

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bethune-Cookman College - December 1997**

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	0	0	45	211	402	549	645	667	616	501	334	135	6	0	0	0	0	0	0	4112
2	0	0	0	0	0	0	0	48	200	368	460	324	446	390	170	101	55	4	0	0	0	0	0	0	2566
3	0	0	0	0	0	0	0	17	136	299	421	500	385	296	236	240	68	2	0	0	0	0	0	0	2600
4	0	0	0	0	0	0	0	6	19	38	104	156	145	111	100	85	23	1	0	0	0	0	0	0	789
5	0	0	0	0	0	0	0	47	170	306	603	615	474	557	382	203	54	2	0	0	0	0	0	0	3413
6	0	0	0	0	0	0	0	39	206	398	553	649	675	630	508	342	142	7	0	0	0	0	0	0	4151
7	0	0	0	0	0	0	0	38	205	397	547	646	668	632	521	338	110	4	0	0	0	0	0	0	4105
8	0	0	0	0	0	0	0	28	165	294	532	621	641	593	497	281	71	4	0	0	0	0	0	0	3725
9	0	0	0	0	0	0	0	37	179	117	146	538	391	293	451	205	89	4	0	0	0	0	0	0	2450
10	0	0	0	0	0	0	0	28	182	108	66	78	47	67	100	144	72	3	0	0	0	0	0	0	895
11	0	0	0	0	0	0	0	7	61	68	143	170	166	127	162	112	52	1	0	0	0	0	0	0	1069
12	0	0	0	0	0	0	0	6	9	16 ?	32	57	96	123	77	74	16	1	0	0	0	0	0	0	505
13	0	0	0	0	0	0	0	2	14	31	71	80	52	61	47	20	12	2	0	0	0	0	0	0	391
14	0	0	0	0	0	0	0	7	9	20	49	63	132	91	54	32	21	1	0	0	0	0	0	0	477
15	0	0	0	0	0	0	0	4	60	116	131	242	88	83	45	21	4	1	0	0	0	0	0	0	794
16	0	0	0	0	0	0	0	13	86	203	213	268	283	263	280	328	136	7	0	0	0	0	0	0	2082
17	0	0	0	0	0	0	0	35	200	365	518	624	656	619	511	347	151	10	0	0	0	0	0	0	4036
18	0	0	0	0	0	0	0	18	134	359	508	604	632	593	493	335	138	8	0	0	0	0	0	0	3822
19	0	0	0	0	0	0	0	24	141	279	495	602	633	602	497	339	141	8	0	0	0	0	0	0	3762
20	0	0	0	0	0	0	0	20	95	217	240	351	626	563	446	292	82	5	0	0	0	0	0	0	2936
21	0	0	0	0	0	0	0	28	99	206	340	387	370	334	311	185	72	8	0	0	0	0	0	0	2340
22	0	0	0	0	0	0	0	19	147	321	460	537	396	216	245	225	84	4	0	0	0	0	0	0	2653
23	0	0	0	0	0	0	0	14	88	186	221	140	85	130	105	63	18	1	0	0	0	0	0	0	1051
24	0	0	0	0	0	0	0	10	37	98	124	240	249	130	116	42	17	1	0	0	0	0	0	0	1065
25	0	0	0	0	0	0	0	6	51	80	94	119	39 ?	45 ?	30	34	16	0	0	0	0	0	0	0	515
26	0	0	0	0	0	0	0	9	63	181	270	267	267	147	112	144	45	0	0	0	0	0	0	0	1506
27	0	0	0	0	0	0	0	4	12	65	155	175	128	141	92	124	31	1	0	0	0	0	0	0	928
28	0	0	0	0	0	0	0	8	76	223	283	377	345	244	205	134	112	7	0	0	0	0	0	0	2014
29	0	0	0	0	0	0	0	13	130	90	140	489	567	552	465	283	112	11	0	0	0	0	0	0	2851
30	0	0	0	0	0	0	0	18	163	359	522	633	672	640	539	382	177	20	0	0	0	0	0	0	4126
31	0	0	0	0	0	0	0	18	110	353	499	621	680	591	533	370	123	15	0	0	0	0	0	0	3913
Avg	0	0	0	0	0	0	0	20	112	212	306	381	377	338	285	199	77	5	0	0	0	0	0	0	2311
S D	0	0	0	0	0	0	0	14	66	129	190	212	232	222	186	120	49	4	0	0	0	0	0	0	1330
S/A	0	0	0	0	0	0	0	0.69	0.59	0.61	0.62	0.56	0.61	0.66	0.65	0.6	0.64	0.94	0	0	0	0	0	0	0.58
Min	0	0	0	0	0	0	0	2	9	16	32	57	39	45	30	20	4	0	0	0	0	0	0	0	391
Max	0	0	0	0	0	0	0	48	211	402	603	649	680	640	539	382	177	20	0	0	0	0	0	0	4151

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 16430 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: 8.33 uV/Wm-2  
Serial Number: 17800F3  
Calibration Date: 9/13/96

**Direct Normal Solar Radiation  
Hourly Integrated and Daily Totals  
Watt-Hours per Square Meter  
Bethune-Cookman College - December 1997**

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	0	0	201	595	801	889	947	963	948	904	814	580	77	0	0	0	0	0	0	7718
2	0	0	0	0	0	0	0	157	467	640	450	69	179	186	34	18	23	5	0	0	0	0	0	0	2229
3	0	0	0	0	0	0	0	13	102	219	300	328	256	113	58	254	76	7	0	0	0	0	0	0	1726
4	0	0	0	0	0	0	0	4	5	3	10	15	15	11	12	14	8	2	0	0	0	0	0	0	99
5	0	0	0	0	0	0	0	168	201	502	772	317	62	374	160	38	21	5	0	0	0	0	0	0	2618
6	0	0	0	0	0	0	0	191	623	827	931	979	998	994	928	844	626	94	0	0	0	0	0	0	8035
7	0	0	0	0	0	0	0	185	631	839	926	983	993	966	953	846	370	7	0	0	0	0	0	0	7698
8	0	0	0	0	0	0	0	57	320	344	888	936	937	910	663	340	40	5	0	0	0	0	0	0	5441
9	0	0	0	0	0	0	0	108	372	28	8	522	148	81	552	177	163	14	0	0	0	0	0	0	2175
10	0	0	0	0	0	0	0	12	114	19	7	6	3	7	10	127	96	3	0	0	0	0	0	0	405
11	0	0	0	0	0	0	0	5	10	10	17	15	13	12	19	18	11	6	0	0	0	0	0	0	135
12	0	0	0	0	0	0	0	3	1	1	3	5	8	11	8	11	4	1	0	0	0	0	0	0	54
13	0	0	0	0	0	0	0	1	3	4	6	7	4	5	5	3	3	3	0	0	0	0	0	0	44
14	0	0	0	0	0	0	0	4	2	2	4	5	11	8	6	4	6	1	0	0	0	0	0	0	51
15	0	0	0	0	0	0	0	7	22	30	13	26	8	7	5	4	1	1	0	0	0	0	0	0	123
16	0	0	0	0	0	0	0	42	20	25	17	16	30	30	130	756	536	56	0	0	0	0	0	0	1658
17	0	0	0	0	0	0	0	228	683	812	911	974	998	1002	969	888	691	182	0	0	0	0	0	0	8337
18	0	0	0	0	0	0	0	64	353	759	868	916	923	915	891	808	568	87	0	0	0	0	0	0	7151
19	0	0	0	0	0	0	0	11	228	550	867	939	940	947	912	831	601	97	0	0	0	0	0	0	6924
20	0	0	0	0	0	0	0	22	25	46	32	140	870	825	528	496	60	8	0	0	0	0	0	0	3053
21	0	0	0	0	0	0	0	28	47	131	212	156	126	115	131	34	18	13	0	0	0	0	0	0	1011
22	0	0	0	0	0	0	0	34	372	598	677	623	225	28	86	195	48	11	0	0	0	0	0	0	2896
23	0	0	0	0	0	0	0	13	17	22	31	13	7	12	12	10	5	1	0	0	0	0	0	0	144
24	0	0	0	0	0	0	0	11	9	13	14	25	21	13	13	6	6	3	0	0	0	0	0	0	136
25	0	0	0	0	0	0	0	9	13	13	8	10	1	3	3	5	3	2	0	0	0	0	0	0	70
26	0	0	0	0	0	0	0	21	14	36	32	23	27	12	13	23	11	4	0	0	0	0	0	0	215
27	0	0	0	0	0	0	0	3	3	8	17	16	9	13	7	19	6	1	0	0	0	0	0	0	100
28	0	0	0	0	0	0	0	6	17	64	43	132	98	26	26	21	94	6	0	0	0	0	0	0	534
29	0	0	0	0	0	0	0	26	124	14	44	463	759	680	659	494	240	29	0	0	0	0	0	0	3533
30	0	0	0	0	0	0	0	71	548	806	922	985	1009	1010	985	923	722	208	0	0	0	0	0	0	8189
31	0	0	0	0	0	0	0	17	136	675	837	885	979	865	937	834	277	67	0	0	0	0	0	0	6509
Avg	0	0	0	0	0	0	0	56	196	285	347	370	375	359	342	318	191	32	0	0	0	0	0	0	2871
S/D	0	0	0	0	0	0	0	70	227	329	396	403	428	422	397	358	248	52	0	0	0	0	0	0	3056
S/A	0	0	0	0	0	0	0	1.26	1.16	1.16	1.14	1.09	1.14	1.17	1.16	1.13	1.3	1.61	0	0	0	0	0	0	1.06
Min	0	0	0	0	0	0	0	1	1	1	3	5	1	3	3	3	1	1	0	0	0	0	0	0	44
Max	0	0	0	0	0	0	0	228	683	839	931	985	1009	1010	985	923	722	208	0	0	0	0	0	0	8337

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 53305 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: XXXXXXXX
Calibration Date: 1/1/1997

**Diffuse Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bethune-Cookman College - December 1997**

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	0	0	20	44	54	62	62	64	63	58	48	28	2	0	0	0	0	0	0	504
2	0	0	0	0	0	0	0	28	69	92	216	283	335	282	153	95	50	4	0	0	0	0	0	0	1607
3	0	0	0	0	0	0	0	15	107	204	259	300	224	230	207	157	51	2	0	0	0	0	0	0	1756
4	0	0	0	0	0	0	0	5	17	37	98	147	136	104	95	80	22	1	0	0	0	0	0	0	743
5	0	0	0	0	0	0	0	25	109	84	190	425	435	343	302	190	50	2	0	0	0	0	0	0	2156
6	0	0	0	0	0	0	0	16	39	49	54	58	59	57	58	48	29	2	0	0	0	0	0	0	469
7	0	0	0	0	0	0	0	16	38	46	53	54	57	75	59	42	35	3	0	0	0	0	0	0	477
8	0	0	0	0	0	0	0	23	85	139	59	59	64	69	169	160	64	3	0	0	0	0	0	0	897
9	0	0	0	0	0	0	0	24	80	107	142	224	300	247	181	141	61	3	0	0	0	0	0	0	1511
10	0	0	0	0	0	0	0	26	152	100	63	75	45	64	95	105	53	3	0	0	0	0	0	0	780
11	0	0	0	0	0	0	0	6	58	64	134	162	158	120	152	106	50	2	0	0	0	0	0	0	1013
12	0	0	0	0	0	0	0	6	9	15 ?	31	54	91	116	73	70	15	1	0	0	0	0	0	0	481
13	0	0	0	0	0	0	0	2	13	29	68	76	50	58	44	19	11	2	0	0	0	0	0	0	372
14	0	0	0	0	0	0	0	6	8	19	47	60	125	87	51	31	19	1	0	0	0	0	0	0	454
15	0	0	0	0	0	0	0	4	55	105	124	226	83	79	43	19	3	0	0	0	0	0	0	0	743
16	0	0	0	0	0	0	0	13	81	193	204	259	265	245	222	65	36	4	0	0	0	0	0	0	1586
17	0	0	0	0	0	0	0	14	36	41	47	51	51	48	43	37	24	2	0	0	0	0	0	0	394
18	0	0	0	0	0	0	0	12	44	57	61	66	73	71	63	51	32	3	0	0	0	0	0	0	533
19	0	0	0	0	0	0	0	25	79	57	51	51	64	62	57	46	29	2	0	0	0	0	0	0	523
20	0	0	0	0	0	0	0	19	90	199	223	267	99	91	195	111	71	4	0	0	0	0	0	0	1370
21	0	0	0	0	0	0	0	25	87	153	229	296	294	268	248	173	69	7	0	0	0	0	0	0	1851
22	0	0	0	0	0	0	0	16	57	85	113	174	259	200	206	158	74	3	0	0	0	0	0	0	1347
23	0	0	0	0	0	0	0	13	84	177	205	133	80	123	99	60	17	1	0	0	0	0	0	0	992
24	0	0	0	0	0	0	0	10	35	93	117	225	236	122	110	40	16	1	0	0	0	0	0	0	1005
25	0	0	0	0	0	0	0	6	48	75	91	114	37 ?	43 ?	28	32	15	0	0	0	0	0	0	0	489
26	0	0	0	0	0	0	0	9	60	167	254	254	251	140	106	136	42	0	0	0	0	0	0	0	1418
27	0	0	0	0	0	0	0	4	11	62	147	166	123	134	89	117	29	1	0	0	0	0	0	0	883
28	0	0	0	0	0	0	0	7	72	197	261	300	286	228	193	126	93	7	0	0	0	0	0	0	1770
29	0	0	0	0	0	0	0	10	105	84	118	215	106	161	138	113	54	10	0	0	0	0	0	0	1115
30	0	0	0	0	0	0	0	11	37	48	53	56	58	57	51	44	31	6	0	0	0	0	0	0	453
31	0	0	0	0	0	0	0	17	73	92	72	102	83	90	69	59	65	10	0	0	0	0	0	0	732
Avg	0	0	0	0	0	0	0	14	61	94	124	161	148	132	118	86	40	3	0	0	0	0	0	0	981
S D	0	0	0	0	0	0	0	8	33	56	73	101	106	81	71	49	22	3	0	0	0	0	0	0	509
S/A	0	0	0	0	0	0	0	0.54	0.55	0.59	0.59	0.63	0.71	0.61	0.6	0.57	0.54	0.84	0	0	0	0	0	0	0.52
Min	0	0	0	0	0	0	0	2	8	15	31	51	37	43	28	19	3	0	0	0	0	0	0	0	372
Max	0	0	0	0	0	0	0	28	152	204	261	425	435	343	302	190	93	10	0	0	0	0	0	0	2156

Daylight Data Recovery: 0% missing; 1% exceed the 15% QC threshold -- 16430 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: 8.08 uV/Wm-2  
Serial Number: 17879F3  
Calibration Date: 9/13/96