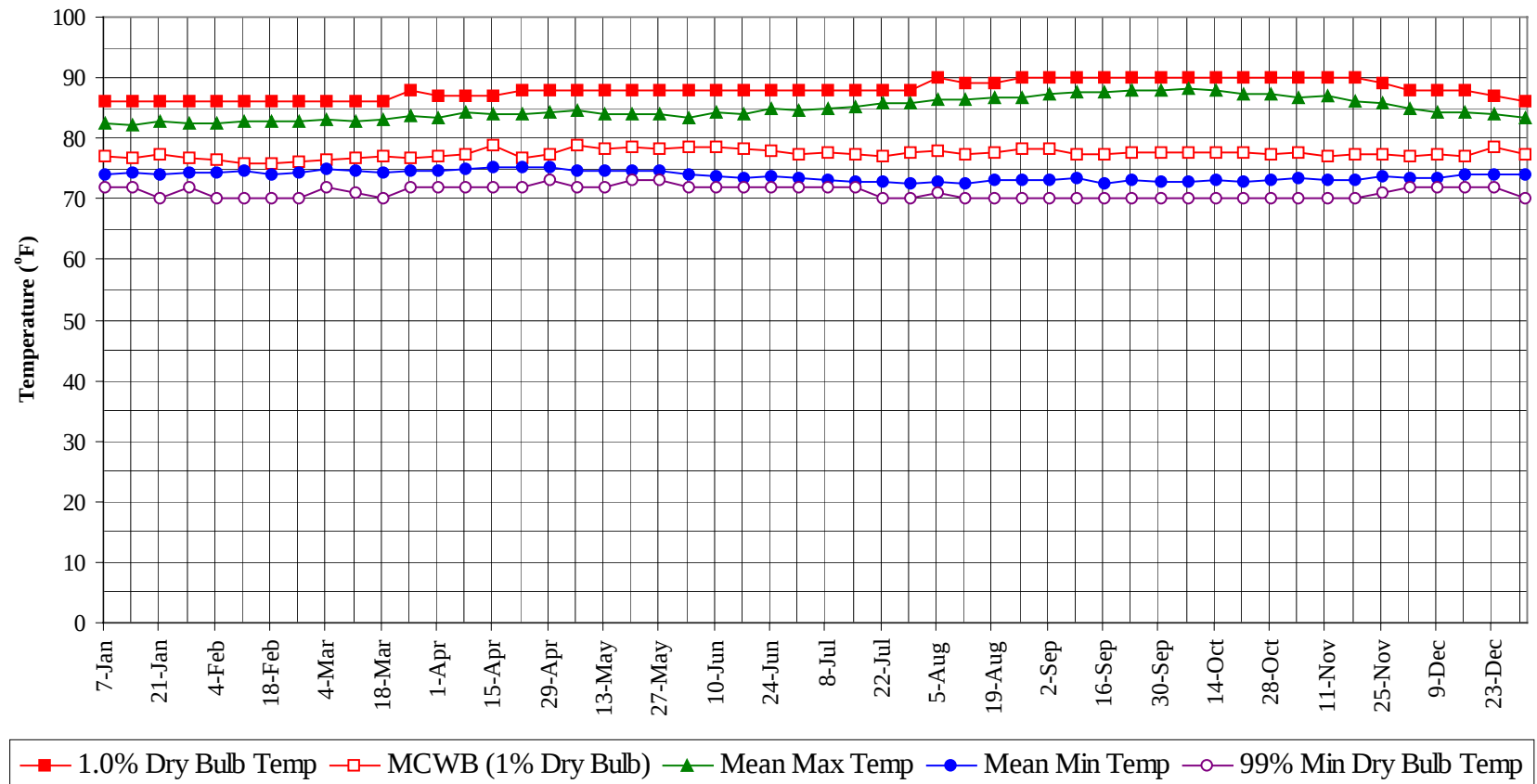
WMO No. 814050

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

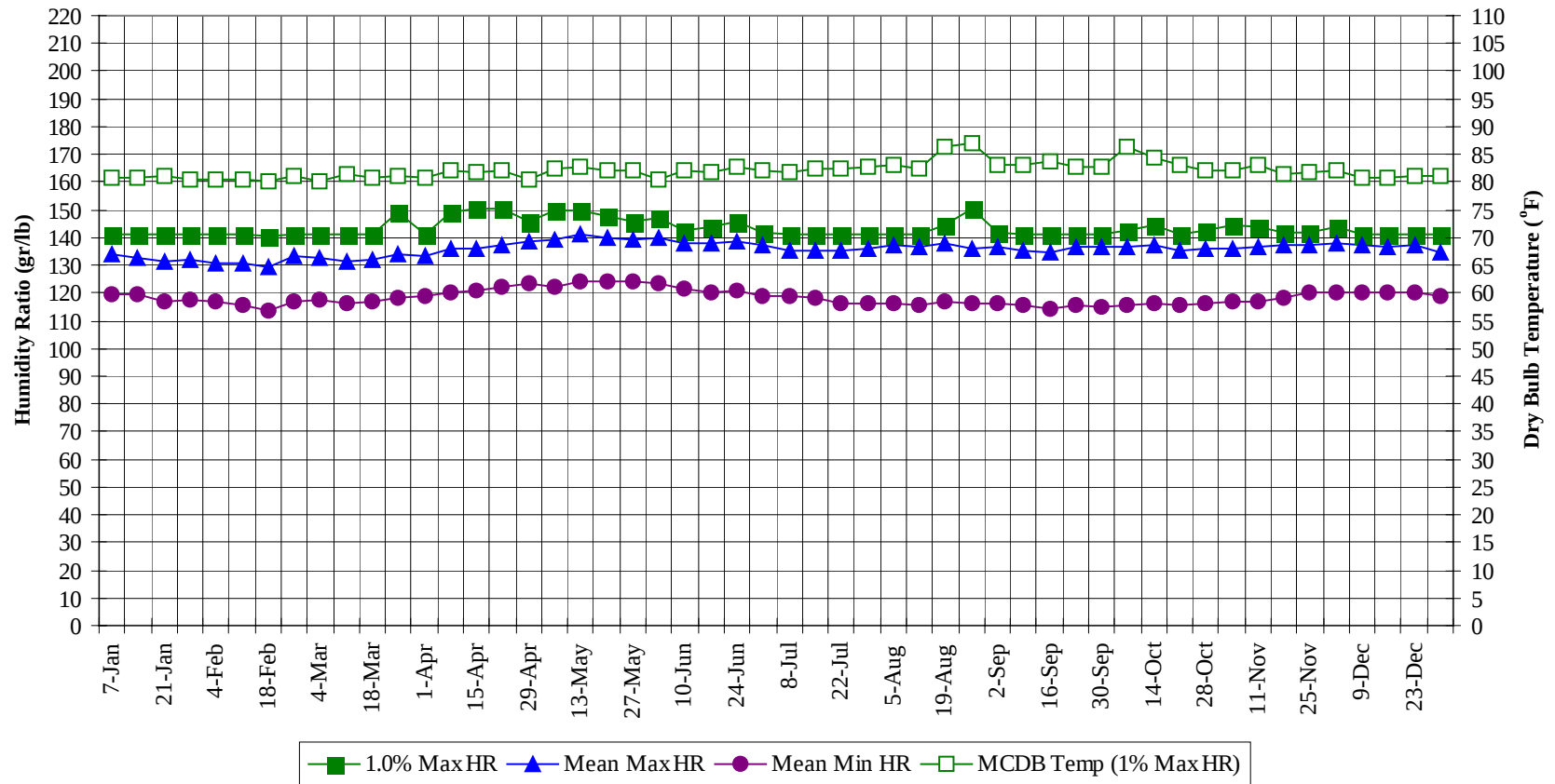
Period of Record = 1973 to 1996[illegible]

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

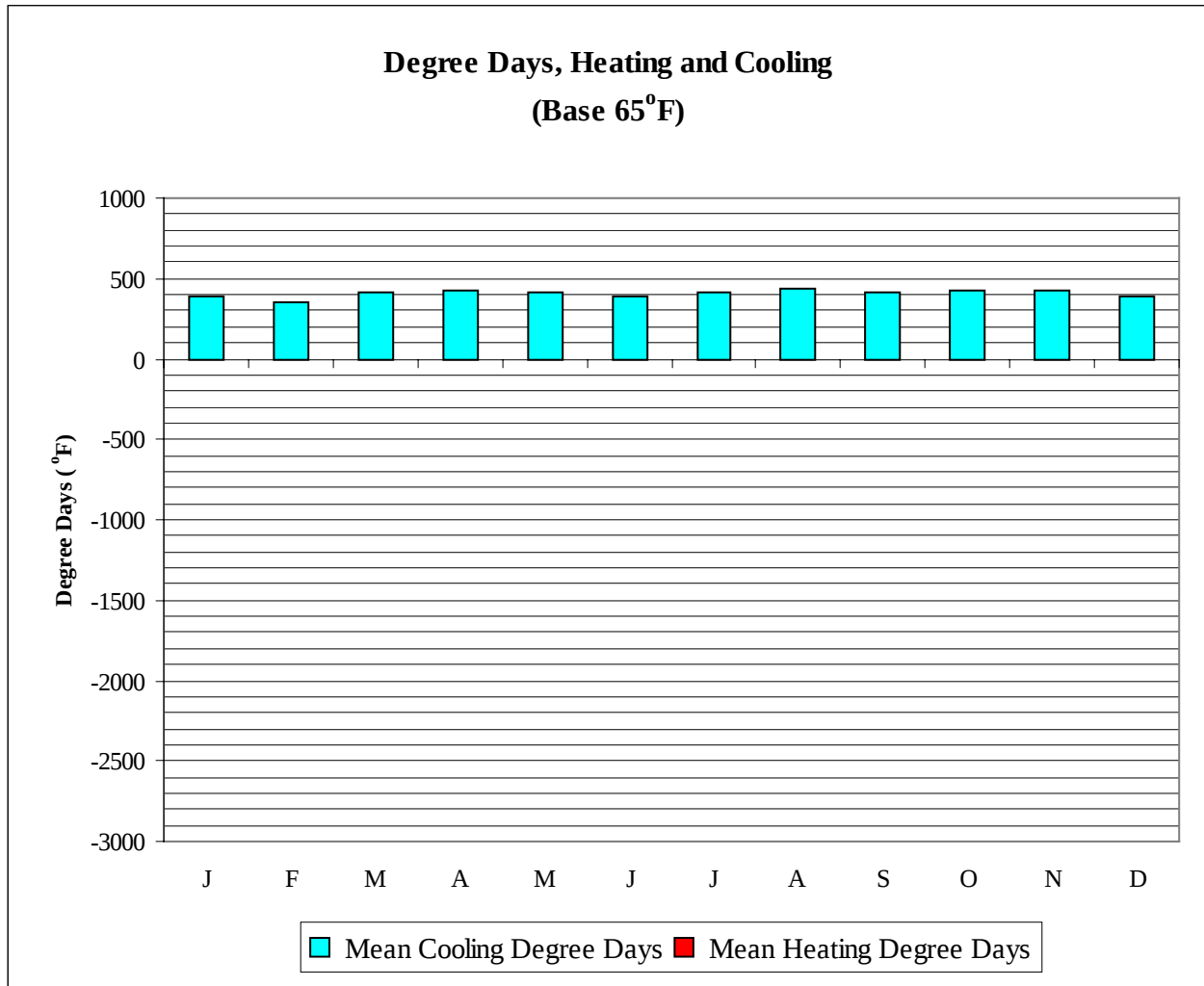


CAYENNE/ROCHAMBEAU FG

WMO No. 814050

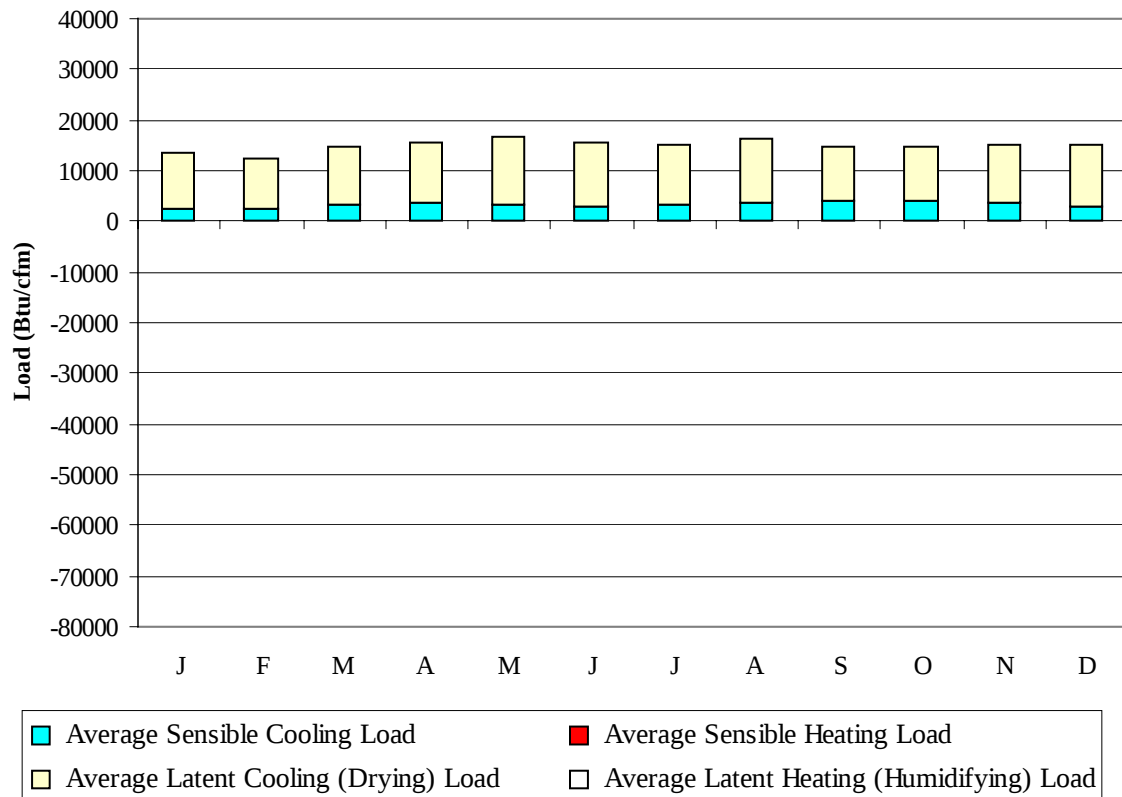
Long Term Dry Bulb Temperature and Humidity Summary

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	86.0	77.1	82.6	74.0	72.0	141.4	80.7	134.0	119.2
14-Jan	86.0	76.8	82.2	74.4	72.0	141.4	80.7	132.4	119.3
21-Jan	86.0	77.4	82.7	74.1	70.0	141.4	81.1	131.1	117.0
28-Jan	86.0	76.7	82.5	74.4	72.0	141.4	80.6	132.0	117.8
4-Feb	86.0	76.5	82.5	74.3	70.0	141.4	80.3	131.0	117.0
11-Feb	86.0	75.9	82.8	74.5	70.0	141.4	80.5	130.7	115.8
18-Feb	86.0	75.8	82.7	74.1	70.0	140.7	80.1	129.6	113.8
25-Feb	86.0	76.2	82.9	74.2	70.0	141.4	81.1	133.4	116.7
4-Mar	86.0	76.3	83.0	74.9	72.0	141.4	80.2	132.5	117.7
11-Mar	86.0	76.6	82.7	74.5	71.0	141.4	81.3	131.4	116.4
18-Mar	86.0	77.0	83.2	74.5	70.0	141.4	80.6	132.1	117.2
25-Mar	88.0	76.8	83.6	74.7	72.0	149.1	81.2	134.2	118.3
1-Apr	87.0	77.0	83.5	74.7	72.0	141.4	80.7	133.3	118.8
8-Apr	87.0	77.3	84.3	74.9	72.0	149.1	82.2	136.0	120.1
15-Apr	87.0	79.0	84.0	75.3	72.0	150.5	81.9	136.0	121.1
22-Apr	88.0	76.7	83.9	75.1	72.0	150.5	82.1	137.3	121.9
29-Apr	88.0	77.2	84.4	75.2	73.0	145.6	80.4	138.4	123.7
6-May	88.0	78.7	84.7	74.6	72.0	149.8	82.5	139.0	122.5
13-May	88.0	78.3	84.0	74.7	72.0	149.8	82.6	141.3	124.2
20-May	88.0	78.7	84.0	74.7	73.0	147.7	82.1	139.7	124.3
27-May	88.0	78.2	84.0	74.6	73.0	145.6	82.0	139.4	124.4
3-Jun	88.0	78.5	83.3	74.1	72.0	147.0	80.3	139.6	123.6
10-Jun	88.0	78.5	84.4	73.7	72.0	142.8	82.1	138.2	121.4
17-Jun	88.0	78.4	84.1	73.4	72.0	143.5	81.9	137.7	120.4
24-Jun	88.0	77.9	84.8	73.6	72.0	145.6	82.6	138.6	120.7
1-Jul	88.0	77.5	84.5	73.3	72.0	142.1	82.0	137.2	119.2
8-Jul	88.0	77.7	84.8	73.3	72.0	141.4	81.6	135.5	118.8
15-Jul	88.0	77.5	85.1	72.9	72.0	141.4	82.4	135.4	118.2
22-Jul	88.0	77.2	85.8	72.7	70.0	141.4	82.4	135.3	116.2
29-Jul	88.0	77.7	85.9	72.7	70.0	141.4	82.9	135.9	116.5
5-Aug	90.0	78.1	86.5	72.8	71.0	141.4	83.1	137.1	116.1
12-Aug	89.0	77.4	86.4	72.6	70.0	141.4	82.5	136.6	115.9
19-Aug	89.0	77.8	86.6	73.3	70.0	144.2	86.5	138.0	116.6
26-Aug	90.0	78.3	86.7	73.1	70.0	150.5	87.0	135.9	116.5
2-Sep	90.0	78.3	87.2	73.2	70.0	142.1	83.2	136.6	116.1
9-Sep	90.0	77.5	87.5	73.3	70.0	141.4	83.0	135.2	115.8
16-Sep	90.0	77.4	87.5	72.6	70.0	141.4	83.7	134.4	114.5
23-Sep	90.0	77.7	88.0	73.0	70.0	141.4	82.7	136.5	115.7
30-Sep	90.0	77.8	88.0	72.8	70.0	141.4	82.9	136.5	115.2
7-Oct	90.0	77.8	88.1	72.9	70.0	142.8	86.4	136.9	115.8
14-Oct	90.0	77.8	88.0	73.2	70.0	144.2	84.3	137.1	116.4
21-Oct	90.0	77.7	87.2	72.9	70.0	141.4	83.1	135.5	115.6
28-Oct	90.0	77.4	87.2	73.1	70.0	142.8	82.2	136.2	116.1
4-Nov	90.0	77.7	86.7	73.3	70.0	144.2	82.2	136.1	117.1
11-Nov	90.0	77.1	86.9	73.1	70.0	143.5	83.0	136.5	117.0
18-Nov	90.0	77.3	86.2	73.2	70.0	142.1	81.5	137.1	118.2
25-Nov	89.0	77.4	85.8	73.8	71.0	142.1	81.6	137.4	120.3
2-Dec	88.0	77.0	85.0	73.4	72.0	143.5	82.2	138.1	120.4
9-Dec	88.0	77.5	84.4	73.5	72.0	141.4	80.9	137.2	120.3
16-Dec	88.0	77.1	84.3	73.9	72.0	141.4	80.9	136.7	120.0
23-Dec	87.0	78.7	83.9	74.1	72.0	141.4	81.2	136.9	120.3
31-Dec	86.0	77.3	83.4	73.9	70.0	141.4	81.0	134.7	119.0



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	392	0
FEB	359	0
MAR	417	0
APR	425	0
MAY	416	0
JUN	391	0
JUL	413	0
AUG	439	0
SEP	419	0
OCT	431	0
NOV	423	0
DEC	387	0
ANN	4910	0

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	2682	0	10745	0
FEB	2556	0	10002	0
MAR	3134	0	11670	0
APR	3525	0	12022	0
MAY	3238	0	13426	0
JUN	2874	0	12683	0
JUL	3290	0	11821	0
AUG	3858	0	12261	0
SEP	3995	0	10700	0
OCT	4126	0	10642	0
NOV	3701	0	11435	0
DEC	2954	0	12015	0
ANN	39933	0	139422	0

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

No Solar Radiation
Data Available

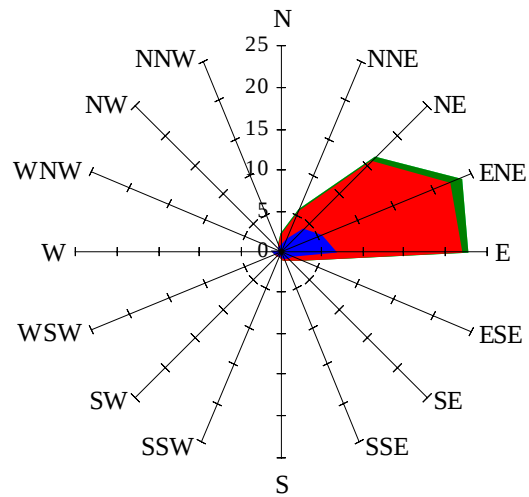


Average Annual Solar Heat and Illumination – Nearest Available Site

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

Wind Summary - December, January, and February

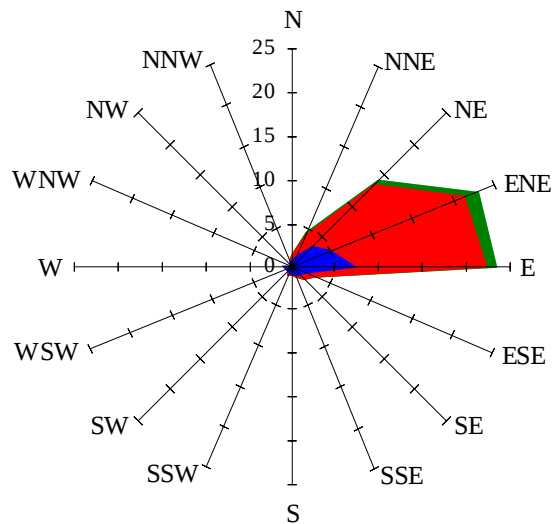
Labels of Percent Frequency on North Axis



Percent Calm = 19.77

Wind Summary - March, April, and May

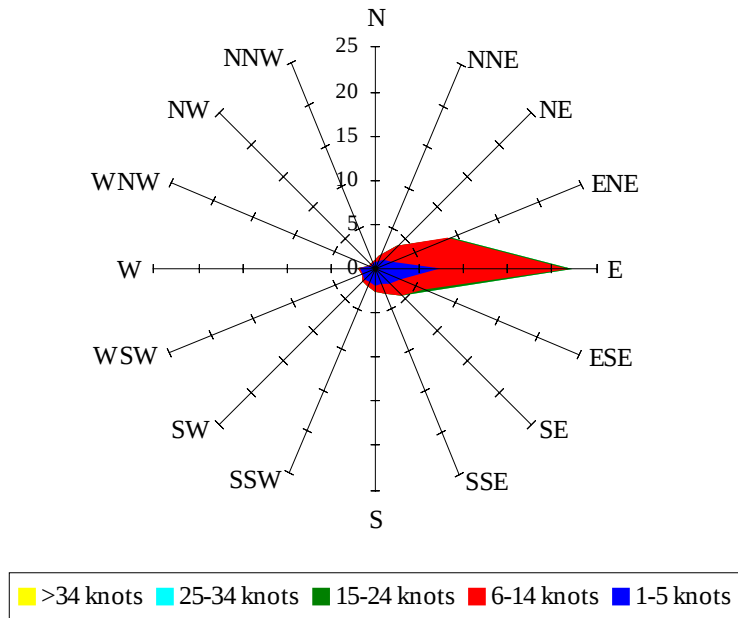
Labels of Percent Frequency on North Axis



Percent Calm = 23.00

Wind Summary - June, July, and August

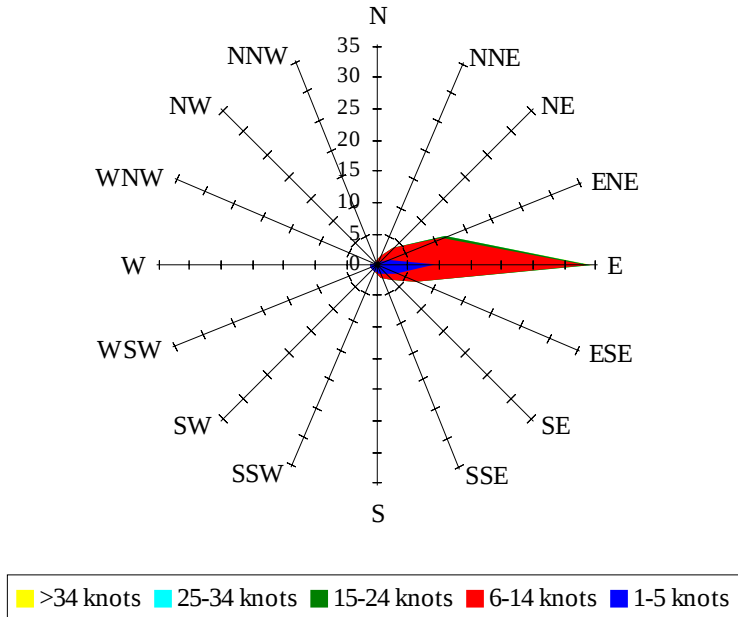
Labels of Percent Frequency on North Axis



Percent Calm = 38.61

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 32.01