

Table 2.13(a) Design 97.5 percentile of beam and diffuse irradiance on vertical and horizontal surfaces: Belfast (Aldergrove) (February 2003 to September 2012)

Month	Orientation		Daily mean irradiance (W·m ⁻²) and mean hourly irradiance (W·m ⁻²) for the 21st day of the given month																				
			Mean	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	
January Sunrise: 0830 Sunset: 1642	Normal to beam		324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	N	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	14	0	0	0	0	0	0	4	36	39	54	58	55	44	40	11	0	0	0	0	0
	NE	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	14	0	0	0	0	0	0	4	30	39	54	58	55	44	44	14	0	0	0	0	0
	E	Beam	21	0	0	0	0	0	0	0	0	356	126	14	0	0	0	0	0	0	0	0	0
		Diffuse	18	0	0	0	0	0	0	4	35	110	87	57	55	44	38	12	0	0	0	0	0
	SE	Beam	81	0	0	0	0	0	0	0	0	687	400	380	301	177	0	0	0	0	0	0	0
		Diffuse	33	0	0	0	0	0	0	5	41	182	161	151	123	82	34	10	0	0	0	0	0
	S	Beam	110	0	0	0	0	0	0	0	0	615	440	524	554	514	0	0	0	0	0	0	0
		Diffuse	40	0	0	0	0	0	0	4	36	166	172	188	185	165	40	11	0	0	0	0	0
	SW	Beam	75	0	0	0	0	0	0	0	0	183	222	361	483	551	0	0	0	0	0	0	0
		Diffuse	32	0	0	0	0	0	0	4	30	73	113	146	167	174	44	14	0	0	0	0	0
	W	Beam	16	0	0	0	0	0	0	0	0	0	0	0	129	265	0	0	0	0	0	0	0
		Diffuse	18	0	0	0	0	0	0	4	35	39	54	58	80	104	38	12	0	0	0	0	0
	NW	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	14	0	0	0	0	0	0	5	41	39	54	58	55	44	34	10	0	0	0	0	0
	Horiz.	Beam	36	0	0	0	0	0	0	11	87	135	115	145	148	119	78	24	0	0	0	0	0
Diffuse		20	0	0	0	0	0	0	4	30	57	94	96	87	70	38	10	0	0	0	0	0	
Global		56	0	0	0	0	0	0	14	117	191	209	241	235	189	117	34	0	0	0	0	0	
February Sunrise: 0733 Sunset: 1743	Normal to beam		489	0	0	0	0	0	0	565	657	712	772	633	733	641	664	0	0	0	0	0	
	N	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	24	0	0	0	0	0	4	25	51	70	82	87	86	74	56	32	11	0	0	0	0
	NE	Beam	1	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	24	0	0	0	0	0	4	25	52	70	82	87	86	74	56	32	13	0	0	0	0
	E	Beam	41	0	0	0	0	0	0	0	407	344	206	28	0	0	0	0	0	0	0	0	0
		Diffuse	32	0	0	0	0	0	4	25	147	138	114	77	86	74	56	32	13	0	0	0	0
	SE	Beam	115	0	0	0	0	0	0	0	549	609	585	516	300	185	12	0	0	0	0	0	0
		Diffuse	47	0	0	0	0	0	4	25	183	199	196	178	145	100	52	32	11	0	0	0	0
	S	Beam	174	0	0	0	0	0	0	0	369	517	622	701	563	598	445	354	0	0	0	0	0
		Diffuse	60	0	0	0	0	0	4	25	138	178	204	217	206	189	152	108	11	0	0	0	0
	SW	Beam	138	0	0	0	0	0	0	0	0	122	294	475	496	661	618	641	0	0	0	0	0
		Diffuse	52	0	0	0	0	0	4	25	51	88	133	170	190	202	192	173	13	0	0	0	0
	W	Beam	61	0	0	0	0	0	0	0	0	0	0	0	139	336	428	553	0	0	0	0	0
		Diffuse	36	0	0	0	0	0	4	25	51	70	82	87	107	133	148	153	13	0	0	0	0
	NW	Beam	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140	0	0	0	0	0
		Diffuse	25	0	0	0	0	0	4	25	51	70	82	87	86	74	56	59	11	0	0	0	0
	Horiz.	Beam	73	0	0	0	0	0	1	4	133	217	279	322	255	258	171	101	24	0	0	0	0
Diffuse		36	0	0	0	0	0	6	40	82	105	119	121	131	105	86	48	12	0	0	0	0	
Global		109	0	0	0	0	0	7	44	214	322	398	442	387	363	257	149	36	0	0	0	0	
March Sunrise: 0622 Sunset: 1821	Normal to beam		565	0	0	0	0	306	487	595	675	720	752	745	762	771	777	759	0	0	0	0	
	N	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	40	0	0	0	0	8	34	64	88	106	117	121	118	106	87	62	34	11	0	0	0
	NE	Beam	16	0	0	0	0	0	167	163	61	0	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	44	0	0	0	0	8	88	105	93	106	117	121	118	106	87	62	34	12	0	0	0
	E	Beam	70	0	0	0	0	0	297	423	424	343	192	6	0	0	0	0	0	0	0	0	0
		Diffuse	55	0	0	0	0	8	129	176	182	167	139	100	118	106	87	62	34	14	0	0	0
	SE	Beam	132	0	0	0	0	0	253	436	539	575	534	436	281	114	0	0	0	0	0	0	0
		Diffuse	67	0	0	0	0	8	115	179	210	220	213	191	156	110	87	62	34	12	0	0	0
	S	Beam	178	0	0	0	0	0	61	193	337	471	562	610	584	536	444	317	160	0	0	0	0
		Diffuse	73	0	0	0	0	8	55	113	161	196	219	227	220	198	162	116	61	11	0	0	0
	SW	Beam	166	0	0	0	0	0	0	0	0	91	262	427	545	645	696	697	631	0	0	0	0
		Diffuse	69	0	0	0	0	8	34	64	88	110	154	189	212	220	214	194	159	12	0	0	0
	W	Beam	104	0	0	0	0	0	0	0	0	0	0	0	187	375	541	669	731	0	0	0	0
		Diffuse	58	0	0	0	0	8	34	64	88	106	117	121	136	164	182	188	180	14	0	0	0
	NW	Beam	30	0	0	0	0	0	0	0	0	0	0	0	0	0	68	249	404	0	0	0	0
		Diffuse	45	0	0	0	0	8	34	64	88	106	117	121	118	106	85	102	112	12	0	0	0
	Horiz.	Beam	131	0	0	0	0	2	46	142	245	341	407	441	423	389	324	234	124	25	0	0	0
Diffuse		58	0	0	0	0	12	65	109	139	157	168	169	165	146	119	85	47	12	0	0	0	
Global		189	0	0	0	0	15	111	251	385	498	575	610	588	536	444	320	170	37	0	0	0	

Table continues

Table 2.13(a) Design 97.5 percentile of beam and diffuse irradiance on vertical and horizontal surfaces: Belfast (Aldergrove) (February 2003 to September 2012) — *continued*

Month	Orientation		Daily mean irradiance ($\text{W}\cdot\text{m}^{-2}$) and mean hourly irradiance ($\text{W}\cdot\text{m}^{-2}$) for the 21st day of the given month																			
			Mean	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030
April Sunrise: 0506 Sunset: 1940	Normal to beam		584	0	0	0	0	476	624	691	703	575	852	695	825	698	794	402	597	834	0	0
	N	Beam	7	0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	120	0	0
		Diffuse	58	0	0	0	13	50	69	95	119	141	149	151	146	133	114	97	63	49	9	0
	NE	Beam	46	0	0	0	0	362	366	261	105	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	66	0	0	0	15	137	146	137	122	141	149	151	146	133	114	97	63	32	10	0
	E	Beam	107	0	0	0	0	466	585	576	473	268	193	0	0	0	0	0	0	0	0	0
		Diffuse	78	0	0	0	16	165	198	207	201	191	154	151	146	133	114	97	63	32	12	0
	SE	Beam	141	0	0	0	0	296	462	553	563	426	532	320	213	23	0	0	0	0	0	0
		Diffuse	82	0	0	0	14	119	168	202	221	231	221	196	157	116	114	97	63	32	12	0
	S	Beam	140	0	0	0	0	0	68	206	323	335	559	471	532	390	339	104	38	0	0	0
		Diffuse	79	0	0	0	13	40	75	125	169	208	226	229	220	196	159	126	65	32	9	0
	SW	Beam	150	0	0	0	0	0	0	0	0	48	259	347	539	529	639	318	429	491	0	0
		Diffuse	83	0	0	0	15	40	69	95	119	137	167	202	221	227	219	188	160	122	10	0
	W	Beam	121	0	0	0	0	0	0	0	0	0	0	19	231	358	564	346	568	815	0	0
		Diffuse	79	0	0	0	16	40	69	95	119	141	149	130	160	189	204	196	193	186	12	0
	NW	Beam	57	0	0	0	0	0	0	0	0	0	0	0	0	159	171	375	661	0	0	
		Diffuse	68	0	0	0	14	40	69	95	119	141	149	151	146	133	123	145	146	155	12	0
	Horiz.	Beam	190	0	0	0	22	88	206	321	408	384	613	511	587	455	443	177	180	129	27	0
Diffuse		83	0	0	1	16	68	105	139	171	224	192	218	190	193	152	173	99	41	9	0	
Global		273	0	0	1	38	156	312	460	579	608	805	729	778	648	595	350	279	170	36	0	
May Sunrise: 0406 Sunset: 2036	Normal to beam		565	0	0	0	139	231	425	639	711	758	789	806	776	711	741	780	781	780	538	0
	N	Beam	22	0	0	0	52	40	0	0	0	0	0	0	0	0	0	0	24	179	229	0
		Diffuse	76	0	0	8	61	92	100	121	141	156	165	168	164	154	134	110	71	80	87	7
	NE	Beam	41	0	0	0	126	182	262	266	140	0	0	0	0	0	0	0	0	0	0	0
		Diffuse	81	0	0	8	87	140	177	168	147	156	165	168	164	154	134	110	83	54	27	6
	E	Beam	91	0	0	0	127	217	381	507	454	332	165	0	0	0	0	0	0	0	0	0
		Diffuse	90	0	0	8	87	152	213	226	217	196	165	168	164	154	134	110	83	54	27	7
	SE	Beam	115	0	0	0	53	125	277	452	502	490	421	302	139	0	0	0	0	0	0	0
		Diffuse	91	0	0	8	62	121	181	213	228	230	218	194	160	154	134	110	83	54	27	8
	S	Beam	114	0	0	0	0	0	11	132	256	361	430	455	412	318	237	122	0	0	0	0
		Diffuse	84	0	0	8	36	70	100	135	173	202	220	224	216	197	160	113	83	54	27	7
	SW	Beam	150	0	0	0	0	0	0	0	0	20	187	341	443	475	527	543	488	390	179	0
		Diffuse	93	0	0	8	36	70	100	121	141	130	170	202	223	233	223	200	167	124	73	6
	W	Beam	153	0	0	0	0	0	0	0	0	0	28	214	355	509	646	714	731	482	0	0
		Diffuse	97	0	0	8	36	70	100	121	141	156	165	138	175	206	219	221	214	194	156	7
	NW	Beam	94	0	0	0	0	0	0	0	0	0	0	0	0	26	193	371	522	643	503	0
		Diffuse	87	0	0	8	36	70	100	121	141	156	165	168	164	132	150	164	174	176	161	8
	Horiz.	Beam	236	0	0	1	22	70	188	365	484	578	640	665	622	528	483	419	316	206	67	8
Diffuse		103	0	1	14	75	139	179	185	203	216	222	222	222	221	188	148	112	73	45	9	
Global		339	0	1	15	97	209	367	550	687	794	863	888	845	749	671	567	428	279	112	16	
June Sunrise: 0345 Sunset: 2108	Normal to beam		461	0	0	0	61	343	516	554	585	416	578	706	661	718	837	805	717	614	640	0
	N	Beam	24	0	0	0	25	75	13	0	0	0	0	0	0	0	0	0	33	148	278	0
		Diffuse	82	0	0	8	57	102	97	129	151	177	180	176	174	160	141	118	83	94	99	17
	NE	Beam	44	0	0	0	56	276	331	249	138	7	0	0	0	0	0	0	0	0	0	0
		Diffuse	88	0	0	8	67	167	185	181	167	175	180	176	174	160	141	118	93	67	38	16
	E	Beam	81	0	0	0	54	314	455	437	374	186	130	0	0	0	0	0	0	0	0	0
		Diffuse	97	0	0	8	67	179	220	231	228	229	192	176	174	160	141	118	93	67	38	18
	SE	Beam	91	0	0	0	21	169	313	369	392	256	294	252	112	0	0	0	0	0	0	0
		Diffuse	96	0	0	8	56	132	180	213	232	251	234	201	173	160	141	118	93	67	38	19
	S	Beam	86	0	0	0	0	0	0	85	180	176	286	366	324	297	244	109	0	0	0	0
		Diffuse	89	0	0	8	39	76	103	137	178	226	232	226	222	196	157	115	93	67	38	17
	SW	Beam	133	0	0	0	0	0	0	0	0	0	111	265	346	448	562	533	427	294	203	0
		Diffuse	98	0	0	8	39	76	103	129	151	177	187	204	228	229	220	200	170	131	81	16
	W	Beam	145	0	0	0	0	0	0	0	0	0	9	165	338	550	645	638	564	565	0	0
		Diffuse	102	0	0	8	39	76	103	129	151	177	180	146	185	205	218	223	217	198	168	18
	NW	Beam	92	0	0	0	0	0	0	0	0	0	0	0	0	29	217	379	474	503	596	0
		Diffuse	93	0	0	8	39	76	103	129	151	177	180	176	174	137	152	169	181	183	176	19
	Horiz.	Beam	223	0	0	1	12	114	242	330	413	328	485	604	552	561	581	469	326	195	115	13
Diffuse		119	1	1	13	83	142	172	210	239	317	287	253	260	227	181	155	133	104	57	24	
Global		342	1	1	14	95	256	414	540	652	645	772	857	812	788	762	625	459	299	173	37	

Table continues

Table 2.13(a) Design 97.5 percentile of beam and diffuse irradiance on vertical and horizontal surfaces: Belfast (Aldergrove) (February 2003 to September 2012) — *continued*

Month	Orientation		Daily mean irradiance (W·m ⁻²) and mean hourly irradiance (W·m ⁻²) for the 21st day of the given month																				
			Mean	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	
July	Normal to beam		501	0	0	0	196	306	414	517	579	629	662	686	705	689	690	686	667	537	556	0	
	N	Beam	20	0	0	0	79	63	3	0	0	0	0	0	0	0	0	0	0	106	219	0	
		Diffuse	78	0	0	7	64	89	94	121	143	159	168	171	166	156	138	115	89	85	86	9	
	NE	Beam	45	0	0	0	181	248	268	233	135	7	0	0	0	0	0	0	0	0	0	0	
		Diffuse	84	0	0	7	100	150	175	175	160	137	168	171	166	156	138	115	89	62	32	8	
	E	Beam	88	0	0	0	177	287	375	421	386	298	164	4	0	0	0	0	0	0	0	0	
		Diffuse	93	0	0	7	98	163	207	227	225	208	180	143	166	156	138	115	89	62	32	10	
	SE	Beam	103	0	0	0	69	158	263	362	410	414	367	276	150	0	0	0	0	0	0	0	
		Diffuse	94	0	0	7	61	121	173	211	232	237	228	205	171	156	138	115	89	62	32	10	
	Sunrise: 0414 Sunset: 2048	S	Beam	99	0	0	0	0	0	0	91	194	288	355	386	379	319	236	127	1	0	0	0
			Diffuse	86	0	0	7	32	65	95	136	176	206	225	230	222	202	169	125	75	62	32	9
		SW	Beam	130	0	0	0	0	0	0	0	0	135	271	387	452	489	482	427	281	201	0	0
			Diffuse	95	0	0	7	32	65	95	121	143	159	173	204	224	232	226	206	174	132	82	8
		W	Beam	129	0	0	0	0	0	0	0	0	0	0	0	167	320	455	555	603	504	504	0
			Diffuse	98	0	0	7	32	65	95	121	143	159	168	171	174	202	218	223	216	193	162	10
		NW	Beam	76	0	0	0	0	0	0	0	0	0	0	0	0	154	303	426	431	512	0	0
			Diffuse	87	0	0	7	32	65	95	121	143	159	168	171	166	129	150	165	174	173	164	10
		Horiz.	Beam	209	0	0	2	28	86	175	286	385	473	534	567	570	520	462	383	285	154	81	15
Horiz.		Diffuse	112	0	1	11	65	123	171	203	228	244	252	251	240	228	202	169	132	103	51	10	
Horiz.		Global	320	0	1	13	93	210	345	488	614	717	786	818	810	748	664	552	417	257	133	24	
August	Normal to beam		445	0	0	0	0	138	247	351	418	509	555	594	615	607	618	596	647	783	0	0	
	N	Beam	5	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	100	0	0	
		Diffuse	63	0	0	0	13	53	75	106	131	147	157	159	154	142	122	97	66	48	34	0	
	NE	Beam	19	0	0	0	0	106	149	139	71	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	69	0	0	0	14	84	134	153	150	147	157	159	154	142	122	97	66	34	34	0	
	E	Beam	55	0	0	0	0	134	233	296	286	245	136	0	0	0	0	0	0	0	0	0	
		Diffuse	78	0	0	0	14	94	162	204	215	204	177	159	154	142	122	97	66	34	34	0	
	SE	Beam	87	0	0	0	0	84	180	279	334	380	351	281	168	30	0	0	0	0	0	0	
		Diffuse	84	0	0	0	13	77	144	198	230	242	235	211	175	130	122	97	66	34	34	0	
	Sunrise: 0508 Sunset: 1948	S	Beam	108	0	0	0	0	0	22	99	186	291	361	401	398	344	271	162	51	0	0	0
			Diffuse	85	0	0	0	13	40	90	140	185	217	237	242	232	210	172	126	69	34	34	0
		SW	Beam	135	0	0	0	0	0	0	0	32	159	287	395	456	496	473	469	471	0	0	0
			Diffuse	89	0	0	0	14	40	75	106	131	145	183	213	232	238	229	206	170	125	34	0
		W	Beam	116	0	0	0	0	0	0	0	0	0	0	5	160	301	431	507	613	765	0	0
			Diffuse	85	0	0	0	14	40	75	106	131	147	157	140	173	199	212	214	204	186	34	0
		NW	Beam	57	0	0	0	0	0	0	0	0	0	0	0	0	0	113	244	397	612	0	0
			Diffuse	73	0	0	0	13	40	75	106	131	147	157	159	154	142	133	147	152	154	34	0
		Horiz.	Beam	145	0	0	0	9	24	80	161	240	338	399	438	440	400	351	268	202	130	0	0
Horiz.		Diffuse	102	0	2	2	19	82	148	198	235	249	257	253	240	223	189	154	101	46	56	2	
Horiz.		Global	247	0	2	2	28	107	228	359	475	587	656	691	680	622	540	422	303	176	56	2	
September	Normal to beam		511	0	0	0	0	0	283	323	268	685	635	858	825	643	788	733	604	0	0	0	
	N	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	40	0	0	0	0	9	42	72	98	108	120	121	114	102	80	55	26	4	0	0	
	NE	Beam	10	0	0	0	0	0	141	91	13	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	43	0	0	0	0	9	89	103	110	108	120	121	114	102	80	55	26	4	0	0	
	E	Beam	48	0	0	0	0	0	269	271	179	311	132	0	0	0	0	0	0	0	0	0	
		Diffuse	52	0	0	0	0	9	130	159	163	160	134	121	114	102	80	55	26	5	0	0	
	SE	Beam	108	0	0	0	0	0	240	292	241	570	450	459	269	61	0	0	0	0	0	0	
		Diffuse	62	0	0	0	0	9	120	165	182	217	208	185	143	102	80	55	26	4	0	0	
	Sunrise: 0606 Sunset: 1829	S	Beam	164	0	0	0	0	0	70	142	161	495	504	695	636	437	426	268	100	0	0	0
			Diffuse	71	0	0	0	0	9	67	119	157	201	221	231	216	189	151	102	47	4	0	0
		SW	Beam	165	0	0	0	0	0	0	0	0	130	263	524	630	557	716	652	488	0	0	0
			Diffuse	70	0	0	0	0	9	42	72	98	120	165	198	215	217	209	183	141	4	0	0
		W	Beam	103	0	0	0	0	0	0	0	0	0	0	46	256	351	586	654	591	0	0	0
			Diffuse	58	0	0	0	0	9	42	72	98	108	120	103	141	169	183	184	166	5	0	0
		NW	Beam	31	0	0	0	0	0	0	0	0	0	0	0	0	0	113	273	347	0	0	0
			Diffuse	45	0	0	0	0	9	42	72	98	108	120	121	114	102	87	103	107	4	0	0
		Horiz.	Beam	119	0	0	0	0	1	53	104	117	358	364	501	458	316	309	196	75	9	0	0
Horiz.		Diffuse	60	0	0	0	0	15	80	135	188	158	182	156	150	155	108	77	41	4	0	0	
Horiz.		Global	180	0	0	0	0	16	133	239	305	516	546	657	608	471	417	273	116	13	0	0	

Table continues

Table 2.13(a) Design 97.5 percentile of beam and diffuse irradiance on vertical and horizontal surfaces: Belfast (Aldergrove) (February 2003 to September 2012) — *continued*

Month	Orientation		Daily mean irradiance ($\text{W}\cdot\text{m}^{-2}$) and mean hourly irradiance ($\text{W}\cdot\text{m}^{-2}$) for the 21st day of the given month																					
			Mean	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030		
October	Normal to beam		396	0	0	0	0	0	0	58	266	877	748	748	716	611	336	0	0	0	0	0		
	N	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	24	0	0	0	0	0	9	33	64	77	85	86	79	67	48	26	0	0	0	0	0	
	NE	Beam	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	24	0	0	0	0	0	9	44	64	77	85	86	79	67	48	29	0	0	0	0	0	
	E	Beam	29	0	0	0	0	0	0	47	168	363	126	0	0	0	0	0	0	0	0	0	0	
		Diffuse	30	0	0	0	0	0	9	55	123	131	96	86	79	67	48	28	0	0	0	0	0	
	SE	Beam	101	0	0	0	0	0	0	56	255	775	564	433	265	86	0	0	0	0	0	0	0	
		Diffuse	44	0	0	0	0	0	9	58	151	212	189	162	124	79	48	26	0	0	0	0	0	
	Sunrise: 0703 Sunset: 1716	S	Beam	150	0	0	0	0	0	33	193	733	672	679	617	467	209	0	0	0	0	0	0	
			Diffuse	56	0	0	0	0	0	9	51	131	204	212	214	201	172	114	26	0	0	0	0	0
		SW	Beam	112	0	0	0	0	0	0	18	262	386	526	607	574	327	0	0	0	0	0	0	
			Diffuse	47	0	0	0	0	0	9	33	76	111	151	182	199	198	150	29	0	0	0	0	0
		W	Beam	38	0	0	0	0	0	0	0	0	0	0	66	242	345	253	0	0	0	0	0	0
			Diffuse	32	0	0	0	0	0	9	33	64	77	85	84	119	142	127	28	0	0	0	0	0
		NW	Beam	1	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	
			Diffuse	24	0	0	0	0	0	9	33	64	77	85	86	79	67	59	26	0	0	0	0	0
	Horiz.	Beam	65	0	0	0	0	0	1	10	75	318	304	309	272	190	70	20	0	0	0	0	0	
		Diffuse	37	0	0	0	0	0	14	70	124	99	119	120	114	104	89	37	3	0	0	0	0	
		Global	103	0	0	0	0	0	15	80	200	417	423	429	386	294	160	58	3	0	0	0	0	
November	Normal to beam		365	0	0	0	0	0	0	94	351	630	726	760	721	0	0	0	0	0	0	0		
	N	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	12	0	0	0	0	0	2	28	48	55	55	49	35	24	0	0	0	0	0	0	0	
	NE	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	12	0	0	0	0	0	2	28	48	55	55	49	35	27	0	0	0	0	0	0	0	
	E	Beam	13	0	0	0	0	0	0	0	57	141	105	0	0	0	0	0	0	0	0	0	0	
		Diffuse	16	0	0	0	0	0	2	52	92	72	55	49	35	24	0	0	0	0	0	0	0	
	SE	Beam	77	0	0	0	0	0	0	93	321	498	453	323	148	0	0	0	0	0	0	0	0	
		Diffuse	30	0	0	0	0	0	2	63	146	165	144	108	61	21	0	0	0	0	0	0	0	
	Sunrise: 0803 Sunset: 1617	S	Beam	124	0	0	0	0	0	0	74	313	600	698	698	597	0	0	0	0	0	0	0	0
			Diffuse	40	0	0	0	0	0	2	57	143	189	196	187	158	24	0	0	0	0	0	0	0
		SW	Beam	99	0	0	0	0	0	0	12	122	350	534	665	695	0	0	0	0	0	0	0	0
			Diffuse	33	0	0	0	0	0	2	38	86	130	161	180	180	27	0	0	0	0	0	0	0
		W	Beam	29	0	0	0	0	0	0	0	0	0	57	242	387	0	0	0	0	0	0	0	0
			Diffuse	17	0	0	0	0	0	2	28	48	55	58	91	113	24	0	0	0	0	0	0	0
		NW	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Diffuse	12	0	0	0	0	0	2	28	48	55	55	49	35	21	0	0	0	0	0	0	0
	Horiz.	Beam	32	0	0	0	0	0	1	13	75	162	191	177	121	38	0	0	0	0	0	0	0	
		Diffuse	19	0	0	0	0	0	2	59	89	85	79	68	51	26	0	0	0	0	0	0	0	
		Global	52	0	0	0	0	0	3	72	165	246	271	245	172	64	0	0	0	0	0	0	0	
December	Normal to beam		342	0	0	0	0	0	0	0	824	495	533	597	628	0	0	0	0	0	0	0		
	N	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	9	0	0	0	0	0	0	0	20	31	43	45	40	27	15	0	0	0	0	0	0	
	NE	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Diffuse	9	0	0	0	0	0	0	19	31	43	45	40	27	17	0	0	0	0	0	0	0	
	E	Beam	19	0	0	0	0	0	0	0	0	358	104	0	0	0	0	0	0	0	0	0	0	
		Diffuse	13	0	0	0	0	0	0	20	98	68	45	40	27	14	0	0	0	0	0	0	0	
	SE	Beam	83	0	0	0	0	0	0	0	771	409	359	289	171	0	0	0	0	0	0	0	0	
		Diffuse	28	0	0	0	0	0	0	21	182	150	135	106	64	12	0	0	0	0	0	0	0	
	Sunrise: 0843 Sunset: 1602	S	Beam	118	0	0	0	0	0	0	0	732	474	522	566	544	0	0	0	0	0	0	0	0
			Diffuse	37	0	0	0	0	0	0	20	174	167	177	173	153	15	0	0	0	0	0	0	0
		SW	Beam	84	0	0	0	0	0	0	0	265	262	379	511	599	0	0	0	0	0	0	0	0
			Diffuse	29	0	0	0	0	0	0	19	78	110	140	160	166	17	0	0	0	0	0	0	0
		W	Beam	20	0	0	0	0	0	0	0	0	0	15	157	302	0	0	0	0	0	0	0	0
			Diffuse	13	0	0	0	0	0	0	20	31	43	46	74	96	14	0	0	0	0	0	0	0
		NW	Beam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Diffuse	9	0	0	0	0	0	0	21	31	43	45	40	27	12	0	0	0	0	0	0	0
	Horiz.	Beam	23	0	0	0	0	0	0	14	118	95	110	110	80	35	0	0	0	0	0	0	0	
		Diffuse	14	0	0	0	0	0	2	28	41	73	75	63	42	12	3	0	0	0	0	0	0	
		Global	38	0	0	0	0	0	2	42	159	168	185	173	122	48	3	0	0	0	0	0	0	