IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-FT-40-70CRI.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-40-70CRI
[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] 4000

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	15586
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	153
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	8294
Maximum Candela Angle	37.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	8294
Maximum Candela Angle (<90 Degrees Vertical)	37.5H 67.5V
Maximum Candela At 90 Degrees Vertical	222 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1912 (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)	787.7	N.A.	5.1
FM - Front-Medium (30-60)	4581.3	N.A.	29.4
FH - Front-High (60-80)	4895.0	N.A.	31.4
FVH - Front-Very High (80-90)	270.5	N.A.	1.7
BL - Back-Low (0-30)	704.1	N.A.	4.5
BM - Back-Medium (30-60)	2356.6	N.A.	15.1
BH - Back-High (60-80)	1143.9	N.A.	7.3
BVH - Back-Very High (80-90)	197.0	N.A.	1.3
UL - Uplight-Low (90-100)	179.3	N.A.	1.2
UH - Uplight-High (100-180)	470.7	N.A.	3.0
Total	15586.1	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	1369	1369	1369	1369	1369	1369	1369	1369	1369	1369
2.5	1429	1442	1438	1444	1440	1436	1430	1423	1410	1397
5.0	1357	1346	1379	1429	1458	1457	1468	1486	1483	1446
7.5	1398	1402	1356	1381	1379	1378	1366	1430	1492	1483
10.0	1391	1366	1393	1414	1410	1429	1428	1444	1474	1509
12.5	1469	1480	1496	1477	1470	1468	1462	1486	1480	1639
15.0	1545	1533	1556	1532	1590	1585	1575	1578	1601	1641
17.5	1691	1683	1705	1676	1638	1646	1678	1673	1691	1737
20.0	1783	1818	1827	1810	1860	1862	1736	1823	1819	1782
22.5	1969	1957	1993	1995	1947	1957	1942	1921	1909	1950
25.0	2173	2188	2162	2095	2162	2142	2046	2016	2053	2002
27.5	2371	2406	2362	2334	2273	2263	2238	2123	2095	2098
30.0	2688	2704	2681	2510	2482	2465	2347	2272	2163	2231
32.5	2875	2890	2846	2805	2708	2650	2562	2434	2289	2295
35.0	3123	3082	3022	2984	2975	2960	2781	2565	2372	2324
37.5	3339	3318	3229	3181	3167	3155	3119	2773	2516	2365
40.0	3611	3560	3488	3423	3390	3381	3393	3008	2673	2354
42.5	3948	3876	3786	3716	3662	3660	3668	3337	2791	2427
45.0	4323	4274	4154	4084	4006	4002	3963	3722	2917	2568
47.5	4776	4750	4622	4545	4455	4428	4335	4040	3204	2743
50.0	5305	5281	5155	5131	4990	4910	4814	4453	3539	3009
52.5	5738	5721	5663	5718	5564	5446	5331	4907	4029	3358
55.0	5976	5982	5999	6187	6155	6074	5913	5420	4552	3538
57.5	6106	6125	6246	6507	6667	6679	6481	6022	5123	3851
60.0	6167	6202	6402	6768	7052	7127	7031	6561	5697	4334
62.5	6220	6268	6562	7034	7422	7532	7482	7062	6076	4746
65.0	6151	6196	6548	7201	7764	7977	8035	7434	6268	4960
67.5	5897	5956	6388	7233	8207	8294	8182	7700	6160	4547
70.0	4901	5055	5678	6870	8189	8230	8183	7435	5471	3855
72.5	2840	3081	4393	5663	7216	7527	7975	6257	4321	2674
75.0	1310	1488	3040	4225	5596	6014	6369	4849	2889	1455
77.5	620	675	1527	2656	3839	3777	3471	2975	1544	892
80.0	505	540	873	1348	1912	1908	1602	1581	963	662
82.5	402	441	619	921	1047	1010	920	859	584	484
85.0	309	343	458	551	543	513	556	421	333	373
87.5	208	227	290	320	213	198	256	220	234	254
90.0	65	79	115	132	149	153	164	171	182	194
92.5	74	82	117	135	150	155	166	171	183	193
95.0	83	84	119	137	152	156	167	169	181	187
97.5	91	87	119	138	153	156	166	165	176	161
100.0	98	91	119	139	153	155	164	161	163	129
102.5	104	95	118	140	152	155	161	154	145	112
105.0	107	99	117	141	152	153	156	142	127	105
107.5	109	103	115	141	150	151	149	128	111	100
110.0	110	107	114	140	147	147	139	115	100	97
112.5	111	109	112	138	142	139	126	106	93	94
115.0	112	111	111	134	133	129	117	100	88	92
117.5	112	112	109	127	124	121	110	96	85	90
120.0	112	112	107	118	117	114	105	93	84	88
122.5	111	110	103	110	111	109	102	91	84	87
125.0	108	108	100	103	107	105	100	91	84	85
127.5	105	104	98	98	102	102	99	93	85	87
130.0	101	101	97	95	100	100	99	93	87	88

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CANDELA TABULATION - (Cont.)

132.5	100	99	96	94	99	100	97	89	88	91
135.0	100	100	97	94	93	91	87	84	88	93
137.5	97	98	93	84	77	76	73	74	82	92
140.0	84	84	78	69	61	59	57	61	70	81
142.5	68	67	63	53	43	42	42	47	57	67
145.0	52	51	46	37	30	30	29	34	43	52
147.5	35	34	31	26	19	18	15	20	29	35
150.0	25	24	22	15	6	6	5	8	16	22
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	1369	1369	1369	1369	1369	1369	1369	1369	1369	1369
2.5	1386	1373	1374	1364	1353	1359	1353	1345	1342	1344
5.0	1410	1375	1349	1366	1441	1448	1429	1418	1396	1383
7.5	1457	1411	1393	1436	1453	1436	1415	1365	1308	1273
10.0	1484	1457	1427	1486	1436	1401	1331	1318	1314	1271
12.5	1628	1545	1516	1584	1468	1356	1318	1329	1307	1352
15.0	1690	1612	1588	1611	1479	1430	1342	1417	1434	1455
17.5	1799	1729	1715	1700	1522	1437	1537	1502	1501	1561
20.0	1907	1796	1800	1727	1583	1557	1552	1587	1618	1660
22.5	2025	1951	1936	1793	1618	1652	1653	1732	1706	1811
25.0	2079	2070	2006	1806	1694	1691	1763	1783	1851	1902
27.5	2207	2129	2135	1883	1721	1782	1831	1914	1930	2048
30.0	2270	2184	2212	1976	1794	1875	1944	1965	2047	2130
32.5	2276	2208	2218	2022	1843	1923	1973	2072	2184	2304
35.0	2298	2200	2229	1999	1834	1941	2051	2168	2249	2355
37.5	2294	2212	2252	1968	1820	1930	2081	2183	2266	2396
40.0	2276	2266	2225	1917	1809	1897	2097	2162	2280	2455
42.5	2334	2232	2235	1883	1773	1877	2059	2137	2303	2664
45.0	2358	2237	2255	1884	1689	1891	2016	2097	2354	2856
47.5	2409	2301	2211	1852	1628	1868	1962	2037	2553	2571
50.0	2482	2382	2226	1844	1561	1799	1892	1985	2539	2335
52.5	2669	2444	2314	1840	1529	1739	1806	1989	2363	2168
55.0	2848	2592	2374	1790	1504	1669	1711	1991	2174	2032
57.5	3091	2743	2427	1743	1436	1557	1605	1917	2005	1902
60.0	3311	2858	2523	1704	1344	1421	1472	1790	1838	1766
62.5	3448	2910	2484	1634	1231	1284	1337	1651	1667	1629
65.0	3389	2833	2304	1499	1104	1139	1199	1512	1495	1494
67.5	3060	2448	2000	1316	1000	1009	1078	1385	1313	1325
70.0	2410	1807	1424	1100	887	909	968	1246	1114	1203
72.5	1549	1220	892	868	765	798	851	1074	971	1090
75.0	868	755	648	688	660	667	746	923	775	884
77.5	572	516	457	543	533	547	625	721	638	819

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CANDELA TABULATION - (Cont.)

80.0	458	406	355	450	429	431	494	538	550	722
82.5	359	317	286	390	368	361	396	420	477	594
85.0	300	220	251	336	308	303	316	331	408	456
87.5	241	122	230	269	259	252	268	260	275	330
90.0	157	93	193	220	217	205	222	215	209	204
92.5	124	144	173	214	208	195	208	205	194	183
95.0	126	177	163	206	201	182	201	198	192	181
97.5	142	178	162	190	191	168	192	190	187	175
100.0	148	169	159	168	180	162	184	184	181	167
102.5	142	157	152	150	169	159	178	179	177	158
105.0	133	145	143	138	156	155	172	175	172	148
107.5	124	133	134	130	145	150	167	171	167	138
110.0	115	124	125	124	134	144	163	169	163	127
112.5	109	116	118	118	125	139	157	165	159	118
115.0	103	109	112	115	119	135	152	161	152	111
117.5	100	105	107	112	116	131	146	155	144	106
120.0	95	101	104	110	114	128	142	148	135	103
122.5	93	97	101	108	112	126	137	140	123	101
125.0	91	94	98	105	112	124	132	132	112	100
127.5	90	93	97	105	111	122	127	123	104	98
130.0	91	94	98	105	111	121	122	115	98	97
132.5	93	95	99	105	109	117	118	107	94	95
135.0	96	98	101	106	106	105	107	101	93	95
137.5	98	101	102	103	98	91	90	89	92	95
140.0	90	93	93	90	83	75	69	72	80	88
142.5	77	79	78	74	66	57	50	53	64	73
145.0	59	60	61	57	49	40	35	37	47	56
147.5	40	41	42	39	33	25	22	26	32	39
150.0	25	25	25	24	19	10	9	16	22	25
152.5	13	13	13	11	7	4	3	4	11	16
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	1369	1369
2.5	1352	1364
5.0	1381	1371
7.5	1279	1273
10.0	1287	1294
12.5	1364	1372
15.0	1461	1406
17.5	1537	1614
20.0	1657	1620
22.5	1810	1810
25.0	1919	1899

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CANDELA TABULATION - (Cont.)

27.5	2090	2119
30.0	2221	2216
32.5	2380	2385
35.0	2442	2453
37.5	2498	2534
40.0	2615	2701
42.5	2848	2868
45.0	2566	2558
47.5	2369	2381
50.0	2249	2250
52.5	2135	2132
55.0	2019	2017
57.5	1892	1881
60.0	1758	1749
62.5	1623	1620
65.0	1501	1493
67.5	1324	1308
70.0	1220	1201
72.5	1047	962
75.0	863	821
77.5	857	819
80.0	820	781
82.5	690	661
85.0	532	529
87.5	371	396
90.0	173	146
92.5	116	91
95.0	114	105
97.5	110	118
100.0	108	124
102.5	107	126
105.0	108	126
107.5	110	124
110.0	112	121
112.5	113	118
115.0	112	115
117.5	111	112
120.0	110	111
122.5	108	109
125.0	107	107
127.5	104	105
130.0	101	101
132.5	98	99
135.0	97	97
137.5	97	97
140.0	93	93
142.5	77	78
145.0	61	61
147.5	44	45
150.0	28	28
152.5	18	19
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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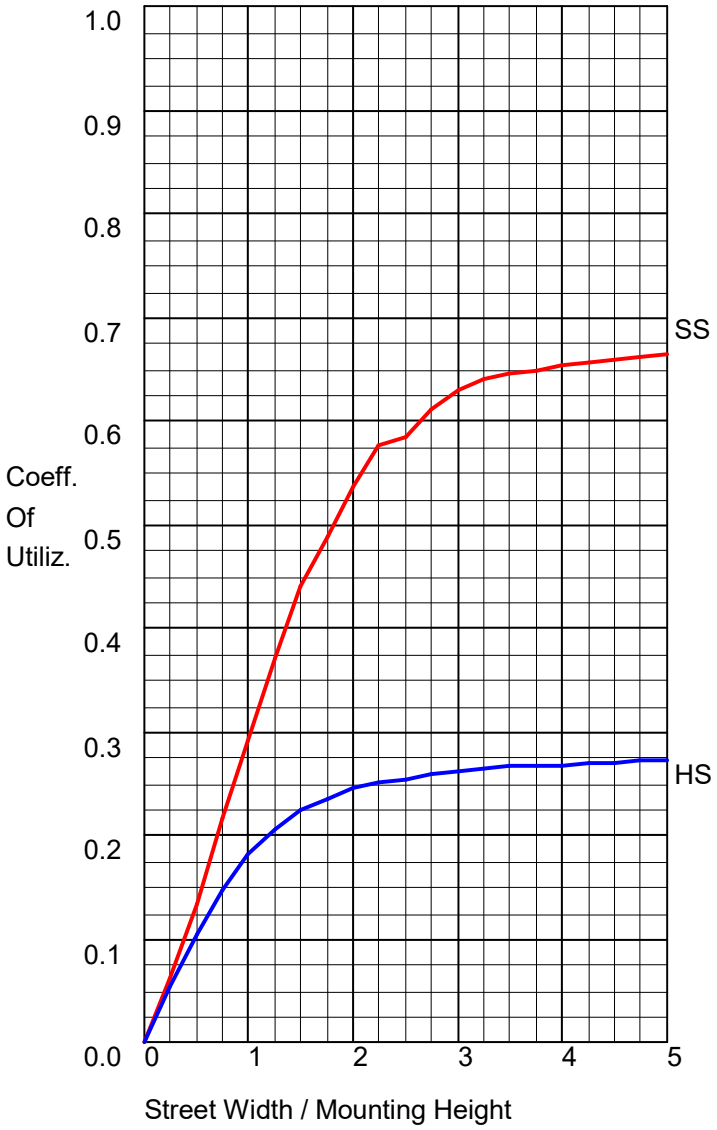
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	10534.4	67.6
Downward House Side	4401.6	28.2
Downward Total	14936.0	95.8
Upward Street Side	297.6	1.9
Upward House Side	352.4	2.3
Upward Total	650.0	4.2
Total Flux	15586.0	100.0

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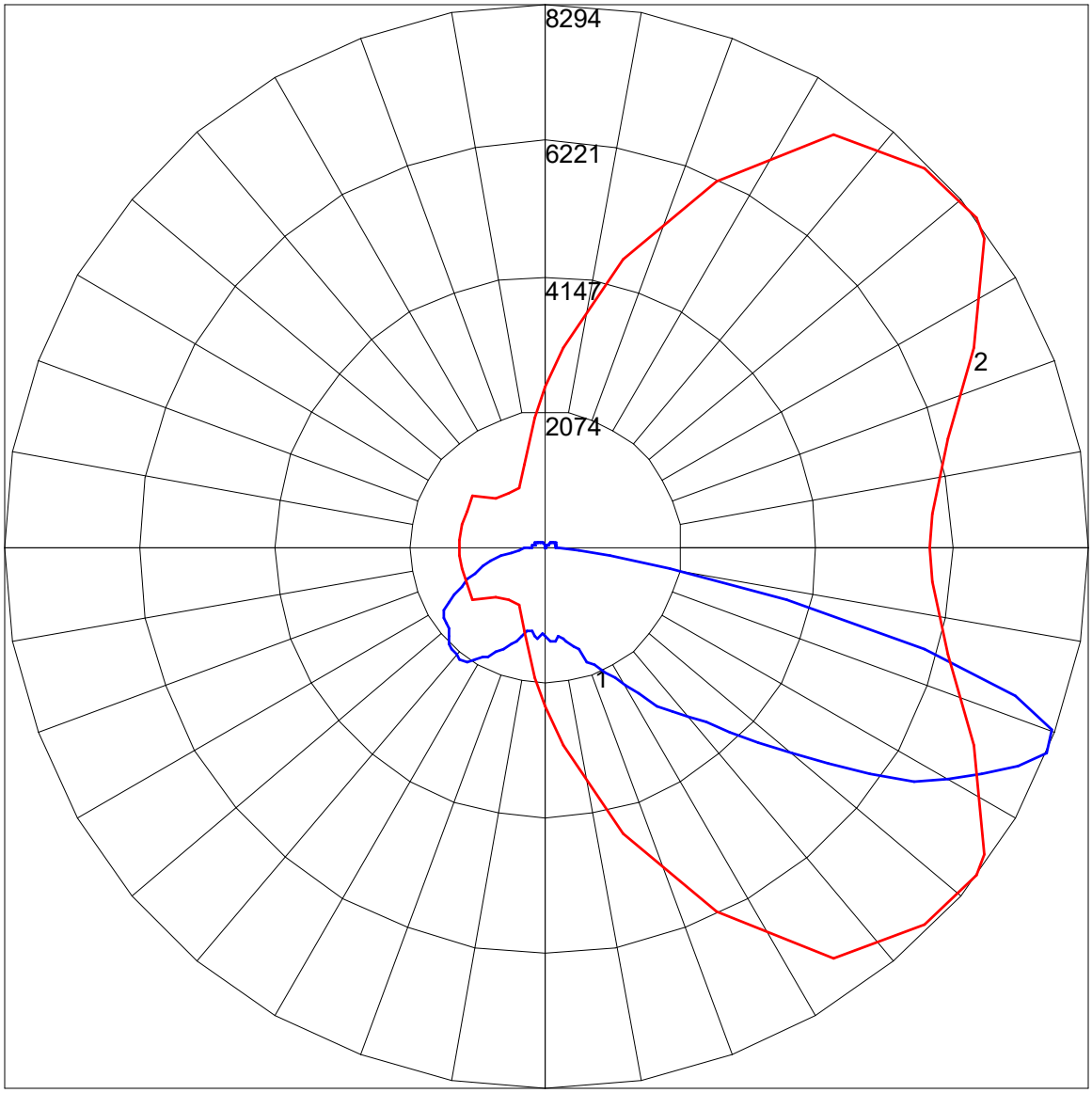
POLAR GRAPH



Maximum Candela = 8294 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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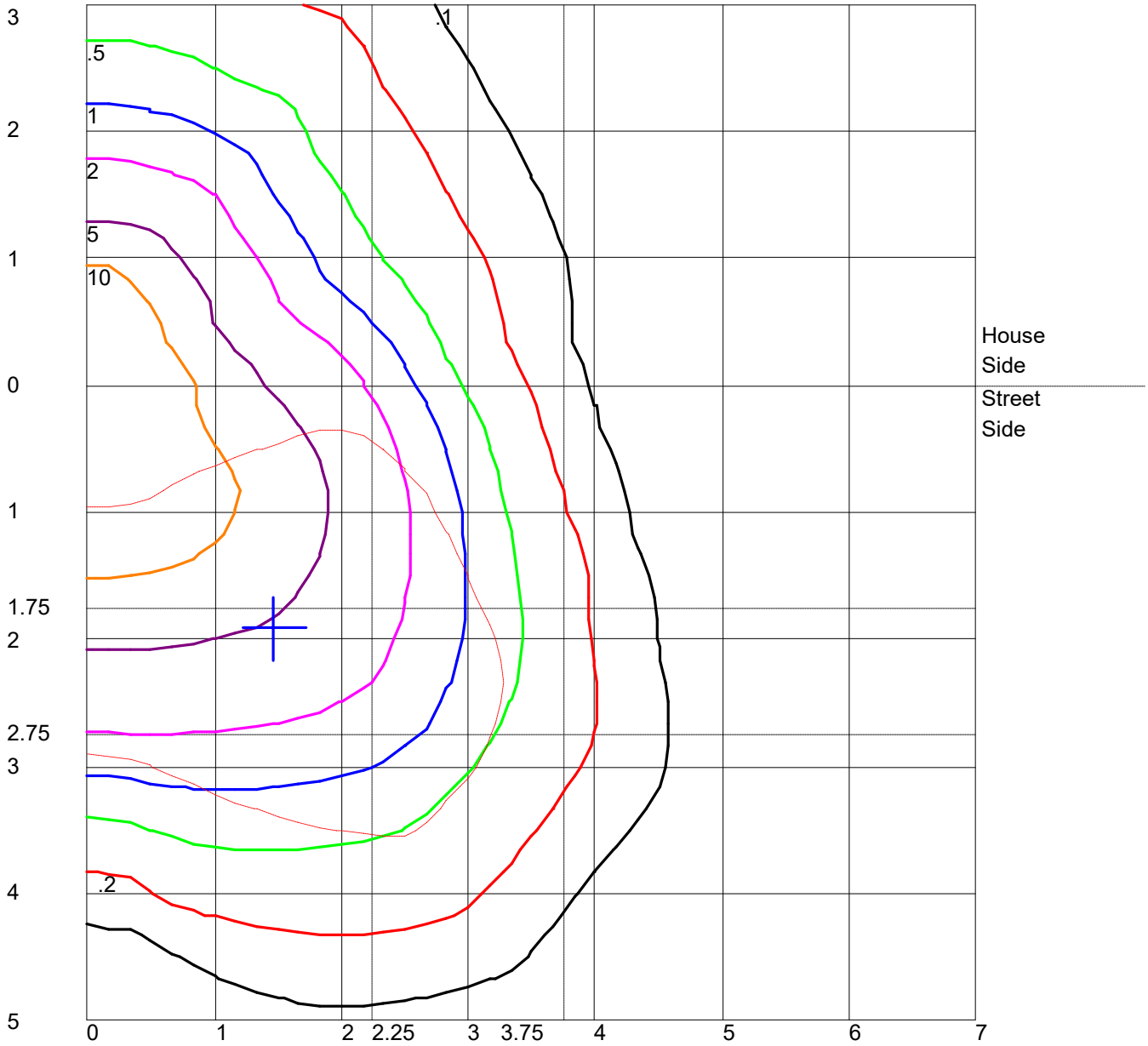
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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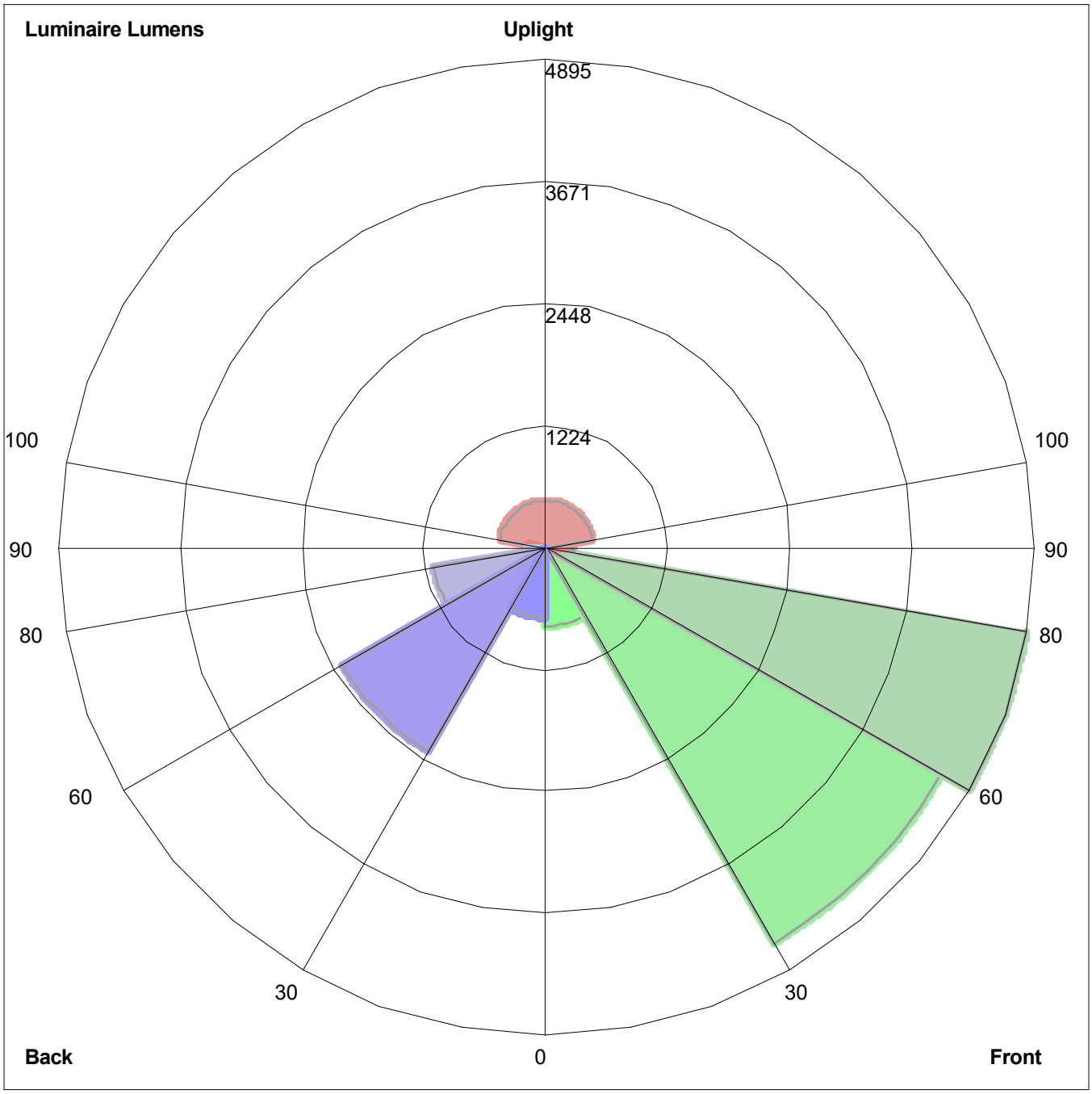
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=787.7, Medium=4581.3, High= 4895.0, Very High=270.5
Back: Low=704.1, Medium=2356.6, High=1143.9, Very High=197.0
Uplight: Low=179.3, High=470.7

BUG Rating : B3-U3-G3

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