



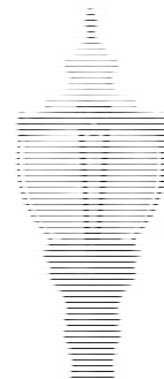
IES ROAD REPORT
PHOTOMETRIC FILENAME : FGL-SGL-CCO-150PSMH-ASY.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] KL01704
 [TESTLAB] KIM LIGHTING
 [TESTDATE] 06/19/09
 [ISSUEDATE] 06/22/09
 [MANUFAC] ARCHITECTURAL AREA LIGHTING
 [LUMCAT] FGL-XX-SLG-CCO-150PSMH-ASY
 [LUMINAIRE] FEDERAL GLOBE LARGE WITH STACKED
 [MORE] CONTRA CLINE REFLECTOR ASSEMBLY;
 [MORE] AND STANDARD LENS GLOBE
 [LAMP] ONE 150 WATT MEDIUM BASE ED-28 PSMH-VBU
 [LAMPCAT] MH 150W/U/PS/740-VENTURE
 [BALLAST] 150W PSMH
 [OTHER] LUMENS-14000

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Medium
Cutoff Classification (deprecated)	Semi-Cutoff
Lumens Per Lamp	14000 (1 lamp)
Total Lamp Lumens	14000
Luminaire Lumens	5515
Total Luminaire Efficiency	39 %
Downward Total Efficiency	30 %
Upward Waste Light Ratio	0.23
Maximum Candela	2376
Maximum Candela Angle	67.5H 70V
Maximum Candela At 90 Degrees Vertical	282 (2.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	615 (4.4% Lamp Lumens)
Total Luminaire Watts	190
Ballast Factor	1.00



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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	188.0	1.3	3.4
FM - Front-Medium (30-60)	841.2	6.0	15.3
FH - Front-High (60-80)	1429.2	10.2	25.9
FVH - Front-Very High (80-90)	208.6	1.5	3.8
BL - Back-Low (0-30)	108.2	0.8	2.0
BM - Back-Medium (30-60)	537.9	3.8	9.8
BH - Back-High (60-80)	770.0	5.5	14.0
BVH - Back-Very High (80-90)	172.7	1.2	3.1
UL - Uplight-Low (90-100)	173.4	1.2	3.1
UH - Uplight-High (100-180)	1085.9	7.8	19.7
Total	5515.1	39.3	100.0
BUG Rating	B2-U5-G2		

IES ROAD REPORT
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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>67.5</u>	<u>75.0</u>
0.0	86	86	86	86	86	86	86	86	86	86
2.5	86	86	86	86	86	86	86	86	86	86
5.0	105	105	104	104	104	104	105	103	104	102
7.5	148	147	146	149	150	150	148	147	148	145
10.0	246	245	244	247	251	255	256	254	256	252
12.5	327	326	323	326	326	326	321	311	310	305
15.0	383	382	376	374	366	358	346	331	328	318
17.5	428	427	424	414	398	386	371	354	351	341
20.0	482	482	480	471	455	443	429	406	402	391
22.5	552	551	550	553	530	515	510	486	482	462
25.0	598	594	594	593	594	578	598	573	569	554
27.5	652	647	626	619	622	607	607	602	598	567
30.0	708	702	674	672	658	637	637	625	618	585
32.5	898	882	842	847	838	804	802	794	799	750
35.0	1178	1186	1120	1133	1098	1132	1188	1170	1199	1102
37.5	1274	1291	1301	1296	1295	1305	1413	1408	1414	1356
40.0	1183	1190	1237	1196	1204	1190	1266	1238	1198	1178
42.5	859	869	878	858	858	852	839	845	853	830
45.0	627	621	626	615	595	595	578	578	570	568
47.5	531	537	531	524	519	498	490	480	476	467
50.0	510	512	503	498	490	469	465	449	446	430
52.5	506	505	501	496	494	474	464	449	445	432
55.0	528	534	530	536	558	535	511	481	478	473
57.5	606	620	622	634	653	618	585	567	564	548
60.0	751	776	757	758	765	746	734	717	700	653
62.5	922	953	907	895	845	839	824	818	814	756
65.0	1185	1202	1169	1162	1110	1094	1109	1140	1144	1069
67.5	1696	1744	1662	1683	1690	1711	1754	1823	1845	1742
70.0	2041	2119	2026	2072	2214	2203	2288	2352	2376	2209
71.0	1871	1929	1878	2034	2192	2174	2288	2302	2320	2155
72.5	1857	1917	1880	2013	2193	2193	2305	2302	2321	2146
75.0	1330	1341	1363	1431	1577	1626	1655	1679	1747	1574
77.5	821	814	839	858	950	954	1020	1050	1049	942
80.0	534	535	542	526	558	577	574	599	608	615
82.5	406	402	408	386	367	377	382	401	419	408
85.0	392	387	387	357	339	349	363	365	362	327
87.5	433	428	417	368	366	353	362	391	389	335
90.0	282	280	276	256	258	250	258	262	265	249
92.5	202	201	196	191	189	188	190	188	188	179
95.0	172	171	168	165	162	162	160	159	158	153
97.5	157	157	154	151	149	148	146	144	144	139
100.0	149	149	147	144	142	141	139	137	136	132
102.5	146	146	145	142	141	138	136	134	132	130
105.0	148	148	147	146	142	139	136	132	130	127
107.5	152	152	151	148	146	141	137	131	130	126
110.0	159	158	158	155	153	146	140	133	130	125
112.5	182	182	180	174	164	156	147	136	134	126
115.0	198	198	198	190	177	165	155	142	139	130
117.5	210	212	210	202	190	180	164	151	146	134
120.0	246	244	242	233	219	207	186	166	160	146
122.5	310	306	306	282	269	242	213	186	178	161
125.0	358	357	346	312	297	274	246	209	200	183
127.5	394	393	386	351	315	278	250	226	219	198

IES ROAD REPORT
PHOTOMETRIC FILENAME : FGL-SGL-CCO-150PSMH-ASY.IES

CANDELA TABULATION - (Cont.)

130.0	418	416	391	353	311	283	253	227	221	205
132.5	415	415	385	351	321	298	262	237	233	217
135.0	398	397	379	351	330	314	278	250	243	222
137.5	406	405	390	366	349	333	310	282	275	252
140.0	409	406	390	360	337	327	320	307	303	284
142.5	381	382	369	345	325	317	321	325	322	309
145.0	353	350	342	326	321	304	318	344	343	342
147.5	332	337	332	317	315	316	323	354	358	360
150.0	330	330	331	322	326	342	351	367	370	381
152.5	341	344	352	358	366	414	407	399	396	415
155.0	411	424	445	440	451	467	480	485	477	481
157.5	494	520	533	518	488	464	472	478	478	490
160.0	473	482	473	455	444	451	441	436	437	442
162.5	391	394	382	391	399	379	377	378	384	402
165.0	267	267	264	268	278	296	306	321	322	331
167.5	161	159	166	186	207	226	251	272	274	282
170.0	114	115	132	151	175	199	222	240	245	262
172.5	74	75	83	98	118	134	150	155	156	163
175.0	41	41	42	46	50	53	56	60	60	65
177.5	26	26	26	26	25	25	25	25	25	24
180.0	17	17	17	17	17	17	17	17	17	17

Vert. Horizontal Angles
Angles

	<u>85.0</u>	<u>90.0</u>	<u>95.0</u>	<u>105.0</u>	<u>115.0</u>	<u>125.0</u>	<u>135.0</u>	<u>145.0</u>	<u>155.0</u>	<u>165.0</u>
0.0	86	86	86	86	86	86	86	86	86	86
2.5	86	86	86	85	85	85	84	84	83	83
5.0	102	101	100	98	95	102	90	87	85	84
7.5	142	141	138	132	125	117	108	99	92	87
10.0	246	243	238	222	206	184	154	130	112	99
12.5	294	287	281	266	245	212	176	148	129	117
15.0	304	297	290	273	248	217	186	161	142	132
17.5	328	323	317	300	271	239	206	180	161	151
20.0	382	384	378	351	320	278	237	208	189	176
22.5	450	450	452	429	384	322	277	244	214	199
25.0	509	486	482	466	416	348	286	251	226	210
27.5	533	515	501	484	435	371	297	256	234	222
30.0	551	521	506	483	432	378	318	274	249	234
32.5	690	651	621	624	574	495	425	362	309	298
35.0	1058	1078	1031	990	933	787	672	561	529	474
37.5	1324	1210	1256	1298	1195	1134	926	783	735	698
40.0	1120	1084	1114	1086	992	921	817	668	629	590
42.5	791	781	812	823	766	723	607	597	554	533
45.0	524	510	508	507	481	438	412	365	362	353
47.5	430	416	414	393	370	331	302	284	267	266
50.0	397	376	365	345	323	290	260	249	237	234
52.5	392	370	354	333	308	276	244	229	219	221
55.0	426	402	381	369	329	285	249	227	218	217
57.5	495	479	466	461	418	338	268	242	219	219
60.0	626	606	595	593	532	414	293	240	217	216
62.5	734	734	718	731	654	520	354	277	241	225
65.0	1074	1102	1098	1060	999	774	531	388	347	297
67.5	1788	1755	1751	1601	1541	1174	697	530	506	398
70.0	2320	2207	2113	1985	1894	1424	800	566	476	410
71.0	2227	2162	2069	1935	1786	1362	810	638	514	424
72.5	2210	2138	2039	1903	1750	1334	790	622	507	430

IES ROAD REPORT
PHOTOMETRIC FILENAME : FGL-SGL-CCO-150PSMH-ASY.IES

CANDELA TABULATION - (Cont.)

75.0	1586	1503	1436	1276	1142	946	702	546	490	437
77.5	890	840	830	775	722	598	520	473	403	387
80.0	553	545	545	507	491	446	402	350	294	278
82.5	381	374	368	388	397	374	337	299	244	230
85.0	317	323	329	379	391	398	368	334	258	228
87.5	323	338	342	370	410	398	373	336	250	226
90.0	238	237	238	234	242	232	215	194	175	165
92.5	174	172	171	166	166	162	154	148	143	137
95.0	148	146	145	142	141	138	134	130	128	125
97.5	135	134	133	130	130	126	124	122	119	118
100.0	129	128	127	125	123	122	119	118	116	114
102.5	126	124	123	122	119	117	116	114	112	110
105.0	123	122	120	118	115	113	111	110	107	106
107.5	120	118	116	114	111	109	107	106	103	102
110.0	118	115	114	110	108	106	103	102	99	97
112.5	116	114	112	109	106	104	101	99	98	95
115.0	118	115	114	110	106	104	101	99	97	94
117.5	123	121	118	112	108	105	103	99	96	93
120.0	132	127	123	116	111	108	106	102	98	94
122.5	142	135	130	122	115	112	110	106	99	98
125.0	165	156	150	142	137	137	128	119	108	102
127.5	177	169	164	158	155	158	130	134	138	111
130.0	181	170	162	147	138	130	122	120	124	112
132.5	186	174	162	142	133	124	117	115	117	104
135.0	194	181	167	144	130	122	117	116	108	98
137.5	216	198	181	152	134	126	118	111	104	98
140.0	245	222	202	166	146	134	119	110	102	104
142.5	282	258	234	190	167	148	132	114	106	116
145.0	323	305	279	226	207	186	160	137	131	138
147.5	361	348	326	277	264	262	222	190	198	178
150.0	386	382	377	357	359	356	339	325	298	255
152.5	411	430	458	518	514	500	522	506	458	390
155.0	518	544	560	588	630	634	606	576	556	468
157.5	506	539	557	562	588	604	595	553	493	481
160.0	454	471	488	517	538	541	519	488	459	446
162.5	404	405	405	410	434	424	399	373	363	382
165.0	344	346	346	336	323	309	298	277	264	249
167.5	286	290	293	294	293	289	271	242	194	169
170.0	277	273	271	266	251	242	216	177	146	123
172.5	167	170	174	175	166	146	126	106	87	75
175.0	70	72	75	77	72	65	58	50	44	38
177.5	24	23	23	23	22	21	20	19	18	17
180.0	17	17	17	17	17	17	17	17	17	17

Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	86	86
2.5	83	83
5.0	83	83
7.5	85	85
10.0	93	92
12.5	110	110
15.0	129	128
17.5	148	148
20.0	175	176

IES ROAD REPORT
PHOTOMETRIC FILENAME : FGL-SGL-CCO-150PSMH-ASY.IES

CANDELA TABULATION - (Cont.)

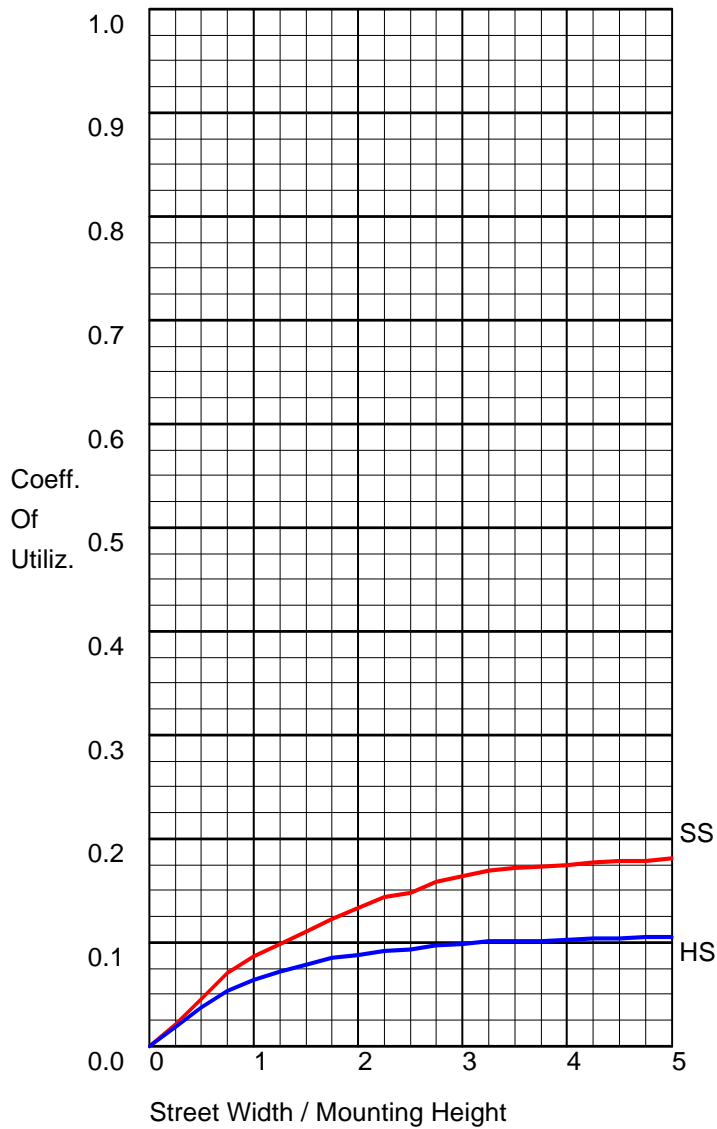
22.5	194	195
25.0	205	203
27.5	217	217
30.0	230	229
32.5	298	290
35.0	533	558
37.5	739	707
40.0	626	602
42.5	513	518
45.0	343	335
47.5	266	265
50.0	232	237
52.5	221	220
55.0	218	221
57.5	220	219
60.0	210	210
62.5	221	222
65.0	253	244
67.5	337	341
70.0	349	342
71.0	356	328
72.5	346	329
75.0	354	341
77.5	359	381
80.0	280	268
82.5	214	213
85.0	228	231
87.5	214	211
90.0	158	158
92.5	135	134
95.0	123	123
97.5	117	117
100.0	113	112
102.5	109	108
105.0	104	104
107.5	100	99
110.0	96	95
112.5	94	94
115.0	92	92
117.5	90	90
120.0	90	90
122.5	93	91
125.0	102	102
127.5	107	106
130.0	105	105
132.5	102	101
135.0	96	94
137.5	98	98
140.0	102	101
142.5	106	104
145.0	124	118
147.5	162	166
150.0	223	224
152.5	367	371
155.0	474	495
157.5	518	498

IES ROAD REPORT
PHOTOMETRIC FILENAME : FGL-SGL-CCO-150PSMH-ASY.IES

CANDELA TABULATION - (Cont.)

160.0	454	458
162.5	379	379
165.0	252	255
167.5	163	167
170.0	115	115
172.5	68	67
175.0	34	34
177.5	16	16
180.0	17	17

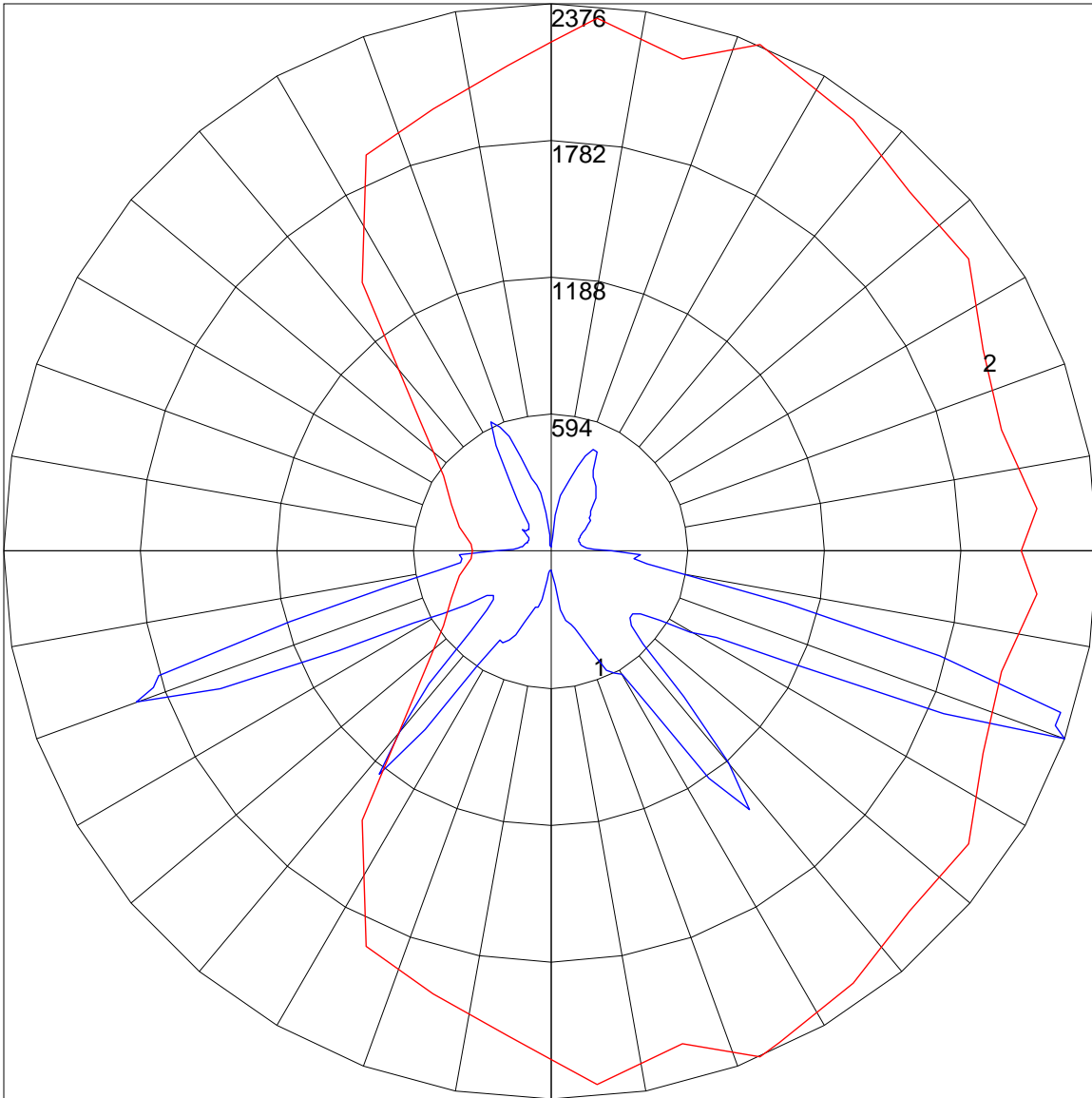
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

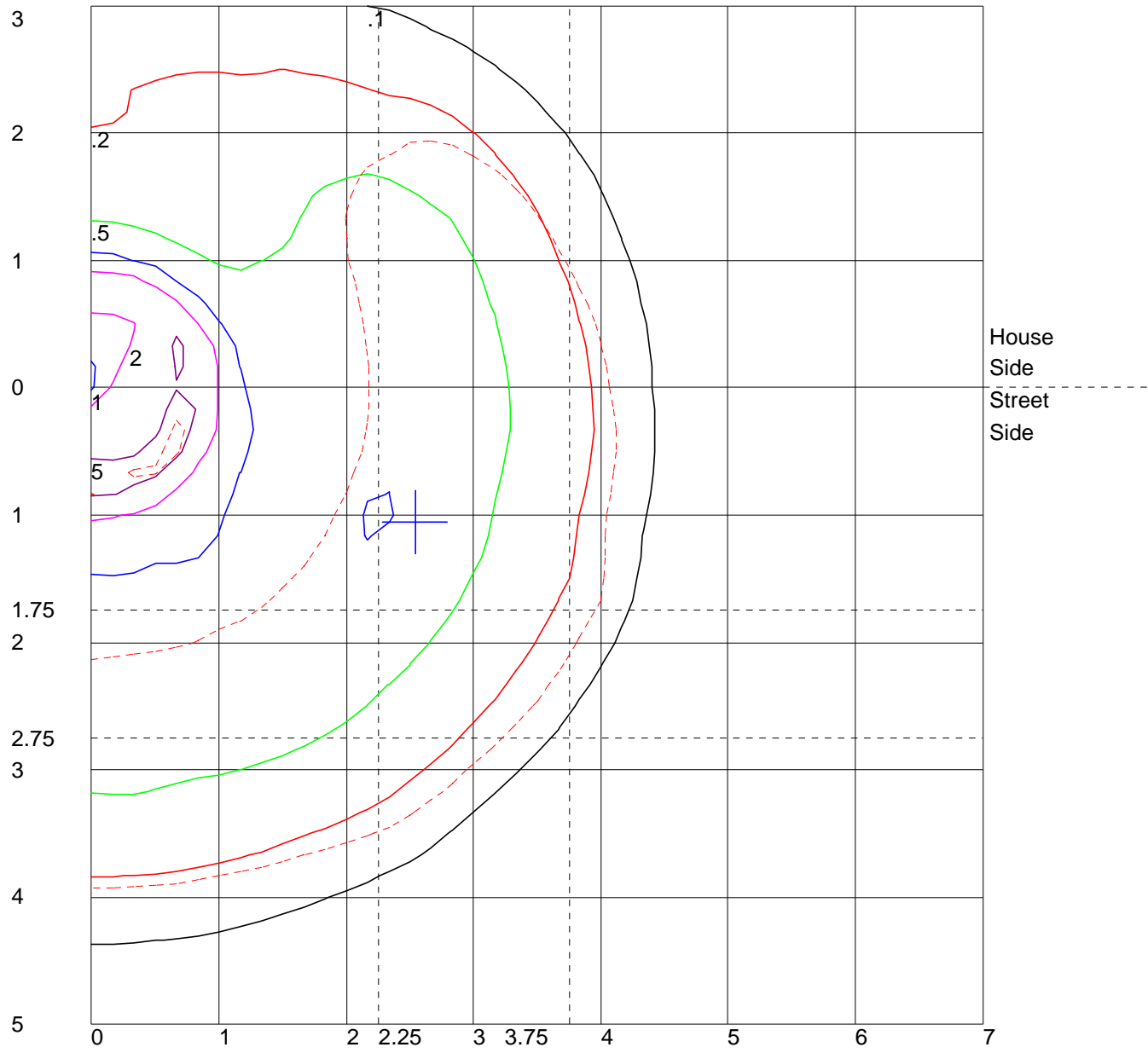
	Lumens	Percent Of Lamp
Downward Street Side	2666.9	19.0
Downward House Side	1588.9	11.3
Downward Total	4255.8	30.4
Upward Street Side	739.9	5.3
Upward House Side	519.4	3.7
Upward Total	1259.3	9.0
Total Flux	5515.1	39.4

POLAR GRAPH



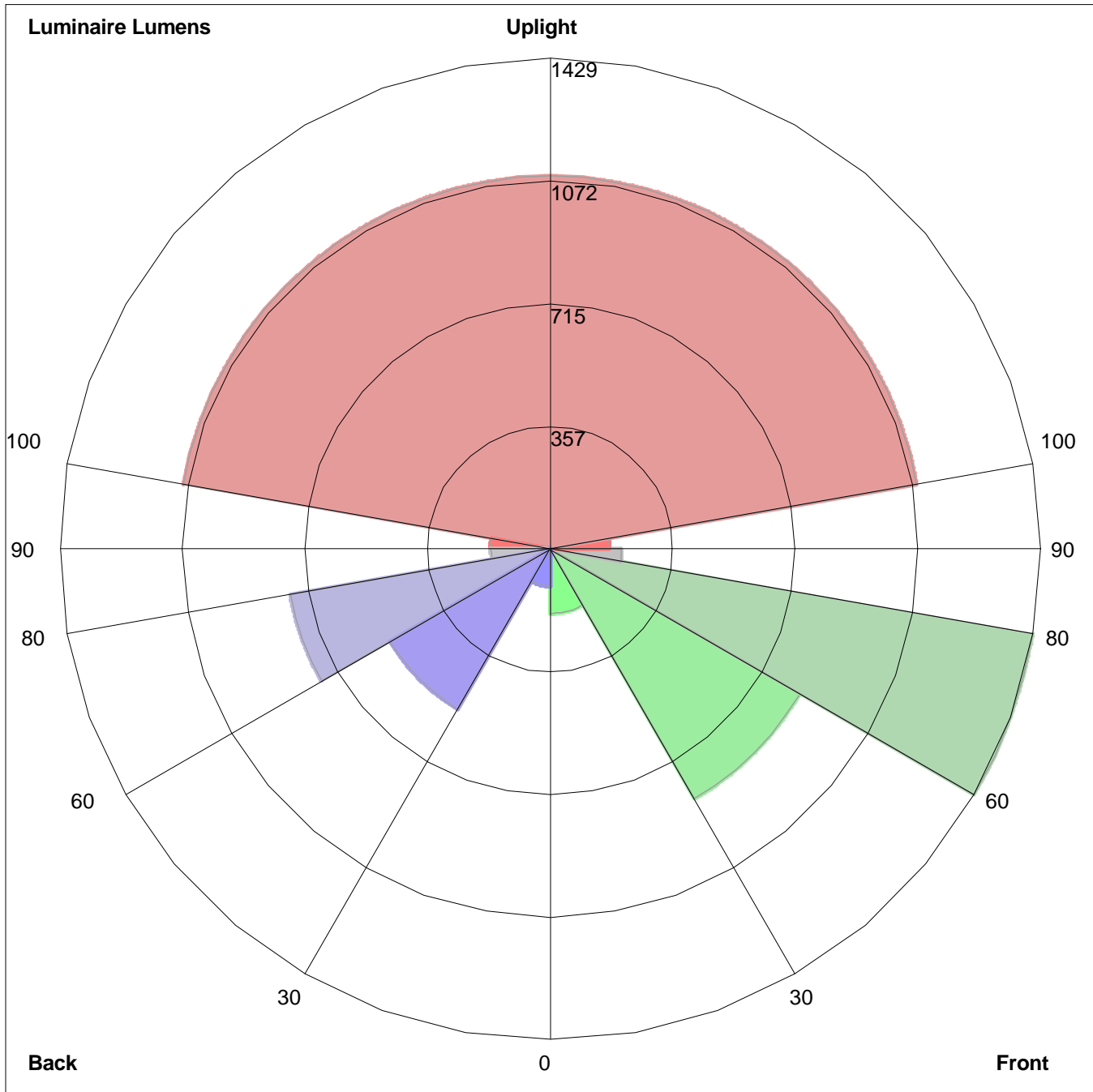
Maximum Candela = 2376 Located At Horizontal Angle = 67.5, Vertical Angle = 70
1 - Vertical Plane Through Horizontal Angles (67.5 - 247.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (70) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



Distance In Units Of Mounting Height
 Values Based On 10 Foot Mounting Height
 1/2 Maximum Candela Trace Shown As Dashed Curve
 (+) = Maximum Candela Point

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
 Front: Low=188.0, Medium=841.2, High=1429.2, Very High=208.6
 Back: Low=108.2, Medium=537.9, High=770.0, Very High=172.7
 Uplight: Low=173.4, High=1085.9

BUG Rating : B2-U5-G2