

CHARLOTTESVILLE VA

Latitude = 38.13 N

Longitude = 78.45 W

Period of Record = 1973 to 1996

WMO No. 724016

Elevation = 640 feet

Average Pressure = 29.34 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	97	77	109	9.6	SW
0.4% Occurrence	93	76	108	8.8	SSW
1.0% Occurrence	91	75	108	8.3	S
2.0% Occurrence	89	74	106	8.0	S
Mean Daily Range	19	-	-	-	-
97.5% Occurrence	24	21	10	6.6	NW
99.0% Occurrence	19	16	8	6.5	W
99.6% Occurrence	14	12	6	5.9	WNW
Median of Extreme Lows	3	2	3	6.3	NW
	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	151	7.6	S
0.4% Occurrence	79	88	135	8.0	S
1.0% Occurrence	77	87	125	7.5	S
2.0% Occurrence	76	85	121	7.3	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	154	86	1.00	7.3	S
0.4% Occurrence	138	83	0.90	6.6	S
1.0% Occurrence	130	82	0.85	6.8	S
2.0% Occurrence	126	81	0.82	6.5	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		49	1014	689	1935

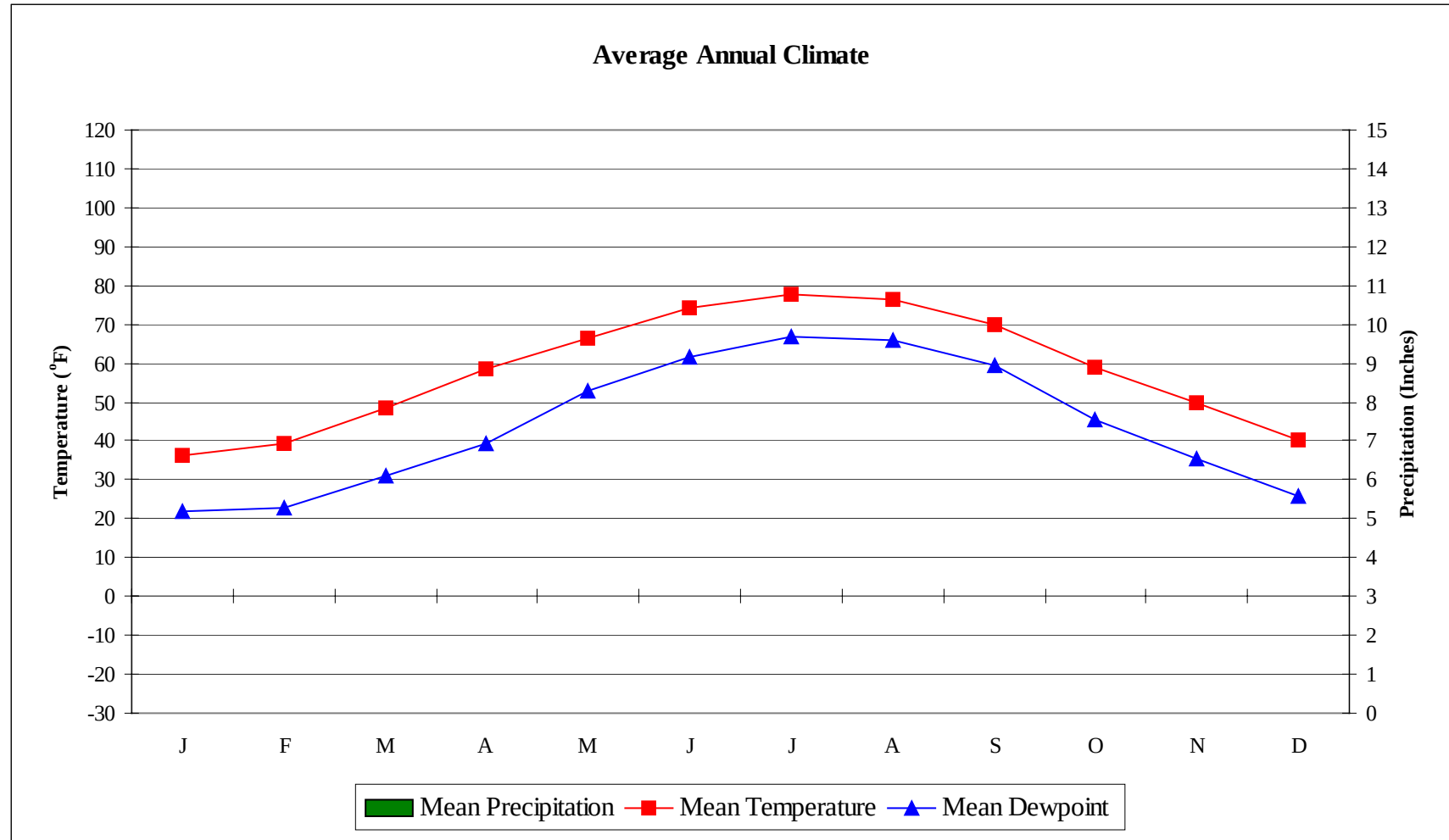
Other Site Data

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	3.2	90	2.4 + 0.9
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 (#)
60.6	N/A	N/A	54

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

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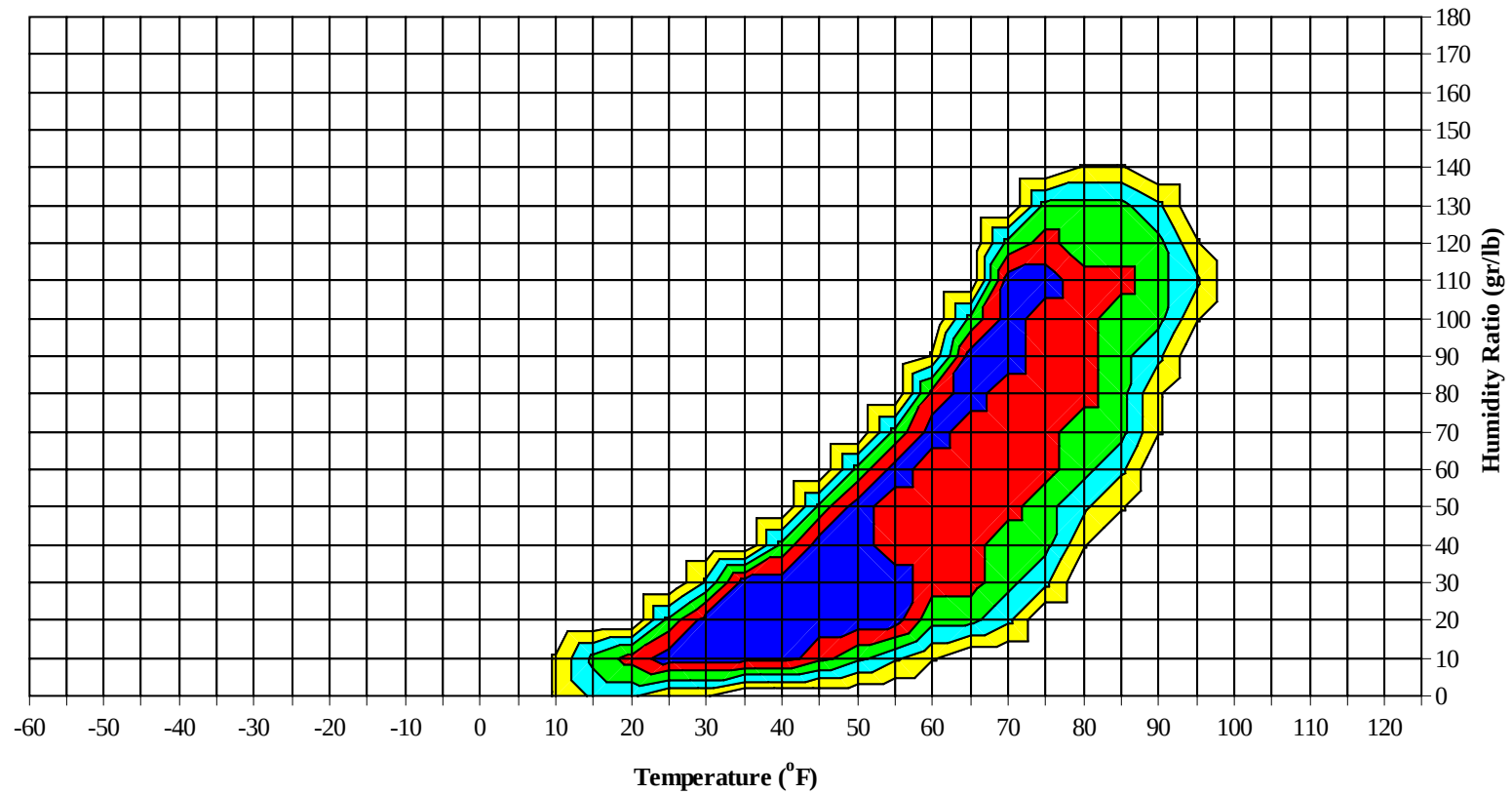


No Precipitation Data Available

CHARLOTTESVILLE VA

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Long Term Psychrometric Summary

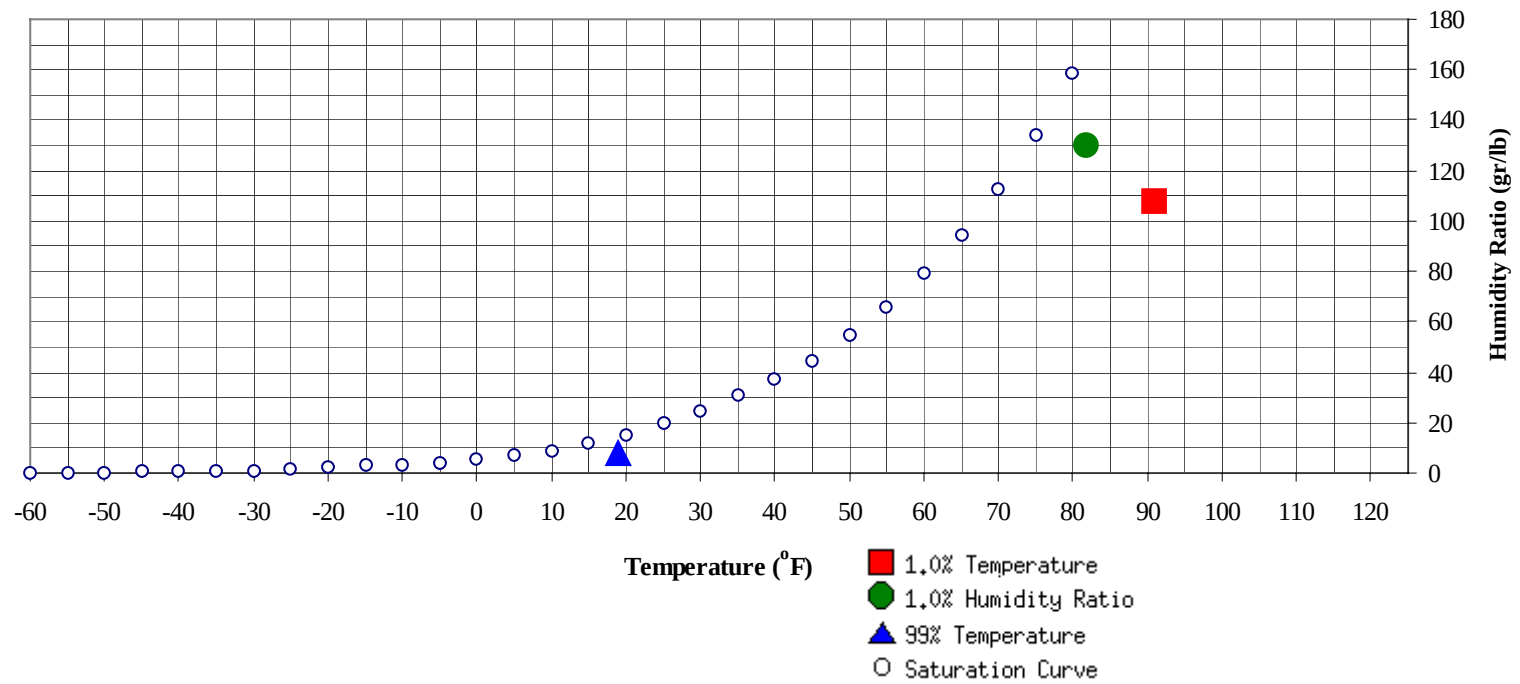


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

CHARLOTTESVILLE VA

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Psychrometric Summary of Peak Design Values



	(°F)	MCHR	Enthalpy	1.0% Humidity Ratio	(gr/lb)	MCDB	MCWB	MC Dewpt	Enthalpy
		(gr/lb)	(btu/lb)			(°F)	(°F)	(°F)	(btu/lb)
99% Dry Bulb	19	7.9	5.8	Ratio	130.2	81.9	76.1	74	40.1

1.0% Dry Bulb	(°F)	MCHR	MCWB	Enthalpy
		(gr/lb)	(°F)	(btu/lb)
	91	107.9	75	38.8

CHARLOTTESVILLE VA

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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															
85 / 89												1	0	1	65.6
80 / 84												3	1	4	63.8
75 / 79		0	0	0	61.0		1	0	1	58.4		6	3	9	60.0
70 / 74		1	0	1	55.9		3	1	4	56.5	0	8	7	16	57.6
65 / 69	0	3	1	3	54.7	0	7	3	9	53.6	3	18	13	34	54.5
60 / 64	1	7	4	12	51.9	3	10	8	21	52.0	9	28	23	60	51.5
55 / 59	3	10	7	20	48.0	4	17	13	34	47.8	16	31	32	79	47.7
50 / 54	7	21	15	43	43.9	11	26	22	59	43.9	27	41	42	110	44.5
45 / 49	14	31	26	71	39.9	17	27	26	70	39.8	40	38	40	118	40.3
40 / 44	24	44	40	107	36.1	21	34	36	91	35.9	46	34	37	117	36.6
35 / 39	46	49	50	144	32.2	36	37	37	109	31.5	46	21	28	94	32.2
30 / 34	50	43	50	143	28.1	44	35	41	121	27.8	38	13	17	68	28.4
25 / 29	42	21	30	92	23.4	40	17	22	79	23.3	16	3	4	23	23.5
20 / 24	26	11	15	52	19.0	26	7	9	43	18.9	6	1	1	7	19.0
15 / 19	18	6	7	31	14.7	14	2	4	20	14.2	3	1	1	5	14.8
10 / 14	11	2	3	16	10.0	6	1	1	7	10.4	0	0		0	11.2
5 / 9	3	1	1	5	5.5	3	0	1	4	5.3					
0 / 4	3	1	1	5	0.7	0	0		0	1.1					
-5 / -1	0	0	0	0	-3.8	0			0	-2.5					
-10 / -6	0			0	-7.0										

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.

CHARLOTTESVILLE VA

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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	75.4		1	0	1	75.3
90 / 94		2	1	3	67.0	3	1	4	73.1		0	15	3	18	74.1
85 / 89		6	2	8	64.5	0	14	4	18	69.7	0	43	16	59	72.6
80 / 84	0	12	7	19	62.8	0	33	14	47	67.5	4	61	41	105	70.3
75 / 79	0	19	15	34	60.8	4	42	31	77	64.9	24	56	60	140	67.8
70 / 74	4	27	22	53	57.8	16	49	50	116	62.2	62	39	63	165	66.0
65 / 69	13	34	33	80	55.0	43	43	54	141	59.9	71	17	34	121	62.8
60 / 64	28	38	38	104	52.4	58	33	42	134	56.6	46	7	18	71	58.5
55 / 59	34	40	34	109	48.7	51	20	31	102	52.6	22	1	4	27	53.8
50 / 54	51	34	42	127	45.2	42	9	15	66	48.3	10	1	1	12	49.8
45 / 49	49	18	26	92	41.1	22	2	5	29	43.9	1		0	1	45.3
40 / 44	33	8	13	54	36.6	10	0	0	10	39.5	0			0	43.0
35 / 39	18	3	6	26	32.6	1		0	1	35.8					
30 / 34	9	1	1	11	28.9	0			0						
25 / 29	1		0	1	24.8										
20 / 24	0		0	0	18.0										
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															

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CHARLOTTESVILLE VA

WMO No. 724016

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		0	0	0	77.1		0	0	0	76.7					
95 / 99		8	2	10	76.9		2	1	3	76.8		1	0	1	73.7
90 / 94	0	33	10	43	75.8		25	7	32	76.0		8	1	9	74.9
85 / 89	1	62	29	93	74.2	0	52	20	72	74.1		22	5	27	72.5
80 / 84	12	68	55	136	72.2	5	71	49	125	72.0	1	39	19	59	70.2
75 / 79	41	46	70	157	70.6	29	54	72	155	70.1	8	50	39	97	67.8
70 / 74	101	24	60	185	68.7	100	32	70	203	68.4	44	55	65	164	65.7
65 / 69	62	6	18	86	64.6	73	10	23	106	64.4	62	38	53	154	61.9
60 / 64	22	1	3	26	60.0	30	2	5	37	60.1	56	17	35	109	58.1
55 / 59	6		0	6	55.3	9	0	1	10	54.9	33	7	15	55	53.6
50 / 54	1			1	50.1	3		0	3	50.5	23	2	6	31	49.1
45 / 49						0			0	45.7	10	0	1	11	45.0
40 / 44						0			0	43.3	3			3	40.3
35 / 39											0			0	37.1
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															

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CHARLOTTESVILLE VA

WMO No. 724016

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															
90 / 94		0		0	73.0										
85 / 89		2	0	2	69.3										
80 / 84		10	1	11	67.1		2	0	2	64.7					
75 / 79	0	25	8	33	64.4		6	1	7	62.4	0	0		0	61.6
70 / 74	3	39	23	65	61.4	0	14	5	19	59.3	0	2	1	3	61.1
65 / 69	14	43	37	94	58.7	6	23	15	43	57.6	0	6	4	9	57.7
60 / 64	32	48	48	128	54.9	14	30	26	70	54.2	4	10	6	21	53.7
55 / 59	39	41	48	127	50.8	20	35	33	89	49.4	7	20	12	39	49.4
50 / 54	46	27	43	116	46.6	30	41	38	110	44.8	13	30	20	63	44.4
45 / 49	46	10	26	82	42.7	39	40	42	121	40.7	20	40	34	95	40.4
40 / 44	37	3	12	53	39.0	43	28	41	112	36.8	36	45	48	129	36.5
35 / 39	21	0	3	24	34.7	39	15	27	81	32.8	44	43	51	137	32.3
30 / 34	9		0	9	30.6	30	6	10	46	28.8	54	28	39	121	28.1
25 / 29	1			1	26.8	13	1	3	17	24.9	35	15	19	69	23.3
20 / 24						3	0	0	3	20.2	17	7	9	33	19.0
15 / 19						1	0		1	17.2	9	2	3	14	14.8
10 / 14											4	1	1	6	10.5
5 / 9											3	0	1	4	5.9
0 / 4											1	0	0	1	1.4
-5 / -1															
-10 / -6															

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CHARLOTTESVILLE VA

WMO No. 724016

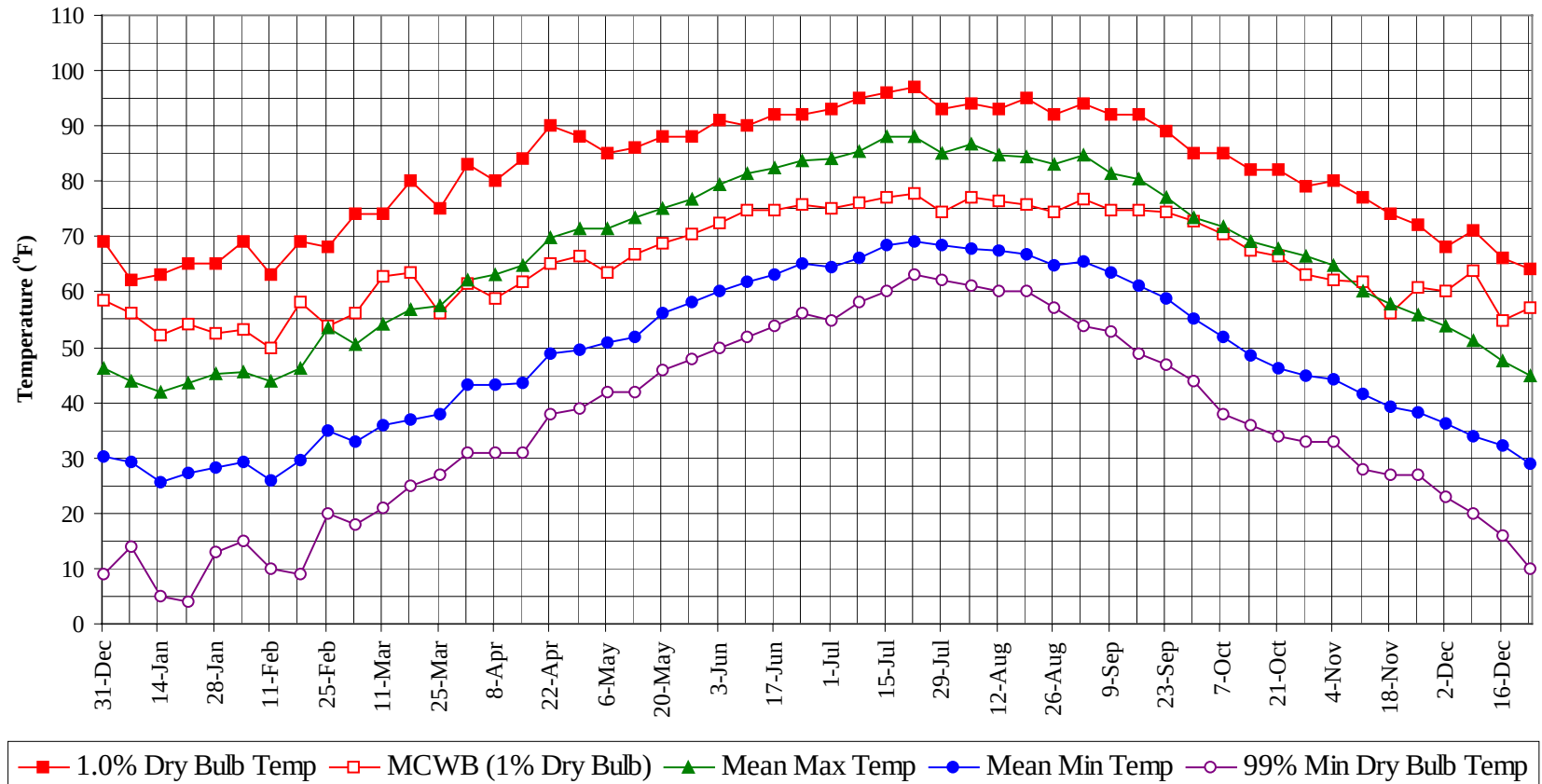
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

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		1	0	1	76.9
95 / 99		13	3	16	76.5
90 / 94	0	85	22	107	75.2
85 / 89	3	201	74	278	73.1
80 / 84	25	297	180	503	70.5
75 / 79	112	303	286	702	67.8
70 / 74	347	294	353	994	65.2
65 / 69	362	246	280	887	60.4
60 / 64	316	231	254	800	55.4
55 / 59	249	223	232	704	50.2
50 / 54	266	230	249	745	45.4
45 / 49	253	207	232	692	40.9
40 / 44	243	197	235	676	36.6
35 / 39	238	167	210	615	32.3
30 / 34	220	125	167	512	28.2
25 / 29	139	57	82	278	23.5
20 / 24	75	26	37	137	19.0
15 / 19	41	10	15	66	14.6
10 / 14	21	4	5	30	10.2
5 / 9	8	2	2	11	5.6
0 / 4	4	1	1	6	0.9
-5 / -1	0	0	0	0	-3.7
-10 / -6	0			0	-7.0

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Annual Summary of Temperatures

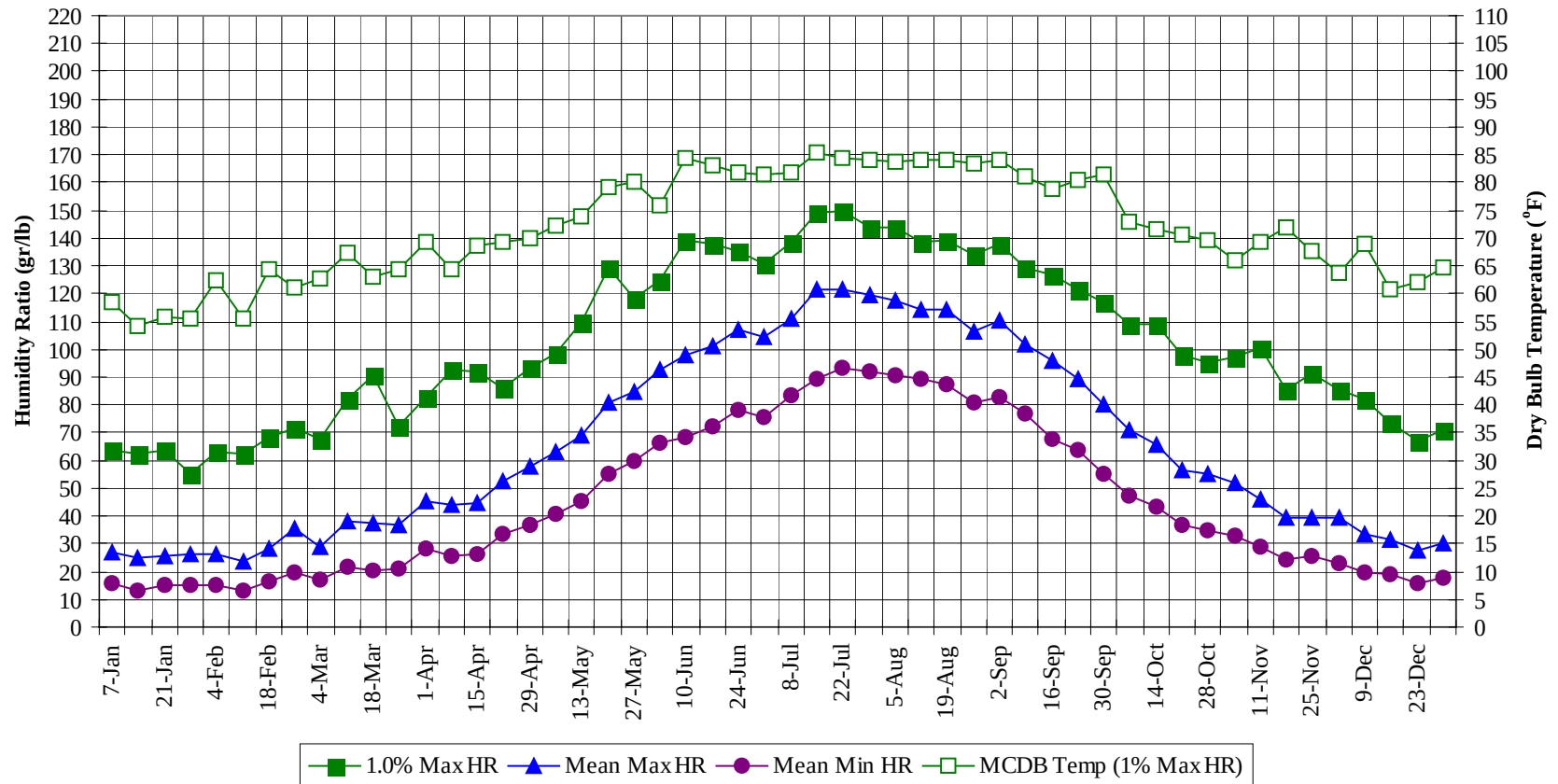


CHARLOTTESVILLE

VA

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Long Term Humidity and Dry Bulb Temperature Summary

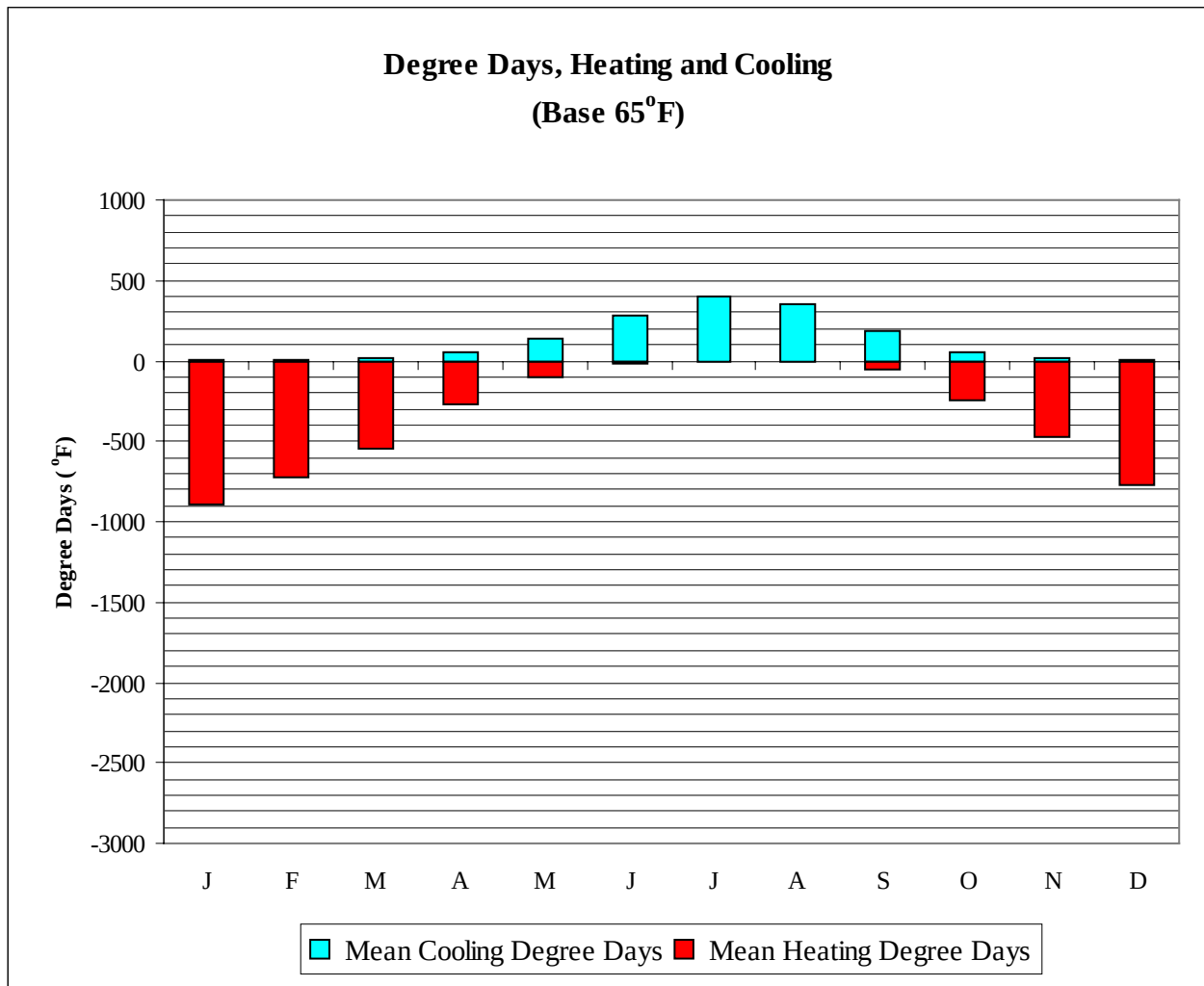


CHARLOTTESVILLE VA

WMO No. 724016

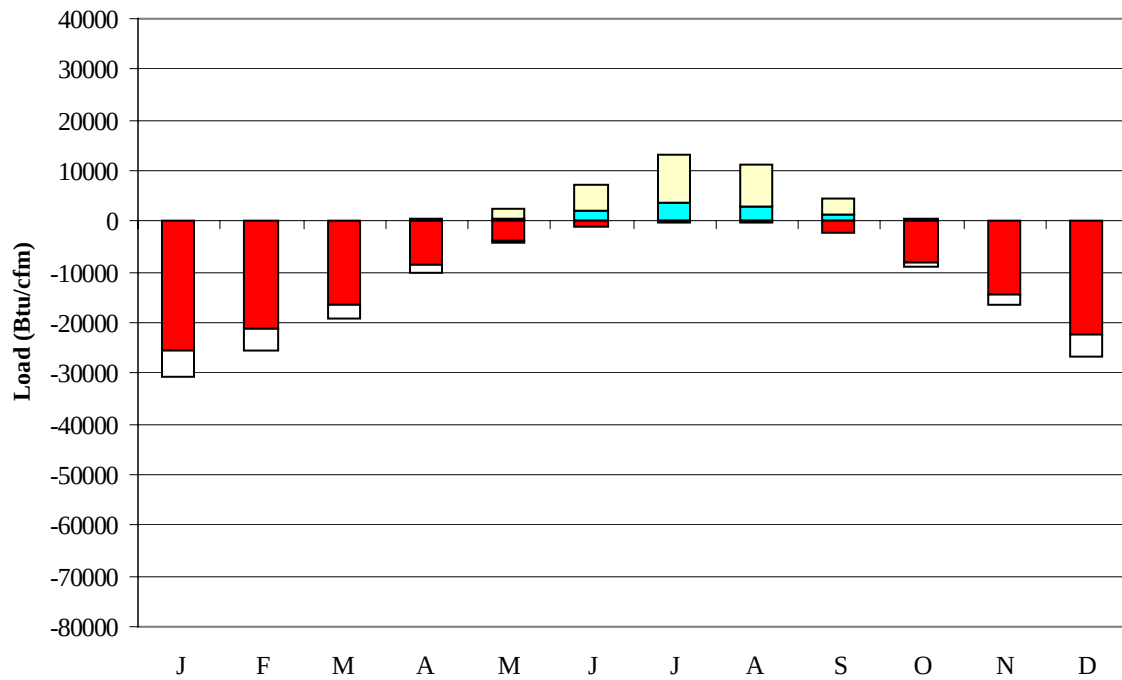
Long Term Dry Bulb Temperature and Humidity Summary

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	62.0	56.3	44.0	29.3	14.0	63.7	58.4	27.3	15.9
14-Jan	63.0	52.3	41.7	25.7	5.0	62.3	54.2	24.9	13.4
21-Jan	65.0	54.3	43.6	27.1	4.0	63.7	55.7	25.9	15.0
28-Jan	65.0	52.6	45.1	28.2	13.0	55.3	55.5	26.2	15.2
4-Feb	69.0	53.3	45.7	29.4	15.0	63.0	62.3	26.1	14.9
11-Feb	63.0	49.9	44.0	25.9	10.0	62.3	55.5	23.4	13.2
18-Feb	69.0	58.2	46.1	29.5	9.0	68.6	64.3	28.1	16.4
25-Feb	68.0	53.7	53.4	34.8	20.0	71.4	61.2	35.5	19.8
4-Mar	74.0	56.3	50.5	32.9	18.0	67.9	62.7	29.2	16.9
11-Mar	74.0	62.9	54.1	36.0	21.0	81.9	67.3	38.1	22.0
18-Mar	80.0	63.4	56.9	36.9	25.0	90.3	63.0	37.6	20.6
25-Mar	75.0	56.0	57.4	38.0	27.0	72.1	64.3	36.5	20.8
1-Apr	83.0	61.6	62.1	43.1	31.0	82.6	69.3	45.5	28.4
8-Apr	80.0	58.7	63.2	43.1	31.0	92.4	64.5	44.2	25.7
15-Apr	84.0	61.8	64.8	43.6	31.0	91.7	68.5	44.8	26.3
22-Apr	90.0	65.3	70.0	49.0	38.0	86.1	69.4	52.6	33.8
29-Apr	88.0	66.5	71.4	49.4	39.0	93.1	70.1	57.8	36.6
6-May	85.0	63.4	71.5	50.9	42.0	98.7	72.2	62.9	41.0
13-May	86.0	66.7	73.6	51.9	42.0	109.9	74.0	68.7	45.2
20-May	88.0	68.9	75.1	56.1	46.0	129.5	79.3	80.5	55.0
27-May	88.0	70.3	76.9	58.1	48.0	118.3	80.0	84.7	60.0
3-Jun	91.0	72.3	79.3	60.1	50.0	124.6	75.9	92.6	66.1
10-Jun	90.0	74.9	81.3	61.9	52.0	139.3	84.5	98.1	68.1
17-Jun	92.0	74.9	82.6	63.1	54.0	137.9	83.0	101.3	72.1
24-Jun	92.0	75.7	83.9	65.3	56.0	135.1	81.8	107.2	78.1
1-Jul	93.0	75.2	84.0	64.5	55.0	130.9	81.4	104.5	75.4
8-Jul	95.0	76.1	85.5	66.2	58.0	138.6	81.7	111.1	83.3
15-Jul	96.0	77.0	87.9	68.6	60.0	149.1	85.3	121.8	89.2
22-Jul	97.0	77.8	88.2	69.2	63.0	149.8	84.5	121.8	93.0
29-Jul	93.0	74.4	85.2	68.4	62.0	143.5	84.2	119.5	91.7
5-Aug	94.0	77.1	86.7	67.9	61.0	143.5	83.7	117.5	90.4
12-Aug	93.0	76.5	84.6	67.6	60.0	138.6	84.0	114.4	89.4
19-Aug	95.0	75.8	84.5	66.8	60.0	139.3	84.1	114.5	87.2
26-Aug	92.0	74.3	83.1	64.9	57.0	133.7	83.5	106.6	80.9
2-Sep	94.0	76.9	84.7	65.4	54.0	137.9	84.2	110.4	83.0
9-Sep	92.0	74.6	81.5	63.4	53.0	129.5	81.2	101.7	76.6
16-Sep	92.0	74.9	80.3	61.0	49.0	126.7	78.7	95.9	67.9
23-Sep	89.0	74.3	77.1	58.9	47.0	121.8	80.4	89.0	63.4
30-Sep	85.0	72.6	73.4	55.0	44.0	116.9	81.5	79.9	55.0
7-Oct	85.0	70.4	71.7	51.8	38.0	109.2	73.0	70.8	47.5
14-Oct	82.0	67.4	69.3	48.7	36.0	109.2	71.5	65.4	43.4
21-Oct	82.0	66.4	67.9	46.1	34.0	98.0	70.6	56.6	36.5
28-Oct	79.0	63.2	66.5	45.0	33.0	95.2	69.5	55.3	35.0
4-Nov	80.0	62.2	64.8	44.2	33.0	97.3	66.0	51.6	33.1
11-Nov	77.0	61.9	60.3	41.6	28.0	100.8	69.2	46.1	28.7
18-Nov	74.0	56.2	57.8	39.1	27.0	85.4	71.8	39.6	24.5
25-Nov	72.0	60.9	55.9	38.3	27.0	91.0	67.6	39.4	25.5
2-Dec	68.0	60.0	53.9	36.2	23.0	85.4	63.8	39.6	22.7
9-Dec	71.0	63.7	51.0	33.8	20.0	81.9	69.0	33.4	19.6
16-Dec	66.0	54.8	47.7	32.3	16.0	73.5	60.8	31.7	18.9
23-Dec	64.0	57.3	44.8	28.9	10.0	67.2	62.0	27.4	16.0
31-Dec	69.0	58.4	46.1	30.1	9.0	70.7	64.7	30.5	17.4



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	1	891
FEB	2	729
MAR	14	540
APR	59	268
MAY	136	105
JUN	287	18
JUL	401	3
AUG	351	6
SEP	189	48
OCT	51	247
NOV	12	472
DEC	2	778
ANN	1504	4105

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	-25489	1	-5057
FEB	0	-21067	3	-4364
MAR	50	-16250	34	-3003
APR	308	-8722	135	-1424
MAY	722	-3990	1581	-168
JUN	2144	-898	5023	-4
JUL	3666	-226	9478	0
AUG	2805	-359	8215	0
SEP	1125	-2057	3515	-12
OCT	160	-8278	482	-537
NOV	21	-14417	154	-2090
DEC	0	-22544	8	-4072
ANN	11001	-124297	28629	-20731

Average Annual Solar Radiation – Nearest Available Site

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

City: LYNCHBURG
 State: VA
 WBAN No: 13733
 Lat(N): 37.33
 Long(W): 79.2
 Elev(ft): 915

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.458
 Vert Gap: 0.305

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	750	1010	1360	1700	1910	2050	1960	1780	1480	1160	810	660	1390
	Std Dev	51	80	92	140	82	107	125	93	99	91	74	36	30
	Minimum	640	820	1180	1460	1750	1850	1750	1590	1240	1000	640	590	1320
	Maximum	860	1170	1540	2050	2080	2250	2210	1960	1660	1340	950	740	1440
	Diffuse	320	420	540	670	800	860	860	770	630	450	340	290	580
Clear Day	Global	1020	1370	1820	2260	2520	2610	2530	2280	1890	1430	1050	900	1810
NORTH	Global	210	280	350	450	550	620	590	490	390	310	230	190	390
	Diffuse	210	280	350	430	500	540	520	470	390	310	230	190	370
Clear Day	Global	200	260	330	430	580	680	620	480	370	290	220	180	390
EAST	Global	500	650	820	980	1050	1110	1060	990	870	730	540	450	810
	Diffuse	260	340	430	530	600	640	630	580	490	380	280	230	450
Clear Day	Global	740	940	1160	1340	1410	1420	1380	1300	1150	940	750	670	1100
SOUTH	Global	1180	1230	1180	1000	820	750	780	920	1090	1260	1190	1110	1040
	Diffuse	360	430	490	540	560	570	570	570	530	470	390	340	480
Clear Day	Global	1960	1990	1760	1340	1000	850	900	1160	1530	1800	1870	1890	1500
WEST	Global	510	650	840	990	1040	1100	1040	1000	870	740	540	450	810
	Diffuse	260	340	440	540	610	650	640	590	490	380	280	240	460
Clear Day	Global	740	940	1160	1340	1410	1420	1380	1300	1150	940	750	670	1100

Average Annual Solar Heat and Illumination – Nearest Available Site

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

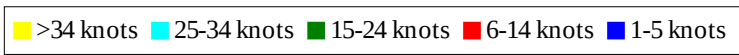
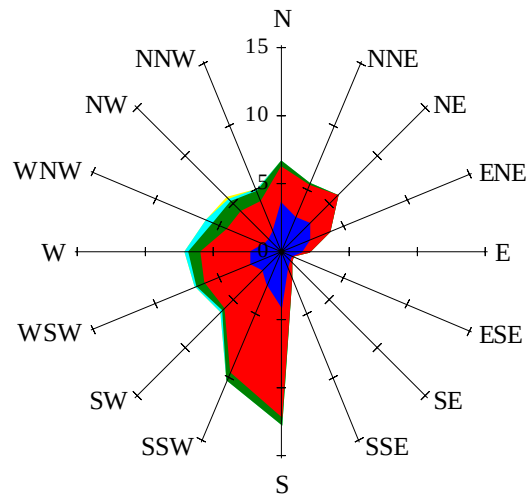
AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	490	700	970	1230	1390	1490	1430	1290	1060	820	550	430	990
NORTH	Unshaded	150	190	250	300	360	400	380	330	270	210	160	130	260
	Shaded	130	170	220	280	330	370	350	300	250	190	140	120	240
EAST	Unshaded	340	460	580	700	750	780	750	700	620	510	370	310	570
	Shaded	310	420	520	620	650	690	660	620	550	460	340	280	510
SOUTH	Unshaded	880	900	810	640	500	450	470	580	730	900	880	840	710
	Shaded	870	840	660	440	350	360	360	400	550	800	860	820	610
WEST	Unshaded	350	460	590	710	740	780	740	710	620	520	370	310	580
	Shaded	320	420	530	620	650	680	650	620	550	470	340	280	510

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	36	72	85	70	33	41	81	101	97	71
	M.Cloudy	22	45	54	46	21	28	55	74	74	52
NORTH	M.Clear	9	14	15	14	9	21	16	17	17	16
	M.Cloudy	9	15	17	15	8	14	17	19	19	16
EAST	M.Clear	74	62	15	14	9	72	75	37	17	16
	M.Cloudy	28	34	17	15	8	34	45	31	19	16
SOUTH	M.Clear	35	69	81	67	32	11	26	42	40	21
	M.Cloudy	16	37	44	37	16	11	22	34	33	19
WEST	M.Clear	9	14	17	64	72	11	16	17	47	76
	M.Cloudy	9	15	17	36	29	11	17	19	38	49
M.Clear	(% hrs)	38	37	37	39	39	44	43	39	37	41

		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	23	65	85	82	52	13	43	51	35	5
	M.Cloudy	14	40	57	56	34	8	25	30	22	4
NORTH	M.Clear	8	14	17	16	13	5	10	11	9	2
	M.Cloudy	6	14	18	18	12	4	10	11	9	2
EAST	M.Clear	56	73	35	16	13	39	44	11	9	2
	M.Cloudy	19	35	26	18	12	12	20	11	9	2
SOUTH	M.Clear	16	52	71	68	40	33	80	91	70	14
	M.Cloudy	8	28	42	42	23	11	31	36	27	4
WEST	M.Clear	8	14	17	49	73	5	10	18	50	19
	M.Cloudy	6	14	18	33	36	4	10	13	21	6
M.Clear	(% hrs)	45	45	44	42	45	38	39	38	38	40

Wind Summary - December, January, and February

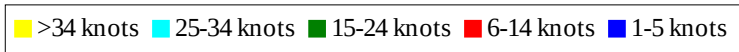
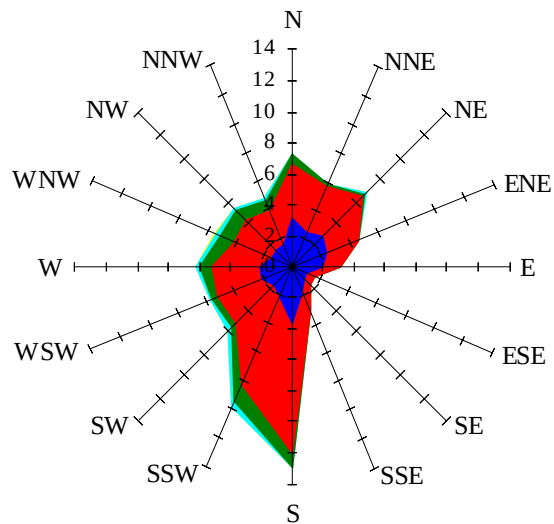
Labels of Percent Frequency on North Axis



Percent Calm = 13.59

Wind Summary - March, April, and May

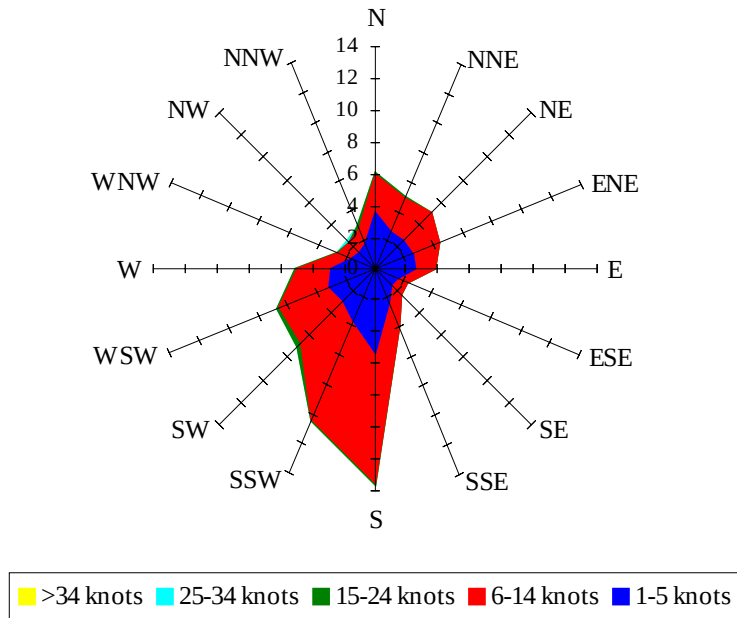
Labels of Percent Frequency on North Axis



Percent Calm = 10.77

Wind Summary - June, July, and August

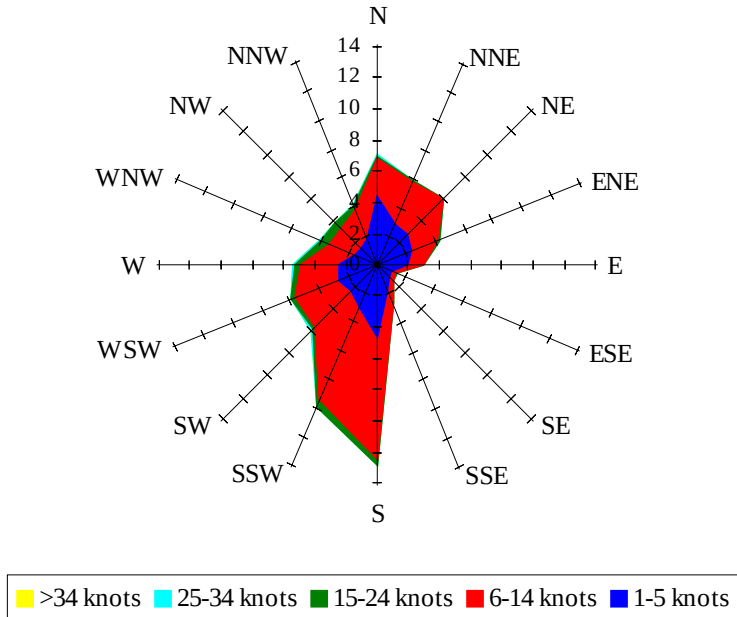
Labels of Percent Frequency on North Axis



Percent Calm = 16.78

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 17.23