IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-3-50-70CRI.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12570
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/05/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-3-50-70CRI
[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] 5000

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	15557
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	11629
Maximum Candela Angle	50H 65V
Maximum Candela (<90 Degrees Vertical)	11629
Maximum Candela Angle (<90 Degrees Vertical)	50H 65V
Maximum Candela At 90 Degrees Vertical	229 (1.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	883 (5.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	607.5	N.A.	3.9
FM - Front-Medium (30-60)	5812.0	N.A.	37.4
FH - Front-High (60-80)	4665.8	N.A.	30.0
FVH - Front-Very High (80-90)	183.5	N.A.	1.2
BL - Back-Low (0-30)	555.6	N.A.	3.6
BM - Back-Medium (30-60)	1934.1	N.A.	12.4
BH - Back-High (60-80)	1046.0	N.A.	6.7
BVH - Back-Very High (80-90)	166.0	N.A.	1.1
UL - Uplight-Low (90-100)	175.7	N.A.	1.1
UH - Uplight-High (100-180)	411.1	N.A.	2.6
Total	15557.3	N.A.	100.0
BUG Rating	B3-U3-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	35	45	50	55	65	75
0.0	937	937	937	937	937	937	937	937	937	937
2.5	953	952	958	965	964	961	953	960	948	941
5.0	915	917	923	950	966	971	969	976	974	968
7.5	904	911	894	911	913	917	930	956	974	977
10.0	891	889	901	907	922	929	933	929	971	989
12.5	913	927	930	933	933	931	940	955	961	1056
15.0	944	947	960	957	988	978	973	988	1033	1082
17.5	1051	1053	1074	1051	1059	1095	1104	1073	1116	1135
20.0	1163	1181	1206	1200	1249	1198	1225	1248	1244	1223
22.5	1419	1444	1476	1471	1456	1453	1419	1426	1409	1411
25.0	1809	1852	1784	1751	1790	1722	1699	1652	1660	1574
27.5	2310	2363	2301	2217	2111	2123	2004	1952	1891	1774
30.0	2870	2920	2865	2662	2562	2445	2392	2282	2099	2042
32.5	3228	3235	3233	3223	3010	2850	2683	2635	2356	2201
35.0	3581	3537	3531	3578	3561	3271	3093	2937	2565	2361
37.5	3915	3882	3854	3928	3967	3805	3547	3266	2830	2491
40.0	4346	4273	4275	4333	4374	4299	4032	3605	3078	2571
42.5	4824	4736	4774	4868	4825	4701	4543	4025	3285	2702
45.0	5432	5372	5442	5529	5400	5094	4918	4519	3400	2831
47.5	6177	6202	6222	6357	6134	5569	5300	4891	3644	3009
50.0	7000	7028	7013	7223	6997	6209	5769	5218	3995	3297
52.5	7992	8051	7905	8042	7873	7091	6380	5677	4509	3645
55.0	9020	9130	9107	9178	8921	7989	7203	6303	5166	3928
57.5	8943	8954	9274	10074	10228	9153	8144	7273	5800	4400
60.0	8042	8056	8401	9562	10819	10526	9608	8407	6699	5140
62.5	5677	5963	6839	8433	10030	11469	11088	9670	7652	6006
65.0	2225	2446	3531	6327	8967	11063	11629	11073	8730	6857
67.5	1030	1061	1450	2794	7148	10022	11064	11527	9102	6879
70.0	752	776	945	1507	3560	8546	9845	10576	9444	6414
72.5	573	589	738	1064	2027	5049	7201	8343	8414	4789
75.0	430	450	591	851	1299	2206	3479	4912	5023	2701
77.5	330	350	470	706	958	1287	1492	1683	1934	853
80.0	251	282	382	577	727	854	883	854	714	560
82.5	195	230	316	479	535	552	539	548	495	442
85.0	178	224	249	361	374	396	353	344	347	351
87.5	119	147	185	257	215	253	235	221	238	264
90.0	58	70	104	122	141	160	166	173	188	203
92.5	67	72	105	122	139	160	163	171	185	196
95.0	77	74	107	123	139	158	162	166	183	188
97.5	84	76	107	124	139	156	160	160	176	159
100.0	88	78	106	125	139	153	157	154	161	126
102.5	91	81	105	126	139	150	153	147	141	101
105.0	93	85	103	126	138	146	146	135	120	93
107.5	94	88	101	126	137	139	134	118	101	87
110.0	94	90	99	125	134	127	119	103	87	84
112.5	94	92	96	123	128	113	104	91	78	80
115.0	94	93	94	119	118	101	93	84	73	77
117.5	94	93	93	111	107	92	86	79	70	75
120.0	94	93	89	100	97	86	81	75	69	74
122.5	92	91	84	90	90	83	78	74	68	71
125.0	88	87	79	82	85	80	77	73	68	70
127.5	84	82	76	77	81	78	77	74	69	71
130.0	79	78	74	73	78	78	77	74	70	72

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CANDELA TABULATION - (Cont.)

132.5	77	76	73	71	77	77	75	72	71	74
135.0	75	75	73	71	71	69	67	67	71	76
137.5	75	74	71	64	60	58	58	60	67	75
140.0	65	65	60	53	47	46	47	51	58	67
142.5	54	52	49	41	33	33	36	39	47	56
145.0	41	40	36	29	23	22	25	27	35	44
147.5	27	26	24	20	15	10	13	16	24	29
150.0	20	18	17	12	6	5	6	7	13	18
152.5	10	9	7	3	3	2	3	4	6	9
155.0	3	3	2	2	2	2	2	2	3	5
157.5	1	1	1	1	2	2	2	2	2	3
160.0	1	1	1	1	2	2	2	2	2	2
162.5	1	1	1	1	2	2	2	2	2	2
165.0	1	1	1	2	2	2	2	2	2	2
167.5	1	1	1	2	2	2	2	2	2	2
170.0	1	1	1	2	2	2	2	2	2	2
172.5	1	1	1	2	2	2	2	2	2	2
175.0	1	1	1	2	2	2	2	2	2	2
177.5	1	1	1	2	2	2	2	2	2	2
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	**Horizontal Angles**									
	85	**90**	**95**	**105**	**115**	**125**	**135**	**145**	**155**	**165**
0.0	937	937	937	937	937	937	937	937	937	937
2.5	935	928	926	930	927	931	931	936	943	950
5.0	942	930	932	958	998	1008	1005	1008	999	998
7.5	965	949	952	1000	1022	1021	1005	984	956	948
10.0	984	964	972	1029	1043	1005	999	1000	1013	987
12.5	1051	1024	1050	1107	1058	1028	1022	1051	1034	1081
15.0	1108	1063	1092	1146	1108	1122	1094	1159	1152	1186
17.5	1173	1136	1180	1209	1161	1171	1252	1232	1225	1294
20.0	1282	1226	1263	1253	1245	1279	1277	1336	1342	1373
22.5	1448	1384	1383	1342	1300	1355	1366	1434	1418	1502
25.0	1574	1539	1485	1407	1391	1404	1448	1491	1528	1569
27.5	1764	1646	1639	1478	1408	1480	1519	1587	1596	1684
30.0	1907	1770	1749	1558	1459	1543	1586	1627	1675	1761
32.5	1999	1850	1812	1628	1487	1565	1590	1698	1798	1919
35.0	2103	1892	1828	1622	1483	1563	1623	1768	1884	2027
37.5	2148	1949	1847	1582	1451	1529	1654	1796	1920	2082
40.0	2192	2000	1829	1525	1420	1483	1663	1772	1921	2148
42.5	2300	2013	1829	1464	1353	1470	1616	1707	1940	2255
45.0	2355	2062	1840	1432	1277	1462	1553	1645	2068	2244
47.5	2473	2147	1840	1398	1216	1406	1496	1607	2257	2165
50.0	2615	2305	1888	1372	1162	1362	1456	1576	2304	2116
52.5	2875	2500	2014	1386	1129	1305	1406	1565	2247	2029
55.0	3166	2767	2239	1407	1107	1243	1349	1523	2161	1924
57.5	3631	3127	2529	1458	1097	1185	1278	1449	2051	1825
60.0	4267	3620	2947	1524	1074	1102	1205	1357	1877	1715
62.5	4698	3972	3168	1579	1026	1004	1124	1250	1627	1603
65.0	4929	4020	3023	1546	947	901	1048	1150	1357	1512
67.5	4519	3472	2402	1336	861	792	945	1044	1142	1409
70.0	3768	2658	1563	1003	733	684	838	923	989	1277
72.5	2462	1661	861	695	592	579	707	789	907	1067
75.0	932	684	553	500	482	480	556	638	708	736
77.5	536	481	371	430	420	412	427	467	537	598

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CANDELA TABULATION - (Cont.)

80.0	399	374	292	384	376	360	381	411	453	480
82.5	333	301	249	338	323	305	336	362	395	401
85.0	292	218	226	301	282	272	281	287	335	335
87.5	243	132	222	261	247	241	244	233	233	252
90.0	173	105	207	229	218	204	217	208	198	191
92.5	130	147	187	221	211	196	206	202	191	177
95.0	126	183	173	215	206	185	200	195	188	175
97.5	136	185	171	199	194	171	191	187	182	168
100.0	144	172	165	175	182	160	182	180	176	160
102.5	138	156	154	154	168	153	174	174	172	150
105.0	126	139	141	138	153	148	166	168	166	140
107.5	113	124	127	126	139	142	160	163	160	128
110.0	103	111	116	116	126	134	153	158	153	116
112.5	94	102	106	109	116	128	145	153	147	105
115.0	88	94	99	104	109	122	138	147	139	97
117.5	84	89	93	100	104	118	132	140	129	89
120.0	80	85	89	96	101	115	127	132	118	84
122.5	78	81	85	93	99	112	122	124	106	81
125.0	75	78	82	90	98	109	117	115	94	78
127.5	74	77	81	89	97	108	112	106	84	75
130.0	75	77	81	89	97	106	107	97	77	74
132.5	77	79	82	89	94	101	101	88	73	72
135.0	79	81	84	89	92	92	91	81	70	71
137.5	81	82	85	86	84	79	75	69	69	71
140.0	75	78	78	77	72	65	57	54	59	65
142.5	64	67	66	63	58	49	40	40	47	52
145.0	50	52	52	49	42	34	27	26	34	40
147.5	34	35	36	34	28	20	17	18	22	26
150.0	21	21	22	21	16	10	7	10	14	16
152.5	10	11	11	10	8	6	4	3	6	10
155.0	6	6	6	6	5	4	3	2	1	1
157.5	4	4	4	4	4	3	2	1	0	0
160.0	3	3	3	3	3	3	2	1	0	0
162.5	3	3	3	3	3	3	2	1	0	0
165.0	3	3	3	3	3	3	2	1	0	0
167.5	3	3	3	3	3	3	2	1	0	0
170.0	3	3	3	3	3	3	2	1	0	0
172.5	3	3	3	3	3	3	2	1	0	0
175.0	3	3	3	3	3	2	2	1	0	0
177.5	2	3	3	3	3	2	2	1	0	0
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	937	937
2.5	949	960
5.0	978	962
7.5	948	965
10.0	1003	989
12.5	1097	1105
15.0	1181	1128
17.5	1274	1321
20.0	1373	1325
22.5	1499	1489
25.0	1577	1547

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CANDELA TABULATION - (Cont.)

27.5	1706	1721
30.0	1831	1803
32.5	1952	1938
35.0	2059	2059
37.5	2088	2100
40.0	2021	2010
42.5	1934	1910
45.0	1762	1741
47.5	1686	1654
50.0	1612	1576
52.5	1543	1502
55.0	1482	1430
57.5	1415	1349
60.0	1355	1255
62.5	1314	1177
65.0	1302	1125
67.5	1279	1080
70.0	1232	1070
72.5	1016	1000
75.0	967	1047
77.5	870	934
80.0	684	714
82.5	493	506
85.0	471	467
87.5	248	206
90.0	137	99
92.5	108	78
95.0	108	92
97.5	106	103
100.0	104	112
102.5	103	116
105.0	102	117
107.5	101	114
110.0	100	110
112.5	97	105
115.0	95	100
117.5	93	94
120.0	90	91
122.5	87	88
125.0	84	85
127.5	81	82
130.0	78	78
132.5	74	75
135.0	73	73
137.5	71	71
140.0	67	67
142.5	56	56
145.0	43	43
147.5	30	30
150.0	18	18
152.5	11	12
155.0	1	1
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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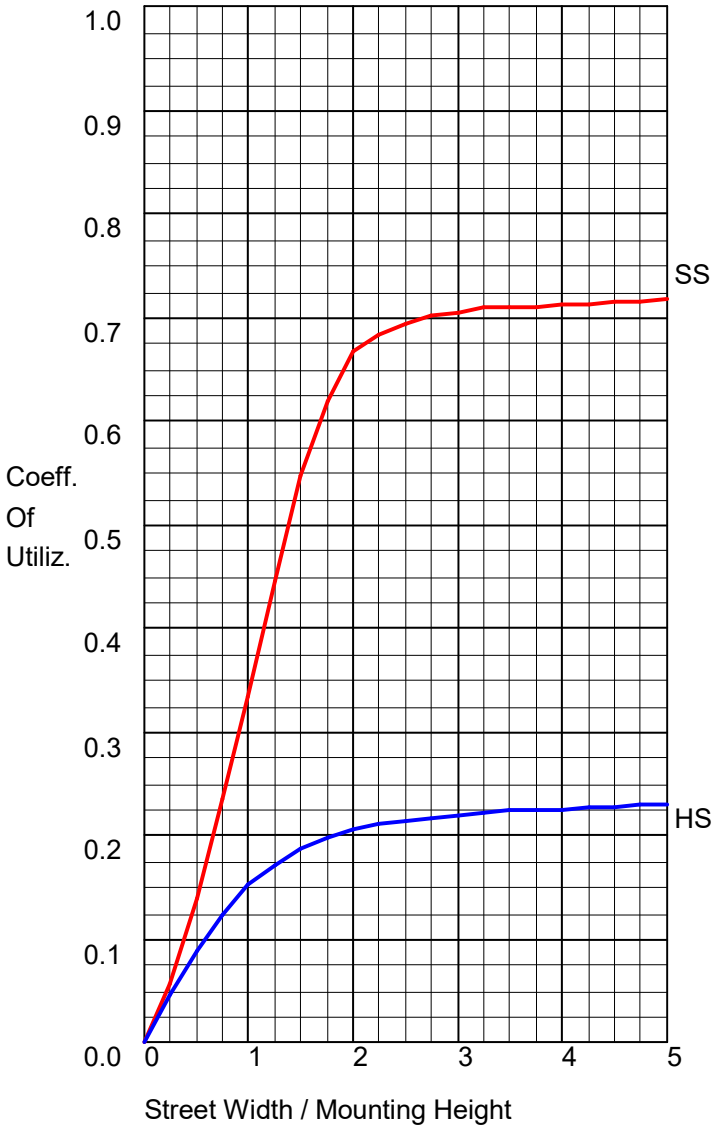
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	11268.7	72.4
Downward House Side	3701.8	23.8
Downward Total	14970.5	96.2
Upward Street Side	262.5	1.7
Upward House Side	324.3	2.1
Upward Total	586.8	3.8
Total Flux	15557.3	100.0

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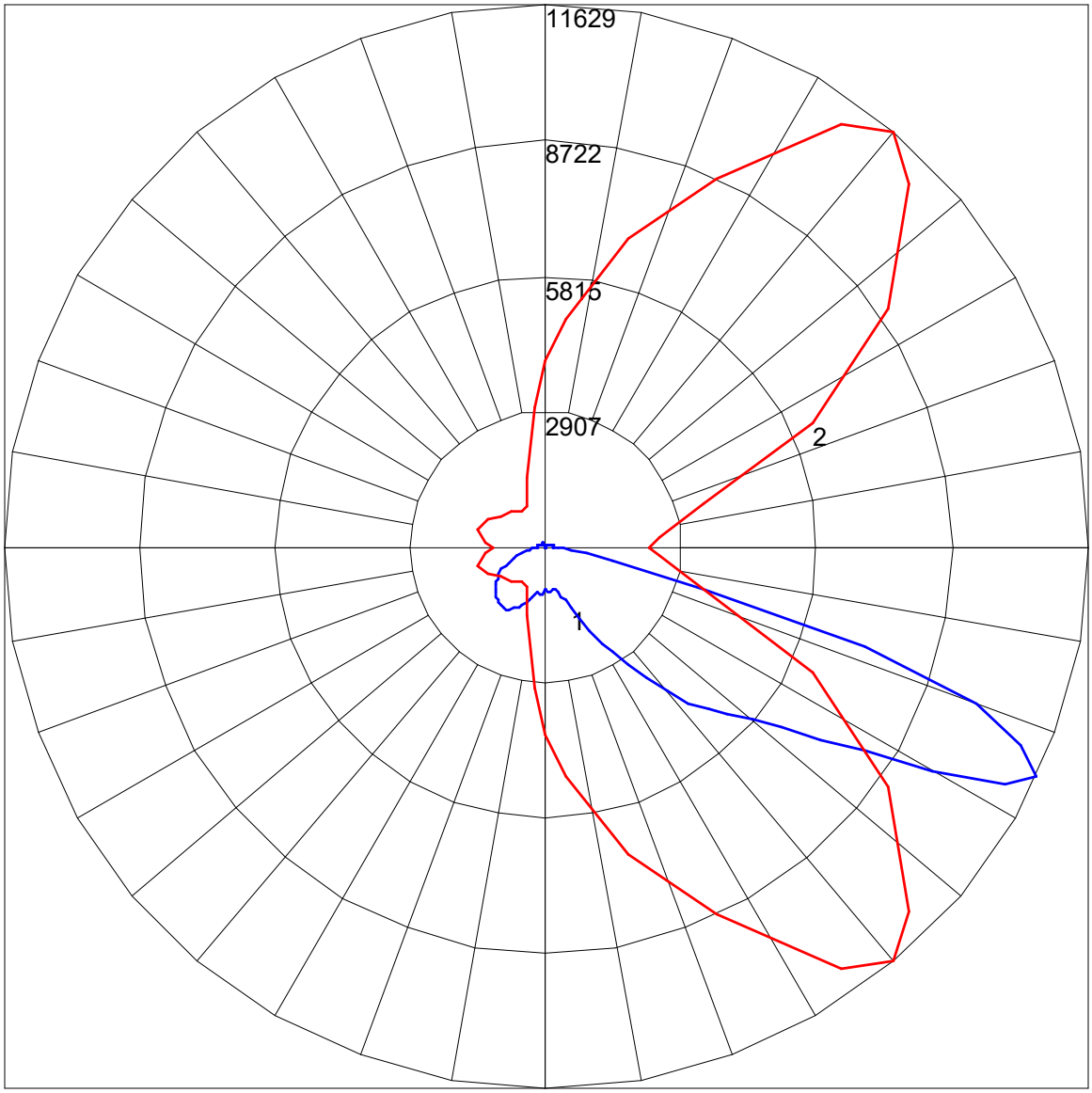
POLAR GRAPH



Maximum Candela = 11629 Located At Horizontal Angle = 50, Vertical Angle = 65
1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

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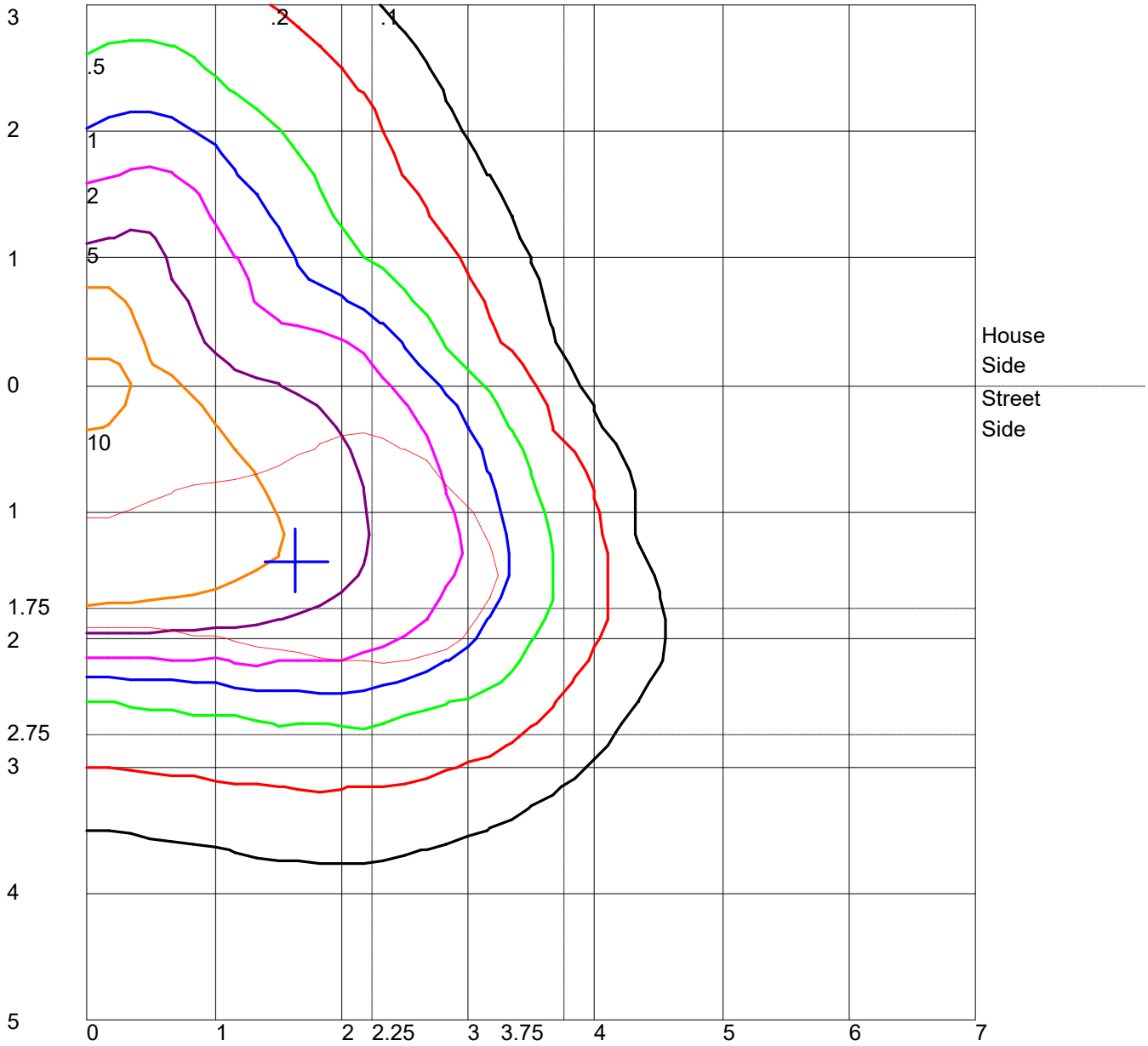
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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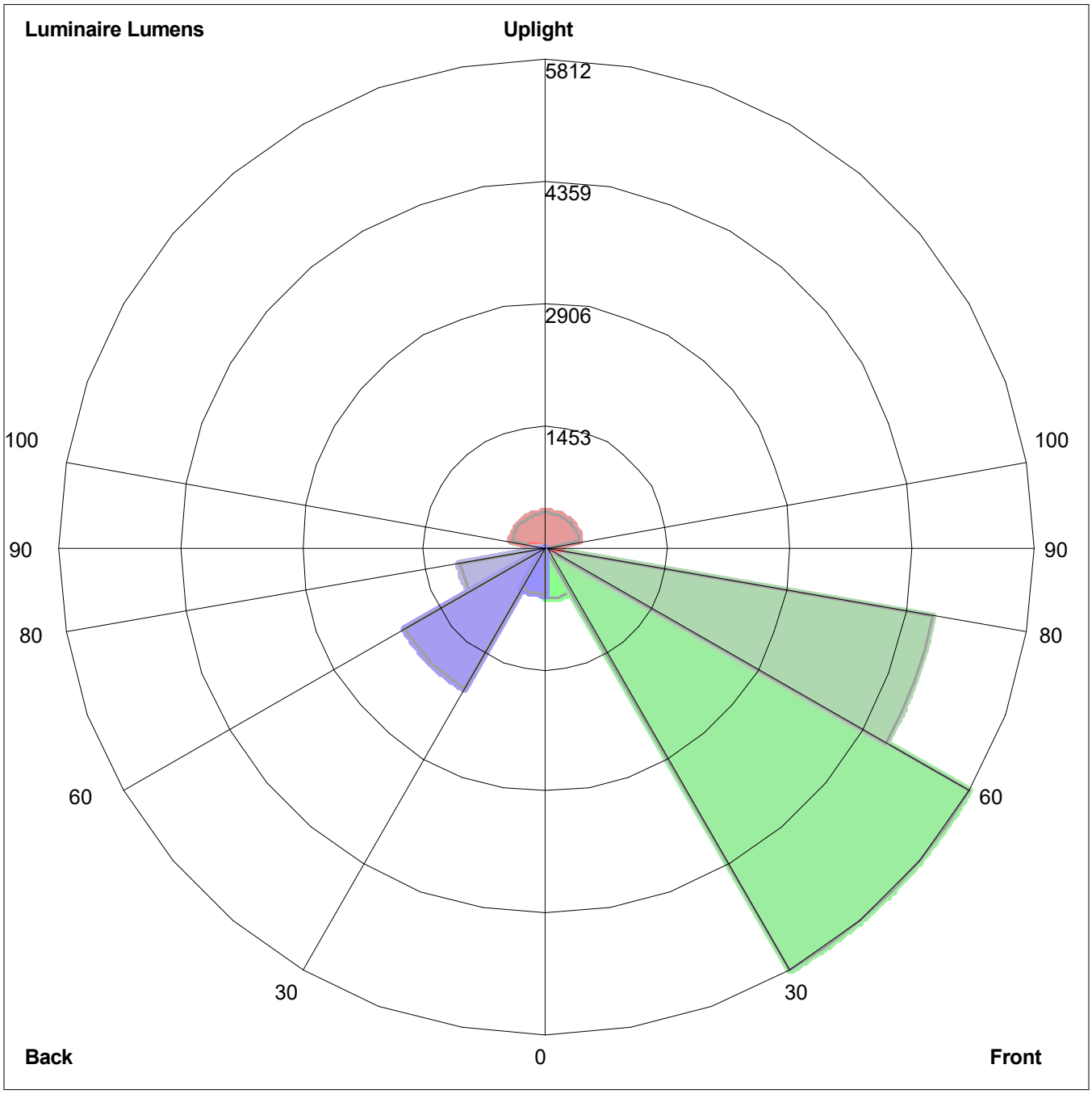
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=607.5, Medium= 5812.0, High=4665.8, Very High=183.5
Back: Low=555.6, Medium=1934.1, High= 1046.0, Very High=166.0
Uplight: Low=175.7, High=411.1

BUG Rating : B3-U3-G3

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