IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-FT-40-70CRI-IH.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12642
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/29/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-FT-40-70CRI-IH
[_ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[OTHER] SCALED FROM ORIGINAL TEST DATA
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Outdoor
[_SEARCH_COLORTEMP] 4000

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	11264
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.05
Maximum Candela	7470
Maximum Candela Angle	45H 67.5V
Maximum Candela (<90 Degrees Vertical)	7470
Maximum Candela Angle (<90 Degrees Vertical)	45H 67.5V
Maximum Candela At 90 Degrees Vertical	162 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	868 (7.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	715.4	N.A.	6.4
FM - Front-Medium (30-60)	4448.3	N.A.	39.5
FH - Front-High (60-80)	3633.5	N.A.	32.3
FVH - Front-Very High (80-90)	140.8	N.A.	1.2
BL - Back-Low (0-30)	463.8	N.A.	4.1
BM - Back-Medium (30-60)	902.2	N.A.	8.0
BH - Back-High (60-80)	367.8	N.A.	3.3
BVH - Back-Very High (80-90)	81.0	N.A.	0.7
UL - Uplight-Low (90-100)	135.5	N.A.	1.2
UH - Uplight-High (100-180)	375.3	N.A.	3.3
Total	11263.6	N.A.	100.0
BUG Rating	B1-U3-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	42.5	45.0	55.0	65.0	75.0
0.0	1211	1211	1211	1211	1211	1211	1211	1211	1211	1211
2.5	1265	1270	1272	1268	1271	1265	1267	1256	1250	1247
5.0	1168	1152	1173	1238	1291	1306	1316	1310	1299	1275
7.5	1192	1193	1181	1198	1213	1184	1182	1231	1306	1292
10.0	1187	1175	1201	1215	1218	1222	1226	1245	1260	1329
12.5	1234	1277	1303	1282	1281	1269	1254	1270	1279	1431
15.0	1322	1320	1366	1328	1387	1370	1376	1372	1400	1435
17.5	1478	1463	1499	1491	1444	1465	1504	1475	1511	1529
20.0	1628	1652	1628	1606	1662	1570	1571	1635	1634	1612
22.5	1795	1788	1838	1810	1758	1751	1760	1722	1728	1752
25.0	2133	2097	2043	1946	1986	1917	1869	1841	1859	1803
27.5	2286	2328	2235	2215	2143	2132	2121	1989	1913	1930
30.0	2643	2663	2632	2425	2371	2330	2275	2140	2011	2006
32.5	2868	2869	2819	2746	2654	2567	2510	2329	2159	2089
35.0	3091	3071	3013	2944	2939	2857	2792	2497	2265	2135
37.5	3346	3290	3221	3169	3136	3158	3122	2728	2390	2167
40.0	3625	3543	3477	3430	3369	3413	3396	2981	2567	2190
42.5	3915	3864	3769	3732	3665	3703	3656	3346	2693	2221
45.0	4262	4221	4131	4092	4011	4011	3979	3684	2906	2434
47.5	4739	4663	4584	4531	4430	4371	4371	4039	3158	2649
50.0	5183	5140	5098	5068	4925	4859	4826	4456	3546	2875
52.5	5438	5442	5464	5588	5475	5367	5333	5000	4029	3176
55.0	5526	5560	5630	5916	5990	5918	5878	5535	4569	3428
57.5	5530	5581	5713	6109	6372	6479	6360	6049	5051	3581
60.0	5486	5551	5751	6250	6619	6849	6790	6536	5381	3816
62.5	5255	5341	5661	6358	6816	7044	7148	6898	5533	4266
65.0	4218	4326	4902	6113	7040	7298	7407	6827	5551	4354
67.5	2836	2860	3526	5002	6848	7445	7470	6473	5478	4209
70.0	1512	1674	2249	3455	5433	6649	6769	6032	5011	3601
72.5	796	886	1511	2213	3414	4417	4821	5297	3943	2354
75.0	572	612	1171	1716	2292	2774	2942	3333	2076	1119
77.5	443	472	682	1170	1680	1612	1646	1773	1159	686
80.0	334	362	488	627	828	856	868	866	611	489
82.5	262	286	379	471	432	345	321	272	262	353
85.0	208	222	297	285	186	160	156	161	180	215
87.5	112	119	141	118	111	119	122	131	142	163
90.0	45	53	74	88	102	112	115	124	133	145
92.5	51	56	77	90	104	115	118	125	136	145
95.0	57	59	78	93	105	115	119	125	137	143
97.5	64	62	80	95	107	116	120	124	134	122
100.0	70	66	82	97	108	117	119	121	125	92
102.5	74	69	83	99	109	117	119	117	110	79
105.0	77	73	84	101	110	115	117	108	95	73
107.5	80	77	85	103	111	114	113	97	83	73
110.0	83	80	87	104	111	108	105	85	72	72
112.5	85	83	87	104	107	100	95	78	67	70
115.0	87	86	88	103	101	91	87	74	65	69
117.5	88	88	88	98	94	85	82	71	64	69
120.0	90	90	87	92	88	81	79	70	63	67
122.5	90	88	84	86	84	79	77	69	64	66
125.0	88	87	81	81	81	78	76	69	64	66
127.5	84	84	80	79	80	77	76	70	66	66
130.0	83	82	79	77	79	77	77	71	67	69

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CANDELA TABULATION - (Cont.)

132.5	81	81	78	77	79	77	76	69	67	70
135.0	81	81	80	77	75	71	69	64	67	71
137.5	81	81	77	70	64	60	59	58	63	70
140.0	72	71	66	59	51	47	46	49	54	62
142.5	59	59	54	46	37	35	35	38	44	52
145.0	44	44	40	32	26	25	25	26	33	40
147.5	29	29	27	22	17	13	12	15	22	28
150.0	21	20	19	13	5	4	5	8	12	17
152.5	11	9	6	4	2	2	2	4	6	9
155.0	3	3	2	1	1	2	2	2	4	5
157.5	1	1	1	1	1	1	2	2	2	4
160.0	1	1	1	1	1	1	1	2	2	2
162.5	0	1	1	1	1	1	1	2	2	2
165.0	1	1	1	1	1	1	2	2	2	2
167.5	1	1	1	1	1	1	1	2	2	2
170.0	1	1	1	1	1	1	1	2	2	2
172.5	1	1	1	1	1	2	2	2	2	2
175.0	1	1	1	1	1	2	2	2	2	2
177.5	1	1	1	1	1	2	2	2	2	2
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	**Horizontal Angles**									
	85.0	**90.0**	**95.0**	**105.0**	**115.0**	**125.0**	**135.0**	**145.0**	**155.0**	**165.0**
0.0	1211	1211	1211	1211	1211	1211	1211	1211	1211	1211
2.5	1238	1226	1220	1194	1184	1181	1176	1175	1179	1180
5.0	1268	1228	1209	1196	1254	1279	1272	1265	1264	1249
7.5	1280	1260	1222	1252	1283	1298	1279	1217	1150	1135
10.0	1336	1298	1245	1303	1283	1249	1172	1168	1126	1124
12.5	1451	1405	1334	1395	1310	1204	1152	1121	1097	1095
15.0	1532	1475	1401	1470	1303	1228	1141	1129	1089	1042
17.5	1625	1577	1533	1544	1371	1246	1191	1062	950	891
20.0	1710	1668	1645	1567	1412	1233	1087	927	830	751
22.5	1851	1783	1778	1630	1402	1218	964	816	679	622
25.0	1901	1889	1847	1672	1383	1108	845	676	597	553
27.5	2011	1957	1941	1728	1333	977	725	612	532	501
30.0	2062	2000	2002	1793	1245	862	661	551	499	480
32.5	2077	2005	1997	1768	1128	771	606	516	476	499
35.0	2080	1998	2020	1682	988	709	566	493	493	517
37.5	2102	2011	2035	1593	864	654	535	498	498	559
40.0	2139	2056	2029	1489	785	607	523	489	522	633
42.5	2125	2044	2040	1371	736	570	522	484	559	793
45.0	2213	2045	2082	1276	681	573	517	473	600	809
47.5	2254	2127	2034	1204	625	591	502	458	618	513
50.0	2356	2214	2035	1189	600	585	484	437	529	359
52.5	2520	2265	2086	1173	600	567	460	420	424	303
55.0	2702	2392	2124	1200	617	520	424	388	343	274
57.5	2762	2366	2092	1129	577	453	368	349	299	256
60.0	2868	2465	2101	1115	484	363	311	300	266	239
62.5	3012	2482	2074	1090	359	287	264	261	241	220
65.0	2960	2433	1940	929	276	248	239	236	217	200
67.5	2735	2200	1692	619	242	229	223	217	194	183
70.0	2211	1644	1162	383	227	216	209	193	177	203
72.5	1287	946	675	249	211	205	191	180	208	252
75.0	627	562	423	216	198	187	178	187	184	173
77.5	419	383	242	204	184	172	170	161	156	157

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CANDELA TABULATION - (Cont.)

80.0	328	287	190	194	169	165	169	155	147	144
82.5	266	222	153	182	163	159	160	153	146	141
85.0	218	146	143	169	158	148	159	153	146	140
87.5	179	73	157	163	154	146	160	154	148	140
90.0	123	64	152	162	155	148	162	156	149	140
92.5	82	115	141	166	160	150	165	160	153	143
95.0	80	143	135	163	159	144	163	160	156	147
97.5	107	142	130	152	151	131	155	154	153	144
100.0	112	133	126	138	143	126	148	149	150	139
102.5	108	122	120	124	135	124	143	145	146	133
105.0	101	112	111	112	125	122	138	142	143	125
107.5	94	102	104	104	116	119	134	140	141	117
110.0	88	95	97	98	108	115	131	138	137	108
112.5	83	89	91	94	101	112	128	136	133	100
115.0	79	84	87	91	97	109	124	133	129	93
117.5	76	81	83	89	94	107	121	129	122	88
120.0	74	78	81	87	91	105	118	124	114	87
122.5	71	75	78	85	91	104	114	118	105	84
125.0	70	73	76	83	90	102	111	112	96	83
127.5	70	72	76	83	90	101	108	105	88	83
130.0	71	73	77	84	90	101	104	99	83	82
132.5	72	74	78	84	88	97	100	92	79	81
135.0	75	77	80	85	86	88	91	86	78	80
137.5	76	78	81	83	81	76	76	74	77	80
140.0	70	73	74	73	69	63	58	60	67	75
142.5	60	62	63	60	55	48	42	45	54	61
145.0	46	48	48	46	40	34	29	32	40	47
147.5	32	33	33	32	27	22	19	23	28	33
150.0	19	20	20	19	15	10	9	15	19	22
152.5	11	11	11	10	8	6	5	6	11	15
155.0	6	6	6	6	5	4	3	4	4	5
157.5	4	4	4	4	4	4	3	2	2	1
160.0	3	4	4	4	4	4	2	2	1	1
162.5	3	3	4	4	4	3	2	2	1	0
165.0	3	3	4	4	4	3	2	2	1	0
167.5	3	3	3	4	4	3	2	2	1	0
170.0	3	3	3	4	3	3	2	2	1	0
172.5	3	3	3	3	3	3	2	2	1	0
175.0	3	3	3	3	3	2	2	1	1	0
177.5	3	3	3	3	3	2	2	1	1	0
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	**Horizontal Angles**	
	175.0	**180.0**
0.0	1211	1211
2.5	1186	1189
5.0	1247	1260
7.5	1119	1119
10.0	1114	1137
12.5	1086	1079
15.0	1006	1031
17.5	867	862
20.0	712	710
22.5	595	587
25.0	527	524

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CANDELA TABULATION - (Cont.)

27.5	499	498
30.0	484	484
32.5	513	516
35.0	547	548
37.5	603	607
40.0	694	708
42.5	858	822
45.0	505	483
47.5	367	365
50.0	314	312
52.5	283	284
55.0	262	265
57.5	243	245
60.0	222	224
62.5	203	204
65.0	186	190
67.5	174	177
70.0	221	221
72.5	249	211
75.0	155	143
77.5	139	117
80.0	119	88
82.5	109	70
85.0	100	60
87.5	97	63
90.0	91	61
92.5	90	71
95.0	93	87
97.5	91	97
100.0	90	104
102.5	89	107
105.0	91	108
107.5	94	107
110.0	96	104
112.5	97	101
115.0	96	98
117.5	95	96
120.0	93	94
122.5	91	93
125.0	90	91
127.5	88	88
130.0	85	86
132.5	84	84
135.0	82	82
137.5	81	81
140.0	78	79
142.5	66	67
145.0	51	52
147.5	36	37
150.0	23	24
152.5	16	16
155.0	7	7
157.5	1	1
160.0	0	0
162.5	0	0
165.0	0	0

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CANDELA TABULATION - (Cont.)

167.5	0	0
170.0	0	0
172.5	0	0
175.0	0	0
177.5	0	0
180.0	2	2

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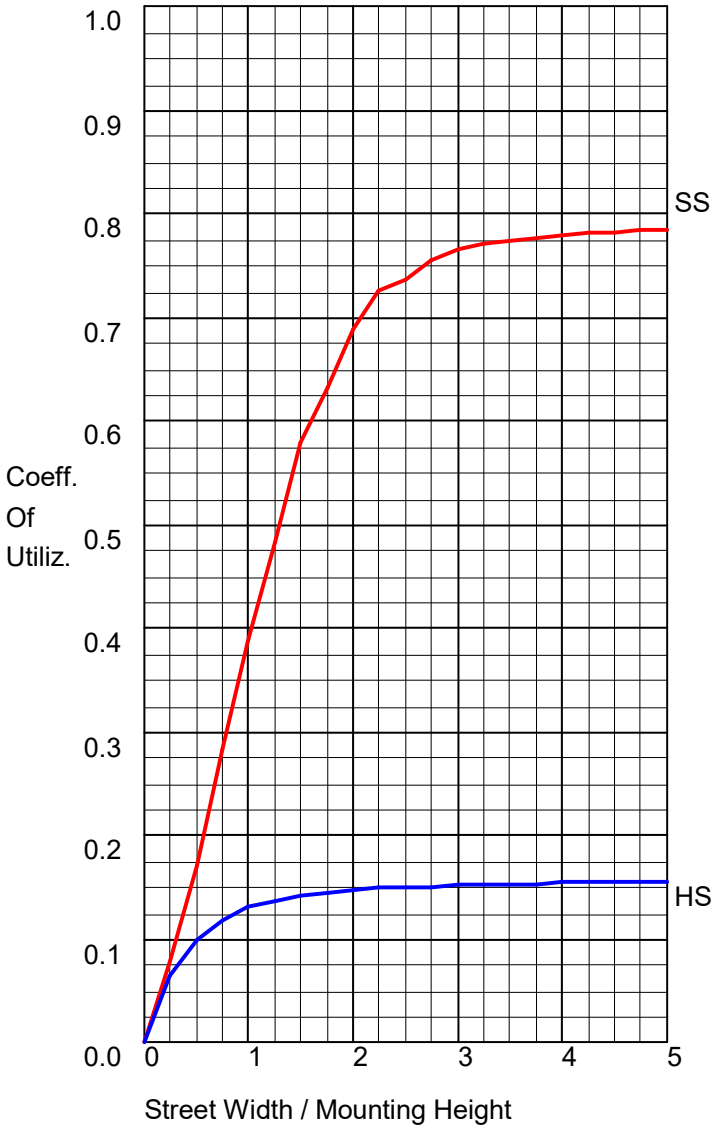
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	8938.0	79.4
Downward House Side	1814.8	16.1
Downward Total	10752.8	95.5
Upward Street Side	224.4	2.0
Upward House Side	286.4	2.5
Upward Total	510.8	4.5
Total Flux	11263.6	100.0

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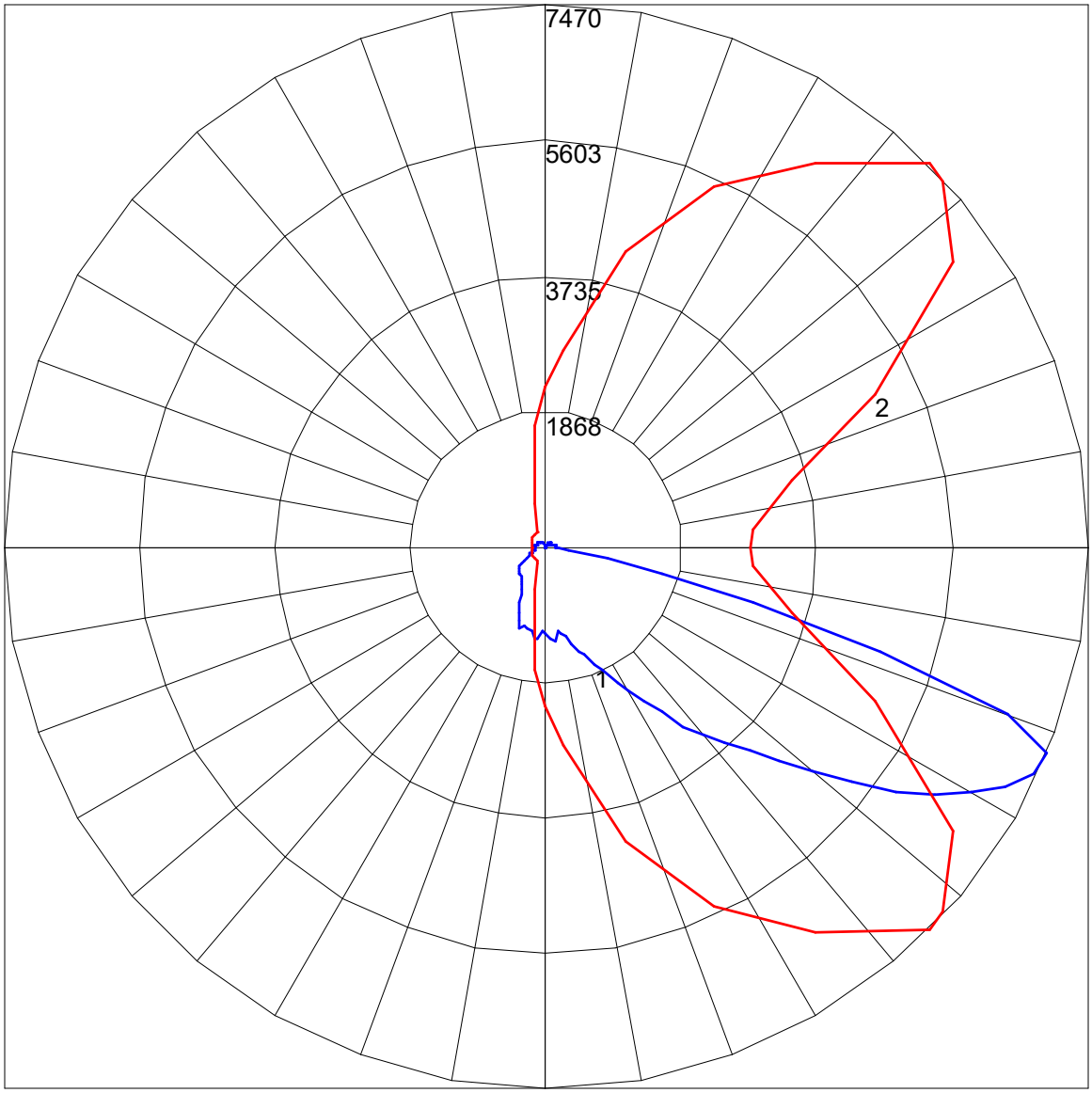
POLAR GRAPH



Maximum Candela = 7470 Located At Horizontal Angle = 45, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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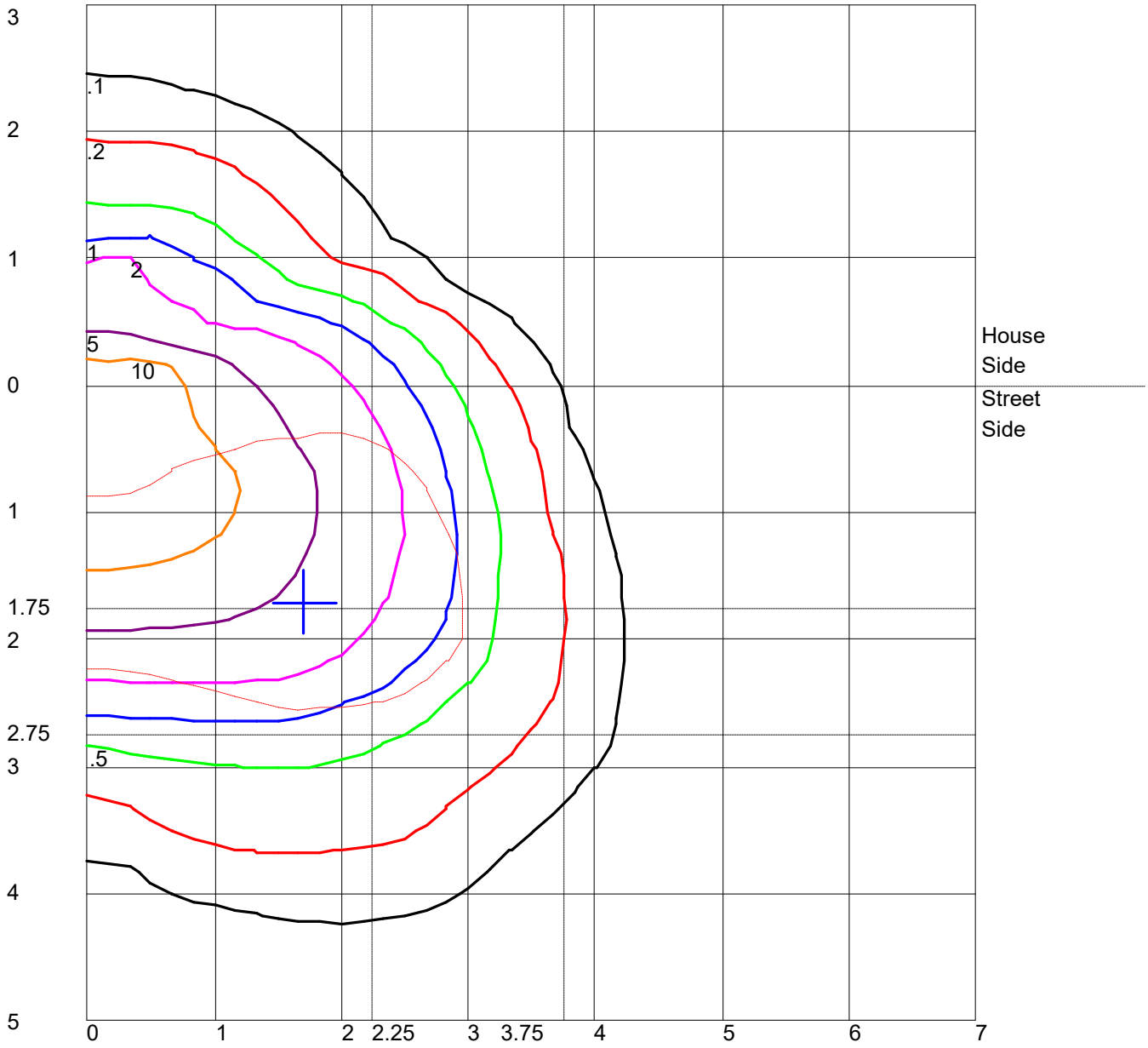
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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

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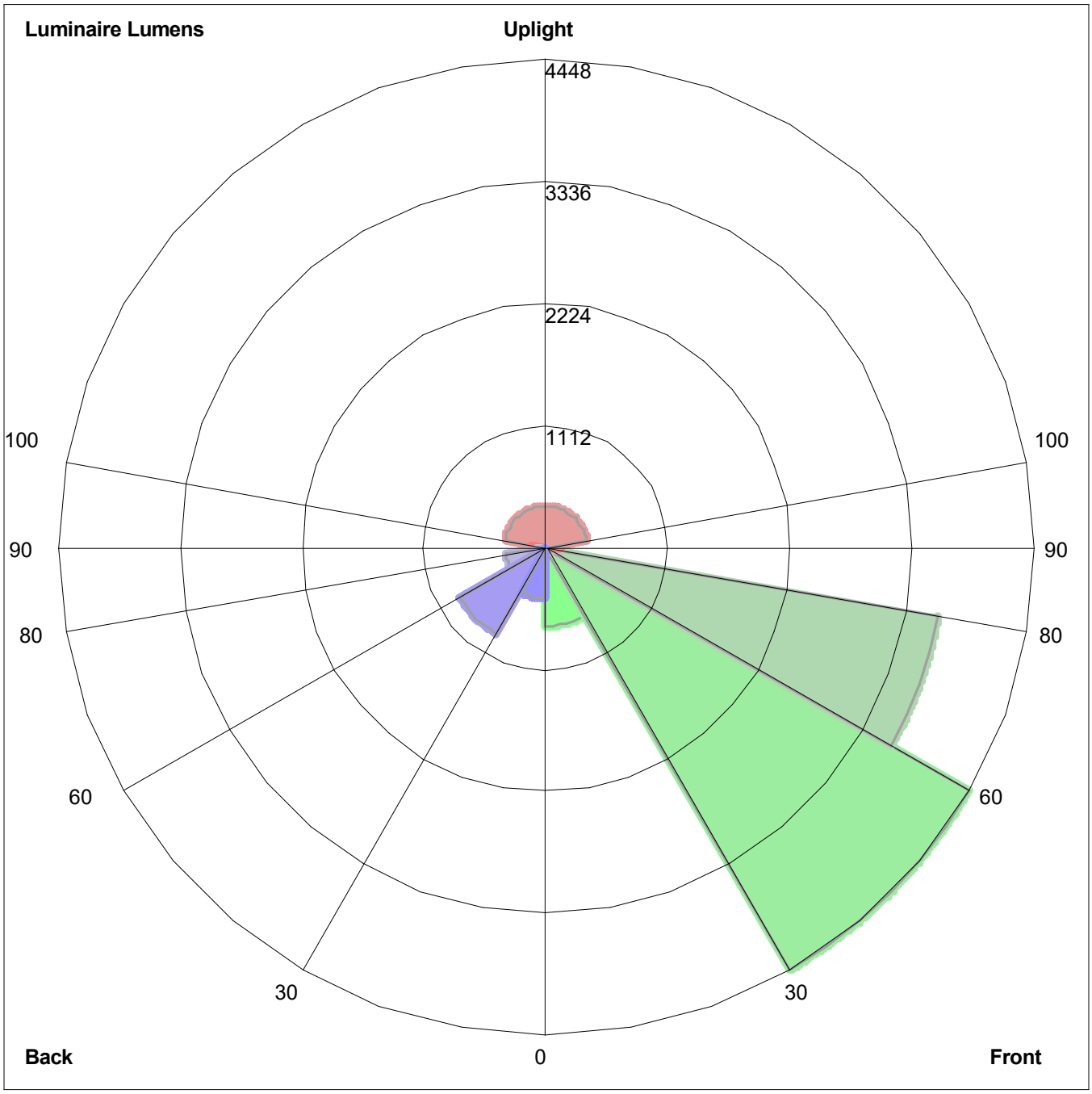
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=715.4, Medium=4448.3, High=3633.5, Very High=140.8
Back: Low=463.8, Medium=902.2, High=367.8, Very High=81.0
Uplight: Low=135.5, High=375.3

BUG Rating : B1-U3-G2

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