

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bethune-Cookman College - June 1999**

Field: GHI

Hour Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	8	85	386	461	764	887	1022	1045	964	877	713	398	220	72	1	0	0	0	0	7903
2	0	0	0	0	0	9	81	109	413	515	779	1071	1021	975	881	722	313	124	50	1	0	0	0	0	7063
3	0	0	0	0	0	15	142	291	436	610	809	931	975	962	848	693	442	141	29	0	0	0	0	0	7323
4	0	0	0	0	0	8	109	310	546	734	838	999	878	98	224	589	210	95	25	0	0	0	0	0	5663
5	0	0	0	0	0	11	141	229	476	669	815	1010	1036	879	858	693	467	253	67	2	0	0	0	0	7606
6	0	0	0	0	0	19	134	322	479	775	926	1013	984	928	723	517	344	286	81	2	0	0	0	0	7532
7	0	0	0	0	0	17	135	320	622	548	608	686	657	713	548	344	283	181	106	3	0	0	0	0	5771
8	0	0	0	0	0	11	111	383	511	604	953	977	1003	926	672	576	433	167	47	1	0	0	0	0	7375
9	0	0	0	0	0	8	141	251	514	669	736	917	578	976	810	403	341	159	36	1	0	0	0	0	6539
10	0	0	0	0	0	8	58	141	292	462	664	280	188	601	567	502	164	118	34	2	0	0	0	0	4080
11	0	0	0	0	0	14	134	224	549	762	780	917	1001	987	551	689	432	193	27	1	0	0	0	0	7261
12	0	0	0	0	0	11	149	336	547	700	668	381	80	50	361	530	157	101	37	2	0	0	0	0	4111
13	0	0	0	0	0	9	96	164	224	249	179	275	547	922	547	158	16	198	47	1	0	0	0	0	3632
14	0	0	0	0	0	14	132	331	567	743	857	910	901	964	741	594	155	75	30	3	0	0	0	0	7016
15	0	0	0	0	0	16	144	343	485	394	809	867	864	705	833	644	185	75	24	0	0	0	0	0	6388
16	0	0	0	0	0	15	57	91	205	583	844	662	776	476	324	53	18	23	31	1	0	0	0	0	4161
17	0	0	0	0	0	14	98	240	400	607	531	432	258	64	46	15	25	44	29	1	0	0	0	0	2805
18	0	0	0	0	0	7	85	201	353	718	357	584	324	382	387	248	27	52	39	3	0	0	0	0	3766
19	0	0	0	0	0	6	40	236	288	332	386	788	800	520	886	551	74	73	26	3	0	0	0	0	5010
20	0	0	0	0	0	8	31	160	179	423	943	1036	638	479	237	166	209	226	46	1	0	0	0	0	4783
21	0	0	0	0	0	3	44	194	185	378	746	445	86	225	278	69	46	78	25	2	0	0	0	0	2804
22	0	0	0	0	0	8	77	298	108	228	416	987	982	955	510	470	223	110	31	2	0	0	0	0	5407
23	0	0	0	0	0	6	118	289	386	609	639	785	857	967	864	699	473	252	45	2	0	0	0	0	6992
24	0	0	0	0	0	15	156	264	331	420	526	565	708	730	689	698	505	275	50	2	0	0	0	0	5934
25	0	0	0	0	0	6	51	117	293	524	686	738	511	426	528	363	132	18	1	?	0	0	0	0	4393
26	0	0	0	0	0	14	152	312	413	655	789	975	467	267	509	381	195	42	15	0	0	0	0	0	5185
27	0	0	0	0	0	10	69	195	325	256	513	378	615	734	787	715	189	13	16	1	0	0	0	0	4816
28	0	0	0	0	0	9	49	106	172	645	509	541	475	80	52	25	8	9	7	1	0	0	0	0	2686
29	0	0	0	0	0	3	43	66	185	472	343	302	409	398	166	112	88	100	27	1	0	0	0	0	2716
30	0	0	0	0	0	5	102	150	165	285	438	399	275	413	469	445	149	17	4	1	0	0	0	0	3316
Avg	0	0	0	0	0	10	99	235	370	544	666	729	665	625	559	446	223	124	37	1	0	0	0	0	5335
S D	0	0	0	0	0	4	39	90	143	166	201	264	298	320	256	234	155	83	22	1	0	0	0	0	1657
S/A	0	0	0	0	0	0.4	0.4	0.38	0.39	0.31	0.3	0.36	0.45	0.51	0.46	0.53	0.69	0.67	0.6	0.67	0	0	0	0	0.31
Min	0	0	0	0	0	3	31	66	108	228	179	275	80	50	46	15	8	9	1	0	0	0	0	0	2686
Max	0	0	0	0	0	19	156	386	622	775	953	1071	1045	987	886	722	505	286	106	3	0	0	0	0	7903

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5030 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: BC  
Latitude: 29.18° N  
Longitude: 81.02° W  
Elevation: 20 Meters AMSL  
Time Zone: -5

Instrument: PSP  
Calibration Constant: 8.67 uV/Wm-2  
Serial Number: 13434F3  
Calibration Date: 5/18/98

**Direct Normal Solar Radiation  
Hourly Integrated and Daily Totals  
Watt-Hours per Square Meter  
Bethune-Cookman College - June 1999**

Field: DNI

Hour Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	19	97	350	401	738	700	880	923	834	786	733	342	169	74	5	0	0	0	0	7049
2	0	0	0	0	0	33	64	38	337	368	462	812	696	769	797	704	257	64	43	3	0	0	0	0	5447
3	0	0	0	0	0	40	188	238	264	326	500	614	701	800	753	660	513	113	19	143	0	0	0	0	5873
4	0	0	0	0	0	14	127	385	595	683	635	745	614	6	31	372	65	36	16	11	0	0	0	0	4333
5	0	0	0	0	0	16	151	183	391	491	603	765	778	683	784	726	550	410	62	14	0	0	0	0	6607
6	0	0	0	0	0	38	258	421	512	846	894	872	769	789	582	457	350	415	105	5	0	0	0	0	7315
7	0	0	0	0	0	52	240	392	604	280	156	228	168	247	150	62	49	63	106	13	0	0	0	0	2810
8	0	0	0	0	0	24	143	588	445	428	813	799	791	701	336	329	245	71	37	2	0	0	0	0	5750
9	0	0	0	0	0	16	124	81	335	407	559	514	191	625	553	90	142	116	27	3	0	0	0	0	3782
10	0	0	0	0	0	7	28	17	62	157	243	89	22	238	153	220	41	44	28	6	0	0	0	0	1357
11	0	0	0	0	0	32	124	62	544	779	538	553	671	800	363	644	362	144	14	3	0	0	0	0	5631
12	0	0	0	0	0	24	180	389	499	406	291	157	11	8	115	280	16	35	17	3	0	0	0	0	2429
13	0	0	0	0	0	10	55	57	88	35	20	49	254	552	245	45	2	121	27	3	0	0	0	0	1564
14	0	0	0	0	0	28	205	446	551	673	650	646	642	749	575	445	21	19	15	4	0	0	0	0	5670
15	0	0	0	0	0	37	211	430	443	170	599	635	593	389	674	526	60	24	15	6	0	0	0	0	4812
16	0	0	0	0	0	33	29	31	47	245	545	328	453	172	75	9	5	9	25	3	0	0	0	0	2008
17	0	0	0	0	0	31	42	65	193	325	86	165	33	8	4	2	7	18	22	4	0	0	0	0	1006
18	0	0	0	0	0	18	57	40	185	393	133	150	56	62	38	46	5	19	22	57	0	0	0	0	1283
19	0	0	0	0	0	13	30	109	76	48	91	402	310	160	634	301	13	25	22	35	0	0	0	0	2270
20	0	0	0	0	0	20	20	84	39	231	851	868	402	90	26	25	35	74	31	6	0	0	0	0	2801
21	0	0	0	0	0	5	23	64	37	99	306	64	12	27	53	7	11	29	18	7	0	0	0	0	760
22	0	0	0	0	0	31	102	399	40	31	81	756	776	822	309	247	102	39	22	4	0	0	0	0	3762
23	0	0	0	0	0	10	232	261	224	244	333	489	465	757	770	720	567	306	22	4	0	0	0	0	5405
24	0	0	0	0	0	66	139	109	93	56	61	119	218	259	264	600	511	387	40	4	0	0	0	0	2927
25	0	0	0	0	0	12	36	39	43	119	212	342	170	60	121	51	33	4	2	2	0	0	0	0	1247
26	0	0	0	0	0	30	159	417	363	319	534	662	189	26	148	126	47	10	4	6	0	0	0	0	3040
27	0	0	0	0	0	28	47	59	56	49	38	34	121	267	513	647	159	2	12	3	0	0	0	0	2036
28	0	0	0	0	0	20	34	37	33	332	108	77	43	9	8	5	0	2	3	2	0	0	0	0	713
29	0	0	0	0	0	10	26	23	36	104	40	41	35	51	27	22	23	37	14	4	0	0	0	0	493
30	0	0	0	0	0	11	62	53	39	32	54	61	39	56	84	118	26	4	2	1	0	0	0	0	643
Avg	0	0	0	0	0	24	108	196	252	314	371	431	372	367	332	307	152	94	29	12	0	0	0	0	3361
S D	0	0	0	0	0	14	74	172	201	235	272	302	297	321	282	267	185	121	26	27	0	0	0	0	2095
S/A	0	0	0	0	0	0.56	0.68	0.88	0.8	0.75	0.73	0.7	0.8	0.87	0.85	0.87	1.22	1.29	0.89	2.19	0	0	0	0	0.62
Min	0	0	0	0	0	5	20	17	33	31	20	34	11	6	4	2	0	2	2	1	0	0	0	0	493
Max	0	0	0	0	0	66	258	588	604	846	894	880	923	834	797	733	567	415	106	143	0	0	0	0	7315

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 133440 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: BC  
Latitude: 29.18° N  
Longitude: 81.02° W  
Elevation: 20 Meters AMSL  
Time Zone: -5

Instrument: Estimated DNI  
Calibration Constant: 0.00  
Serial Number: XXXXXXX  
Calibration Date: 1/1/1997

**Diffuse Solar Radiation on a Horizontal Surface (Shadow Band PSP)**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bethune-Cookman College - June 1999**

Field: DHI

Hour Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	7	64	234	207	189	263	168	132	166	195	176	197	157	60	1	0	0	0	0	2216
2	0	0	0	0	0	7	65	94	194	240	357	283	332	241	190	204	177	98	42	1	0	0	0	0	2526
3	0	0	0	0	0	13	97	192	270	354	361	335	282	197	194	207	155	92	26	0	0	0	0	0	2775
4	0	0	0	0	0	8	77	145	180	204	269	277	269	93	198	318	172	82	22	0	0	0	0	0	2314
5	0	0	0	0	0	11	102	150	236	289	272	267	266	227	176	158	155	94	56	2	0	0	0	0	2463
6	0	0	0	0	0	16	73	144	156	120	124	167	222	171	210	168	160	121	58	2	0	0	0	0	1912
7	0	0	0	0	0	17	86	153	247	338	468	465	491	478	414	298	253	158	87	2	0	0	0	0	3955
8	0	0	0	0	0	11	76	136	232	272	224	201	219	254	374	338	289	137	41	1	0	0	0	0	2808
9	0	0	0	0	0	8	106	215	305	345	244	417	389	380	321	337	256	114	31	1	0	0	0	0	3470
10	0	0	0	0	0	8	51	134	254	341	444	195	167	376	431	340	141	101	30	1	0	0	0	0	3014
11	0	0	0	0	0	12	111	196	208	158	294	383	336	219	241	208	221	137	25	1	0	0	0	0	2752
12	0	0	0	0	0	10	104	168	243	390	402	231	69	43	264	318	147	88	33	2	0	0	0	0	2513
13	0	0	0	0	0	9	83	142	173	222	161	227	296	392	328	123	17	156	42	1	0	0	0	0	2372
14	0	0	0	0	0	14	83	142	229	222	274	283	264	245	232	253	143	68	28	2	0	0	0	0	2481
15	0	0	0	0	0	16	93	160	215	258	271	251	275	330	243	249	148	65	21	0	0	0	0	0	2595
16	0	0	0	0	0	14	50	78	177	387	351	343	327	308	257	46	16	20	27	1	0	0	0	0	2402
17	0	0	0	0	0	13	88	214	276	357	456	274	224	56	43	13	22	38	25	1	0	0	0	0	2099
18	0	0	0	0	0	6	72	185	234	412	243	439	268	323	354	213	24	45	34	1	0	0	0	0	2853
19	0	0	0	0	0	5	34	188	242	296	303	399	492	365	331	315	66	64	22	3	0	0	0	0	3126
20	0	0	0	0	0	7	27	120	155	237	182	194	239	393	214	148	189	199	39	1	0	0	0	0	2343
21	0	0	0	0	0	3	39	167	163	298	468	384	75	200	230	63	41	66	22	2	0	0	0	0	2220
22	0	0	0	0	0	7	56	121	87	204	342	255	212	164	232	292	160	94	27	1	0	0	0	0	2255
23	0	0	0	0	0	5	65	186	251	417	345	309	396	239	187	159	138	128	41	2	0	0	0	0	2870
24	0	0	0	0	0	14	125	221	278	377	471	449	491	481	454	245	207	121	40	1	0	0	0	0	3976
25	0	0	0	0	0	6	44	100	267	434	492	407	342	368	420	324	112	16	0	?	0	0	0	0	3333
26	0	0	0	0	0	12	112	139	193	410	307	333	279	243	379	281	167	37	15	0	0	0	0	0	2906
27	0	0	0	0	0	9	59	170	292	217	479	345	495	480	340	228	87	12	14	1	0	0	0	0	3229
28	0	0	0	0	0	8	42	91	152	380	415	466	433	71	45	22	7	8	6	1	0	0	0	0	2146
29	0	0	0	0	0	3	38	57	163	395	308	263	374	349	142	95	75	86	24	1	0	0	0	0	2371
30	0	0	0	0	0	5	89	128	142	261	390	340	237	359	396	353	133	15	4	1	0	0	0	0	2851
Avg	0	0	0	0	0	10	74	152	214	301	333	312	296	274	268	216	136	87	31	1	0	0	0	0	2705
S/D	0	0	0	0	0	4	26	43	51	85	99	88	113	121	105	99	75	49	18	1	0	0	0	0	504
S/A	0	0	0	0	0	0.41	0.35	0.28	0.24	0.28	0.3	0.28	0.38	0.44	0.39	0.46	0.55	0.56	0.56	0.66	0	0	0	0	0.19
Min	0	0	0	0	0	3	27	57	87	120	124	167	69	43	43	13	7	8	0	0	0	0	0	0	1912
Max	0	0	0	0	0	17	125	234	305	434	492	466	495	481	454	353	289	199	87	3	0	0	0	0	3976

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5030 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: BC  
Latitude: 29.18° N  
Longitude: 81.02° W  
Elevation: 20 Meters AMSL  
Time Zone: -5

Instrument: PSP  
Calibration Constant: 7.60 uV/Wm-2  
Serial Number: 25951F3  
Calibration Date: 5/18/98