

RICKENBACKER OH

Latitude = 39.82 N

Longitude = 82.93 W

Period of Record = 1967 to 1996

WMO No. 724285

Elevation = 745 feet

Average Pressure = 29.21 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	95	76	105	9.5	W
0.4% Occurrence	91	75	107	9.0	W
1.0% Occurrence	88	73	102	8.6	SW
2.0% Occurrence	86	72	98	7.9	SSW
Mean Daily Range	18	-	-	-	-
97.5% Occurrence	14	12	7	7.6	W
99.0% Occurrence	7	6	5	6.8	W
99.6% Occurrence	2	1	4	7.1	W
Median of Extreme Lows	-2	-3	3	7.9	W
	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	80	90	139	8.5	WSW
0.4% Occurrence	77	87	125	8.2	SW
1.0% Occurrence	76	86	121	7.8	SW
2.0% Occurrence	74	83	114	7.1	SSW
	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	144	87	0.94	6.9	SW
0.4% Occurrence	130	83	0.85	6.4	SSW
1.0% Occurrence	123	81	0.79	7.7	SSW
2.0% Occurrence	118	79	0.77	5.9	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		20	633	312	1276

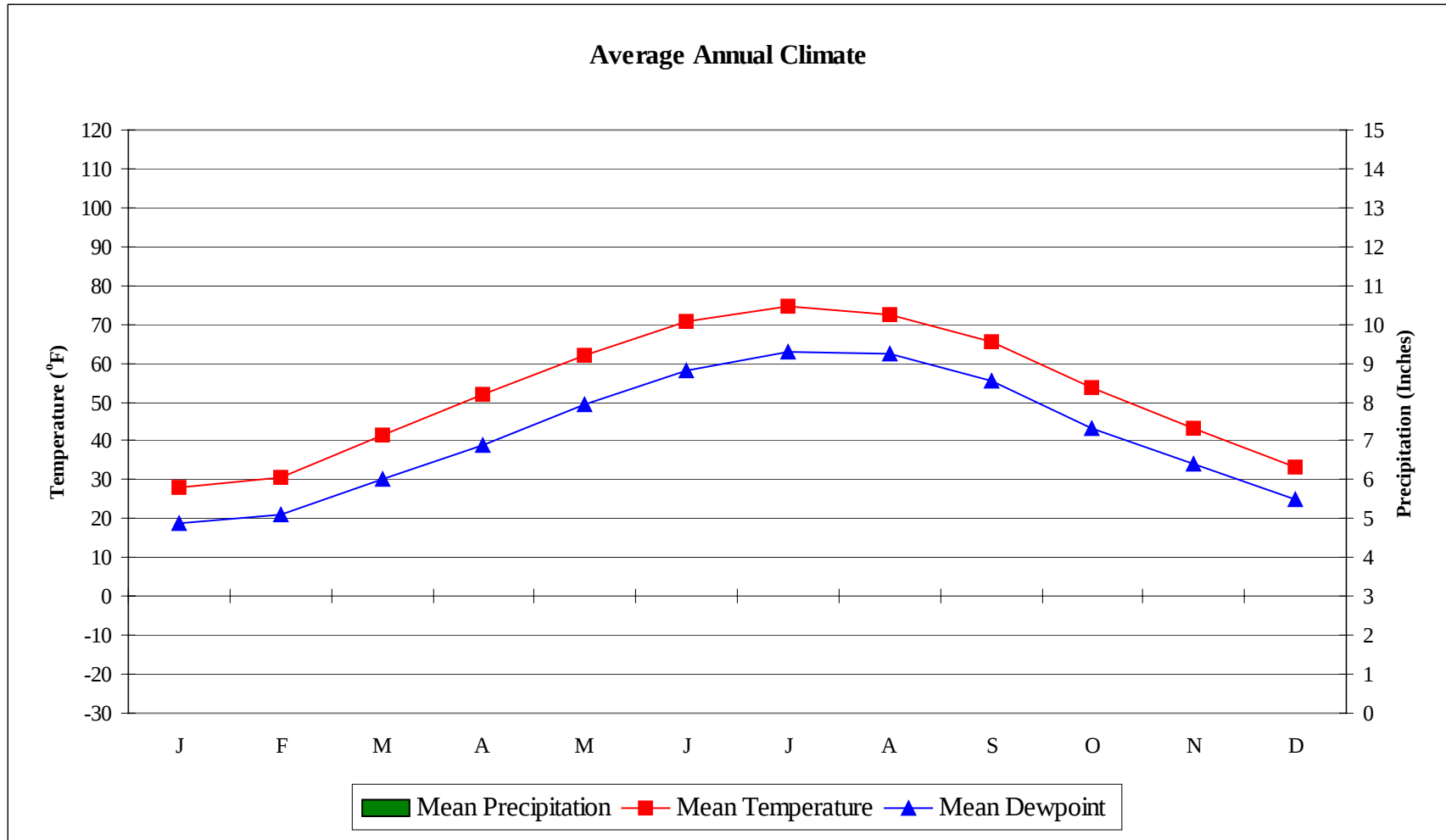
Other Site Data

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	2.8	90	1.6 + 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 (#)
54.9	N/A	N/A	55

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

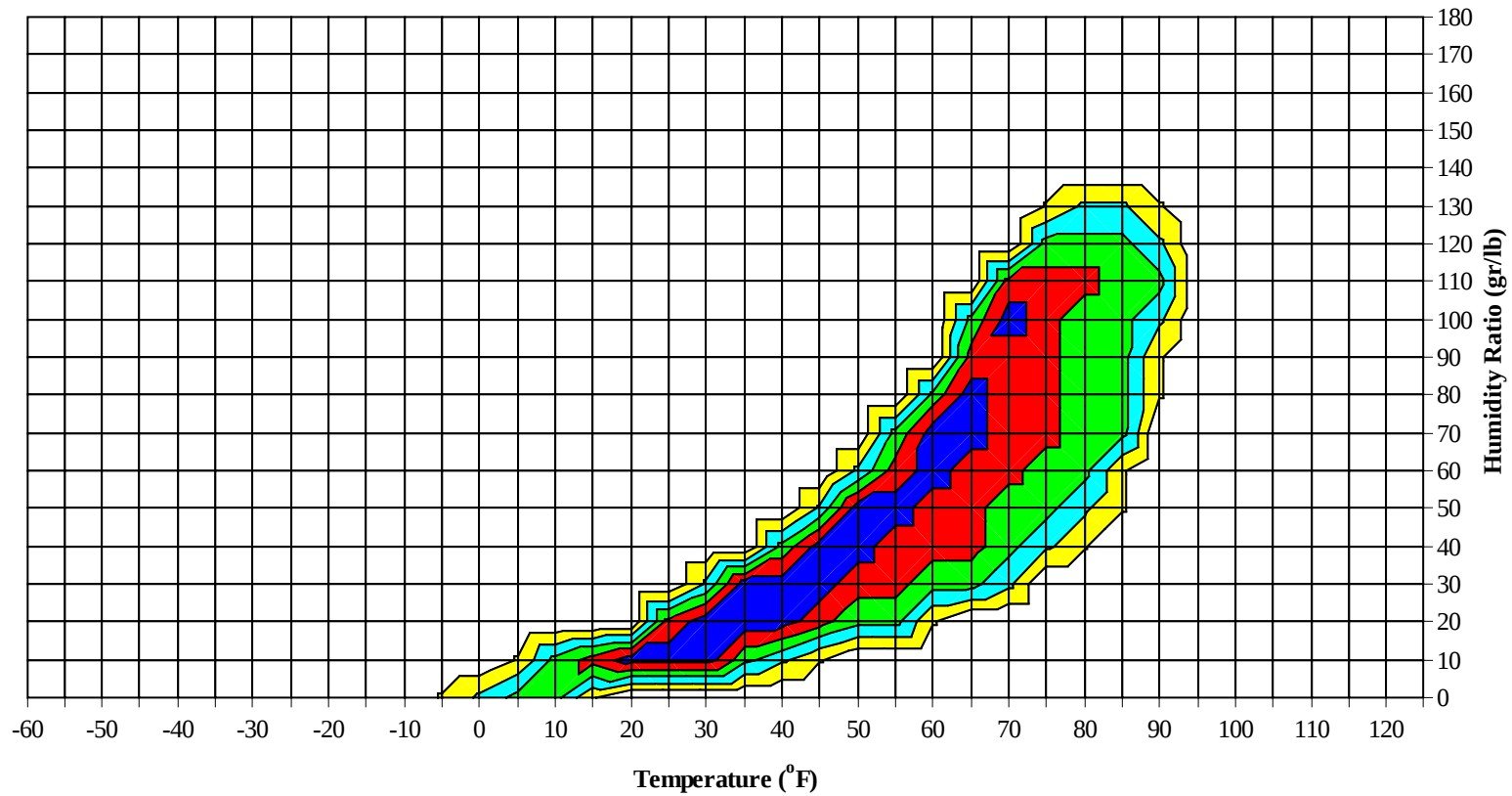
RICKENBACKER OH

WMO No. 724285



No Precipitation Data Available

Long Term Psychrometric Summary

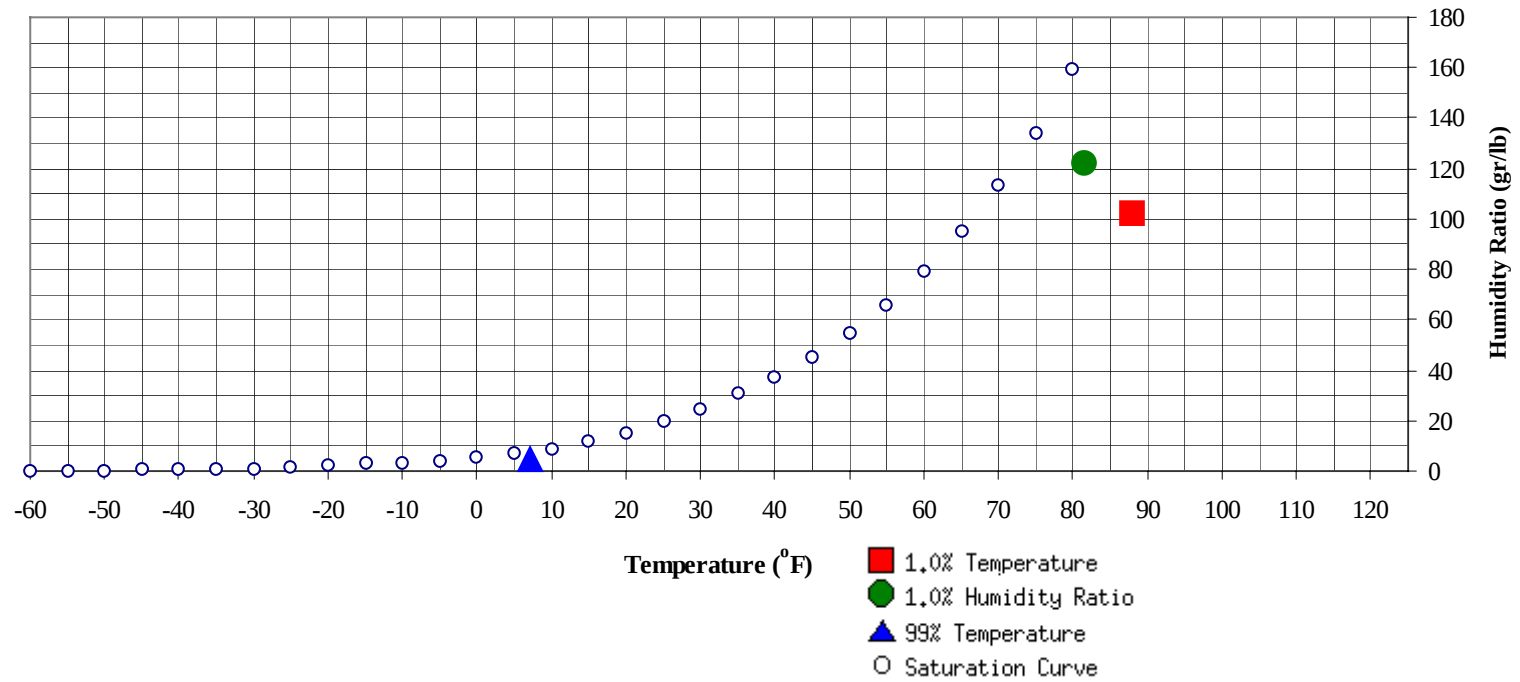


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

RICKENBACKER OH

WMO No. 724285

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	7	5.1	2.5		122.5	81.4	74.6	72	38.7

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	88	102.1	73.1	37.2

RICKENBACKER OH

WMO No. 724285

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

Period of Record = 1967 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	62.7
75 / 79												5	1	6	60.9
70 / 74							0		0	55.3		7	4	11	58.4
65 / 69		0	0	0	58.3		1	0	1	53.3	1	12	8	21	55.6
60 / 64	0	2	1	3	55.0	0	3	1	4	51.7	6	15	15	36	53.7
55 / 59	3	3	3	9	51.7	1	7	5	13	50.2	12	20	20	52	50.3
50 / 54	4	7	4	15	47.0	5	11	9	25	46.9	16	28	24	68	45.8
45 / 49	8	12	10	30	42.5	8	16	14	38	41.9	24	31	31	86	41.8
40 / 44	12	22	20	54	38.2	14	27	27	68	37.7	27	38	39	104	37.3
35 / 39	27	43	36	105	33.3	29	37	34	101	33.2	44	40	42	125	33.0
30 / 34	47	47	52	146	29.1	40	39	43	123	28.8	52	30	38	119	28.8
25 / 29	41	35	37	113	24.2	40	30	34	105	24.3	34	15	18	66	24.6
20 / 24	34	29	31	94	19.8	30	23	24	77	19.7	19	6	6	31	20.1
15 / 19	25	21	23	69	15.0	20	16	16	52	15.2	6	2	3	11	15.4
10 / 14	18	13	16	47	10.4	15	9	10	34	10.6	3	1	1	5	10.7
5 / 9	14	7	7	28	5.6	9	4	5	18	6.0	2	0	0	2	5.8
0 / 4	7	4	4	15	0.9	7	2	2	11	1.2	1			1	1.7
-5 / -1	4	2	2	8	-3.2	3	0	0	3	-2.7					
-10 / -6	2	1	1	4	-7.4	1	0		1	-7.3					
-15 / -11	1	1	1	3	-12.2	0			0	-11.0					
-20 / -16	0	0	0	0	-17.0										
-25 / -21	0	0		0	-21.5										
-30 / -26	0			0	-25.0										

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.

RICKENBACKER OH

WMO No. 724285

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

Period of Record = 1967 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												0		0	77.4
95 / 99												1	0	1	75.2
90 / 94							1	0	1	70.3		8	3	11	73.5
85 / 89		0	0	0	66.6		9	3	12	69.4	0	31	13	45	71.2
80 / 84		7	3	10	64.0		24	10	34	67.0	0	49	27	76	68.9
75 / 79		12	5	17	62.2	1	30	20	51	64.8	9	54	44	107	66.7
70 / 74	0	19	13	32	59.6	8	41	33	83	62.2	42	47	63	153	64.8
65 / 69	6	26	21	53	56.9	28	44	48	121	59.3	69	29	47	144	61.6
60 / 64	20	36	33	89	54.2	50	40	48	137	56.0	54	15	26	95	57.4
55 / 59	26	35	35	96	50.1	46	29	38	112	51.4	38	5	12	55	53.2
50 / 54	33	35	38	106	45.9	49	22	28	98	47.2	20	1	4	25	48.8
45 / 49	37	32	37	106	41.9	39	8	15	62	43.5	6	0	0	6	45.1
40 / 44	43	23	29	94	37.9	19	1	4	24	38.9	1			1	42.4
35 / 39	41	12	17	69	33.7	7	0	0	7	34.4					
30 / 34	22	4	7	33	29.4	1			1	31.5					
25 / 29	10	1	1	12	24.8										
20 / 24	1	0	0	1	20.7										
15 / 19	0			0	16.3										
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															

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RICKENBACKER OH

WMO No. 724285

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1967 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		1	0	1	72.6		0	0	0	78.9					
95 / 99		3	1	4	75.1		1	0	1	76.1		0	0	0	69.4
90 / 94		19	7	26	75.6		12	3	15	75.9		4	1	5	73.9
85 / 89	0	41	20	61	73.0		33	12	46	73.5		14	3	17	72.0
80 / 84	3	69	42	114	70.4	0	64	34	98	70.7		31	12	43	69.5
75 / 79	19	61	61	141	68.8	11	61	54	126	68.7	2	44	27	73	66.9
70 / 74	78	40	69	188	67.0	59	48	72	180	66.8	25	53	48	126	65.2
65 / 69	79	12	35	126	63.2	77	23	44	143	63.3	45	39	50	133	61.6
60 / 64	48	2	11	61	58.5	57	5	21	83	58.8	47	30	42	118	57.3
55 / 59	17	0	2	19	53.7	30	1	6	37	54.1	43	18	30	91	53.1
50 / 54	3			3	49.6	11		1	12	50.2	41	6	18	65	49.0
45 / 49						2		0	2	45.7	24	2	7	33	44.5
40 / 44						0			0	40.6	11	0	2	13	40.2
35 / 39											4		0	4	36.1
30 / 34											0			0	32.2
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															

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RICKENBACKER OH

WMO No. 724285

Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)

Period of Record = 1967 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	67.5										
80 / 84		5	1	6	66.4										
75 / 79		16	4	20	64.7										
70 / 74	2	25	11	38	61.6		2	0	2	63.5		0		0	64.0
65 / 69	10	33	26	69	59.1	1	12	5	18	58.3		0			
60 / 64	21	41	38	100	55.5	10	16	14	40	56.0	2	5	3	10	56.3
55 / 59	33	41	39	113	51.3	15	26	20	61	51.7	5	8	7	20	53.0
50 / 54	42	41	49	132	47.2	23	33	28	84	47.1	9	13	10	32	48.3
45 / 49	45	28	41	114	42.8	29	35	35	99	42.7	13	20	16	49	43.0
40 / 44	42	13	25	80	38.7	32	42	41	115	37.9	18	33	25	76	38.5
35 / 39	30	4	10	44	34.7	46	37	44	127	33.6	38	50	47	135	33.7
30 / 34	17	1	4	22	30.3	40	23	33	96	29.2	57	48	58	163	29.3
25 / 29	6	0	1	7	26.1	28	7	14	49	25.0	40	31	37	108	24.5
20 / 24	1			1	22.2	11	2	4	17	20.4	26	17	21	64	19.9
15 / 19						3	1	1	5	15.5	19	10	12	41	15.3
10 / 14						0	0	0	0	11.8	10	5	6	21	10.7
5 / 9						0		0	0	5.8	4	3	4	11	5.9
0 / 4											3	1	2	6	1.2
-5 / -1											0	1	0	1	-3.5
-10 / -6											1	0	1	2	-7.6
-15 / -11											1	0		1	-11.4
-20 / -16											0	0		0	-16.0
-25 / -21															
-30 / -26															

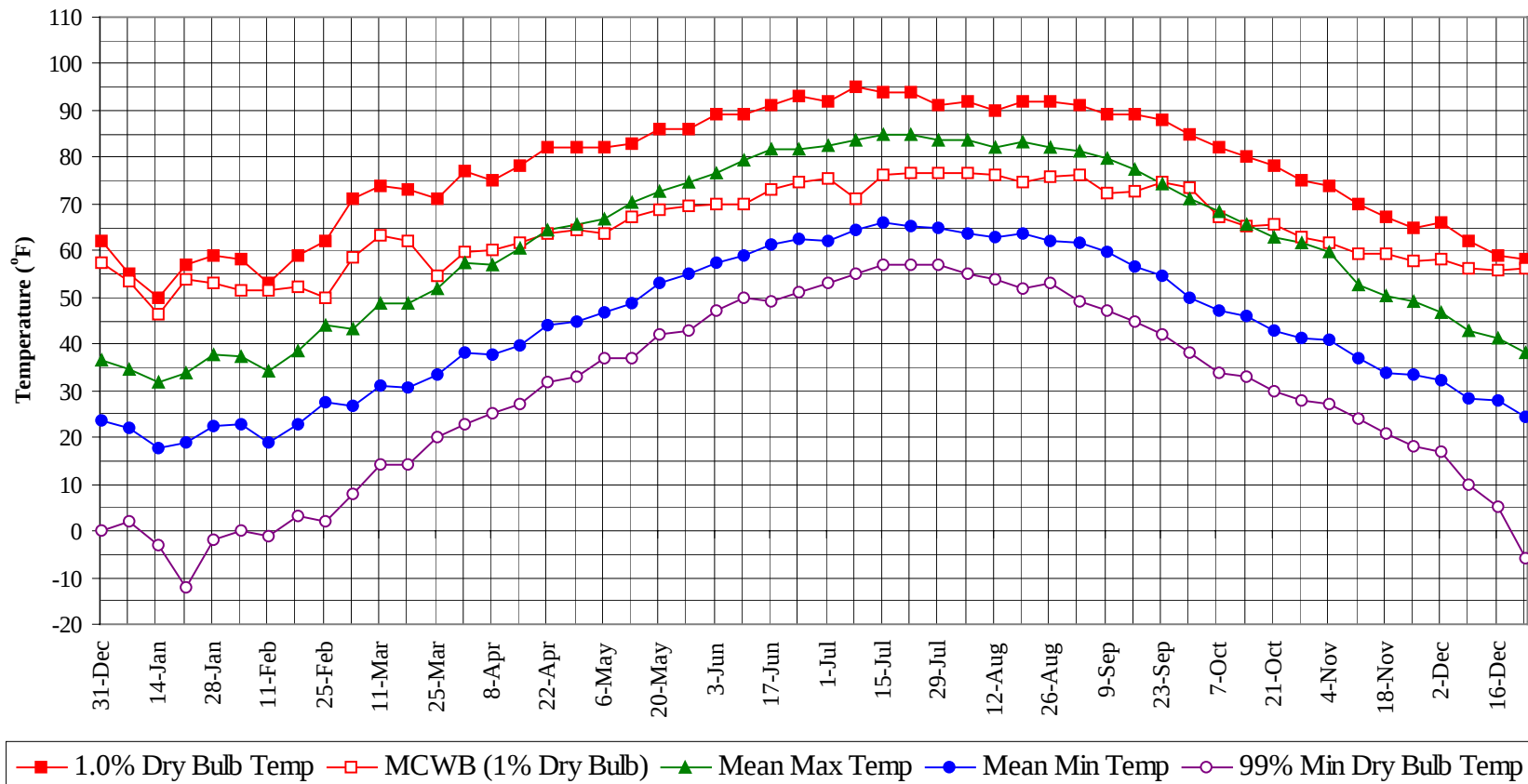
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

RICKENBACKER OH**WMO No. 724285****Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)****Period of Record = 1967 to 1996**

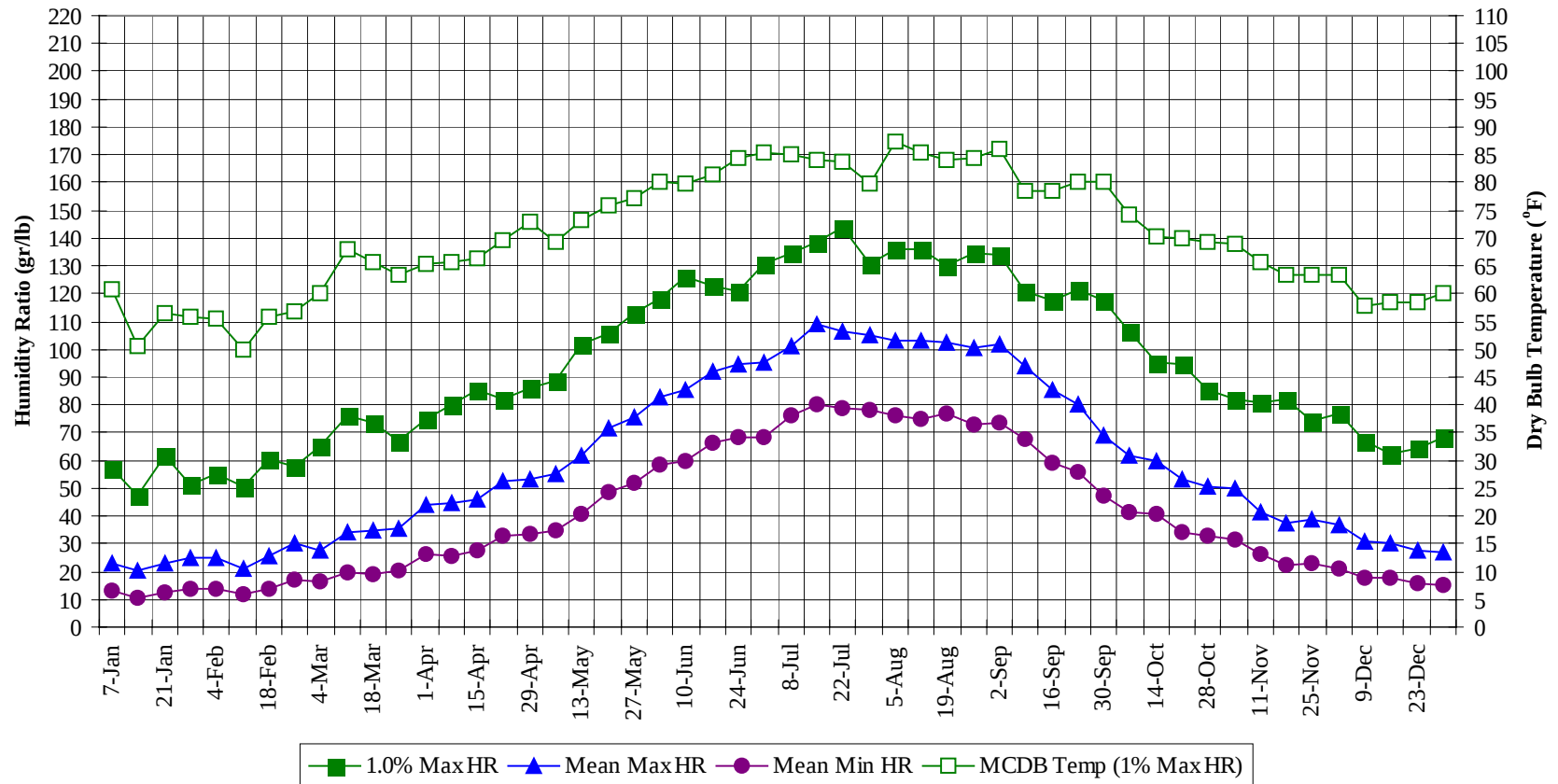
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104		1	0	1	75.2
95 / 99		5	2	7	75.2
90 / 94		43	14	57	75.1
85 / 89	0	130	52	182	72.3
80 / 84	4	249	129	382	69.5
75 / 79	41	285	214	540	67.3
70 / 74	215	286	314	814	65.1
65 / 69	316	231	284	831	61.1
60 / 64	315	209	253	777	56.4
55 / 59	271	191	216	678	51.8
50 / 54	257	195	213	666	47.2
45 / 49	236	182	207	624	42.6
40 / 44	221	198	212	631	38.1
35 / 39	264	222	232	718	33.5
30 / 34	278	192	236	706	29.1
25 / 29	200	120	142	462	24.5
20 / 24	122	76	86	284	19.9
15 / 19	73	50	55	177	15.2
10 / 14	47	28	33	108	10.5
5 / 9	29	14	16	59	5.8
0 / 4	17	6	8	31	1.1
-5 / -1	7	3	3	13	-3.1
-10 / -6	4	2	2	8	-7.5
-15 / -11	2	1	1	4	-12.0
-20 / -16	0	0	0	0	-16.8
-25 / -21	0	0		0	-21.5
-30 / -26	0			0	-25.0

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Annual Summary of Temperatures

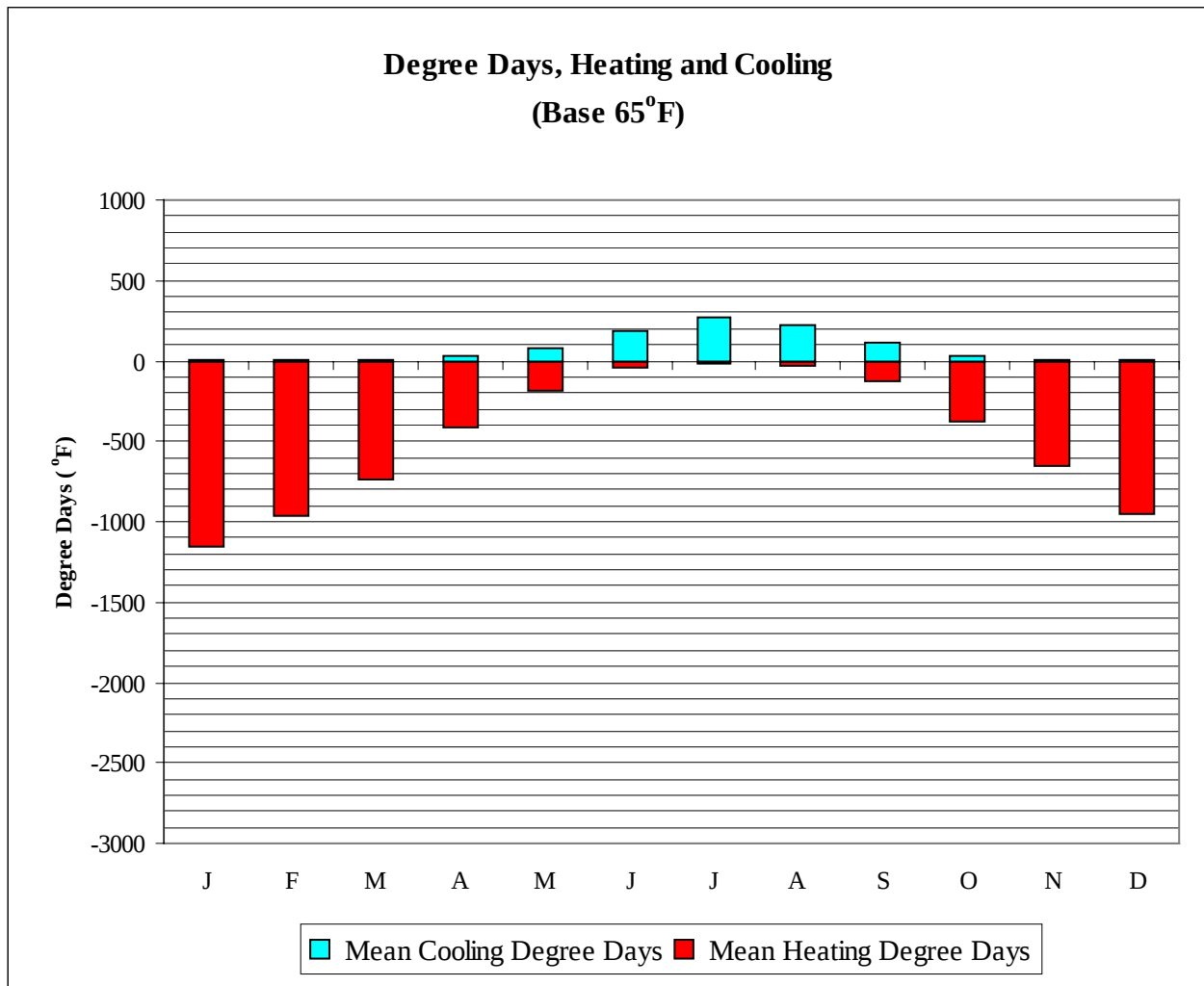


Long Term Humidity and Dry Bulb Temperature Summary



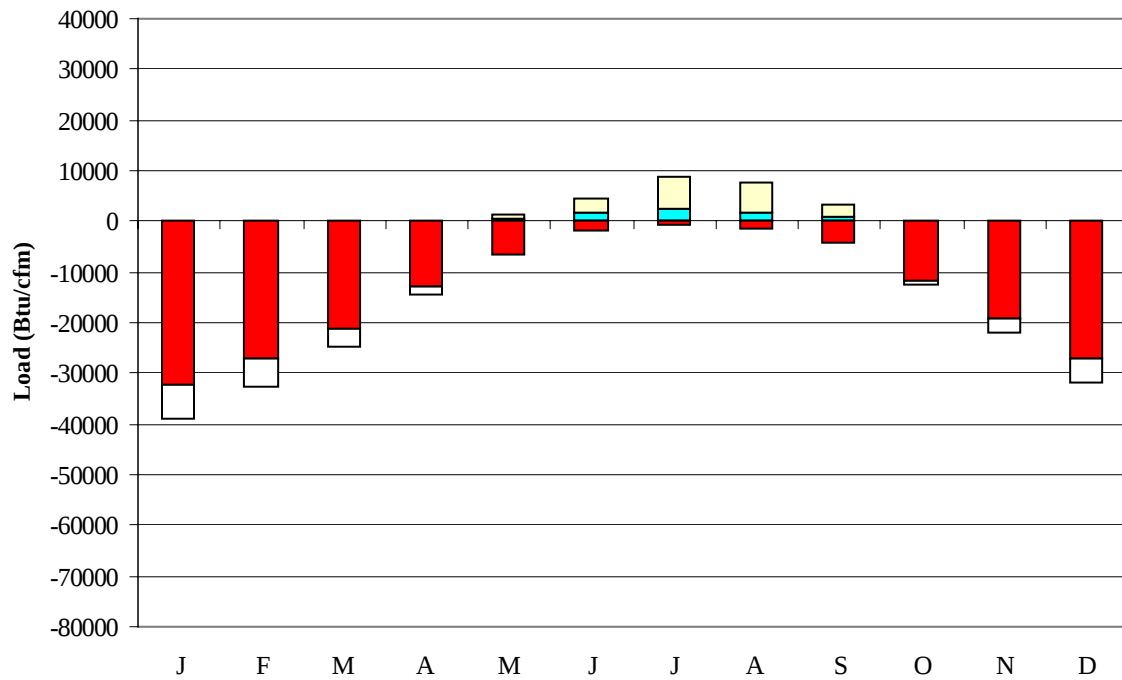
RICKENBACKER OH**WMO No. 724285****Long Term Dry Bulb Temperature and Humidity Summary**

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	55.0	53.3	34.6	22.1	2.0	57.4	60.7	22.8	13.2
14-Jan	50.0	46.4	31.9	17.6	-3.0	47.6	50.5	20.6	10.8
21-Jan	57.0	54.0	34.0	18.9	-12.0	61.6	56.5	23.0	12.6
28-Jan	59.0	53.0	37.7	22.4	-2.0	51.1	55.9	24.7	13.8
4-Feb	58.0	51.7	37.5	23.0	0.0	55.3	55.6	25.1	13.8
11-Feb	53.0	51.3	34.2	18.9	-1.0	50.4	50.0	20.9	11.6
18-Feb	59.0	52.1	38.7	22.7	3.0	60.2	55.8	25.6	14.0
25-Feb	62.0	50.0	43.9	27.4	2.0	58.1	56.9	30.2	17.1
4-Mar	71.0	58.6	43.4	26.7	8.0	65.1	60.0	27.7	16.5
11-Mar	74.0	63.1	48.6	30.9	14.0	76.3	67.9	34.1	19.8
18-Mar	73.0	62.0	48.8	30.8	14.0	73.5	65.8	34.8	19.1
25-Mar	71.0	54.6	51.8	33.4	20.0	67.2	63.4	35.6	20.3
1-Apr	77.0	59.9	57.4	38.3	23.0	74.9	65.4	44.3	26.1
8-Apr	75.0	60.2	57.2	37.8	25.0	79.8	65.6	44.6	25.7
15-Apr	78.0	61.6	60.6	39.8	27.0	85.4	66.4	46.3	27.5
22-Apr	82.0	63.5	64.4	43.9	32.0	81.9	69.5	52.3	32.7
29-Apr	82.0	64.3	65.8	44.8	33.0	86.1	72.8	53.4	33.7
6-May	82.0	63.7	66.7	46.7	37.0	88.9	69.3	55.0	35.1
13-May	83.0	67.2	70.2	48.9	37.0	101.5	73.1	61.8	40.4
20-May	86.0	68.8	72.8	52.9	42.0	105.7	76.0	71.6	48.7
27-May	86.0	69.4	74.6	54.9	43.0	112.7	77.1	75.4	52.1
3-Jun	89.0	70.0	76.6	57.4	47.0	118.3	80.3	82.8	58.6
10-Jun	89.0	70.1	79.4	58.9	50.0	126.0	79.6	85.6	59.6
17-Jun	91.0	73.1	81.6	61.2	49.0	122.5	81.5	91.7	66.2
24-Jun	93.0	74.6	81.6	62.3	51.0	121.1	84.2	94.7	68.2
1-Jul	92.0	75.5	82.6	62.2	53.0	130.9	85.3	95.3	68.2
8-Jul	95.0	71.0	83.8	64.3	55.0	134.4	85.1	101.3	75.9
15-Jul	94.0	76.4	84.9	66.0	57.0	138.6	84.1	109.2	79.8
22-Jul	94.0	76.8	84.9	65.2	57.0	143.5	83.7	106.5	78.9
29-Jul	91.0	76.5	83.7	65.0	57.0	130.9	80.0	105.1	77.9
5-Aug	92.0	76.8	83.6	63.8	55.0	135.8	87.3	103.1	76.0
12-Aug	90.0	76.4	82.2	63.0	54.0	135.8	85.4	102.8	75.1
19-Aug	92.0	74.6	83.1	63.5	52.0	130.2	84.1	102.8	76.7
26-Aug	92.0	76.0	82.2	62.0	53.0	134.4	84.3	100.4	73.2
2-Sep	91.0	76.2	81.5	61.6	49.0	133.7	86.1	101.5	73.7
9-Sep	89.0	72.1	79.8	59.9	47.0	121.1	78.4	94.1	67.7
16-Sep	89.0	72.8	77.3	56.5	45.0	117.6	78.5	85.5	59.4
23-Sep	88.0	74.7	74.2	54.6	42.0	121.8	80.1	80.1	56.1
30-Sep	85.0	73.6	71.3	49.9	38.0	117.6	80.2	69.3	47.1
7-Oct	82.0	67.2	68.5	47.2	34.0	106.4	74.3	61.5	41.1
14-Oct	80.0	65.4	65.8	46.2	33.0	95.2	70.2	60.0	40.4
21-Oct	78.0	65.4	62.8	43.0	30.0	94.5	70.0	53.2	33.9
28-Oct	75.0	63.0	61.5	41.4	28.0	85.4	69.4	50.8	32.6
4-Nov	74.0	61.5	59.9	41.0	27.0	81.9	68.9	49.7	31.2
11-Nov	70.0	59.3	52.8	36.8	24.0	80.5	65.8	41.5	26.3
18-Nov	67.0	59.4	50.4	34.0	21.0	81.9	63.4	37.6	22.4
25-Nov	65.0	57.9	49.1	33.6	18.0	74.2	63.2	38.6	22.9
2-Dec	66.0	58.0	46.8	32.1	17.0	77.0	63.2	37.0	20.9
9-Dec	62.0	56.2	42.7	28.4	10.0	67.2	57.9	30.7	17.8
16-Dec	59.0	55.6	41.4	28.0	5.0	62.3	58.4	30.4	18.0
23-Dec	58.0	56.1	38.2	24.4	-6.0	64.4	58.6	27.6	15.5
31-Dec	62.0	57.5	36.6	23.6	0.0	68.6	60.0	27.0	15.3



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1152
FEB	0	967
MAR	7	732
APR	24	416
MAY	80	186
JUN	191	46
JUL	265	14
AUG	227	28
SEP	115	120
OCT	25	377
NOV	3	657
DEC	0	950
ANN	938	5645

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 (Drying) Load	■ Average Latent Heating (Humidifying) Load

	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	-32273	0	-6630
FEB	0	-27271	0	-5498
MAR	15	-21284	7	-3574
APR	105	-12830	35	-1484
MAY	508	-6424	860	-218
JUN	1604	-1946	3051	-3
JUL	2446	-746	6542	0
AUG	1817	-1293	5809	-1
SEP	741	-4325	2503	-33
OCT	75	-11846	239	-768
NOV	3	-19311	14	-2604
DEC	0	-26931	0	-4838
ANN	7314	-166480	19060	-25651

Average Annual Solar Radiation – Nearest Available Site

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

City: COLUMBUS
 State: OH
 WBAN No: 14821
 Lat(N): 40
 Long(W): 82.88
 Elev(ft): 833

Stn Type: Secondary

SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1

Overhang: 0.534

Vert Gap: 0.321

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	570	800	1100	1460	1740	1900	1860	1670	1360	990	600	470	1210
	Std Dev	50	67	71	127	144	121	102	98	98	78	69	40	33
	Minimum	490	690	980	1180	1460	1620	1710	1430	1210	830	450	390	1150
	Maximum	670	1020	1260	1680	2020	2240	2070	1880	1530	1250	740	550	1280
	Diffuse	360	480	620	750	860	900	890	790	630	460	360	310	620
Clear Day	Global	880	1230	1710	2190	2500	2620	2530	2260	1830	1340	930	770	1740
NORTH	Global	200	270	350	440	550	610	590	490	380	290	210	170	380
	Diffuse	200	270	350	430	500	540	530	470	380	290	210	170	360
Clear Day	Global	190	250	330	430	580	670	620	470	360	270	200	170	380
EAST	Global	360	500	660	850	990	1060	1060	970	820	630	380	300	720
	Diffuse	240	330	430	520	600	640	640	570	470	350	250	210	440
Clear Day	Global	660	870	1110	1320	1420	1440	1420	1320	1140	900	680	590	1070
SOUTH	Global	780	900	920	900	820	770	810	920	1050	1090	780	650	870
	Diffuse	350	420	490	540	580	590	590	580	530	440	340	300	480
Clear Day	Global	1840	1920	1790	1420	1090	940	990	1250	1600	1810	1800	1760	1520
WEST	Global	360	500	640	820	950	1020	1010	950	810	620	380	290	700
	Diffuse	240	330	430	530	610	650	640	580	480	360	250	210	440
Clear Day	Global	660	870	1110	1320	1420	1440	1420	1320	1140	900	680	590	1070

Average Annual Solar Heat and Illumination – Nearest Available Site

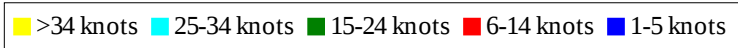
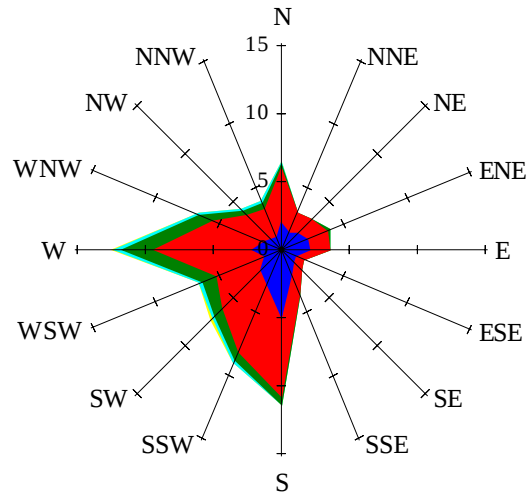
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	370	550	770	1050	1260	1380	1350	1200	970	690	400	310	860
NORTH	Unshaded	140	190	250	300	360	400	390	330	270	200	140	120	260
	Shaded	120	160	210	270	320	360	340	290	240	180	120	100	230
EAST	Unshaded	250	350	470	610	710	760	760	690	580	440	270	200	510
	Shaded	220	300	400	520	600	640	640	590	500	390	230	180	440
SOUTH	Unshaded	580	650	640	590	520	480	500	590	710	790	580	490	590
	Shaded	560	600	510	400	350	360	360	380	510	690	550	470	480
WEST	Unshaded	250	350	450	580	670	730	720	680	570	440	260	200	490
	Shaded	220	310	390	500	580	620	610	580	500	380	230	180	430

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	28	64	79	68	35	37	76	97	97	75
	M.Cloudy	16	37	46	41	21	23	48	68	69	50
NORTH	M.Clear	8	13	15	14	9	20	16	17	17	16
	M.Cloudy	7	14	17	15	9	12	16	19	19	16
EAST	M.Clear	64	63	20	14	9	68	77	43	17	16
	M.Cloudy	18	28	18	15	9	27	41	33	19	16
SOUTH	M.Clear	28	65	81	70	35	11	27	45	45	27
	M.Cloudy	11	29	36	32	15	9	21	34	35	22
WEST	M.Clear	8	13	15	57	68	11	16	17	41	74
	M.Cloudy	7	14	17	28	23	9	16	19	32	44
M.Clear	(% hrs)	26	24	22	21	20	42	39	30	23	26
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	17	57	81	80	55	7	34	45	32	5
	M.Cloudy	10	33	53	53	34	4	19	25	19	4
NORTH	M.Clear	6	13	16	16	13	3	9	11	9	3
	M.Cloudy	5	13	17	17	13	2	8	10	8	2
EAST	M.Clear	47	72	40	16	13	22	42	11	9	3
	M.Cloudy	14	31	28	17	13	5	14	10	8	2
SOUTH	M.Clear	12	49	72	71	46	18	69	85	66	15
	M.Cloudy	6	23	42	42	25	4	19	25	19	4
WEST	M.Clear	6	13	16	42	71	3	9	12	42	19
	M.Cloudy	5	13	17	29	34	2	8	11	14	4
M.Clear	(% hrs)	43	44	35	31	35	19	18	18	19	18

Wind Summary - December, January, and February

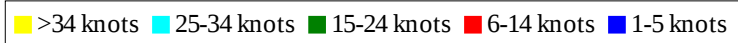
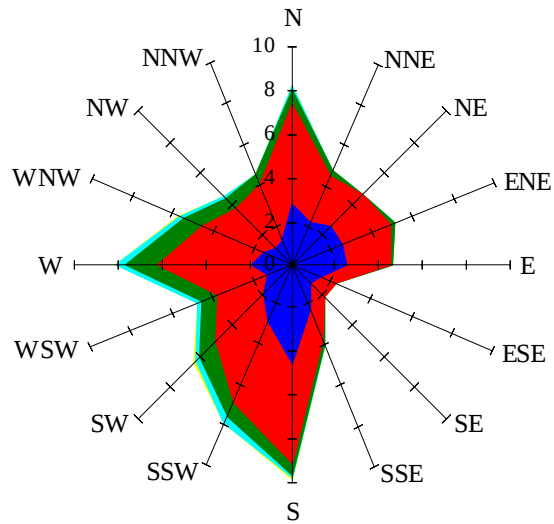
Labels of Percent Frequency on North Axis



Percent Calm = 12.68

Wind Summary - March, April, and May

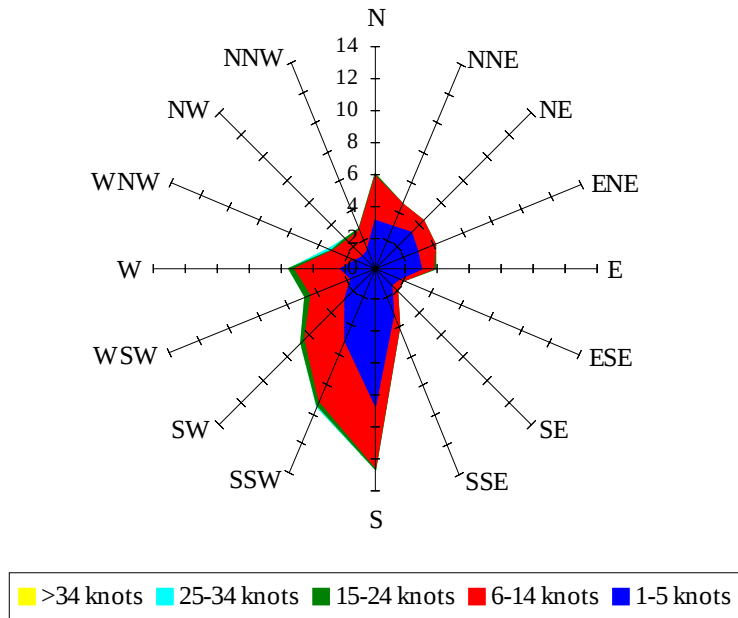
Labels of Percent Frequency on North Axis



Percent Calm = 13.23

Wind Summary - June, July, and August

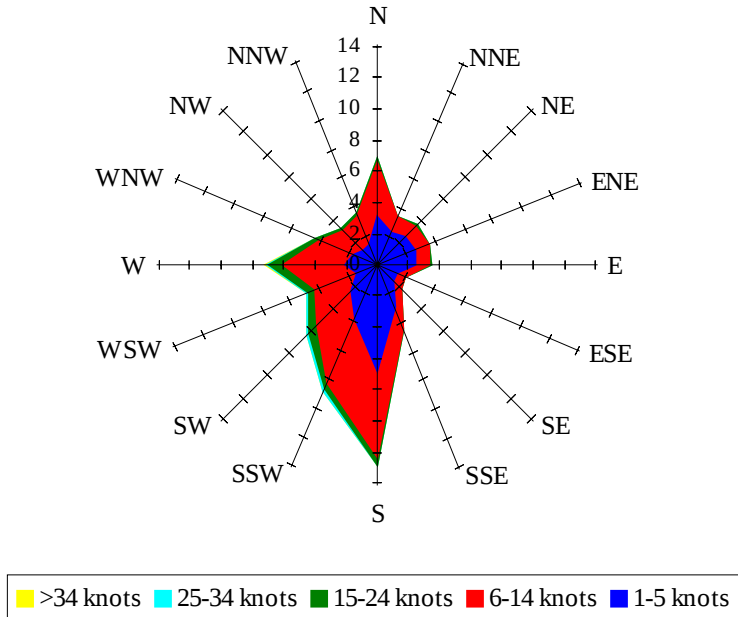
Labels of Percent Frequency on North Axis



Percent Calm = 22.27

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 20.05