

**Global Solar Radiation on a Horizontal Surface  
Hourly Integrated and Daily Totals  
Watt-Hours per Square Meter  
Bethune-Cookman College - October 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	0	29	130	167	268	659	790	411	537	412	326	253	54	0	0	0	0	0	0	4036
2	0	0	0	0	0	0	31	188	305	438	462	590	329	465	407	112	69	19	1	0	0	0	0	0	3415
3	0	0	0	0	0	0	13	85	182	372	376	353	404	636	494	231	129	33	0	0	0	0	0	0	3306
4	0	0	0	0	0	0	14	78	128	190	582	417	445	240	298	188	88	8	0	0	0	0	0	0	2679
5	0	0	0	0	0	0	16	78	135	175	156	116	209	196	201	117	74	19	0	0	0	0	0	0	1494
6	0	0	0	0	0	0	19	121	362	534	357	483	461	558	382	317	263	42	0	0	0	0	0	0	3901
7	0	0	0	0	0	0	20	154	232	335	578	706	704	703	332	224	117	15	0	0	0	0	0	0	4120
8	0	0	0	0	0	0	26	180	358	584	695	548	404	230	186	154	74	16	0	0	0	0	0	0	3455
9	0	0	0	0	0	0	21	162	352	584	741	845	850	772	642	440	230	47	0	0	0	0	0	0	5687
10	0	0	0	0	0	0	25	166	373	577	751	844	852	781	646	412	203	42	0	0	0	0	0	0	5673
11	0	0	0	0	0	0	26	168	361	579	715	774	723	731	629	411	203	37	0	0	0	0	0	0	5357
12	0	0	0	0	0	0	18	158	292	589	734	821	827	759	621	428	216	36	0	0	0	0	0	0	5500
13	0	0	0	0	0	0	32	178	356	566	723	822	757	748	579	345	212	34	0	0	0	0	0	0	5352
14	0	0	0	0	0	0	15	114	322	436	538	744	628	422	458	244	110	11	0	0	0	0	0	0	4043
15	0	0	0	0	0	0	8	60	148	207	232	84	64	82	122	165	41	3	0	0	0	0	0	0	1216
16	0	0	0	0	0	0	2	11	17	30	40	67	57	76	83	43	31	4	0	0	0	0	0	0	461
17	0	0	0	0	0	0	5	65	346	274	489	362	351	732	637	418	201	30	0	0	0	0	0	0	3912
18	0	0	0	0	0	0	19	170	388	580	713	798	808	730	589	397	188	26	0	0	0	0	0	0	5406
19	0	0	0	0	0	0	20	172	380	546	540	755	735	218	499	351	152	25	0	0	0	0	0	0	4391
20	0	0	0	0	0	0	19	169	380	579	704	785	790	722	577	383	144	23	0	0	0	0	0	0	5275
21	0	0	0	0	0	0	2	23	41	186	156	65	111	103	59	53	39	15	0	0	0	0	0	0	853
22	0	0	0	0	0	0	13	153	370	559	437	620	733	674	594	398	181	21	0	0	0	0	0	0	4752
23	0	0	0	0	0	0	13	156	373	564	707	792	798	731	587	400	185	20	0	0	0	0	0	0	5325
24	0	0	0	0	0	0	14	168	391	576	729	810	809	412	450	373	206	32	0	0	0	0	0	0	4969
25	0	0	0	0	0	0	9	138	372	552	684	596	635	492	312	311	152	21	0	0	0	0	0	0	4274
26	0	0	0	0	0	0	6	63	240	543	668	642	785	696	503	377	167	18	0	0	0	0	0	0	4709
27	0	0	0	0	0	0	11	146	357	540	694	772	775	703	574	386	168	11	0	0	0	0	0	0	5136
28	0	0	0	0	0	0	10	133	308	524	676	749	643	657	540	275	111	11	0	0	0	0	0	0	4636
29	0	0	0	0	0	0	9	135	340	519	670	752	756	566	360	356	129	12	0	0	0	0	0	0	4604
30	0	0	0	0	0	0	9	139	328	524	677	717	386	680	557	392	188	14	0	0	0	0	0	0	4609
31	0	0	0	0	0	0	12	137	337	456	613	635	743	512	449	351	123	12	0	0	0	0	0	0	4380
Avg	0	0	0	0	0	0	16	129	292	451	564	608	580	534	445	303	150	23	0	0	0	0	0	0	4094
S/D	0	0	0	0	0	0	8	47	105	157	194	242	244	226	171	115	63	13	0	0	0	0	0	0	1401
S/A	0	0	0	0	0	0	0.51	0.36	0.36	0.35	0.34	0.4	0.42	0.42	0.38	0.38	0.42	0.55	3.27	0	0	0	0	0	0.34
Min	0	0	0	0	0	0	2	11	17	30	40	65	57	76	59	43	31	3	0	0	0	0	0	0	461
Max	0	0	0	0	0	0	32	188	391	589	751	845	852	781	646	440	263	54	1	0	0	0	0	0	5687

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 4276 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 - October 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	0	77	51	46	51	68	58	48	69	67	53	54	31	7	0	0	0	0	0	679
2	0	0	0	0	0	0	28	25	47	51	50	70	47	65	57	25	24	11	0	0	0	0	0	0	499
3	0	0	0	0	0	0	23	38	56	65	55	51	58	64	60	50	55	11	33	0	0	0	0	0	617
4	0	0	0	0	0	0	18	43	40	42	65	51	72	41	55	28	9	8	0	0	0	0	0	0	472
5	0	0	0	0	0	0	29	46	39	15	12	9	34	7	30	3	8	6	4	0	0	0	0	0	242
6	0	0	0	0	0	0	37	31	54	55	41	61	60	71	74	68	81	17	10	0	0	0	0	0	660
7	0	0	0	0	0	0	44	46	40	46	85	63	52	60	55	54	36	12	0	0	0	0	0	0	593
8	0	0	0	0	0	0	49	32	53	55	50	57	60	41	25	31	27	9	0	0	0	0	0	0	490
9	0	0	0	0	0	0	39	7	39	46	31	27	25	34	27	24	21	25	0	0	0	0	0	0	346
10	0	0	0	0	0	0	80	0	20	31	27	23	20	28	23	20	21	28	0	0	0	0	0	0	319
11	0	0	0	0	0	0	45	31	6	60	27	32	29	35	37	31	26	39	0	0	0	0	0	0	399
12	0	0	0	0	0	0	9	18	54	60	18	22	21	24	21	15	11	19	0	0	0	0	0	0	293
13	0	0	0	0	0	0	20	23	31	58	20	43	38	38	32	46	12	19	0	0	0	0	0	0	378
14	0	0	0	0	0	0	16	24	40	64	64	69	55	57	59	58	28	6	0	0	0	0	0	0	541
15	0	0	0	0	0	0	10	16	39	30	25	6	3	3	6	24	16	1	0	0	0	0	0	0	181
16	0	0	0	0	0	0	1	3	1	1	1	1	1	1	1	1	1	12	0	0	0	0	0	0	24
17	0	0	0	0	0	0	2	30	98	44	53	25	29	55	37	12	21	22	0	0	0	0	0	0	430
18	0	0	0	0	0	0	166	24	48	44	33	40	40	43	37	27	28	24	0	0	0	0	0	0	554
19	0	0	0	0	0	0	25	72	62	52	58	50	47	17	39	23	27	24	0	0	0	0	0	0	497
20	0	0	0	0	0	0	8	11	46	39	17	23	32	35	40	25	23	29	0	0	0	0	0	0	326
21	0	0	0	0	0	0	2	2	2	6	4	2	2	4	1	2	2	18	0	0	0	0	0	0	47
22	0	0	0	0	0	0	20	30	43	41	47	52	41	37	33	18	20	16	0	0	0	0	0	0	399
23	0	0	0	0	0	0	17	22	42	36	22	29	29	31	32	10	9	13	0	0	0	0	0	0	292
24	0	0	0	0	0	0	13	14	40	28	26	32	31	31	54	49	45	25	0	0	0	0	0	0	388
25	0	0	0	0	0	0	17	32	38	30	39	44	41	44	36	40	18	24	0	0	0	0	0	0	402
26	0	0	0	0	0	0	15	33	44	32	33	48	35	41	42	30	23	33	0	0	0	0	0	0	410
27	0	0	0	0	0	0	13	23	39	29	29	32	29	29	35	25	17	14	0	0	0	0	0	0	314
28	0	0	0	0	0	0	12	26	52	32	33	35	65	40	42	39	34	16	0	0	0	0	0	0	427
29	0	0	0	0	0	0	20	30	41	28	30	32	31	53	30	34	34	20	0	0	0	0	0	0	383
30	0	0	0	0	0	0	13	34	36	30	31	38	29	29	38	49	54	23	0	0	0	0	0	0	404
31	0	0	0	0	0	0	30	36	39	36	30	44	38	46	62	36	21	14	0	0	0	0	0	0	433
Avg	0	0	0	0	0	0	29	28	41	40	36	38	37	38	38	31	26	19	2	0	0	0	0	0	401
S/D	0	0	0	0	0	0	31	15	18	16	19	18	17	19	18	17	17	9	6	0	0	0	0	0	150
S/A	0	0	0	0	0	0	1.08	0.55	0.43	0.39	0.53	0.49	0.47	0.49	0.46	0.55	0.65	0.46	3.5	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	24
Max	0	0	0	0	0	0	166	72	98	65	85	70	72	71	74	68	81	39	33	0	0	0	0	0	679

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 152214 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 (Shadow Band PSP)**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bethune-Cookman College - October 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	0	28	115	145	236	574	538 ?	336	451	366	281	202	49	0	0	0	0	0	0	3323
2	0	0	0	0	0	0	29	181	258	321 ?	314 ?	474 ?	290	347	368	98	61	17	1	0	0	0	0	0	2758
3	0	0	0	0	0	0	12	75	156	331	335	311	355	545 ?	422	204	110	31	0	0	0	0	0	0	2887
4	0	0	0	0	0	0	13	67	110	163	429 ?	375	386	208	261	173	85	8	0	0	0	0	0	0	2278
5	0	0	0	0	0	0	14	66	118	166	148	109	181	190	182	116	72	19	0	0	0	0	0	0	1380
6	0	0	0	0	0	0	16	95	299 ?	429 ?	251	354	361	390 ?	332	282	183 ?	40	0	0	0	0	0	0	3032
7	0	0	0	0	0	0	19	142	214	306	428 ?	485 ?	533 ?	617 ?	295	196	104	14	0	0	0	0	0	0	3353
8	0	0	0	0	0	0	23	162	317	467 ?	568 ?	450	322	198	170	138	66	15	0	0	0	0	0	0	2895
9	0	0	0	0	0	0	20	161	329	490 ?	457 ?	?	?	611 ?	?	387 ?	223	44	0	0	0	0	0	0	2722 ?
10	0	0	0	0	0	0	25	171	364	483 ?	?	?	?	?	?	392	196	40	0	0	0	0	0	0	1671 ?
11	0	0	0	0	0	0	25	163	364	475 ?	?	?	690 ?	582 ?	386 ?	373	195	35	0	0	0	0	0	0	3288 ?
12	0	0	0	0	0	0	19	154	223	463 ?	?	?	?	?	?	403	212	34	0	0	0	0	0	0	1509 ?
13	0	0	0	0	0	0	35 ?	174	343	475 ?	?	672 ?	518 ?	578 ?	506 ?	314	208	32	0	0	0	0	0	0	3856 ?
14	0	0	0	0	0	0	14	109	274	398	476	567 ?	394 ?	380	356	216	100	10	0	0	0	0	0	0	3295
15	0	0	0	0	0	0	7	57	132	189	214	79	61	80	118	153	36	4	0	0	0	0	0	0	1130
16	0	0	0	0	0	0	2	10	16	29	39	66	57	75	83	43	31	3	0	0	0	0	0	0	456
17	0	0	0	0	0	0	5	58	262 ?	248	341 ?	342	329	576 ?	498 ?	378 ?	194	29	0	0	0	0	0	0	3261 ?
18	0	0	0	0	0	0	18	165	351 ?	?	?	?	?	493 ?	384	180	24	0	0	0	0	0	0	0	1614 ?
19	0	0	0	0	0	0	18	157	355	471 ?	424 ?	542 ?	342 ?	206	411 ?	340	145	23	0	0	0	0	0	0	3433 ?
20	0	0	0	0	0	0	21	168	339 ?	?	?	?	?	?	514 ?	371	137	21	0	0	0	0	0	0	1571 ?
21	0	0	0	0	0	0	2	23	40	183	153	64	109	100	58	52	38	14	0	0	0	0	0	0	837
22	0	0	0	0	0	0	12	147	337 ?	463 ?	372	330 ?	435 ?	465 ?	?	365 ?	176	20	0	0	0	0	0	0	3120 ?
23	0	0	0	0	0	0	14	151	339 ?	?	?	?	?	?	?	354 ?	182	20	0	0	0	0	0	0	1061 ?
24	0	0	0	0	0	0	14	137 ?	?	?	?	?	?	267 ?	375 ?	301 ?	159 ?	30	0	0	0	0	0	0	1283 ?
25	0	0	0	0	0	0	9	132	264 ?	515 ?	550 ?	464 ?	477 ?	391 ?	230	254 ?	148	20	0	0	0	0	0	0	3455 ?
26	0	0	0	0	0	0	6	57	181	?	407 ?	485 ?	?	491 ?	360 ?	364	161	17	0	0	0	0	0	0	2529 ?
27	0	0	0	0	0	0	10	142	340 ?	?	?	?	?	?	?	359	164	10	0	0	0	0	0	0	1024 ?
28	0	0	0	0	0	0	9	127	277	366 ?	?	?	466 ?	577 ?	474 ?	258	102	10	0	0	0	0	0	0	2666 ?
29	0	0	0	0	0	0	9	129	325	430 ?	?	?	?	435 ?	315	341	121	11	0	0	0	0	0	0	2115 ?
30	0	0	0	0	0	0	8	133	314	424 ?	?	520 ?	330	?	522 ?	312 ?	175	13	0	0	0	0	0	0	2752 ?
31	0	0	0	0	0	0	11	136	304 ?	354 ?	484 ?	512 ?	323 ?	405 ?	359	336	117	11	0	0	0	0	0	0	3353 ?
Avg	0	0	0	0	0	0	15	121	256	355	367	387	348	382	338	275	138	21	0	0	0	0	0	0	2384
S D	0	0	0	0	0	0	8	46	98	130	146	176	151	174	133	106	56	12	0	0	0	0	0	0	945
S/A	0	0	0	0	0	0	0.53	0.38	0.38	0.37	0.4	0.46	0.43	0.46	0.39	0.39	0.41	0.55	3.53	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	2	10	16	29	39	64	57	75	58	43	31	3	0	0	0	0	0	0	456
Max	0	0	0	0	0	0	35	181	364	515	574	672	690	617	522	403	223	49	1	0	0	0	0	0	3856

Daylight Data Recovery: 0% missing; 30% exceed the 15% QC threshold -- 4276 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