IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-FT-30-70CRI.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12571
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/05/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-FT-30-70CRI
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[_ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER] SCALED FROM ORIGINAL TEST DATA
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Outdoor
[_SEARCH_COLORTEMP] 3000

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	14964
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	147
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	7963
Maximum Candela Angle	37.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	7963
Maximum Candela Angle (<90 Degrees Vertical)	37.5H 67.5V
Maximum Candela At 90 Degrees Vertical	213 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1836 (12.3% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	756.2	N.A.	5.1
FM - Front-Medium (30-60)	4398.5	N.A.	29.4
FH - Front-High (60-80)	4699.7	N.A.	31.4
FVH - Front-Very High (80-90)	259.7	N.A.	1.7
BL - Back-Low (0-30)	676.1	N.A.	4.5
BM - Back-Medium (30-60)	2262.6	N.A.	15.1
BH - Back-High (60-80)	1098.2	N.A.	7.3
BVH - Back-Very High (80-90)	189.2	N.A.	1.3
UL - Uplight-Low (90-100)	172.1	N.A.	1.2
UH - Uplight-High (100-180)	452.0	N.A.	3.0
Total	14964.3	N.A.	100.0
BUG Rating	B3-U3-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	37.5	45.0	55.0	65.0	75.0
0.0	1314	1314	1314	1314	1314	1314	1314	1314	1314	1314
2.5	1372	1384	1381	1386	1383	1379	1373	1366	1354	1341
5.0	1303	1292	1324	1372	1400	1399	1409	1427	1424	1388
7.5	1342	1346	1302	1326	1324	1323	1311	1373	1432	1424
10.0	1335	1311	1337	1358	1354	1372	1371	1386	1415	1449
12.5	1410	1421	1436	1418	1411	1409	1404	1427	1421	1574
15.0	1483	1472	1494	1471	1527	1522	1512	1515	1537	1576
17.5	1624	1616	1637	1609	1573	1580	1611	1606	1624	1668
20.0	1712	1745	1754	1738	1786	1788	1667	1750	1746	1711
22.5	1890	1879	1913	1915	1869	1879	1865	1844	1833	1872
25.0	2086	2101	2076	2011	2076	2057	1964	1936	1971	1922
27.5	2276	2310	2268	2241	2182	2173	2149	2038	2011	2014
30.0	2581	2596	2574	2410	2383	2367	2253	2181	2077	2142
32.5	2760	2775	2732	2693	2600	2544	2460	2337	2198	2203
35.0	2998	2959	2901	2865	2856	2842	2670	2463	2277	2231
37.5	3206	3186	3100	3054	3041	3029	2995	2662	2416	2271
40.0	3467	3418	3349	3286	3255	3246	3258	2888	2566	2260
42.5	3790	3721	3635	3568	3516	3514	3522	3204	2680	2330
45.0	4151	4103	3988	3921	3846	3842	3805	3573	2801	2466
47.5	4585	4560	4438	4364	4277	4251	4162	3879	3076	2634
50.0	5093	5070	4949	4926	4791	4714	4622	4275	3398	2889
52.5	5509	5493	5437	5490	5342	5229	5118	4711	3868	3224
55.0	5738	5743	5760	5940	5909	5832	5677	5204	4370	3397
57.5	5862	5881	5997	6247	6401	6413	6222	5782	4919	3697
60.0	5921	5955	6147	6498	6771	6843	6750	6299	5470	4161
62.5	5972	6018	6300	6753	7126	7231	7183	6780	5834	4557
65.0	5906	5949	6287	6914	7454	7659	7714	7137	6018	4762
67.5	5662	5718	6133	6944	7880	7963	7856	7393	5914	4366
70.0	4705	4853	5451	6596	7862	7902	7856	7138	5253	3701
72.5	2727	2958	4218	5437	6928	7227	7657	6007	4149	2567
75.0	1258	1429	2919	4056	5373	5774	6115	4656	2774	1397
77.5	595	648	1466	2550	3686	3626	3333	2856	1482	856
80.0	485	518	838	1294	1836	1832	1538	1518	925	636
82.5	386	423	594	884	1005	970	883	825	561	465
85.0	297	329	440	529	521	493	534	404	320	358
87.5	200	218	278	307	205	190	246	211	225	244
90.0	62	76	110	127	143	147	157	164	175	186
92.5	71	79	112	130	144	149	159	164	176	185
95.0	80	81	114	132	146	150	160	162	174	180
97.5	87	84	114	132	147	150	159	158	169	155
100.0	94	87	114	133	147	149	157	155	156	124
102.5	100	91	113	134	146	149	155	148	139	108
105.0	103	95	112	135	146	147	150	136	122	101
107.5	105	99	110	135	144	145	143	123	107	96
110.0	106	103	109	134	141	141	133	110	96	93
112.5	107	105	108	132	136	133	121	102	89	90
115.0	108	107	107	129	128	124	112	96	84	88
117.5	108	108	105	122	119	116	106	92	82	86
120.0	108	108	103	113	112	109	101	89	81	84
122.5	107	106	99	106	107	105	98	87	81	84
125.0	104	104	96	99	103	101	96	87	81	82
127.5	101	100	94	94	98	98	95	89	82	84
130.0	97	97	93	91	96	96	95	89	84	84

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CANDELA TABULATION - (Cont.)

132.5	96	95	92	90	95	96	93	85	84	87
135.0	96	96	93	90	89	87	84	81	84	89
137.5	93	94	89	81	74	73	70	71	79	88
140.0	81	81	75	66	59	57	55	59	67	78
142.5	65	64	60	51	41	40	40	45	55	64
145.0	50	49	44	36	29	29	28	33	41	50
147.5	34	33	30	25	18	17	14	19	28	34
150.0	24	23	21	14	6	6	5	8	15	21
152.5	12	12	8	5	2	2	2	4	6	10
155.0	4	4	2	1	1	1	1	2	3	4
157.5	1	1	1	1	1	1	1	2	2	2
160.0	1	1	1	1	1	1	1	2	2	2
162.5	1	1	1	1	1	1	1	2	2	2
165.0	1	1	1	1	1	1	1	2	2	2
167.5	1	1	1	1	1	1	2	2	2	2
170.0	1	1	1	1	2	2	2	2	2	2
172.5	1	1	1	1	2	2	2	2	2	2
175.0	1	1	1	1	2	2	2	2	2	2
177.5	1	1	1	1	2	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	1314	1314	1314	1314	1314	1314	1314	1314	1314	1314
2.5	1331	1318	1319	1310	1299	1305	1299	1291	1288	1290
5.0	1354	1320	1295	1311	1384	1390	1372	1361	1340	1328
7.5	1399	1355	1337	1379	1395	1379	1359	1311	1256	1222
10.0	1425	1399	1370	1427	1379	1345	1278	1265	1262	1220
12.5	1563	1483	1456	1521	1409	1302	1265	1276	1255	1298
15.0	1623	1548	1525	1547	1420	1373	1288	1360	1377	1397
17.5	1727	1660	1647	1632	1461	1380	1476	1442	1441	1499
20.0	1831	1724	1728	1658	1520	1495	1490	1524	1553	1594
22.5	1944	1873	1859	1721	1553	1586	1587	1663	1638	1739
25.0	1996	1987	1926	1734	1626	1624	1693	1712	1777	1826
27.5	2119	2044	2050	1808	1652	1711	1758	1838	1853	1966
30.0	2179	2097	2124	1897	1722	1800	1866	1887	1965	2045
32.5	2185	2120	2130	1941	1769	1846	1894	1989	2097	2212
35.0	2206	2112	2140	1919	1761	1864	1969	2081	2159	2261
37.5	2202	2124	2162	1889	1747	1853	1998	2096	2176	2300
40.0	2185	2176	2136	1841	1737	1821	2013	2076	2189	2357
42.5	2241	2143	2146	1808	1702	1802	1977	2052	2211	2558
45.0	2264	2148	2165	1809	1622	1816	1936	2013	2260	2742
47.5	2313	2209	2123	1778	1563	1793	1884	1956	2451	2468
50.0	2383	2287	2137	1770	1499	1727	1817	1906	2438	2242
52.5	2563	2346	2222	1767	1468	1670	1734	1910	2269	2081
55.0	2734	2489	2279	1719	1444	1602	1643	1912	2087	1951
57.5	2968	2634	2330	1673	1379	1495	1541	1841	1925	1826
60.0	3179	2744	2422	1636	1290	1364	1413	1719	1765	1696
62.5	3310	2794	2385	1569	1182	1233	1284	1585	1600	1564
65.0	3254	2720	2212	1439	1060	1094	1151	1452	1435	1434
67.5	2938	2350	1920	1263	960	969	1035	1330	1261	1272
70.0	2314	1735	1367	1056	852	873	929	1196	1070	1155
72.5	1487	1171	856	833	734	766	817	1031	932	1047
75.0	833	725	622	661	634	640	716	886	744	849
77.5	549	495	439	521	512	525	600	692	613	786

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CANDELA TABULATION - (Cont.)

80.0	440	390	341	432	412	414	474	517	528	693
82.5	345	304	275	374	353	347	380	403	458	570
85.0	288	211	241	323	296	291	303	318	392	438
87.5	231	117	221	258	249	242	257	250	264	317
90.0	151	89	185	211	208	197	213	206	201	196
92.5	119	138	166	205	200	187	200	197	186	176
95.0	121	170	156	198	193	175	193	190	184	174
97.5	136	171	156	182	183	161	184	182	180	168
100.0	142	162	153	161	173	156	177	177	174	160
102.5	136	151	146	144	162	153	171	172	170	152
105.0	128	139	137	132	150	149	165	168	165	142
107.5	119	128	129	125	139	144	160	164	160	132
110.0	110	119	120	119	129	138	156	162	156	122
112.5	105	111	113	113	120	133	151	158	153	113
115.0	99	105	108	110	114	130	146	155	146	107
117.5	96	101	103	108	111	126	140	149	138	102
120.0	91	97	100	106	109	123	136	142	130	99
122.5	89	93	97	104	108	121	132	134	118	97
125.0	87	90	94	101	108	119	127	127	108	96
127.5	86	89	93	101	107	117	122	118	100	94
130.0	87	90	94	101	107	116	117	110	94	93
132.5	89	91	95	101	105	112	113	103	90	91
135.0	92	94	97	102	102	101	103	97	89	91
137.5	94	97	98	99	94	87	86	85	88	91
140.0	86	89	89	86	80	72	66	69	77	84
142.5	74	76	75	71	63	55	48	51	61	70
145.0	57	58	59	55	47	38	34	36	45	54
147.5	38	39	40	37	32	24	21	25	31	37
150.0	24	24	24	23	18	10	9	15	21	24
152.5	12	12	12	11	7	4	3	4	11	15
155.0	5	5	5	5	4	2	1	2	2	4
157.5	3	4	3	3	2	2	1	1	0	0
160.0	3	3	3	3	2	2	1	1	0	0
162.5	3	3	3	3	2	2	1	0	0	0
165.0	3	3	3	3	2	2	1	1	0	0
167.5	3	3	3	3	2	2	1	1	0	0
170.0	3	3	3	3	2	2	1	1	0	0
172.5	3	3	3	3	2	2	1	1	0	0
175.0	3	3	3	3	2	2	1	1	0	0
177.5	3	3	3	3	2	2	1	1	0	0
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	**Horizontal Angles**	
	175.0	**180.0**
0.0	1314	1314
2.5	1298	1310
5.0	1326	1316
7.5	1228	1222
10.0	1236	1242
12.5	1310	1317
15.0	1403	1350
17.5	1476	1550
20.0	1591	1555
22.5	1738	1738
25.0	1842	1823

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CANDELA TABULATION - (Cont.)

27.5	2007	2034
30.0	2132	2128
32.5	2285	2290
35.0	2345	2355
37.5	2398	2433
40.0	2511	2593
42.5	2734	2754
45.0	2464	2456
47.5	2274	2286
50.0	2159	2160
52.5	2050	2047
55.0	1938	1937
57.5	1817	1806
60.0	1688	1679
62.5	1558	1555
65.0	1441	1433
67.5	1271	1256
70.0	1171	1153
72.5	1005	924
75.0	829	788
77.5	823	786
80.0	787	750
82.5	662	635
85.0	511	508
87.5	356	380
90.0	166	140
92.5	111	87
95.0	109	101
97.5	106	113
100.0	104	119
102.5	103	121
105.0	104	121
107.5	106	119
110.0	108	116
112.5	108	113
115.0	108	110
117.5	107	108
120.0	106	107
122.5	104	105
125.0	103	103
127.5	100	101
130.0	97	97
132.5	94	95
135.0	93	93
137.5	93	93
140.0	89	89
142.5	74	75
145.0	59	59
147.5	42	43
150.0	27	27
152.5	17	18
155.0	6	5
157.5	0	0
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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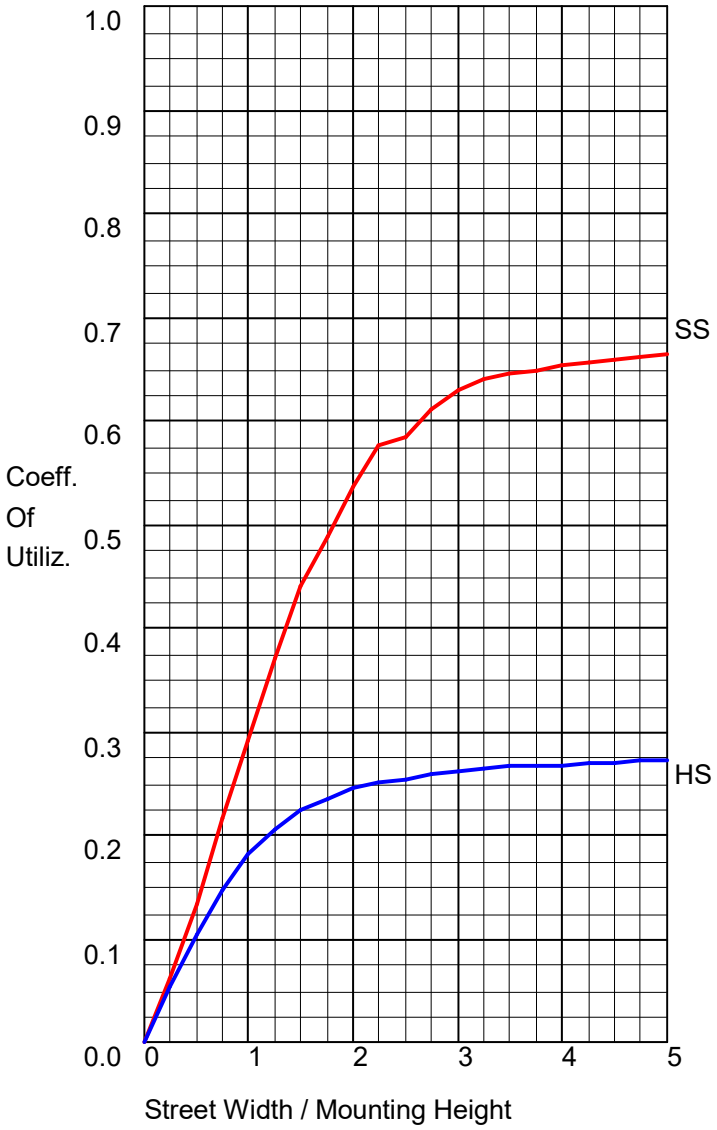
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	10114.1	67.6
Downward House Side	4226.0	28.2
Downward Total	14340.1	95.8
Upward Street Side	285.7	1.9
Upward House Side	338.4	2.3
Upward Total	624.1	4.2
Total Flux	14964.2	100.0

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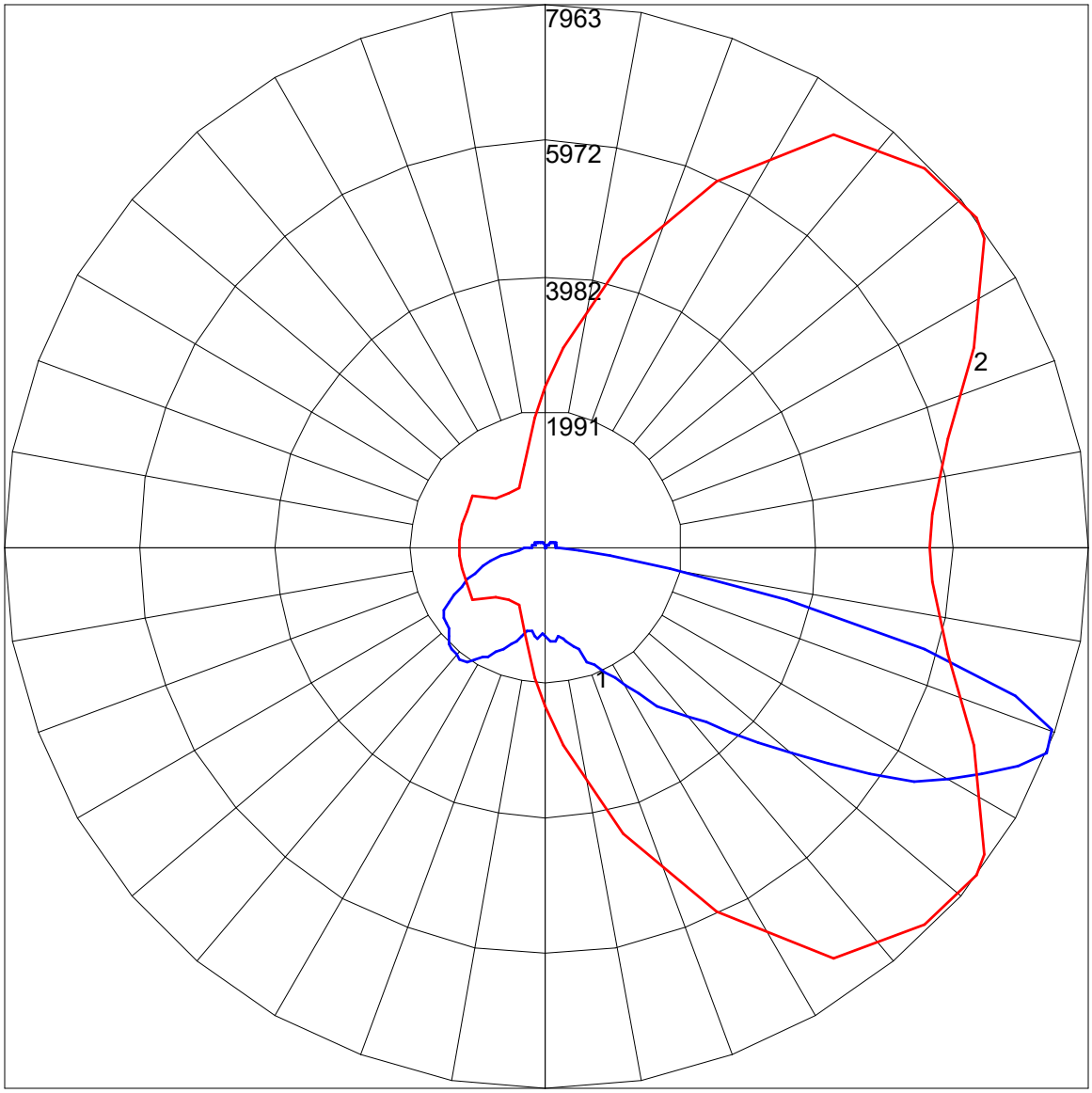
POLAR GRAPH



Maximum Candela = 7963 Located At Horizontal Angle = 37.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (37.5 - 217.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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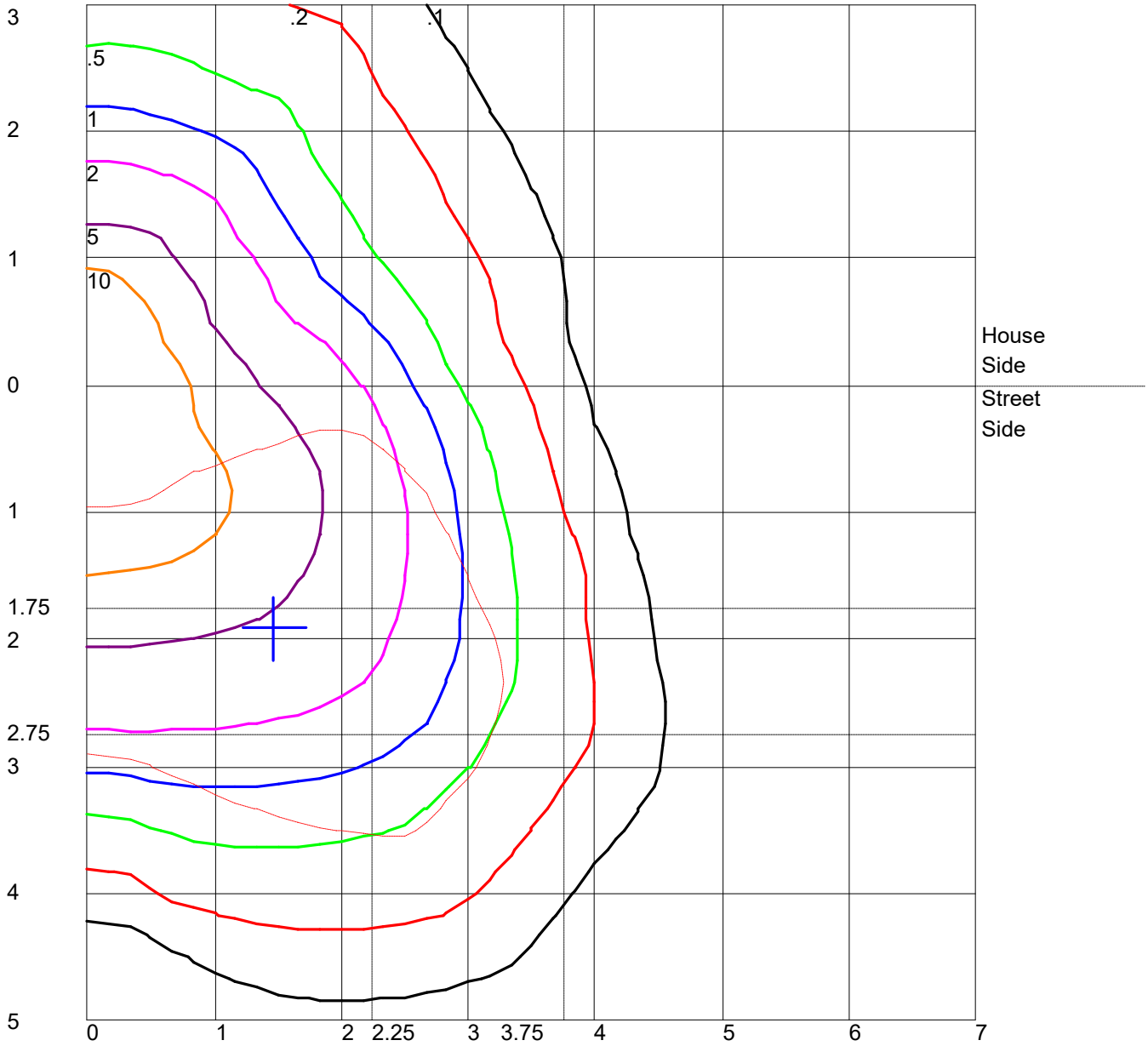
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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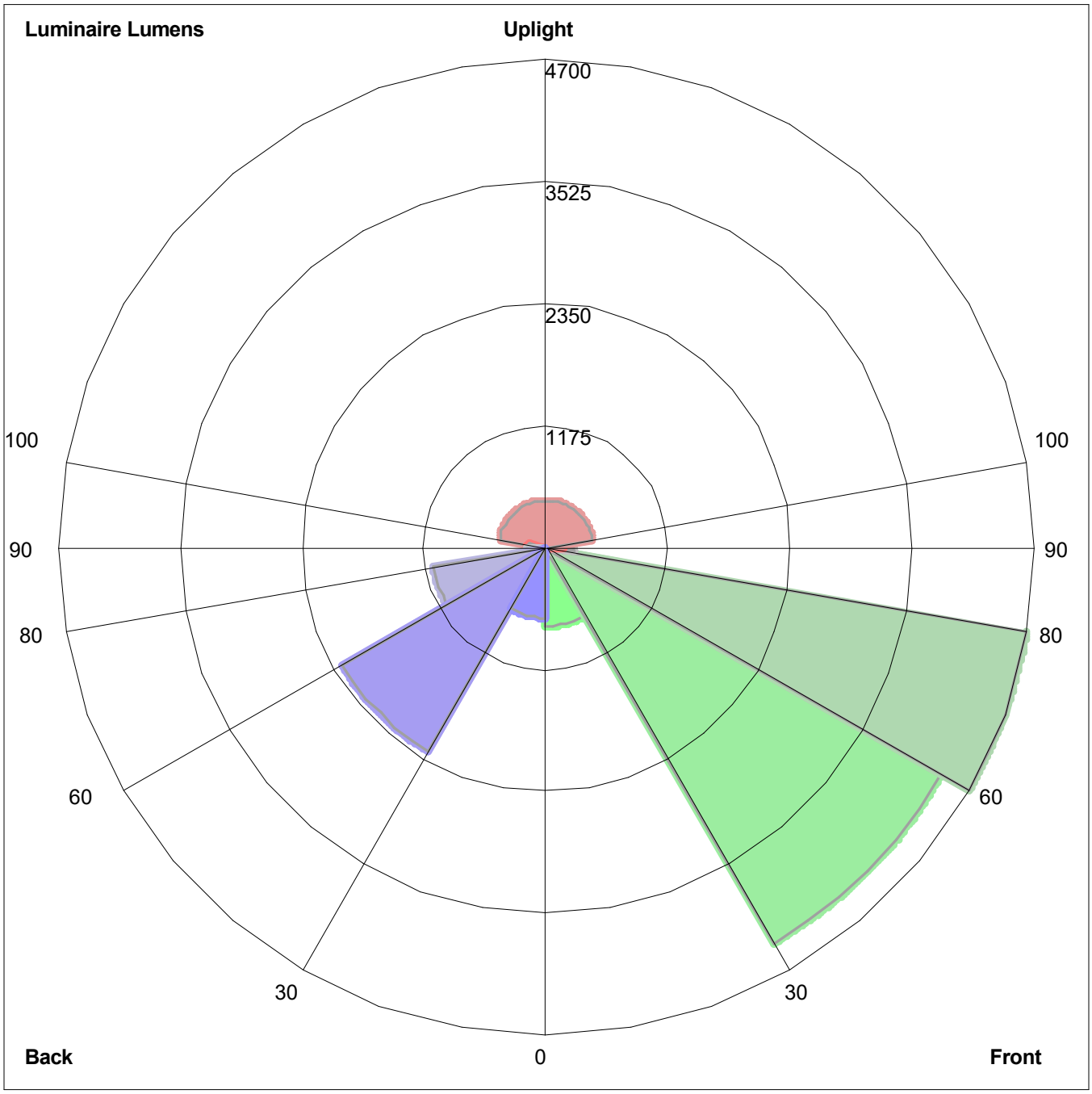
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=756.2, Medium=4398.5, High=4699.7, Very High=259.7
Back: Low=676.1, Medium=2262.6, High=1098.2, Very High=189.2
Uplight: Low=172.1, High=452.0

BUG Rating : B3-U3-G3

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