

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bethune-Cookman College - January 2001**

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	19	179	367	482	603	647	600	488	312	138	10	0	0	0	0	0	0	3844
2	0	0	0	0	0	0	0	9	90	125	189	369	238	239	183	149	54	9	0	0	0	0	0	0	1653
3	0	0	0	0	0	0	0	24	176	367	522	617	652	603	481	335	124	9	0	0	0	0	0	0	3910
4	0	0	0	0	0	0	0	24	179	371	523	618	669	625	515	355	160	18	0	0	0	0	0	0	4057
5	0	0	0	0	0	0	0	26	179	370	521	619	667	621	506	339	153	19	0	0	0	0	0	0	4020
6	0	0	0	0	0	0	0	32	205	368	530	623	665	620	501	341	158	19	0	0	0	0	0	0	4063
7	0	0	0	0	0	0	0	29	182	370	519	596	631	525	499	341	163	17	0	0	0	0	0	0	3872
8	0	0	0	0	0	0	0	7	43	166	211	563	432	357	316	274	115	12	0	0	0	0	0	0	2497
9	0	0	0	0	0	0	0	19	181	377	531	640	685	644	540	378	178	23	0	0	0	0	0	0	4196
10	0	0	0	0	0	0	0	24	166	372	525	634	688	512	492	320	166	23	0	0	0	0	0	0	3922
11	0	0	0	0	0	0	0	26	190	299	457	594	632	584	404	241	101	6	0	0	0	0	0	0	3533
12	0	0	0	0	0	0	0	21	141	293	482	512	452	505	503	367	168	19	0	0	0	0	0	0	3464
13	0	0	0	0	0	0	0	4	41	127	291	344	643	565	452	355	166	25	0	0	0	0	0	0	3014
14	0	0	0	0	0	0	0	17	100	300	384	583	658	615	506	336	116	14	0	0	0	0	0	0	3629
15	0	0	0	0	0	0	0	17	104	304	501	590	662	578	473	354	172	20	0	0	0	0	0	0	3777
16	0	0	0	0	0	0	0	22	167	302	496	597	637	558	499	349	168	22	0	0	0	0	0	0	3818
17	0	0	0	0	0	0	0	29	182	340	474	592	637	583	437	225	86	23	0	0	0	0	0	0	3608
18	0	0	0	0	0	0	0	13	66	193	432	609	674	508	380	190	107	18	0	0	0	0	0	0	3191
19	0	0	0	0	0	0	0	22	103	367	516	614	659	586	333	370	158	24	0	0	0	0	0	0	3752
20	0	0	0	0	0	0	0	8	60	94	94	112	227	262	376	245	162	40	0	0	0	0	0	0	1679
21	0	0	0	0	0	0	0	20	159	284	415	603	684	615	501	339	157	30	0	0	0	0	0	0	3807
22	0	0	0	0	0	0	0	6	62	120	211	533	175	85	74	196	34	6	0	0	0	0	0	0	1502
23	0	0	0	0	0	0	0	3	25	119	350	492	705	676	590	421	216	42	0	0	0	0	0	0	3640
24	0	0	0	0	0	0	0	28	192	395	560	662	715	679	583	420	202	27	0	0	0	0	0	0	4461
25	0	0	0	0	0	0	0	26	183	382	546	662	721	699	595	433	224	45	0	0	0	0	0	0	4518
26	0	0	0	0	0	0	0	29	183	383	544	619	645	661	557	388	187	40	0	0	0	0	0	0	4234
27	0	0	0	0	0	0	0	31	192	343	529	581	668	658	516	365	184	37	0	0	0	0	0	0	4103
28	0	0	0	0	0	0	0	31	196	367	529	639	695	665	567	407	209	42	0	0	0	0	0	0	4348
29	0	0	0	0	0	0	0	40	152	355	524	457	477	490	419	348	179	40	0	0	0	0	0	0	3481
30	0	0	0	0	0	0	0	31	199	363	271	266	234	235	277	237	140	31	0	0	0	0	0	0	2286
Avg	0	0	0	0	0	0	0	21	143	300	439	551	586	538	452	324	151	24	0	0	0	0	0	0	3529
S D	0	0	0	0	0	0	0	9	56	96	126	124	159	150	117	72	43	11	0	0	0	0	0	0	805
S/A	0	0	0	0	0	0	0	0.43	0.39	0.32	0.29	0.22	0.27	0.28	0.26	0.22	0.29	0.48	0	0	0	0	0	0	0.23
Min	0	0	0	0	0	0	0	3	25	94	94	112	175	85	74	149	34	6	0	0	0	0	0	0	1502
Max	0	0	0	0	0	0	0	40	205	395	560	662	721	699	595	433	224	45	0	0	0	0	0	0	4518

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 3776 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:	5/18/1998

**Direct Normal Solar Radiation**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bethune-Cookman College - January 2001**

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	13	43	32	32	11	30	26	25	27	38	35	0	0	0	0	0	0	311
2	0	0	0	0	0	0	0	5	14	14	16	26	22	17	17	20	14	11	0	0	0	0	0	0	175
3	0	0	0	0	0	0	0	17	37	28	31	9	28	42	41	33	29	14	0	0	0	0	0	0	309
4	0	0	0	0	0	0	0	15	38	26	30	9	29	26	25	26	30	17	0	0	0	0	0	0	270
5	0	0	0	0	0	0	0	21	33	24	28	6	27	26	25	27	35	101	0	0	0	0	0	0	351
6	0	0	0	0	0	0	0	17	43	25	28	1	16	19	11	20	30	54	0	0	0	0	0	0	264
7	0	0	0	0	0	0	0	9	30	24	28	4	26	30	7	21	36	34	0	0	0	0	0	0	251
8	0	0	0	0	0	0	0	13	7	13	14	28	34	35	28	38	29	16	0	0	0	0	0	0	254
9	0	0	0	0	0	0	0	8	30	21	13	12	26	23	34	31	43	30	0	0	0	0	0	0	270
10	0	0	0	0	0	0	0	16	32	23	17	15	33	30	49	51	46	25	0	0	0	0	0	0	338
11	0	0	0	0	0	0	0	17	49	55	37	16	27	31	36	43	21	12	0	0	0	0	0	0	343
12	0	0	0	0	0	0	0	17	28	37	42	47	47	35	33	28	34	75	0	0	0	0	0	0	424
13	0	0	0	0	0	0	0	4	9	14	16	22	36	42	38	37	39	39	0	0	0	0	0	0	295
14	0	0	0	0	0	0	0	9	16	46	38	36	41	30	38	37	17	18	0	0	0	0	0	0	327
15	0	0	0	0	0	0	0	12	8	27	80	10	28	43	33	34	40	28	0	0	0	0	0	0	343
16	0	0	0	0	0	0	0	7	97	14	23	17	32	34	39	34	42	29	0	0	0	0	0	0	367
17	0	0	0	0	0	0	0	31	43	38	31	22	31	32	43	31	16	18	0	0	0	0	0	0	337
18	0	0	0	0	0	0	0	9	11	9	45	19	37	38	38	25	12	38	0	0	0	0	0	0	282
19	0	0	0	0	0	0	0	21	20	31	31	14	30	45	40	39	46	38	0	0	0	0	0	0	356
20	0	0	0	0	0	0	0	4	6	8	6	6	10	18	41	31	29	33	0	0	0	0	0	0	190
21	0	0	0	0	0	0	0	14	39	40	50	43	37	48	53	50	55	11	0	0	0	0	0	0	441
22	0	0	0	0	0	0	0	6	13	10	17	34	12	7	7	19	8	8	0	0	0	0	0	0	142
23	0	0	0	0	0	0	0	7	6	16	27	15	27	30	36	31	22	24	0	0	0	0	0	0	241
24	0	0	0	0	0	0	0	16	26	21	21	11	26	25	31	29	22	43	0	0	0	0	0	0	271
25	0	0	0	0	0	0	0	14	30	26	25	14	27	30	33	30	18	34	0	0	0	0	0	0	281
26	0	0	0	0	0	0	0	18	34	23	23	21	32	31	34	37	30	40	0	0	0	0	0	0	322
27	0	0	0	0	0	0	0	28	43	32	32	29	38	41	41	48	42	36	0	0	0	0	0	0	410
28	0	0	0	0	0	0	0	17	45	31	26	19	32	33	37	39	30	35	0	0	0	0	0	0	342
29	0	0	0	0	0	0	0	60	35	24	38	39	41	45	52	53	50	24	0	0	0	0	0	0	460
30	0	0	0	0	0	0	0	20	35	68	17	10	11	10	28	31	36	31	0	0	0	0	0	0	298
Avg	0	0	0	0	0	0	0	15	30	27	29	19	29	31	33	33	31	32	0	0	0	0	0	0	309
S D	0	0	0	0	0	0	0	10	18	13	14	12	8	10	11	9	12	19	0	0	0	0	0	0	72
S/A	0	0	0	0	0	0	0	0.68	0.6	0.49	0.48	0.62	0.29	0.32	0.34	0.27	0.38	0.59	0	0	0	0	0	0	0.23
Min	0	0	0	0	0	0	0	4	6	8	6	1	10	7	7	19	8	8	0	0	0	0	0	0	142
Max	0	0	0	0	0	0	0	60	97	68	80	47	47	48	53	53	55	101	0	0	0	0	0	0	460

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 3776 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 - January 2001**

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	18	159	395 ?	375 ?	?	?	?	?	269 ?	130	9	0	0	0	0	0	0	1356 ?
2	0	0	0	0	0	0	0	8	87	120	180	353	225	229	174	141	51	8	0	0	0	0	0	0	1578
3	0	0	0	0	0	0	0	23	167	271 ?	?	?	526 ?	502 ?	393 ?	283 ?	91	9	0	0	0	0	0	0	2265 ?
4	0	0	0	0	0	0	0	23	171	?	?	?	?	?	?	264 ?	154	16	0	0	0	0	0	0	628 ?
5	0	0	0	0	0	0	0	25	171	?	?	?	?	?	?	260 ?	146	18	0	0	0	0	0	0	619 ?
6	0	0	0	0	0	0	0	31	212 ?	279 ?	?	?	?	?	?	270 ?	152	18	0	0	0	0	0	0	962 ?
7	0	0	0	0	0	0	0	28	175	?	?	?	526 ?	432 ?	411 ?	?	275 ?	155	16	0	0	0	0	0	2019 ?
8	0	0	0	0	0	0	0	8	41	161	204	425 ?	410	317	302	236 ?	108	11	0	0	0	0	0	0	2223
9	0	0	0	0	0	0	0	19	166	?	?	?	?	?	?	?	169	21	0	0	0	0	0	0	374 ?
10	0	0	0	0	0	0	0	23	159	?	?	?	523 ?	449 ?	334 ?	245 ?	155	21	0	0	0	0	0	0	1909 ?
11	0	0	0	0	0	0	0	24	150 ?	276	357 ?	531 ?	532 ?	515 ?	320 ?	183 ?	96	6	0	0	0	0	0	0	2988 ?
12	0	0	0	0	0	0	0	20	119	264	433 ?	430 ?	406	431 ?	392 ?	283 ?	160	18	0	0	0	0	0	0	2956 ?
13	0	0	0	0	0	0	0	4	39	122	282	331	528 ?	408 ?	348 ?	339	157	23	0	0	0	0	0	0	2581
14	0	0	0	0	0	0	0	18	97	246 ?	271 ?	479 ?	?	?	420 ?	279 ?	112	13	0	0	0	0	0	0	1934 ?
15	0	0	0	0	0	0	0	18	103	282	427 ?	491 ?	?	414 ?	449	323	162	19	0	0	0	0	0	0	2687 ?
16	0	0	0	0	0	0	0	13 ?	171 ?	306	444 ?	?	574 ?	405 ?	396 ?	336	157	21	0	0	0	0	0	0	2822 ?
17	0	0	0	0	0	0	0	29	173	326	451	552 ?	?	485 ?	387	212	82	22	0	0	0	0	0	0	2718 ?
18	0	0	0	0	0	0	0	13	64	190	305 ?	?	?	411 ?	271 ?	179	104	17	0	0	0	0	0	0	1554 ?
19	0	0	0	0	0	0	0	20	98	313 ?	433 ?	?	?	442 ?	273	331	146	23	0	0	0	0	0	0	2080 ?
20	0	0	0	0	0	0	0	7	59	91	91	109	220	251	336	232	141 ?	37	0	0	0	0	0	0	1574
21	0	0	0	0	0	0	0	19	137	258	373	407 ?	586 ?	476 ?	422 ?	318	143	29	0	0	0	0	0	0	3166 ?
22	0	0	0	0	0	0	0	6	60	116	201	378 ?	167	80	70	188	32	5	0	0	0	0	0	0	1303
23	0	0	0	0	0	0	0	3	23	113	309	433 ?	?	?	?	?	192	40	0	0	0	0	0	0	1113 ?
24	0	0	0	0	0	0	0	27	178	?	?	?	?	?	?	?	186	26	0	0	0	0	0	0	417 ?
25	0	0	0	0	0	0	0	26	176	326 ?	?	?	?	?	?	?	193 ?	44	0	0	0	0	0	0	764 ?
26	0	0	0	0	0	0	0	28	141 ?	326 ?	?	554 ?	580 ?	570 ?	540 ?	358 ?	178	37	0	0	0	0	0	0	3311 ?
27	0	0	0	0	0	0	0	29	181	331	447 ?	529 ?	598 ?	?	480	344	171	34	0	0	0	0	0	0	3143 ?
28	0	0	0	0	0	0	0	30	186	355	453 ?	?	?	?	?	375	200	39	0	0	0	0	0	0	1637 ?
29	0	0	0	0	0	0	0	37	143	349	450 ?	341 ?	404	442	343 ?	311	165	38	0	0	0	0	0	0	3021
30	0	0	0	0	0	0	0	34	175	324 ?	262	260	227	228	262	223	130	30	0	0	0	0	0	0	2154
Avg	0	0	0	0	0	0	0	20	133	256	337	413	439	394	349	271	141	22	0	0	0	0	0	0	1929
S D	0	0	0	0	0	0	0	9	51	88	107	115	146	118	101	60	40	11	0	0	0	0	0	0	880
S/A	0	0	0	0	0	0	0	0.44	0.39	0.35	0.32	0.28	0.33	0.3	0.29	0.22	0.28	0.49	0	0	0	0	0	0	0.46
Min	0	0	0	0	0	0	0	3	23	91	91	109	167	80	70	141	32	5	0	0	0	0	0	0	374
Max	0	0	0	0	0	0	0	37	212	395	453	554	598	570	540	375	200	44	0	0	0	0	0	0	3311

Daylight Data Recovery: 0% missing; 39% exceed the 15% QC threshold -- 3776 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:	5/18/1998