IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-30-70CRI-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12638
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/26/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-2-30-70CRI-IL
[_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] 3000

CHARACTERISTICS

IES Classification	Type I
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5746
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	56
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.06
Maximum Candela	6932
Maximum Candela Angle	80H 60V
Maximum Candela (<90 Degrees Vertical)	6932
Maximum Candela Angle (<90 Degrees Vertical)	80H 60V
Maximum Candela At 90 Degrees Vertical	127 (2.2% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	436 (7.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	674.6	N.A.	11.7
FM - Front-Medium (30-60)	2741.3	N.A.	47.7
FH - Front-High (60-80)	1145.9	N.A.	19.9
FVH - Front-Very High (80-90)	125.1	N.A.	2.2
BL - Back-Low (0-30)	165.7	N.A.	2.9
BM - Back-Medium (30-60)	356.7	N.A.	6.2
BH - Back-High (60-80)	150.7	N.A.	2.6
BVH - Back-Very High (80-90)	51.2	N.A.	0.9
UL - Uplight-Low (90-100)	93.7	N.A.	1.6
UH - Uplight-High (100-180)	241.5	N.A.	4.2
Total	5746.4	N.A.	100.0
BUG Rating	B1-U3-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	35	45	55	65	75	80
0.0	902	902	902	902	902	902	902	902	902	902
2.5	933	932	943	948	935	928	913	902	899	896
5.0	1060	1051	1070	1050	1050	1044	1043	1008	926	903
7.5	964	977	980	1009	1039	1084	1083	1061	1018	964
10.0	1088	1089	1051	1110	1090	1063	1087	1088	1096	1050
12.5	1165	1162	1117	1119	1163	1139	1087	1165	1216	1185
15.0	1227	1293	1266	1271	1240	1189	1264	1226	1303	1301
17.5	1444	1377	1405	1362	1398	1398	1352	1376	1442	1428
20.0	1528	1543	1578	1546	1520	1528	1572	1560	1564	1574
22.5	1702	1732	1718	1674	1774	1710	1768	1767	1734	1834
25.0	1729	1727	1776	1843	1865	1981	2002	1998	1988	2031
27.5	1760	1747	1788	1814	2018	2135	2294	2323	2257	2374
30.0	1624	1651	1694	1819	2003	2343	2579	2647	2622	2629
32.5	1472	1480	1587	1718	2019	2356	2839	3086	3088	3038
35.0	1268	1273	1376	1609	1950	2408	3013	3492	3433	3325
37.5	1066	1065	1164	1405	1848	2435	3082	3790	3827	3646
40.0	865	856	950	1183	1634	2365	3121	4076	4237	3994
42.5	678	685	761	966	1396	2184	3105	4283	4605	4522
45.0	540	546	612	787	1162	1924	3052	4475	5097	4950
47.5	456	459	506	656	942	1646	2919	4443	5574	5543
50.0	428	426	454	574	777	1366	2652	4419	5967	6028
52.5	448	441	439	534	669	1086	2337	4297	6201	6070
55.0	642	617	523	524	611	833	2005	3989	6302	6321
57.5	1142	1094	889	640	573	667	1549	3538	6291	6564
60.0	1368	1320	1178	973	645	578	1044	2871	6257	6932
62.5	981	952	929	965	856	486	662	2132	6055	6885
65.0	735	738	715	715	741	578	451	1400	5392	6075
67.5	678	680	652	630	584	569	398	807	3858	4785
70.0	633	635	598	575	531	482	470	474	2336	3217
72.5	493	497	488	503	493	446	472	362	1048	1603
75.0	420	420	399	403	444	424	415	434	412	692
77.5	369	373	367	370	405	423	370	504	229	279
80.0	337	343	339	339	375	436	364	387	241	204
82.5	288	291	301	315	353	408	394	306	251	167
85.0	176	188	202	215	257	337	379	276	223	168
87.5	94	102	120	129	142	176	222	229	158	137
90.0	51	59	77	86	96	107	121	127	116	112
92.5	41	45	63	71	78	84	87	95	103	104
95.0	46	47	63	73	80	87	87	96	103	88
97.5	53	50	66	75	81	87	86	96	94	71
100.0	57	52	66	75	82	87	84	90	75	61
102.5	60	54	66	77	82	86	82	81	62	60
105.0	61	57	66	77	81	84	77	70	55	58
107.5	63	59	65	77	81	81	69	61	51	55
110.0	63	60	64	77	80	76	62	54	48	51
112.5	64	62	63	77	78	70	57	47	45	49
115.0	64	63	63	74	74	64	53	43	43	46
117.5	65	64	63	71	69	60	50	40	42	44
120.0	65	64	61	67	64	57	47	38	41	42
122.5	65	64	60	63	61	54	45	38	39	40
125.0	64	63	59	60	59	52	44	38	38	38
127.5	61	61	58	57	57	51	44	39	38	38
130.0	60	60	57	55	55	50	45	40	38	39

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CANDELA TABULATION - (Cont.)

132.5	59	58	56	54	54	51	45	40	40	40
135.0	58	58	55	54	53	48	41	40	41	41
137.5	58	58	56	52	48	42	37	37	40	41
140.0	55	55	52	46	39	34	31	32	35	36
142.5	48	47	44	37	30	25	23	24	28	29
145.0	38	38	35	28	21	18	16	17	20	21
147.5	28	28	24	19	14	11	10	12	12	13
150.0	19	18	17	12	8	2	2	5	7	7
152.5	13	13	11	5	1	0	0	1	1	2
155.0	5	5	2	1	0	0	0	0	0	0
157.5	1	1	1	0	0	0	0	0	0	0
160.0	0	1	0	0	0	0	0	0	0	0
162.5	0	1	0	0	0	0	0	0	0	0
165.0	0	1	1	1	0	0	0	0	0	0
167.5	0	1	1	1	0	0	0	0	0	0
170.0	1	1	1	1	0	0	0	0	0	0
172.5	1	1	1	1	0	0	0	0	0	0
175.0	1	1	1	1	0	0	0	0	0	0
177.5	1	1	1	1	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	**Horizontal Angles**									
	85	**90**	**95**	**105**	**115**	**125**	**135**	**145**	**155**	**165**
0.0	902	902	902	902	902	902	902	902	902	902
2.5	902	901	906	919	921	913	902	878	867	869
5.0	896	910	939	923	860	804	747	686	634	584
7.5	938	938	959	877	758	619	504	430	389	350
10.0	992	981	971	809	646	474	356	272	228	204
12.5	1082	1067	1061	821	517	348	234	185	168	165
15.0	1172	1158	1090	772	445	255	177	166	160	156
17.5	1333	1268	1191	730	359	195	169	156	151	149
20.0	1488	1373	1239	682	289	179	160	151	147	137
22.5	1714	1561	1396	650	233	176	156	144	132	128
25.0	1925	1725	1449	577	207	173	154	132	121	111
27.5	2240	1930	1598	506	204	172	143	121	103	100
30.0	2555	2180	1689	422	203	166	132	106	93	89
32.5	2812	2335	1723	348	195	156	116	95	87	88
35.0	3101	2486	1743	285	187	144	104	90	87	86
37.5	3473	2695	1739	246	175	128	94	91	87	83
40.0	3820	2950	1689	229	160	111	94	93	83	67
42.5	4174	3121	1626	215	144	100	100	91	68	55
45.0	4656	3316	1555	205	131	104	105	79	61	52
47.5	4944	3471	1427	214	131	110	99	70	60	53
50.0	5206	3711	1266	252	156	128	88	69	64	71
52.5	5546	3851	1125	216	165	167	96	74	90	104
55.0	5922	4064	962	170	129	153	126	104	121	126
57.5	6133	3992	769	140	108	107	131	137	122	93
60.0	6382	3872	565	126	108	93	122	139	90	76
62.5	6269	3645	430	114	105	96	127	103	78	68
65.0	5556	3022	318	107	98	109	114	84	77	67
67.5	4469	2295	250	106	96	120	93	85	76	67
70.0	3258	1599	209	107	101	109	89	84	78	69
72.5	1910	1005	166	104	106	98	89	84	78	72
75.0	1040	648	135	102	107	95	90	85	81	74
77.5	359	269	113	105	102	95	92	87	84	75

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CANDELA TABULATION - (Cont.)

80.0	229	190	100	112	103	96	95	89	84	78
82.5	162	147	88	117	107	98	99	92	87	84
85.0	130	95	92	121	111	101	105	96	90	90
87.5	112	41	104	118	109	100	104	103	94	84
90.0	91	30	98	112	107	98	103	97	91	84
92.5	63	63	85	113	108	100	105	100	95	87
95.0	58	90	80	110	107	94	102	99	96	88
97.5	70	93	79	100	101	89	98	96	93	86
100.0	74	88	80	86	97	86	95	94	93	84
102.5	72	81	76	74	89	84	93	93	91	82
105.0	67	74	71	65	81	82	90	92	91	79
107.5	63	67	66	60	71	78	88	91	89	75
110.0	58	61	60	56	63	72	84	89	88	71
112.5	54	56	55	52	58	67	80	87	85	68
115.0	50	52	51	50	53	63	75	84	82	67
117.5	46	48	47	48	50	60	71	79	78	65
120.0	44	45	44	45	47	58	67	74	73	64
122.5	41	42	42	43	46	55	64	70	67	62
125.0	39	40	40	42	45	54	61	66	62	60
127.5	38	38	39	41	45	54	59	62	58	59
130.0	39	39	40	42	45	53	58	59	55	58
132.5	40	40	41	44	45	50	55	57	53	57
135.0	41	41	42	44	45	44	48	52	53	57
137.5	42	43	44	43	40	38	38	42	47	54
140.0	37	38	38	36	34	31	28	32	37	44
142.5	31	32	32	29	25	22	20	21	28	34
145.0	23	23	23	20	17	15	13	14	19	24
147.5	14	14	13	12	11	8	7	10	12	15
150.0	7	7	6	6	5	2	2	4	8	11
152.5	2	2	2	1	1	1	1	1	3	5
155.0	0	0	0	0	1	0	1	1	1	2
157.5	0	0	0	0	0	0	1	1	1	1
160.0	0	0	0	0	0	0	0	1	1	1
162.5	0	0	0	0	0	0	0	1	1	1
165.0	0	0	0	0	0	0	0	1	1	1
167.5	0	0	0	0	0	0	0	1	1	1
170.0	0	0	0	0	0	0	0	1	1	1
172.5	0	0	0	0	0	0	0	0	1	1
175.0	0	0	0	0	0	0	0	0	1	1
177.5	0	0	0	0	0	0	0	0	0	1
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	902	902
2.5	870	876
5.0	574	567
7.5	344	344
10.0	192	194
12.5	163	163
15.0	153	151
17.5	147	147
20.0	134	133
22.5	124	123
25.0	108	108

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CANDELA TABULATION - (Cont.)

27.5	97	96
30.0	90	89
32.5	89	89
35.0	88	87
37.5	82	81
40.0	65	64
42.5	56	55
45.0	54	54
47.5	55	55
50.0	84	88
52.5	108	111
55.0	110	111
57.5	70	71
60.0	59	60
62.5	54	54
65.0	49	48
67.5	47	44
70.0	46	40
72.5	46	37
75.0	48	36
77.5	50	34
80.0	51	32
82.5	56	36
85.0	61	40
87.5	56	40
90.0	58	47
92.5	60	57
95.0	61	64
97.5	61	68
100.0	63	73
102.5	64	74
105.0	67	75
107.5	70	75
110.0	71	75
112.5	72	74
115.0	71	73
117.5	71	71
120.0	70	71
122.5	68	70
125.0	66	67
127.5	64	64
130.0	61	61
132.5	59	60
135.0	58	59
137.5	58	58
140.0	48	48
142.5	37	37
145.0	27	27
147.5	17	17
150.0	12	12
152.5	6	6
155.0	2	2
157.5	1	0
160.0	1	0
162.5	1	0
165.0	1	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	0	0

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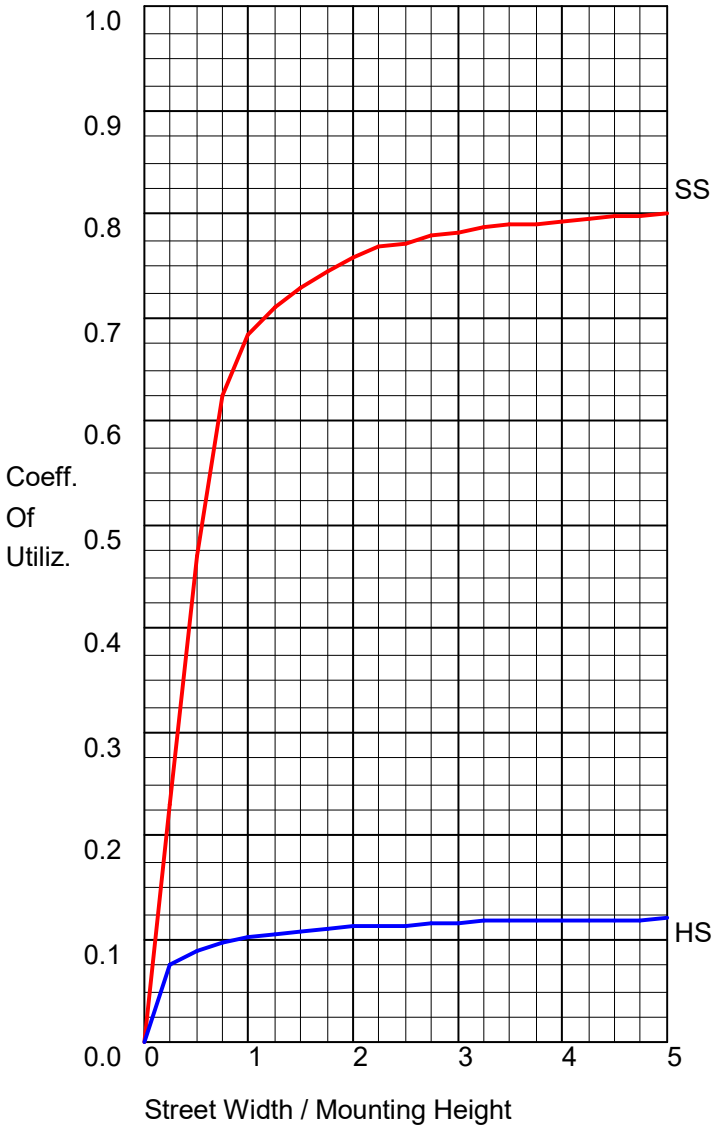
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	4686.9	81.6
Downward House Side	724.3	12.6
Downward Total	5411.2	94.2
Upward Street Side	159.5	2.8
Upward House Side	175.7	3.1
Upward Total	335.2	5.8
Total Flux	5746.4	100.0

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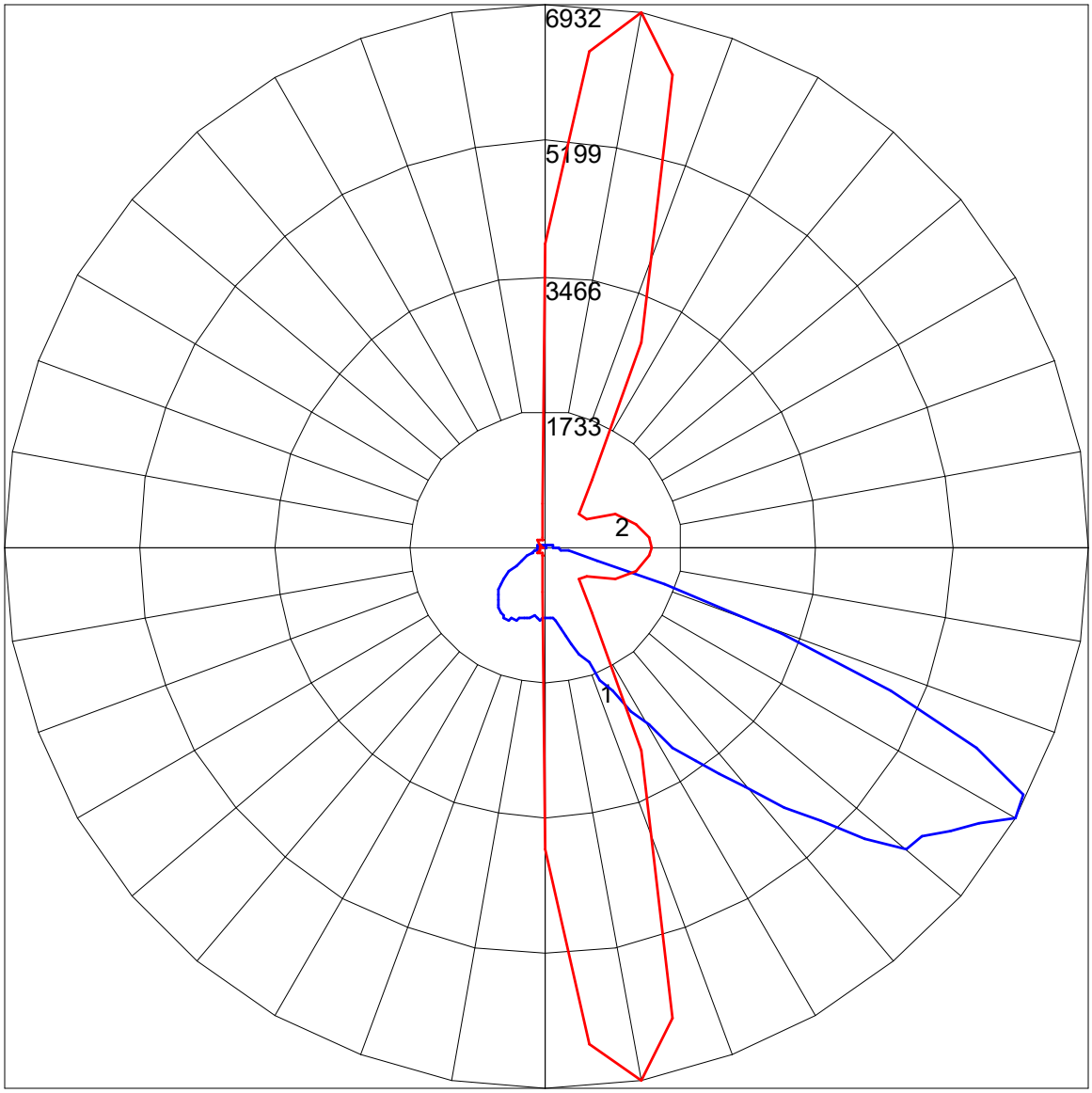
POLAR GRAPH



Maximum Candela = 6932 Located At Horizontal Angle = 80, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

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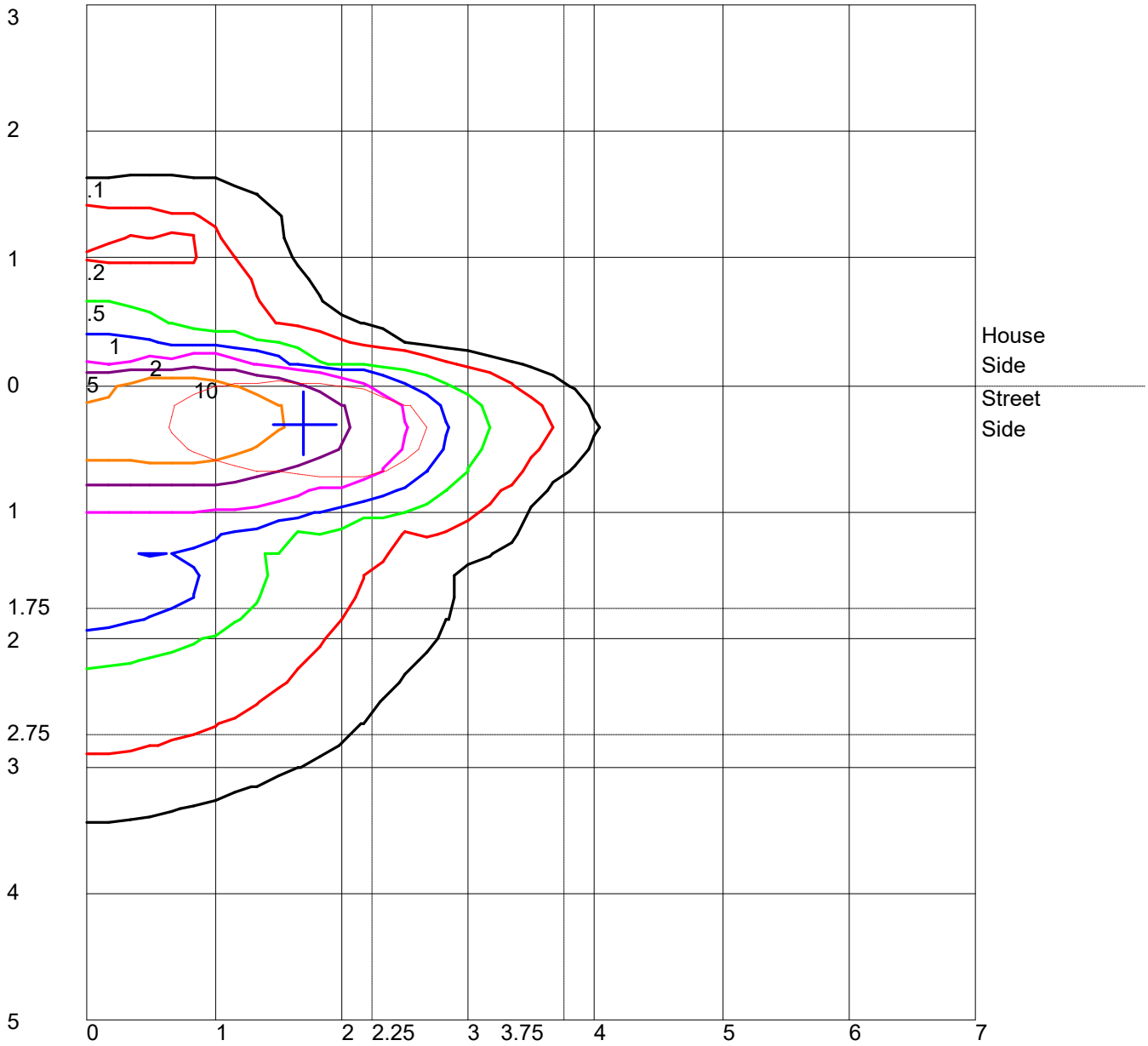
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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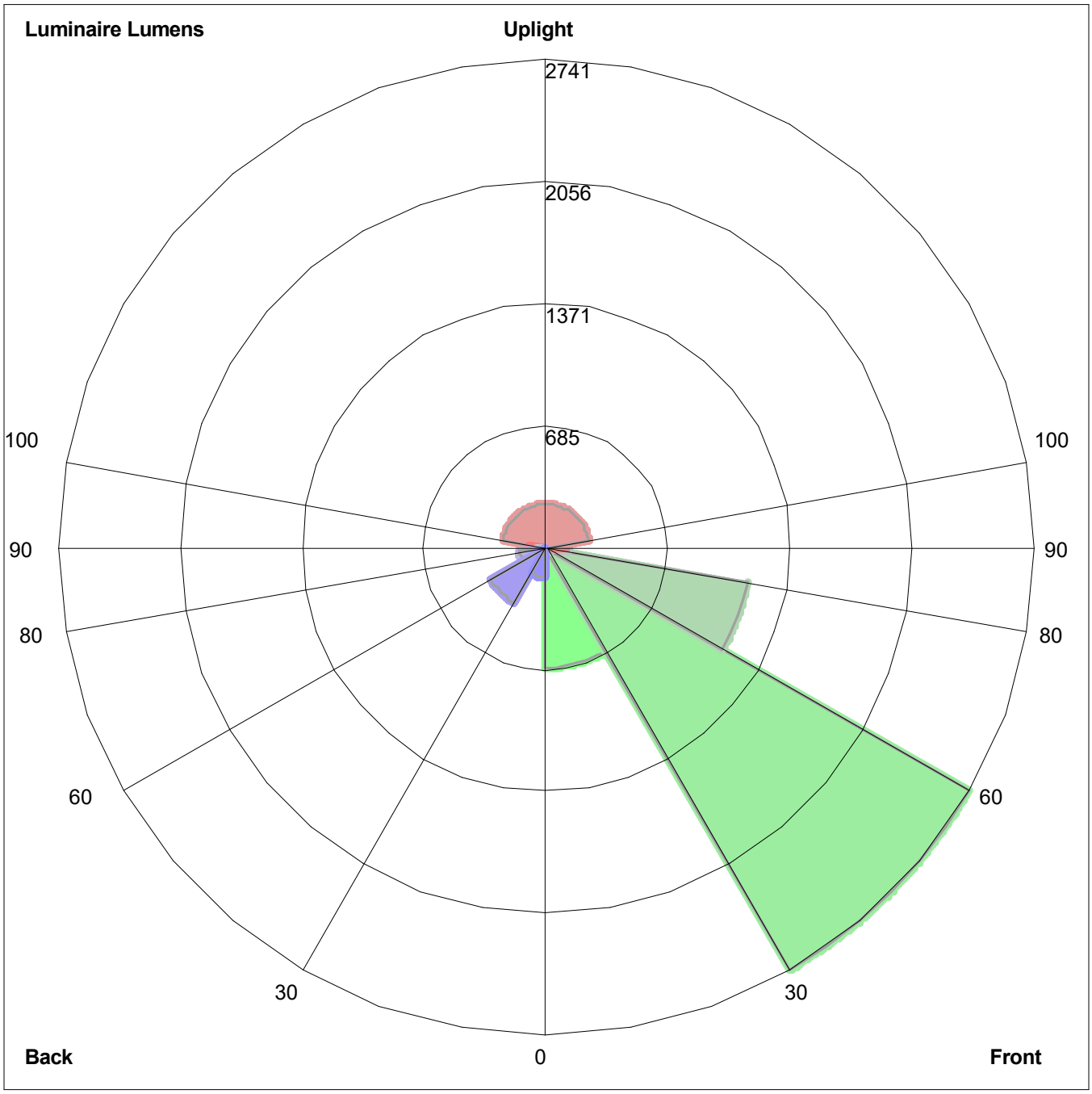
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=674.6, Medium=2741.3, High=1145.9, Very High=125.1
Back: Low=165.7, Medium=356.7, High=150.7, Very High=51.2
Uplight: Low=93.7, High=241.5

BUG Rating : B1-U3-G2

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