IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-10L-SIL-2-40-70CRI.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12569
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/05/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-10L-SIL-2-40-70CRI
[_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 II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	10685
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	159
Total Luminaire Watts	67
Ballast Factor	1.00
Upward Waste Light Ratio	0.05
Maximum Candela	6391
Maximum Candela Angle	72.5H 62.5V
Maximum Candela (<90 Degrees Vertical)	6391
Maximum Candela Angle (<90 Degrees Vertical)	72.5H 62.5V
Maximum Candela At 90 Degrees Vertical	171 (1.6% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	562 (5.3% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	655.2	N.A.	6.1
FM - Front-Medium (30-60)	3986.3	N.A.	37.3
FH - Front-High (60-80)	1636.9	N.A.	15.3
FVH - Front-Very High (80-90)	114.2	N.A.	1.1
BL - Back-Low (0-30)	561.1	N.A.	5.3
BM - Back-Medium (30-60)	2326.4	N.A.	21.8
BH - Back-High (60-80)	765.2	N.A.	7.2
BVH - Back-Very High (80-90)	128.3	N.A.	1.2
UL - Uplight-Low (90-100)	143.4	N.A.	1.3
UH - Uplight-High (100-180)	367.8	N.A.	3.4
Total	10684.8	N.A.	100.0
BUG Rating	B2-U3-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	72.5	75.0
0.0	914	914	914	914	914	914	914	914	914	914
2.5	931	929	939	952	952	949	941	921	916	916
5.0	958	954	969	986	990	984	972	958	952	956
7.5	989	984	958	968	956	958	993	996	978	972
10.0	1013	1017	1021	1023	1033	1004	982	1019	1006	1008
12.5	1107	1125	1108	1096	1084	1058	1077	1038	1109	1111
15.0	1158	1156	1166	1161	1194	1148	1145	1171	1152	1196
17.5	1306	1300	1315	1246	1266	1324	1249	1294	1257	1293
20.0	1405	1404	1419	1400	1442	1392	1444	1429	1394	1394
22.5	1635	1620	1651	1606	1600	1572	1581	1560	1567	1559
25.0	1932	1921	1874	1830	1843	1754	1747	1770	1713	1711
27.5	2392	2404	2349	2255	2097	2042	1984	1959	1916	1908
30.0	2865	2885	2841	2684	2571	2334	2274	2206	2167	2174
32.5	2996	3010	3054	3143	3022	2782	2694	2515	2472	2406
35.0	2888	2868	2924	3119	3357	3214	3119	2859	2736	2667
37.5	2979	2952	2950	3039	3261	3468	3509	3341	3017	2924
40.0	3165	3127	3111	3147	3296	3490	3599	3904	3345	3264
42.5	3306	3237	3222	3254	3414	3619	3713	4067	3867	3676
45.0	3271	3223	3217	3289	3499	3799	3959	4003	4384	4258
47.5	3124	3102	3099	3233	3503	3968	4149	4058	4637	4637
50.0	2946	2921	2912	3073	3423	4088	4398	4266	4774	4802
52.5	2628	2606	2614	2777	3226	4097	4637	4684	4931	5014
55.0	2201	2191	2239	2385	2867	3929	4778	5068	5154	5261
57.5	1763	1757	1789	1955	2397	3508	4747	5322	5511	5591
60.0	1234	1250	1296	1436	1802	2864	4536	5487	5823	5833
62.5	763	773	805	920	1194	1964	4019	5372	6391	6097
65.0	622	622	629	653	748	1110	3174	4997	6194	6293
67.5	543	542	541	564	593	637	2060	4168	5285	5489
70.0	402	408	433	475	520	526	1048	3000	3864	4178
72.5	321	328	325	336	428	459	567	1721	2460	2640
75.0	273	285	286	290	332	385	435	975	1507	1613
77.5	225	247	250	253	288	326	367	649	950	942
80.0	201	222	225	221	248	285	310	437	562	559
82.5	179	189	199	194	215	243	269	328	395	395
85.0	142	153	167	166	181	206	225	250	284	297
87.5	86	99	127	135	146	163	177	187	197	199
90.0	56	70	102	115	126	138	143	152	159	161
92.5	64	72	104	117	128	139	141	152	158	160
95.0	74	74	106	119	129	140	139	152	157	158
97.5	84	77	106	120	130	138	134	148	150	142
100.0	89	79	105	121	129	136	130	140	131	119
102.5	93	82	104	121	128	134	126	128	110	100
105.0	95	86	102	121	128	131	120	114	93	90
107.5	96	89	99	121	127	127	111	99	83	84
110.0	96	92	96	119	125	121	100	86	77	79
112.5	96	93	93	118	121	112	91	76	72	75
115.0	95	94	91	115	116	102	84	69	69	72
117.5	95	94	90	110	108	95	78	65	67	68
120.0	94	93	88	102	101	89	74	63	65	65
122.5	93	92	85	94	94	84	71	61	62	62
125.0	90	89	82	87	89	80	69	61	61	60
127.5	87	86	79	80	84	78	69	61	60	60
130.0	82	81	77	75	80	77	70	62	61	61

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CANDELA TABULATION - (Cont.)

132.5	79	78	75	72	78	75	67	62	63	63
135.0	77	77	75	72	74	69	62	63	64	64
137.5	77	77	74	67	63	58	55	58	62	63
140.0	68	68	64	57	50	45	46	50	54	55
142.5	56	56	52	46	36	33	35	39	44	46
145.0	44	43	40	32	25	24	25	29	34	35
147.5	31	30	26	22	17	12	15	20	22	24
150.0	22	21	19	15	7	4	5	11	13	13
152.5	13	13	9	5	2	0	1	3	4	5
155.0	4	4	3	1	0	0	0	0	1	1
157.5	1	1	0	0	0	0	0	0	0	0
160.0	1	1	0	0	0	0	0	0	0	0
162.5	1	1	0	0	0	0	0	0	0	0
165.0	1	1	0	0	0	0	0	0	0	0
167.5	1	0	0	0	0	0	0	0	0	0
170.0	1	0	0	0	0	0	0	0	0	0
172.5	1	0	0	0	0	0	0	0	0	0
175.0	1	0	0	0	0	0	0	0	0	0
177.5	1	1	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

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	914	914	914	914	914	914	914	914	914	914
2.5	909	903	904	908	903	912	919	914	916	924
5.0	913	901	903	939	945	941	955	942	934	930
7.5	945	922	928	960	966	941	912	872	876	886
10.0	984	961	960	985	973	913	928	910	904	880
12.5	1080	1036	1059	1072	979	956	921	906	898	951
15.0	1178	1116	1139	1138	1061	1028	956	989	977	1005
17.5	1290	1235	1280	1241	1139	1060	1076	1034	1049	1158
20.0	1404	1381	1397	1320	1242	1153	1094	1176	1213	1281
22.5	1622	1561	1563	1464	1323	1228	1233	1318	1381	1523
25.0	1766	1770	1708	1590	1436	1311	1365	1493	1579	1683
27.5	2028	1964	1947	1726	1505	1454	1543	1675	1775	1903
30.0	2215	2183	2155	1918	1645	1626	1713	1826	1934	2094
32.5	2395	2352	2340	2103	1765	1786	1828	1992	2160	2281
35.0	2624	2541	2514	2194	1857	1888	1968	2160	2239	2337
37.5	2851	2770	2723	2261	1941	1967	2096	2210	2278	2349
40.0	3123	3018	2919	2289	2021	1999	2153	2222	2276	2313
42.5	3377	3282	3068	2322	2051	2046	2148	2193	2198	2180
45.0	3665	3412	3299	2366	1973	2111	2099	2097	2018	1955
47.5	4010	3721	3443	2329	1978	2058	2001	1935	1797	1724
50.0	4326	4067	3551	2355	1944	1953	1863	1745	1590	1512
52.5	4745	4401	3711	2313	1869	1812	1696	1569	1411	1361
55.0	5141	4645	3815	2120	1754	1630	1522	1397	1281	1257
57.5	5436	4994	3704	1948	1622	1461	1341	1260	1177	1162
60.0	5705	5028	3486	1777	1433	1260	1180	1135	1067	1043
62.5	5754	4893	3081	1580	1230	1065	1028	1003	940	908
65.0	5461	4295	2460	1315	966	876	883	867	804	763
67.5	4545	3158	1719	958	752	690	724	713	649	628
70.0	3136	2006	1092	646	565	544	570	544	513	505
72.5	1980	1281	733	479	463	437	449	428	410	396
75.0	1283	904	563	409	419	376	368	348	335	338
77.5	607	469	414	371	381	325	311	298	298	297

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CANDELA TABULATION - (Cont.)

80.0	368	339	323	337	338	278	268	264	278	287
82.5	274	260	256	299	284	239	236	246	288	312
85.0	221	167	207	258	233	209	215	234	290	329
87.5	182	89	182	207	193	179	184	210	238	242
90.0	135	63	154	171	165	155	157	148	138	126
92.5	107	109	131	171	164	153	156	148	139	127
95.0	104	142	120	169	163	149	154	147	140	128
97.5	114	148	125	158	157	142	151	145	139	126
100.0	121	142	127	136	150	136	147	143	138	123
102.5	119	132	123	119	139	132	143	141	137	120
105.0	112	120	115	106	126	127	140	139	135	116
107.5	103	108	106	96	113	120	135	137	134	111
110.0	93	98	97	90	100	112	130	134	130	106
112.5	85	89	88	83	89	104	122	130	127	101
115.0	78	81	80	78	81	97	114	126	123	96
117.5	73	75	75	74	75	91	107	119	117	92
120.0	68	70	70	71	72	87	101	112	109	89
122.5	65	66	66	68	70	82	96	105	100	86
125.0	61	62	63	66	69	80	92	99	92	83
127.5	60	61	62	65	69	80	88	92	84	80
130.0	61	61	63	65	70	80	86	87	78	78
132.5	62	62	63	67	69	77	84	82	74	76
135.0	64	64	65	68	69	71	77	79	73	76
137.5	66	67	67	67	64	63	65	67	70	76
140.0	61	62	62	59	55	52	51	54	61	68
142.5	51	52	52	49	44	41	37	41	48	55
145.0	40	40	41	38	33	29	27	28	36	43
147.5	26	27	28	26	23	18	17	20	24	30
150.0	15	15	16	16	13	9	7	12	17	21
152.5	7	7	8	7	5	3	3	4	9	13
155.0	2	2	2	2	2	2	2	2	4	5
157.5	0	0	0	1	1	1	2	2	2	2
160.0	0	0	0	0	1	1	2	2	2	2
162.5	0	0	0	0	1	1	2	2	2	2
165.0	0	0	0	0	1	1	2	2	2	2
167.5	0	0	0	0	1	1	2	2	2	2
170.0	0	0	0	0	1	1	2	2	2	2
172.5	0	0	0	0	1	1	1	2	2	2
175.0	0	0	0	0	0	1	1	2	2	1
177.5	0	0	0	0	1	1	1	2	2	1
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	**Horizontal Angles**	
	175.0	**180.0**
0.0	914	914
2.5	919	927
5.0	911	903
7.5	870	879
10.0	878	857
12.5	944	951
15.0	1005	971
17.5	1160	1183
20.0	1329	1276
22.5	1542	1540
25.0	1751	1757

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CANDELA TABULATION - (Cont.)

27.5	1966	1994
30.0	2226	2219
32.5	2345	2346
35.0	2402	2419
37.5	2417	2462
40.0	2378	2432
42.5	2208	2248
45.0	1947	1980
47.5	1717	1736
50.0	1511	1525
52.5	1356	1367
55.0	1251	1258
57.5	1148	1153
60.0	1015	1025
62.5	873	867
65.0	714	711
67.5	595	589
70.0	485	476
72.5	374	361
75.0	317	301
77.5	267	247
80.0	260	234
82.5	302	275
85.0	328	306
87.5	168	167
90.0	82	59
92.5	83	65
95.0	85	76
97.5	87	87
100.0	89	95
102.5	91	100
105.0	93	103
107.5	95	104
110.0	96	104
112.5	98	104
115.0	98	102
117.5	98	99
120.0	96	97
122.5	93	95
125.0	91	92
127.5	87	88
130.0	84	85
132.5	80	81
135.0	78	78
137.5	77	78
140.0	71	72
142.5	59	60
145.0	46	47
147.5	34	34
150.0	23	23
152.5	16	16
155.0	7	6
157.5	3	3
160.0	2	2
162.5	2	2
165.0	2	2

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CANDELA TABULATION - (Cont.)

167.5	1	1
170.0	1	1
172.5	1	1
175.0	1	1
177.5	1	1
180.0	0	0

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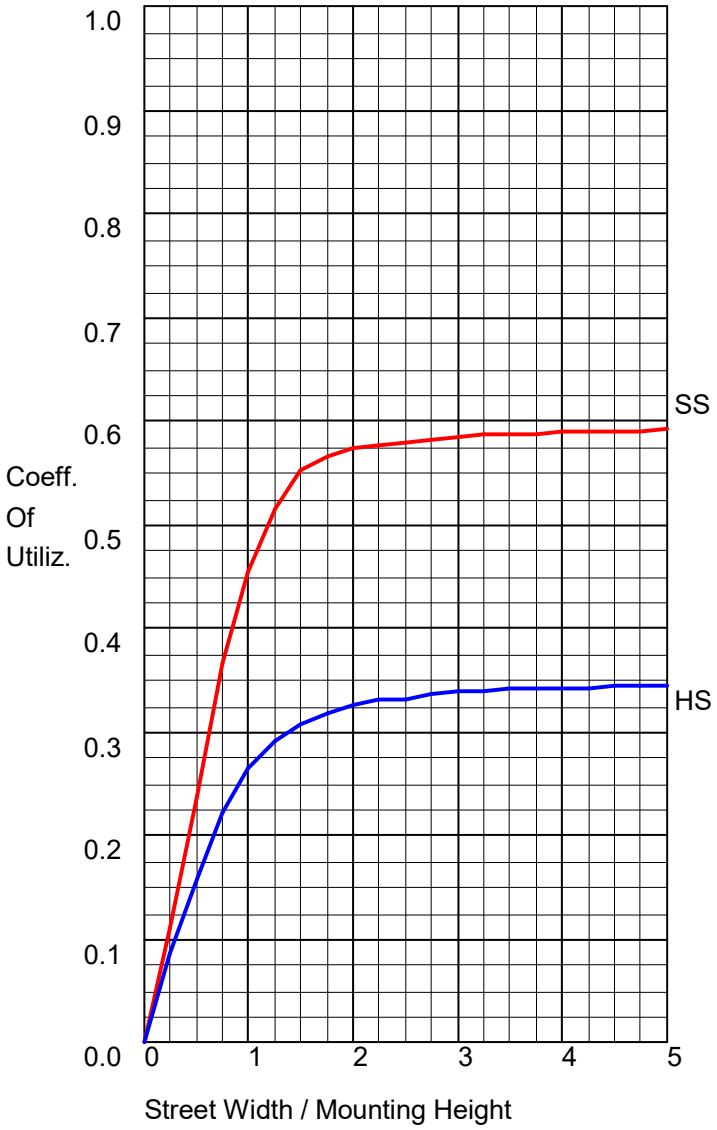
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	6392.7	59.8
Downward House Side	3781.0	35.4
Downward Total	10173.7	95.2
Upward Street Side	243.9	2.3
Upward House Side	267.3	2.5
Upward Total	511.2	4.8
Total Flux	10684.9	100.0

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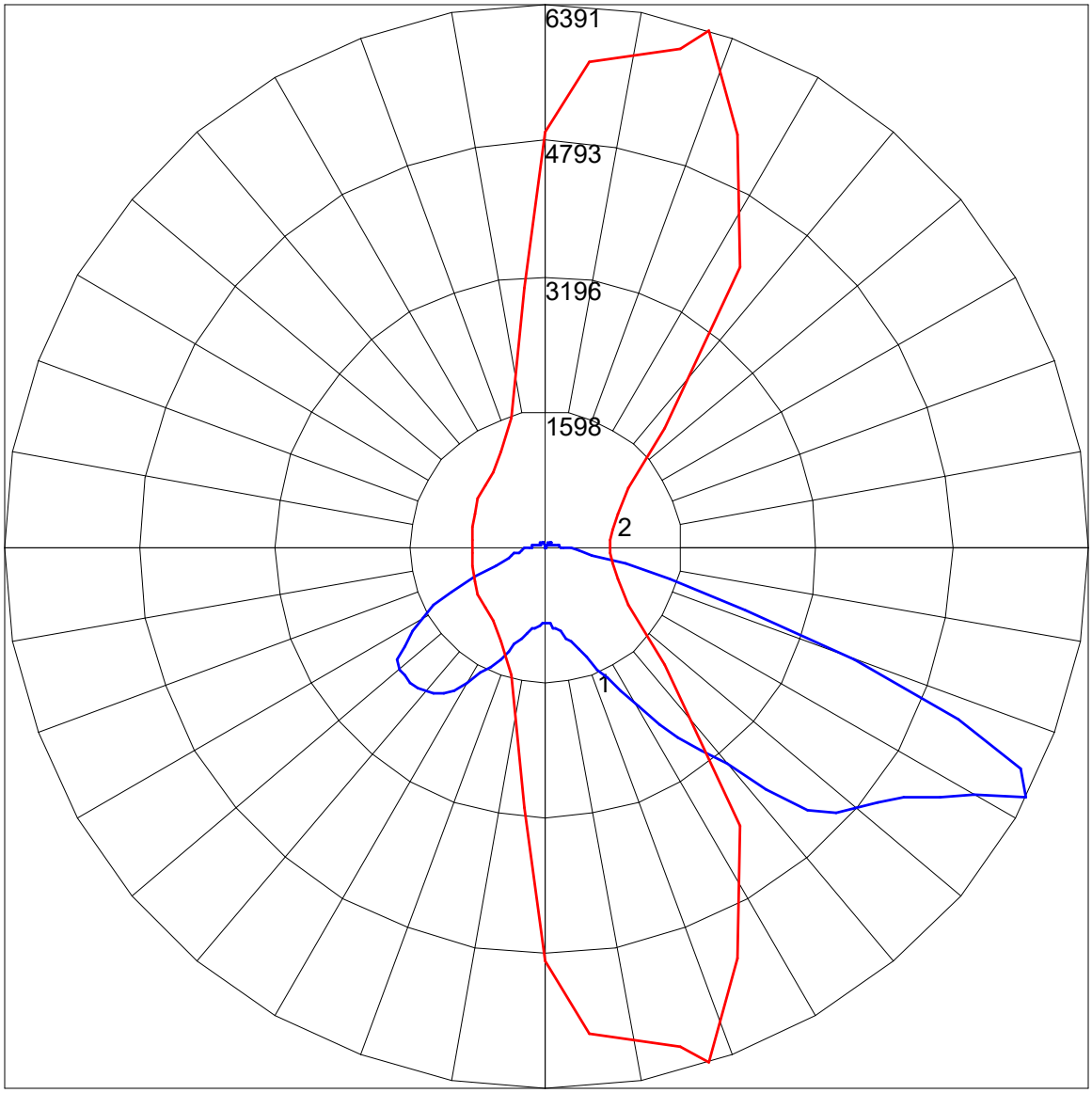
POLAR GRAPH



Maximum Candela = 6391 Located At Horizontal Angle = 72.5, Vertical Angle = 62.5
1 - Vertical Plane Through Horizontal Angles (72.5 - 252.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)

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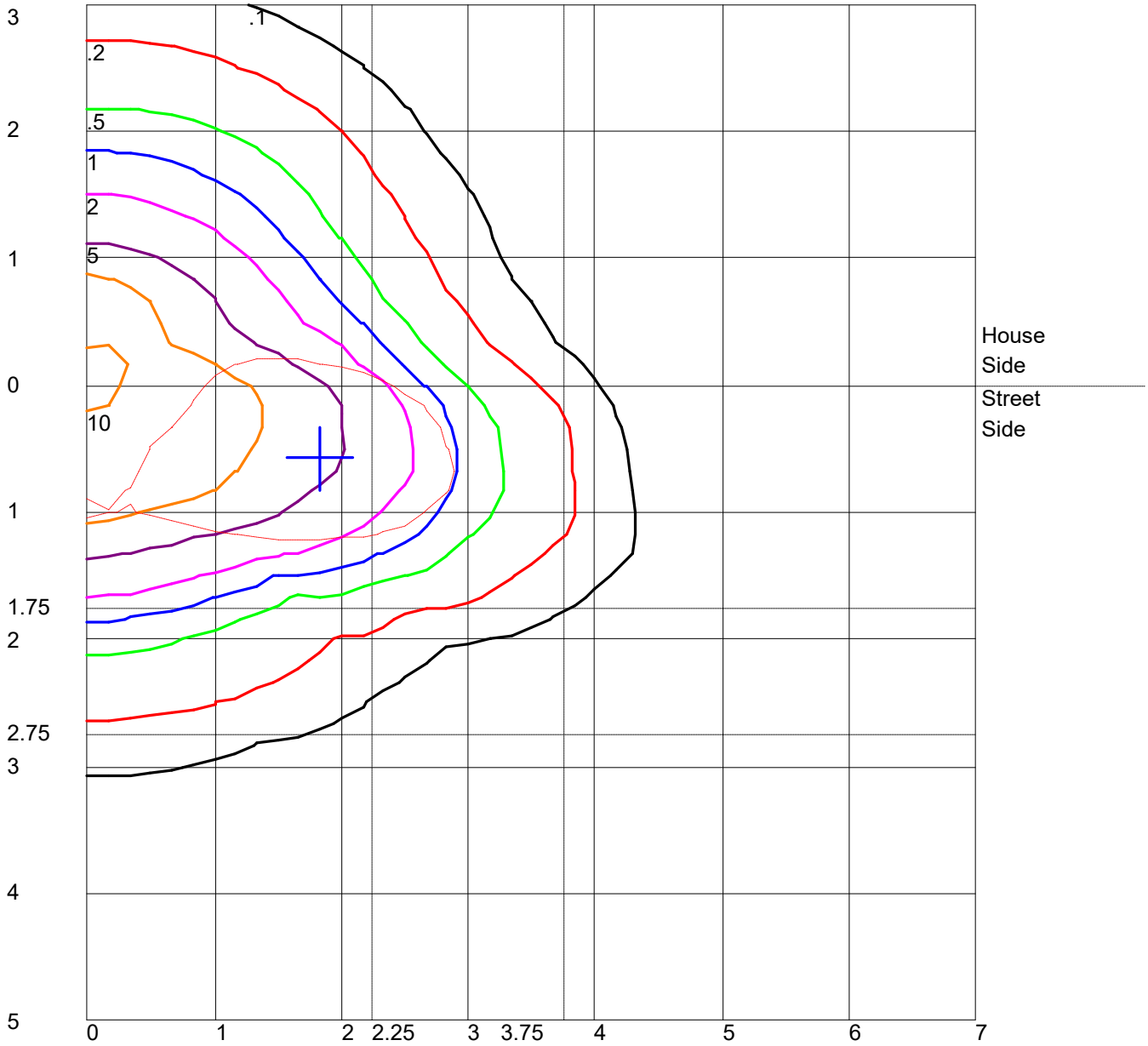
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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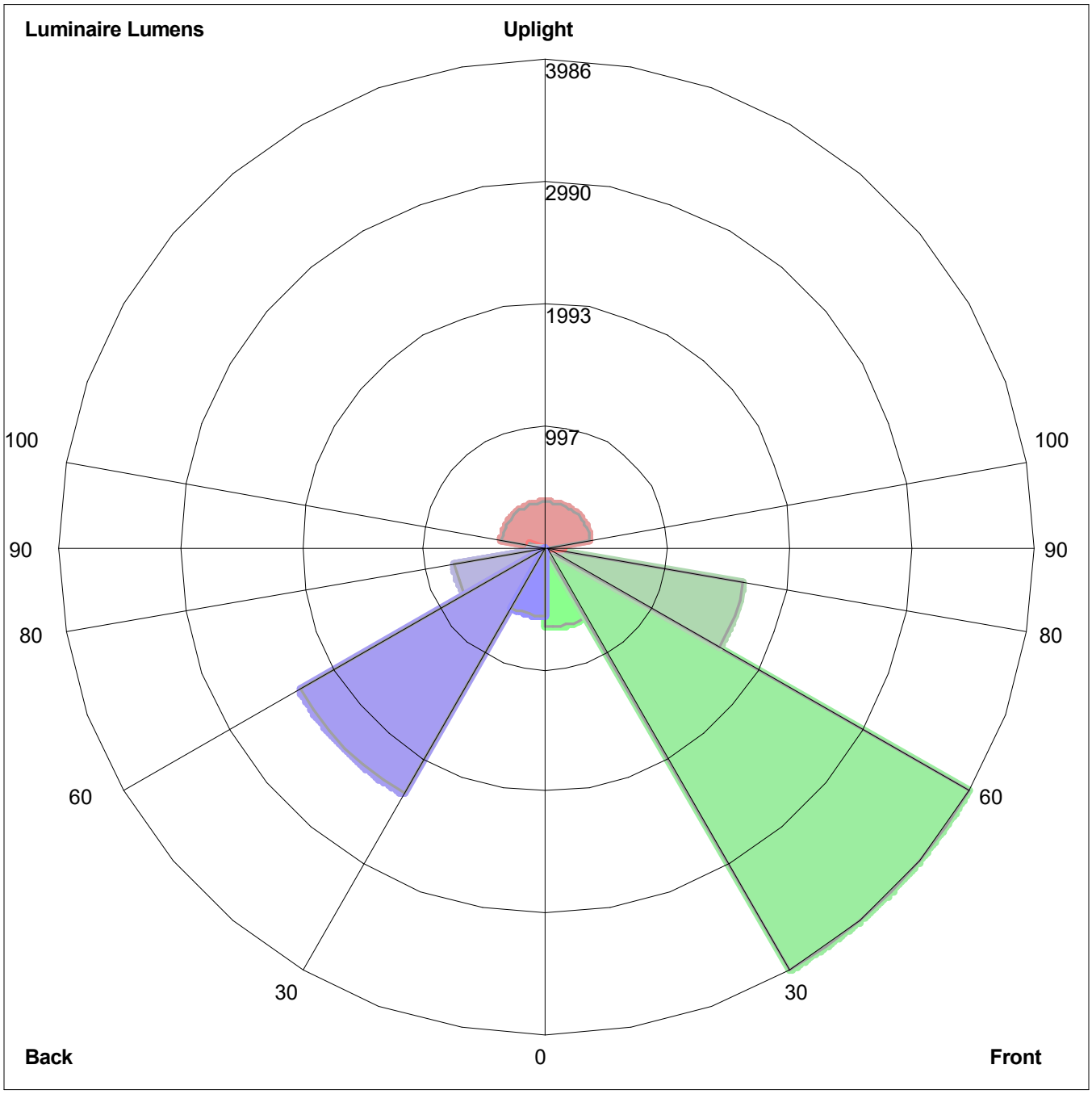
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=655.2, Medium=3986.3, High=1636.9, Very High=114.2
Back: Low=561.1, Medium=2326.4, High=765.2, Very High=128.3
Uplight: Low=143.4, High=367.8

BUG Rating : B2-U3-G2

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