

## Appendix 2

### Solar Radiation on South Walls on Sunny Days \*

Date	Solar Time		Solar Radiation, Btus per hour per square foot					
	AM	PM	Latitude (North)					
			24	32	40	48	56	64
Jan 21	7	5	31	1	0	0	0	0
	8	4	127	115	84	22	0	0
	9	3	176	181	171	139	60	0
	10	2	207	221	223	206	153	20
	11	1	226	245	253	243	201	81
	12		232	253	263	255	217	103
	Daily Totals		1766	1779	1726	1478	1044	304
Feb 21	7	5	46	38	22	4	0	0
	8	4	102	108	107	96	69	19
	9	3	141	158	167	167	151	107
	10	2	168	193	210	217	208	173
	11	1	185	214	236	247	243	213
	12		191	222	245	259	255	226
	Daily Totals		1476	1644	1730	1720	1598	1252
March 31	7	5	27	32	35	35	32	25
	8	4	64	78	89	96	97	89
	9	3	95	119	138	152	154	153
	10	2	120	150	176	195	205	203
	11	1	135	170	200	223	236	235
	12		140	177	208	232	246	246
	Daily Totals		1022	1276	1484	1632	1700	1656

\* Courtesy ASHRAE, *Handbook of Fundamentals*.

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Date	Solar Time		Solar Radiation, Btus per hour per square foot					
	AM	PM	Latitude (North)					
			24	32	40	48	56	64
Apr 21	6	6	2	3	4	5	6	6
	7	5	10	10	12	21	29	37
	8	4	16	35	53	69	82	91
	9	3	41	68	93	115	133	145
	10	2	61	95	126	152	174	188
	11	1	74	112	147	177	266	216
	12		79	118	154	185	209	225
	Daily Totals		488	764	1022	1262	1458	1544
May 21	6	6	5	7	9	10	11	11
	7	5	12	13	13	13	16	28
	8	4	15	15	25	45	63	80
	9	3	16	33	60	86	109	128
	10	2	22	56	89	120	146	167
	11	1	34	72	108	141	170	193
	12		37	77	114	149	178	201
	Daily Totals		246	469	724	982	1218	1436
June 21	6	6	7	9	10	12	12	13
	7	5	13	14	14	15	15	23
	8	4	16	16	16	35	55	73
	9	3	18	19	47	74	98	119
	10	2	18	41	74	105	133	157
	11	1	19	56	92	126	156	181
	12		22	60	98	133	168	189
	Daily Totals		204	370	610	874	1126	1356

Date	Solar Time		Solar Radiation, Btus per hour per square foot					
	AM	PM	Latitude (North)					
			24	32	40	48	56	64
July 21	6	6	6	8	9	11	12	12
	7	5	13	14	14	14	15	28
	8	4	16	16	24	43	61	77
	9	3	18	31	58	83	106	124
	10	2	21	54	86	116	142	162
	11	1	32	69	104	137	165	187
		12	36	74	111	144	173	195
	Daily Totals		246	458	702	956	1186	1400
Aug 21	6	6	2	4	5	6	7	7
	7	5	11	12	12	20	28	35
	8	4	16	33	50	65	78	87
	9	3	39	65	89	110	126	138
	10	2	58	91	120	146	166	179
	11	1	71	107	140	169	191	205
		12	75	113	147	177	200	215
	Daily Totals		470	736	978	1208	1392	1522
Sept 21	7	5	26	30	32	31	28	21
	8	4	62	75	84	90	89	81
	9	3	93	114	132	143	147	141
	10	2	116	145	168	185	193	189
	11	1	131	164	192	212	223	220
		12	136	171	200	221	233	230
	Daily Totals		992	1226	1416	1596	1594	1532

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Date	Solar Time		Solar Radiation, Btus per hour per square foot					
	AM	PM	Latitude (North)					
			24	32	40	48	56	64
Oct 21	7	5	42	32	16	1	0	0
	8	4	99	104	100	87	57	10
	9	3	138	153	160	154	138	90
	10	2	165	188	203	207	195	155
	11	1	182	209	229	237	230	295
	12		188	217	238	247	241	208
	Daily Totals		1442	1588	1654	1626	1480	1106
Nov 21	7	5	29	1	0	0	0	0
	8	4	129	111	81	22	0	0
	9	3	172	176	167	135	58	0
	10	2	204	217	219	201	148	21
	11	1	222	241	248	238	196	79
	12		228	249	258	250	211	100
	Daily Totals		1730	1742	1686	1442	1016	300
Dec 21	7	5	14	0	0	0	0	0
	8	4	130	107	56	0	0	0
	9	3	184	183	163	109	4	0
	10	2	217	226	221	190	103	0
	11	1	236	251	252	231	164	4
	12		243	259	263	244	182	17
	Daily Totals		1808	1794	1646	1304	722	24

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