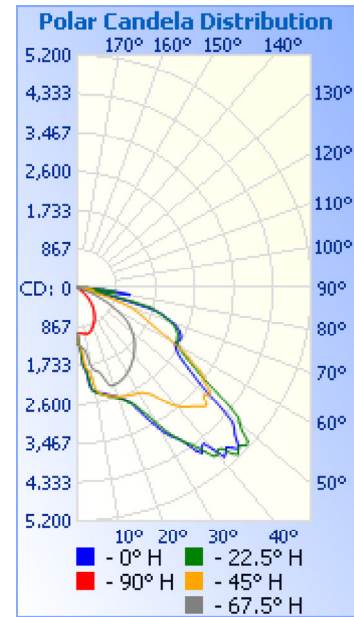


Photometrics Pro

Luminaire Photometric Report

Filename: Wall Pack WPBR 80W
Manufacturer: SARIN Energy Inc.
Lamp: SES-WPBR-5000-80
Lamp Output: 1 lamp, rated Lumens/lamp: 5677.3
Max Candela: 5,159.9 at Horizontal: 22.5°, Vertical: 47°
Input Wattage: 79.7
Luminous Opening: Point
Test Date: 2014-06-19
Test Lab: EVERFINE
Photometry : Type C
Nema Type: 6 X 5

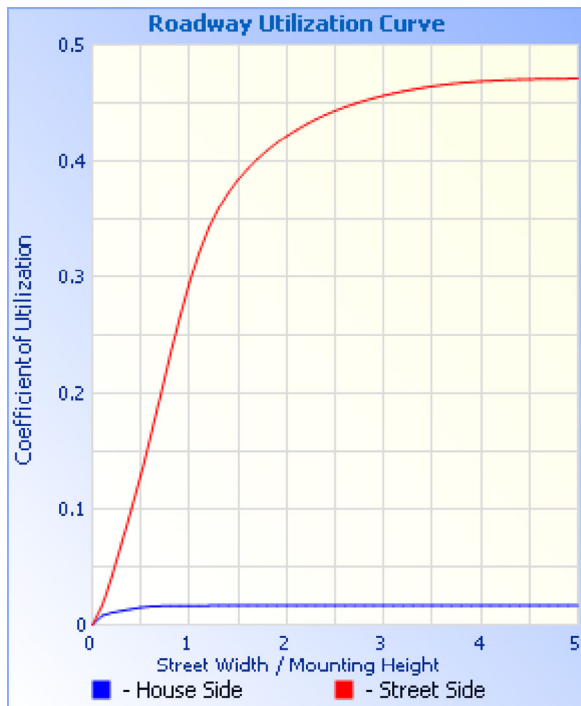
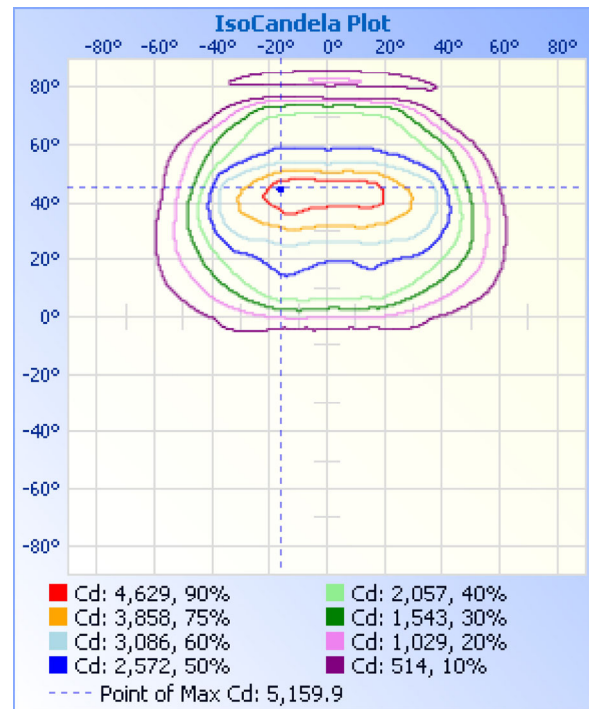
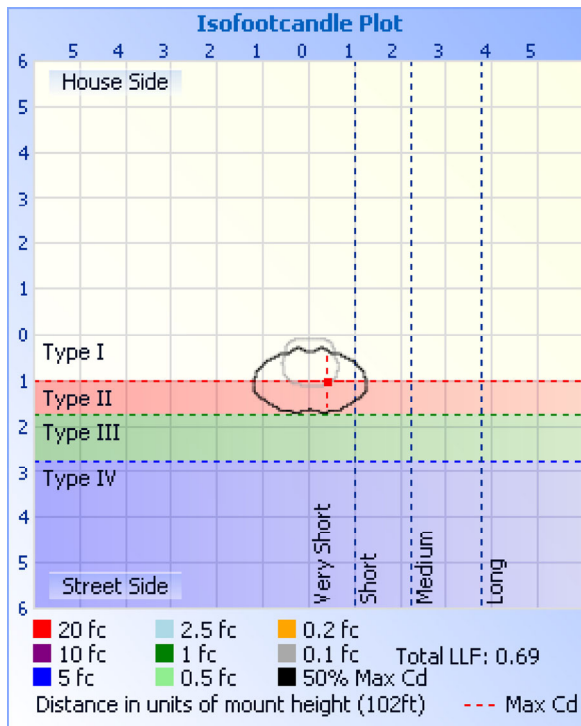


Roadway Summary		
Cutoff Classification:	NONCUTOFF	
Distribution:	TYPE II, VERY SHORT	
Max Cd, 90 Deg Vert:	58.6	
Max Cd, 80 to <90 Deg:	1,183.4	
	Lumens % Lamp	
Downward Street Side:	5,455.4	96.1%
Downward House Side:	183.8	3.2%
Downward Total:	5,639.1	99.3%
Upward Street Side:	24.5	0.4%
Upward House Side:	13.6	0.2%
Upward Total:	38.1	0.7%
Total Lumens:	5,677.3	100%

Flood Summary				
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	94.2%	5,347.5	117.2	80.6
Beam (50%):	53%	3,008.5	81.5	44.4
Total:	100%	5,675.3		

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Luminaire
0-30	1,050.0	18.5%	18.5%
0-40	2,011.5	35.4%	35.4%
0-60	4,398.7	77.5%	77.5%
60-90	1,240.0	21.8%	21.8%
70-100	475.7	8.4%	8.4%
90-120	27.7	0.5%	0.5%
0-90	5,638.7	99.3%	99.3%
90-180	38.1	0.7%	0.7%
0-180	5,676.9	100%	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	102.9	1.8%	90-100	15.0	0.3%
10-20	338.4	6.0%	100-110	8.3	0.1%
20-30	608.6	10.7%	110-120	4.4	0.1%
30-40	961.6	16.9%	120-130	2.8	0%
40-50	1,285.0	22.6%	130-140	2.7	0%
50-60	1,102.2	19.4%	140-150	2.2	0%
60-70	779.4	13.7%	150-160	1.4	0%
70-80	331.0	5.8%	160-170	0.9	0%
80-90	129.7	2.3%	170-180	0.4	0%



Illuminance at a Distance

	Center Beam fc	Beam Width	
16.7ft	3.66 fc	13.6 ft	28.8 ft
33.3ft	0.92 fc	27.2 ft	57.4 ft
50.0ft	0.41 fc	40.8 ft	86.2 ft
66.7ft	0.23 fc	54.5 ft	115.0 ft
83.3ft	0.15 fc	68.0 ft	143.6 ft
100.0ft	0.10 fc	81.7 ft	172.4 ft

Vert. Spread: 44.4°
Horiz. Spread: 81.5°

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50				30				10				0			
RW %:	70	50	30	0	70	50	30	0	50	30	20	0	50	30	20	0	50	30	20	0	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	.99	1.11	1.11	1.11	1.06	1.06	1.06	1.06	1.01	1.01	1.01	1.01	1.01	.99	.99	.99	.99
1	1.08	1.03	.99	.94	1.05	1.01	.97	.83	.96	.93	.90	.87	.92	.89	.87	.88	.86	.84	.84	.84	.82	.82	.82	.82
2	.98	.89	.82	.76	.95	.87	.80	.69	.83	.78	.73	.71	.80	.75	.71	.77	.73	.69	.69	.69	.67	.67	.67	.67
3	.88	.77	.69	.62	.86	.75	.67	.57	.72	.65	.60	.59	.69	.64	.59	.67	.62	.58	.58	.58	.55	.55	.55	.55

4	.80	.67	.58	.51	.78	.66	.57	.48	.63	.56	.50	.61	.54	.49	.59	.53	.48	.46
5	.73	.59	.50	.43	.71	.58	.49	.41	.56	.48	.42	.54	.47	.41	.52	.46	.41	.39
6	.67	.53	.43	.37	.65	.52	.43	.35	.50	.42	.36	.48	.41	.36	.46	.40	.35	.33
7	.62	.47	.38	.32	.60	.46	.38	.30	.45	.37	.31	.43	.36	.31	.42	.35	.30	.28
8	.57	.43	.34	.27	.55	.42	.33	.27	.40	.33	.27	.39	.32	.27	.38	.31	.27	.25
9	.53	.39	.30	.24	.51	.38	.30	.23	.37	.29	.24	.36	.29	.24	.35	.28	.24	.22
10	.49	.35	.27	.22	.48	.35	.27	.21	.34	.26	.21	.33	.26	.21	.32	.25	.21	.19

Candela Table - Type C																	
	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	1020	1020	1012	1003	1000	1004	1013	1023	1020	1020	1012	1003	1000	1004	1013	1023	1020
1	1279	1272	1237	1141	1002	925	892	879	873	875	888	920	998	1136	1236	1270	1279
2	1327	1325	1315	1259	1006	892	868	846	829	841	861	884	998	1248	1310	1321	1327
3	1455	1408	1340	1316	1009	881	821	647	576	640	812	871	997	1297	1332	1400	1455
4	1728	1686	1420	1342	1014	874	623	462	455	457	613	862	998	1317	1409	1674	1728
5	1793	1796	1646	1358	1018	857	476	431	399	427	468	841	999	1329	1626	1780	1793
6	1881	1841	1794	1382	1022	799	448	250	115	242	439	778	1000	1347	1766	1822	1881
7	2185	2034	1835	1430	1026	674	407	60	50	57	394	653	1003	1393	1797	2017	2185
8	2293	2267	1884	1521	1030	547	201	50	47	47	190	533	1005	1484	1843	2246	2293
9	2325	2326	2038	1665	1036	486	67	48	45	45	59	475	1012	1621	1999	2292	2325
10	2350	2358	2268	1790	1038	460	54	46	44	43	48	450	1014	1741	2224	2320	2350
11	2369	2388	2359	1852	1044	450	51	46	45	44	46	440	1016	1801	2306	2346	2369
12	2387	2409	2396	1883	1046	437	50	46	48	46	45	424	1015	1830	2334	2369	2387
13	2402	2428	2429	1905	1048	396	48	49	52	49	45	368	1009	1851	2365	2388	2402
14	2428	2449	2458	1928	1046	281	48	52	58	53	45	240	993	1883	2393	2406	2428
15	2451	2477	2483	1977	1031	141	49	58	68	60	47	120	980	1923	2420	2428	2451
16	2473	2510	2503	2052	1020	81	50	67	81	70	49	66	971	1994	2453	2451	2473
17	2495	2534	2520	2165	1000	62	52	78	99	83	52	50	956	2114	2481	2473	2495
18	2519	2558	2536	2270	984	60	56	93	119	98	55	49	939	2213	2500	2497	2519
19	2548	2587	2560	2306	969	58	60	112	140	116	61	48	923	2249	2524	2524	2548
20	2583	2619	2582	2311	950	57	66	132	161	133	68	47	903	2260	2549	2546	2583
21	2625	2652	2603	2309	938	56	72	152	184	150	75	47	885	2255	2565	2568	2625
22	2668	2693	2620	2307	920	57	81	172	201	170	86	47	867	2253	2565	2600	2668
23	2722	2740	2631	2303	901	57	92	191	207	186	97	47	844	2252	2571	2640	2722
24	2776	2797	2636	2293	884	57	105	202	201	198	109	48	819	2249	2576	2688	2776
25	2846	2850	2647	2283	868	58	118	203	187	197	119	49	796	2256	2575	2743	2846
26	2997	2905	2661	2270	849	59	131	194	168	187	130	50	770	2245	2585	2808	2997
27	3150	3028	2673	2256	831	61	140	179	149	174	140	52	741	2245	2604	2902	3150
28	3302	3152	2685	2239	811	63	149	160	126	155	150	54	715	2246	2627	3054	3302
29	3458	3277	2696	2221	791	65	155	140	105	137	157	55	695	2243	2657	3206	3458
30	3616	3455	2709	2204	766	68	158	118	84	117	160	57	667	2239	2682	3358	3616
31	3766	3625	2726	2184	743	70	156	98	64	98	156	59	639	2222	2704	3528	3766
32	3890	3808	2754	2162	718	73	148	78	49	78	148	62	614	2222	2737	3692	3890
33	3984	3958	2794	2139	694	75	135	60	40	60	138	64	590	2214	2811	3839	3984
34	4068	4094	2841	2118	670	77	122	48	33	47	125	66	565	2198	2888	3952	4068
35	4260	4216	2909	2093	646	79	106	39	28	38	112	67	539	2158	2983	4019	4260
36	4487	4321	3022	2069	622	80	93	32	24	32	98	70	514	2150	3070	4133	4487
37	4615	4472	3137	2038	597	80	79	27	20	27	84	72	491	2144	3156	4364	4615
38	4489	4646	3252	2012	571	80	66	23	17	23	72	72	468	2126	3243	4536	4489
39	4470	4831	3359	1986	545	80	55	19	15	20	59	73	444	2101	3329	4592	4470
40	4700	4858	3444	1954	517	79	45	17	13	17	49	72	420	2094	3405	4542	4700
41	4994	4771	3529	1929	489	77	38	14	11	14	41	71	396	2083	3454	4561	4994
42	4940	4826	3588	1896	459	75	32	12	9	12	34	71	371	2062	3472	4753	4940
43	4858	5063	3640	1864	430	73	27	10	7	9	28	70	345	2052	3512	4975	4858
44	4958	5158	3674	1835	399	70	22	9	6	8	23	68	322	2030	3588	4988	4958
45	5087	5065	3745	1802	369	67	18	7	5	6	19	67	299	2005	3671	4881	5087
46	4952	5046	3821	1771	340	64	16	6	4	5	16	64	274	1979	3693	4840	4952

47	4789	5160	3887	1733	311	60	13	5	3	4	13	61	250	1960	3629	4930	4789
48	4708	5107	3877	1694	282	56	11	4	2	3	10	57	226	1953	3591	4858	4708
49	4582	4853	3725	1655	253	51	9	3	1	3	9	53	199	1935	3601	4697	4582
50	4200	4716	3699	1619	224	47	9	2	1	2	8	49	176	1912	3662	4577	4200
51	3782	4620	3782	1577	194	42	8	2	1	1	7	44	154	1876	3629	4422	3782
52	3455	4312	3753	1535	167	37	7	1	1	1	6	39	134	1837	3557	4085	3455
53	3241	3921	3576	1488	143	32	5	1	1	1	5	33	129	1792	3468	3715	3241
54	3051	3550	3459	1442	131	27	5	1	1	1	4	28	123	1731	3447	3464	3051
55	2875	3284	3432	1397	125	23	4	1	1	1	3	23	116	1657	3350	3242	2875
56	2746	3100	3292	1340	118	19	2	1	1	1	2	18	108	1588	3198	3036	2746
57	2658	2918	3050	1278	107	16	2	1	1	1	1	15	100	1487	3107	2886	2658
58	2591	2774	2923	1207	97	14	1	1	1	1	1	12	92	1402	2968	2759	2591
59	2547	2677	2746	1118	88	12	1	1	1	1	0	10	84	1323	2717	2632	2547
60	2514	2588	2506	1031	81	10	0	1	1	1	0	8	76	1245	2529	2552	2514
61	2518	2547	2299	951	74	8	0	1	1	1	0	7	69	1173	2381	2518	2518
62	2545	2515	2108	882	67	7	0	1	1	1	0	5	62	1091	2258	2491	2545
63	2564	2495	1960	808	61	6	0	1	1	1	0	4	56	1001	2155	2463	2564
64	2561	2479	1835	727	56	5	0	1	1	1	0	4	49	908	2033	2449	2561
65	2544	2469	1731	638	50	4	0	1	1	1	0	3	43	804	1878	2433	2544
66	2511	2436	1630	549	44	4	0	1	1	1	0	2	38	733	1751	2410	2511
67	2477	2394	1542	472	39	3	0	1	2	1	0	2	32	666	1663	2393	2477
68	2423	2350	1454	410	34	2	0	1	2	1	0	1	28	602	1513	2347	2423
69	2353	2289	1367	362	30	2	0	1	2	1	0	1	24	529	1360	2263	2353
70	2257	2208	1270	308	27	1	0	1	2	1	0	0	21	415	1208	2197	2257
71	2151	2113	1133	236	23	1	0	1	2	1	0	0	18	281	961	2111	2151
72	2037	2015	923	168	21	0	0	2	2	2	0	0	16	172	707	2026	2037
73	1935	1903	691	121	18	0	0	2	2	2	0	0	13	104	584	1934	1935
74	1733	1802	487	91	15	0	0	2	2	2	0	0	11	71	395	1824	1733
75	1261	1687	343	68	13	0	0	2	2	2	0	0	9	63	194	1569	1261
76	788	1280	218	54	10	0	0	2	3	2	0	0	7	87	151	1117	788
77	314	867	143	47	8	0	0	2	3	2	0	0	6	128	275	660	314
78	86	454	172	47	6	0	0	2	3	2	0	0	4	145	391	108	86
79	62	98	302	47	5	0	0	2	3	2	0	0	4	136	472	63	62
80	52	68	372	48	4	0	0	2	3	2	0	0	3	121	484	50	52
81	535	54	375	46	3	0	0	2	3	2	0	0	3	105	420	294	535
82	1183	397	341	44	2	0	1	2	3	2	0	0	2	86	357	932	1183
83	1129	872	293	41	2	0	0	2	3	2	0	0	2	69	290	917	1129
84	909	756	245	38	2	0	0	2	3	2	0	0	2	54	231	711	909
85	707	620	201	36	2	0	0	2	3	2	0	0	2	42	164	567	707
86	578	447	147	34	2	0	0	2	2	1	0	0	1	34	108	439	578
87	408	305	107	31	1	0	0	1	2	1	0	0	0	28	71	288	408
88	228	192	79	29	1	0	0	1	1	1	0	0	0	25	48	159	228
89	66	92	64	27	0	0	0	1	1	1	0	0	0	23	41	49	66
90	51	54	59	25	0	0	0	1	1	1	0	0	0	20	38	44	51
91	49	52	54	22	0	0	0	2	2	2	1	0	0	18	35	41	49
92	47	47	49	20	0	0	1	2	2	2	1	0	0	16	32	39	47
93	45	44	44	17	0	1	1	3	3	3	1	0	0	14	30	37	45
94	44	41	40	15	0	1	1	3	3	3	1	0	0	12	28	36	44
95	43	39	36	13	0	1	2	4	3	4	1	0	0	11	25	34	43

96	43	36	33	12	0	1	2	4	4	4	1	0	0	9	23	33	43
97	41	34	30	10	0	1	2	4	4	4	2	0	0	8	22	31	41
98	39	32	27	9	0	1	2	4	4	4	2	0	0	7	20	29	39
99	37	30	25	7	0	1	2	4	4	4	2	1	0	5	19	27	37
100	35	29	22	6	0	1	2	4	5	4	2	1	0	5	17	26	35
101	33	27	20	5	0	1	2	4	5	4	2	1	0	4	16	25	33
102	31	26	19	4	0	1	3	4	5	4	2	1	0	3	15	23	31
103	30	24	17	3	0	1	3	4	5	4	2	1	0	2	14	22	30
104	29	23	15	3	1	1	3	4	6	4	3	1	0	1	13	21	29
105	28	22	14	1	0	1	3	5	6	4	4	1	0	1	12	20	28
106	27	20	13	1	0	1	4	5	6	5	4	1	0	0	11	19	27
107	26	19	11	0	0	2	4	5	6	5	4	1	0	0	10	18	26
108	25	18	10	0	1	2	4	6	6	6	4	1	0	0	9	17	25
109	24	16	9	0	1	2	4	6	6	6	4	1	0	0	8	16	24
110	23	15	8	0	1	2	4	6	6	6	4	2	0	0	7	15	23
111	21	14	7	0	1	2	4	6	7	6	4	2	0	0	6	14	21
112	20	13	6	0	1	2	4	7	7	6	4	2	0	0	6	12	20
113	17	11	5	0	1	3	4	7	7	6	4	2	0	0	5	11	17
114	11	10	4	0	1	3	4	7	7	6	4	2	0	0	4	10	11
115	5	9	4	0	1	3	4	7	7	6	4	2	0	0	3	9	5
116	3	7	3	0	1	3	5	7	7	6	4	2	0	0	2	8	3
117	6	6	1	0	1	3	5	7	7	7	4	2	0	0	1	7	6
118	8	6	1	0	1	3	5	7	7	7	4	2	0	0	1	6	8
119	7	5	0	0	1	3	5	7	7	7	4	2	0	0	1	5	7
120	6	5	0	0	1	3	5	7	7	7	4	2	1	0	1	5	6
121	6	4	0	0	1	3	5	7	7	7	5	2	1	0	1	4	6
122	5	4	0	0	1	3	5	7	7	7	5	3	1	0	1	4	5
123	4	3	0	0	1	4	6	7	8	7	5	3	1	0	1	3	4
124	4	2	0	0	1	4	6	7	8	7	5	3	1	0	1	2	4
125	3	1	0	0	1	4	6	7	8	7	5	3	1	0	1	1	3
126	2	1	0	0	1	4	6	7	8	7	6	3	1	0	1	1	2
127	1	1	0	0	1	4	6	7	8	7	6	3	1	0	1	1	1
128	1	1	0	0	1	4	7	7	8	7	6	3	1	0	1	1	1
129	1	1	0	0	1	4	7	7	8	8	6	3	1	0	1	1	1
130	1	1	0	0	1	4	7	8	8	8	6	3	1	0	1	1	1
131	1	1	0	0	2	5	7	8	8	8	6	3	1	0	1	1	1
132	1	1	0	0	2	5	8	8	9	8	6	3	1	0	1	1	1
133	1	1	0	0	2	5	8	8	9	9	7	3	1	0	1	1	1
134	1	0	0	0	2	5	8	9	9	9	7	4	1	0	1	1	1
135	1	0	0	0	2	5	8	9	9	9	7	4	1	0	1	1	1
136	1	0	0	0	2	5	8	9	9	9	7	4	1	0	1	1	1
137	1	0	0	0	2	5	8	9	10	9	7	4	1	0	1	1	1
138	1	0	0	0	2	5	7	9	10	9	7	4	1	0	1	1	1
139	1	0	0	0	3	5	7	9	10	9	7	4	2	0	1	1	1
140	1	0	0	0	3	5	7	9	10	9	7	5	2	0	1	1	1
141	1	0	0	0	3	5	7	9	10	9	7	5	2	0	1	1	1
142	1	0	0	0	3	5	7	9	10	9	7	5	2	0	1	0	1
143	1	0	0	0	3	5	7	9	10	9	7	5	2	0	1	0	1
144	0	0	0	0	3	5	7	9	10	9	7	5	2	0	1	0	0

145	0	0	0	0	3	5	7	9	10	9	7	5	2	0	1	0	0
146	1	0	0	0	3	5	7	9	10	9	7	5	2	1	1	0	1
147	0	0	0	0	3	5	7	8	10	9	7	5	2	1	1	0	0
148	0	0	0	0	3	5	7	8	9	8	7	5	2	1	1	0	0
149	0	0	0	0	3	5	7	8	8	8	6	5	2	1	0	0	0
150	0	0	0	0	3	5	7	7	8	7	6	5	3	1	1	0	0
151	0	0	0	0	3	5	6	7	8	7	6	5	3	1	0	0	0
152	0	0	0	0	3	5	6	7	7	6	6	5	3	1	0	0	0
153	0	0	0	0	4	4	6	7	7	6	5	5	3	1	0	0	0
154	0	0	0	1	4	4	6	6	7	6	5	5	3	1	0	0	0
155	0	0	0	1	4	4	6	6	6	6	5	5	3	1	0	0	0
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157	0	0	0	1	4	4	6	6	6	6	5	4	3	2	0	0	0
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165	0	1	1	2	4	4	5	5	5	5	5	4	4	3	2	1	0
166	1	1	1	2	5	5	5	5	6	6	5	4	4	3	2	1	1
167	1	1	1	2	5	5	5	6	6	6	5	4	4	3	2	1	1
168	1	1	2	2	5	5	5	6	6	6	5	5	4	3	2	1	1
169	1	1	2	2	5	5	5	6	6	6	5	5	4	3	3	2	1
170	2	2	2	2	5	5	5	6	6	6	5	5	4	3	3	2	2
171	2	2	2	2	5	5	5	5	5	6	5	5	4	3	3	2	2
172	2	2	2	2	5	4	5	5	5	5	5	5	4	3	3	2	2
173	2	2	2	2	5	4	5	5	5	5	4	5	4	4	3	3	2
174	3	2	3	2	5	4	5	5	5	5	4	5	4	4	3	3	3
175	3	2	3	3	4	4	5	5	5	5	4	4	4	4	4	3	3
176	3	3	3	3	4	4	5	5	4	5	4	4	4	4	4	3	3
177	3	3	3	3	4	4	5	5	4	4	4	4	4	4	4	3	3
178	3	3	3	3	4	4	5	4	4	4	3	4	4	4	4	4	3
179	4	3	3	3	4	4	5	4	4	4	3	4	4	4	4	4	4
180	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Luminaire Report Summary

IESNA:LM-63-2002
[TEST]
[TESTDATE] 2014-06-19
[TESTLAB] EVERFINE
[ISSUE DATE] 2014-06-19 14:13:55
[MANUFAC] SARIN Energy Inc.
[LAMP] SES-WPBR-5000-80
[_TOTALLUMINAIRELUMENS] 5676.9
[_LAMPPOSITION] 0,0
[OTHER] EVERFINE GO-R5000_V2 SYSTEM
FILE: CANDELA MULTIPLIER: 1
FILE: VERTICAL ANGLES: 181, HORIZONTAL ANGLES: 17
FILE: COORDINATE SYSTEM: TYPE C
FILE: UNIT OF MEASURE: METRIC
FILE: BALLAST FACTOR: 1

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Reported data calculated from manufacturer's data file, based on IES recommended methods.