IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-3-40-70CRI-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12641
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/29/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-3-40-70CRI-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] 4000

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7775
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	6359
Maximum Candela Angle	35H 67.5V
Maximum Candela (<90 Degrees Vertical)	6359
Maximum Candela Angle (<90 Degrees Vertical)	35H 67.5V
Maximum Candela At 90 Degrees Vertical	196 (2.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	816 (10.5% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	411.7	N.A.	5.3
FM - Front-Medium (30-60)	3458.1	N.A.	44.5
FH - Front-High (60-80)	2866.9	N.A.	36.9
FVH - Front-Very High (80-90)	165.4	N.A.	2.1
BL - Back-Low (0-30)	92.6	N.A.	1.2
BM - Back-Medium (30-60)	251.0	N.A.	3.2
BH - Back-High (60-80)	168.8	N.A.	2.2
BVH - Back-Very High (80-90)	53.4	N.A.	0.7
UL - Uplight-Low (90-100)	96.0	N.A.	1.2
UH - Uplight-High (100-180)	210.8	N.A.	2.7
Total	7774.7	N.A.	100.0
BUG Rating	B1-U3-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	30	35	45	55	65	75
0.0	332	332	332	332	332	332	332	332	332	332
2.5	379	375	372	368	372	364	361	352	345	340
5.0	522	516	512	498	498	486	472	437	397	360
7.5	608	610	592	602	609	614	593	530	475	408
10.0	662	670	686	666	675	680	640	629	570	474
12.5	688	686	688	703	700	696	713	686	669	543
15.0	760	740	751	763	748	743	747	748	717	644
17.5	780	796	787	788	814	838	803	810	805	736
20.0	880	892	899	921	895	896	927	904	887	856
22.5	1033	1025	1026	1042	1046	1055	1034	1043	1035	981
25.0	1153	1162	1217	1270	1243	1232	1249	1238	1223	1208
27.5	1390	1416	1442	1454	1492	1547	1493	1479	1499	1361
30.0	1585	1571	1686	1771	1783	1790	1903	1797	1721	1592
32.5	1817	1836	1943	1999	2069	2160	2209	2155	2034	1858
35.0	1951	1968	2084	2298	2391	2440	2600	2576	2322	2021
37.5	2006	2051	2188	2462	2600	2791	2959	2887	2518	2204
40.0	2038	2057	2260	2613	2780	3021	3282	3153	2748	2316
42.5	2037	2067	2338	2763	2960	3227	3589	3386	2982	2397
45.0	2069	2110	2452	2981	3175	3455	3811	3616	3137	2483
47.5	2156	2196	2627	3244	3457	3762	4039	3878	3201	2672
50.0	2194	2238	2750	3477	3747	4065	4283	4037	3369	2816
52.5	2201	2245	2786	3593	3942	4293	4528	4166	3559	3011
55.0	2535	2530	2928	3683	4039	4378	4690	4306	3770	3414
57.5	3809	3746	3813	4067	4263	4443	4752	4320	3914	3694
60.0	5115	5089	5107	5079	5007	4778	4647	4111	3887	3957
62.5	5600	5641	5736	5869	5831	5526	4542	3712	3770	4241
65.0	4563	4641	5262	6117	6277	6042	4922	3255	3390	4250
67.5	1849	1919	2762	4819	5903	6359	5437	2920	2717	4020
70.0	885	890	1111	2024	3520	5112	5845	3322	1908	3154
72.5	695	704	808	1146	1525	2230	5451	4644	1320	1827
75.0	579	597	671	839	992	1209	2822	3847	1229	654
77.5	494	508	557	672	751	873	1190	2064	731	303
80.0	433	444	476	531	570	658	816	799	433	207
82.5	368	376	396	429	454	499	627	587	354	191
85.0	239	246	258	277	297	331	457	522	324	186
87.5	131	139	149	167	183	204	294	358	260	150
90.0	64	68	83	98	111	122	163	196	156	116
92.5	34	37	52	64	69	75	93	109	102	104
95.0	36	35	50	60	64	70	81	86	94	98
97.5	40	37	50	60	64	70	80	84	92	84
100.0	43	38	51	61	65	70	78	81	85	71
102.5	44	39	51	61	65	69	77	77	75	56
105.0	46	41	50	61	66	69	76	71	63	47
107.5	46	43	50	62	66	68	71	63	52	43
110.0	47	45	49	62	65	67	66	53	44	40
112.5	47	46	49	61	64	64	58	46	39	38
115.0	47	47	48	59	60	59	50	42	35	37
117.5	47	47	47	56	56	53	45	38	33	36
120.0	47	47	46	51	50	48	42	36	32	35
122.5	47	46	43	46	46	44	40	35	32	34
125.0	46	45	41	42	43	42	39	35	32	34
127.5	43	42	39	39	40	40	37	35	33	34
130.0	41	40	38	37	39	38	37	36	33	35

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CANDELA TABULATION - (Cont.)

132.5	40	39	38	36	37	37	37	35	34	36
135.0	39	39	37	36	36	37	36	34	33	36
137.5	39	39	37	36	35	34	32	30	32	35
140.0	37	37	35	32	30	29	26	26	28	31
142.5	33	32	30	26	25	22	20	20	22	26
145.0	27	26	24	20	18	15	14	15	17	20
147.5	20	19	17	13	12	11	9	9	12	14
150.0	13	13	11	9	8	6	5	6	8	8
152.5	9	9	8	4	4	3	2	3	5	6
155.0	3	3	2	2	2	2	1	2	3	4
157.5	1	1	1	1	1	1	1	2	2	2
160.0	0	1	1	1	1	1	1	1	2	2
162.5	0	1	1	1	1	1	1	1	2	2
165.0	0	1	1	1	1	1	1	1	2	2
167.5	0	1	1	1	1	1	1	1	2	2
170.0	0	1	1	1	1	1	1	1	1	2
172.5	0	1	1	1	1	1	1	1	2	2
175.0	0	1	1	1	1	1	1	1	1	2
177.5	0	1	1	1	1	1	1	1	1	2
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**									
	85	**90**	**95**	**105**	**115**	**125**	**135**	**145**	**155**	**165**
0.0	332	332	332	332	332	332	332	332	332	332
2.5	335	331	329	325	316	311	309	307	303	300
5.0	345	340	330	312	297	284	269	258	241	229
7.5	358	343	328	304	277	241	210	197	193	188
10.0	384	362	339	294	241	205	196	188	180	175
12.5	407	377	349	285	217	201	189	180	180	177
15.0	470	403	368	276	219	201	189	184	170	161
17.5	519	434	383	275	228	204	190	167	149	141
20.0	611	491	426	295	243	210	172	146	132	124
22.5	727	558	483	324	255	196	149	128	119	119
25.0	884	660	570	370	252	166	133	117	112	108
27.5	1021	817	650	399	223	143	121	111	102	100
30.0	1252	921	775	398	176	131	116	103	94	89
32.5	1417	1051	856	378	150	125	109	95	86	84
35.0	1544	1161	886	333	139	119	101	89	83	78
37.5	1664	1227	893	290	133	113	94	88	81	74
40.0	1737	1289	914	246	128	105	92	89	78	63
42.5	1828	1385	872	195	123	102	95	88	69	54
45.0	1893	1406	857	163	119	105	98	81	66	53
47.5	1969	1441	904	156	120	108	96	77	66	53
50.0	2126	1561	917	155	126	114	92	76	68	55
52.5	2268	1678	973	148	130	128	93	78	77	95
55.0	2554	1900	1056	134	111	126	105	91	116	122
57.5	2960	2185	1126	126	102	102	112	119	135	91
60.0	3413	2501	1209	119	100	97	116	126	106	67
62.5	3782	2728	1279	113	100	99	113	104	100	74
65.0	3904	2718	1079	110	100	104	103	85	94	77
67.5	3633	2199	739	109	99	102	95	94	86	76
70.0	2844	1392	380	104	101	107	99	91	87	77
72.5	1399	631	156	104	101	103	96	92	84	80
75.0	392	222	130	103	102	99	98	93	87	81
77.5	257	170	116	106	104	99	101	96	90	84

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CANDELA TABULATION - (Cont.)

80.0	191	146	107	108	104	100	104	98	92	86
82.5	150	121	104	116	108	102	108	101	96	91
85.0	128	93	99	117	109	104	111	105	97	92
87.5	105	78	95	118	111	104	113	106	100	92
90.0	87	66	100	118	111	104	114	108	102	95
92.5	81	67	98	117	112	102	113	110	106	98
95.0	74	85	92	114	109	98	108	108	105	98
97.5	68	93	89	104	102	91	103	102	101	94
100.0	70	89	85	90	95	85	97	98	98	88
102.5	69	81	79	78	87	82	92	94	95	83
105.0	64	72	73	70	78	79	88	91	91	76
107.5	57	64	66	64	71	74	84	88	87	68
110.0	52	58	60	59	64	70	81	85	84	63
112.5	48	53	54	56	59	67	77	82	79	57
115.0	45	49	50	53	56	64	73	78	74	53
117.5	42	45	47	51	53	61	70	74	68	49
120.0	40	43	44	49	52	59	66	70	61	46
122.5	38	40	43	47	50	57	63	64	54	45
125.0	37	39	41	46	50	56	60	59	49	43
127.5	36	38	40	45	49	55	57	54	44	42
130.0	37	38	40	44	49	53	54	49	40	40
132.5	37	39	40	45	47	49	50	44	39	39
135.0	38	39	41	44	44	43	42	39	37	38
137.5	37	39	40	42	40	36	32	31	32	36
140.0	35	36	36	36	34	29	23	22	25	29
142.5	29	30	31	30	26	22	17	15	18	21
145.0	23	23	23	22	19	15	11	10	12	15
147.5	16	16	16	15	13	9	6	6	8	9
150.0	9	9	9	9	8	6	4	4	5	6
152.5	6	6	6	6	5	4	3	2	2	3
155.0	4	4	4	4	4	4	2	2	2	2
157.5	2	3	3	3	3	3	2	2	1	1
160.0	2	2	2	2	3	3	2	2	1	1
162.5	2	2	2	2	3	2	2	2	1	1
165.0	2	2	2	2	3	2	2	2	1	1
167.5	2	2	2	2	3	2	2	2	1	1
170.0	2	2	2	2	2	2	2	1	1	1
172.5	2	2	2	2	2	2	2	1	1	1
175.0	2	2	2	2	2	2	2	1	1	0
177.5	2	2	2	2	2	2	2	1	1	0
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	332	332
2.5	296	297
5.0	220	220
7.5	186	186
10.0	174	172
12.5	174	174
15.0	156	155
17.5	136	135
20.0	121	119
22.5	115	114
25.0	105	105

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CANDELA TABULATION - (Cont.)

27.5	95	94
30.0	87	85
32.5	82	81
35.0	78	77
37.5	72	70
40.0	60	59
42.5	54	54
45.0	53	53
47.5	53	53
50.0	56	56
52.5	105	108
55.0	122	125
57.5	51	52
60.0	47	50
62.5	47	48
65.0	47	46
67.5	47	42
70.0	46	38
72.5	47	35
75.0	50	31
77.5	50	29
80.0	52	27
82.5	54	29
85.0	56	30
87.5	57	34
90.0	58	38
92.5	61	48
95.0	62	56
97.5	62	63
100.0	61	66
102.5	60	67
105.0	58	66
107.5	57	63
110.0	56	61
112.5	54	58
115.0	53	55
117.5	52	53
120.0	50	51
122.5	48	49
125.0	46	47
127.5	44	44
130.0	42	42
132.5	40	40
135.0	39	39
137.5	37	37
140.0	30	30
142.5	23	23
145.0	16	16
147.5	10	11
150.0	6	6
152.5	4	4
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	1	1

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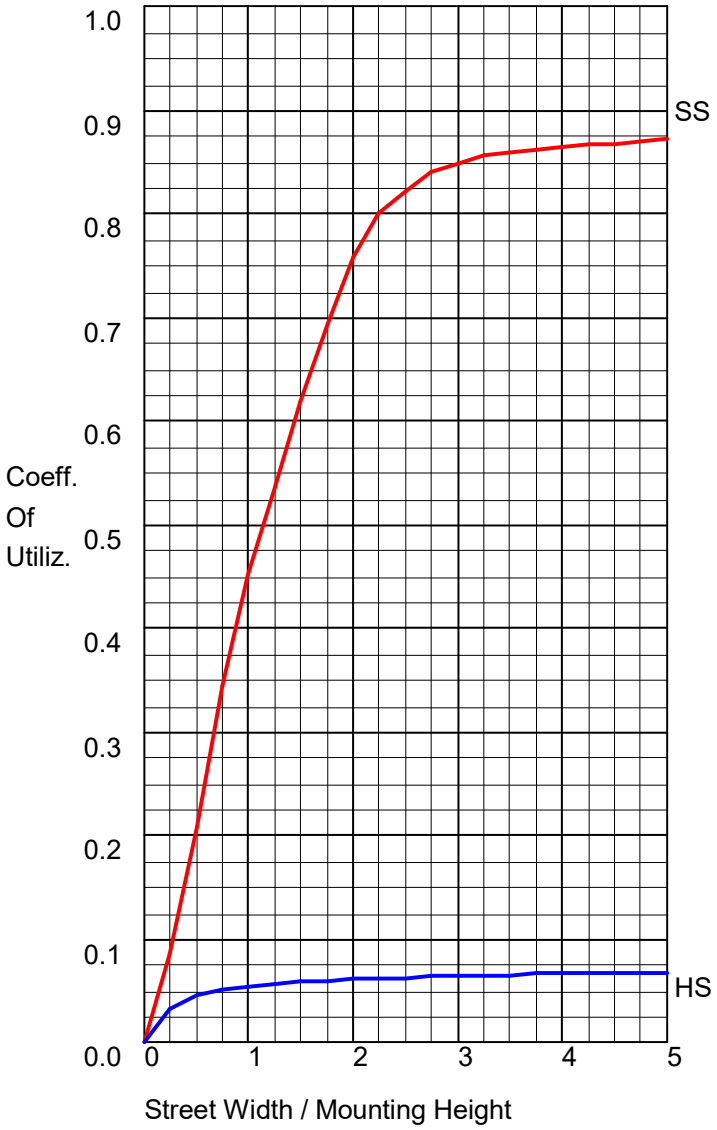
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	6902.1	88.8
Downward House Side	565.8	7.3
Downward Total	7467.9	96.1
Upward Street Side	137.2	1.8
Upward House Side	169.6	2.2
Upward Total	306.8	3.9
Total Flux	7774.7	100.0

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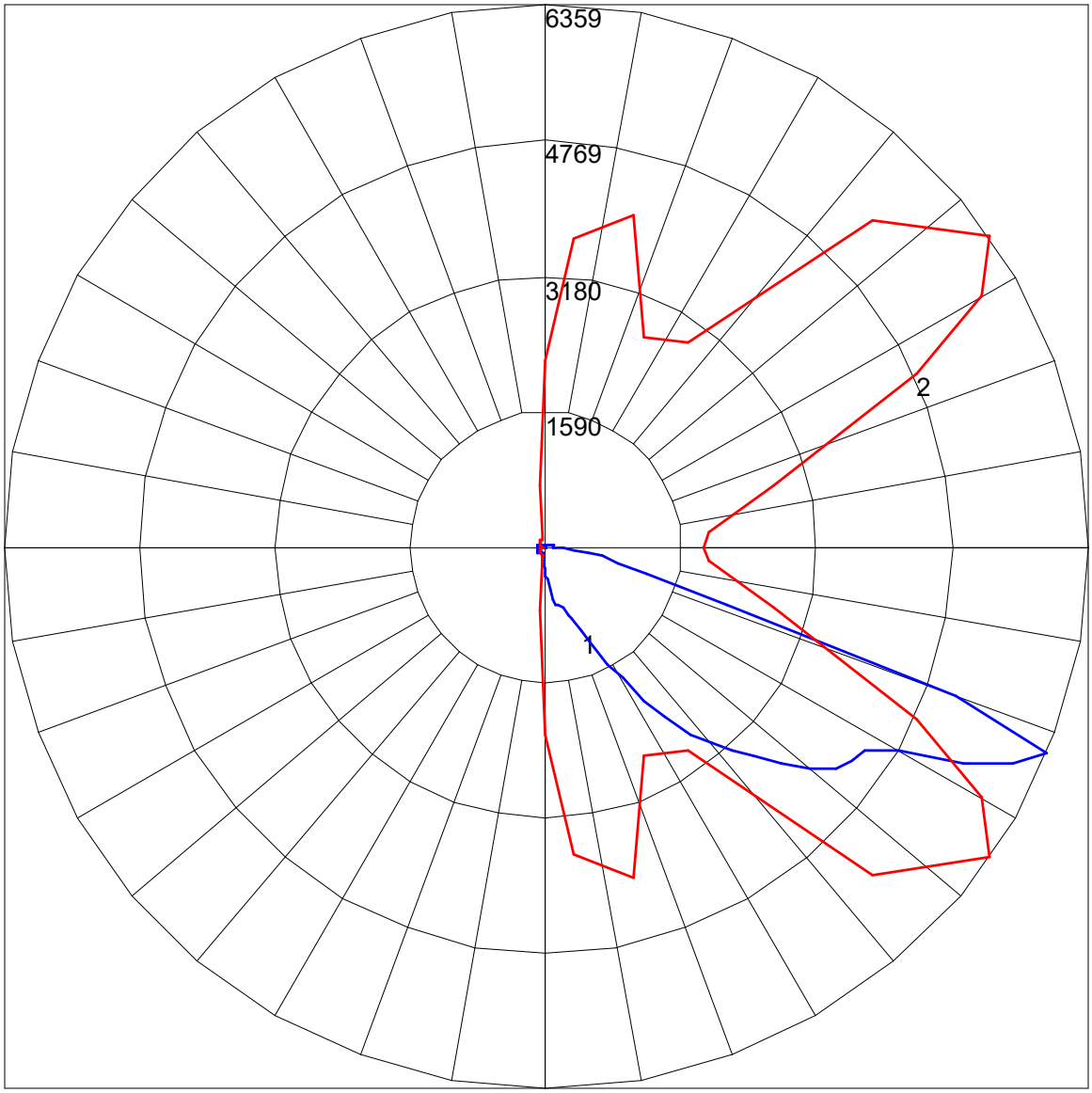
POLAR GRAPH



Maximum Candela = 6359 Located At Horizontal Angle = 35, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (35 - 215) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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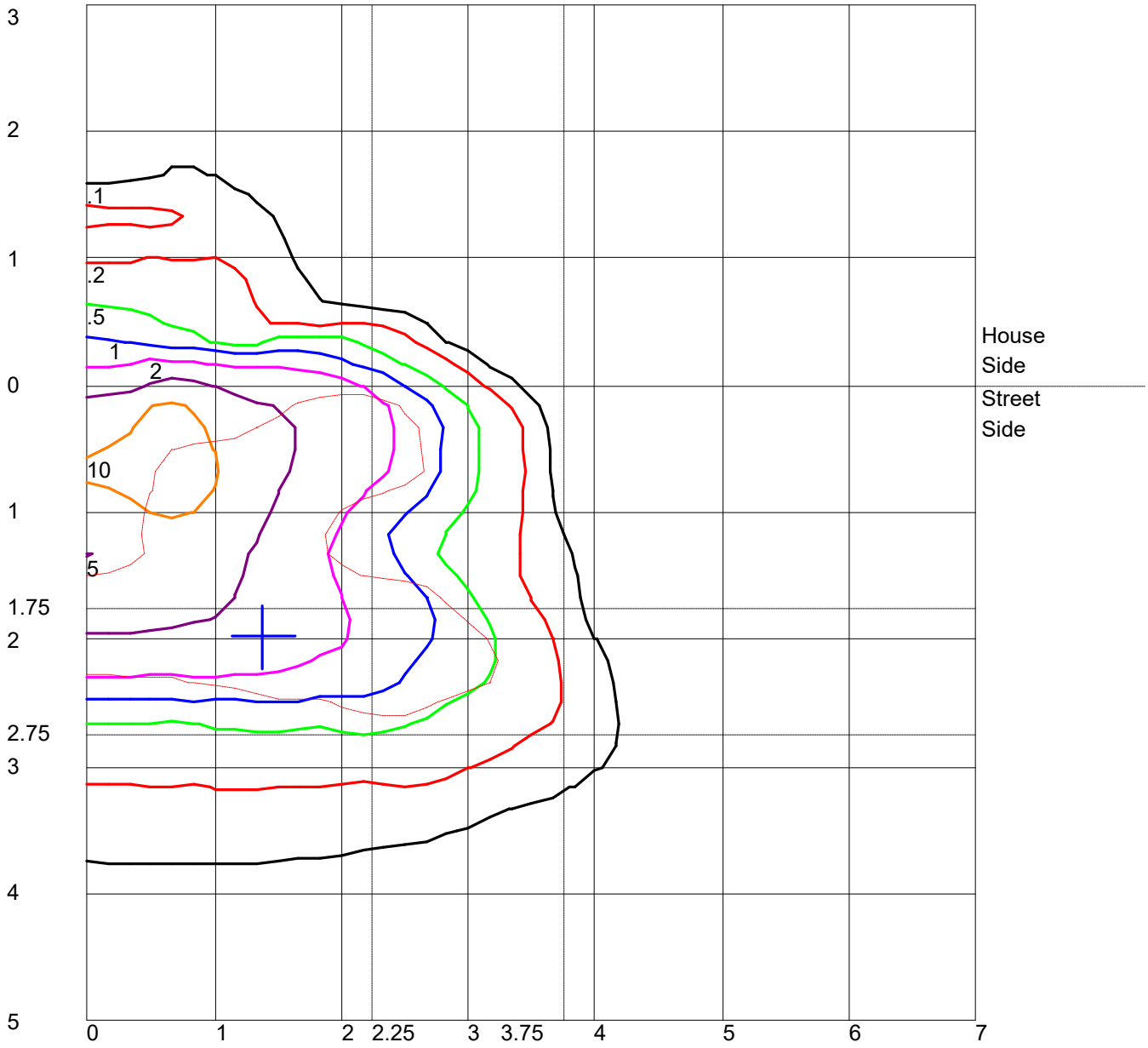
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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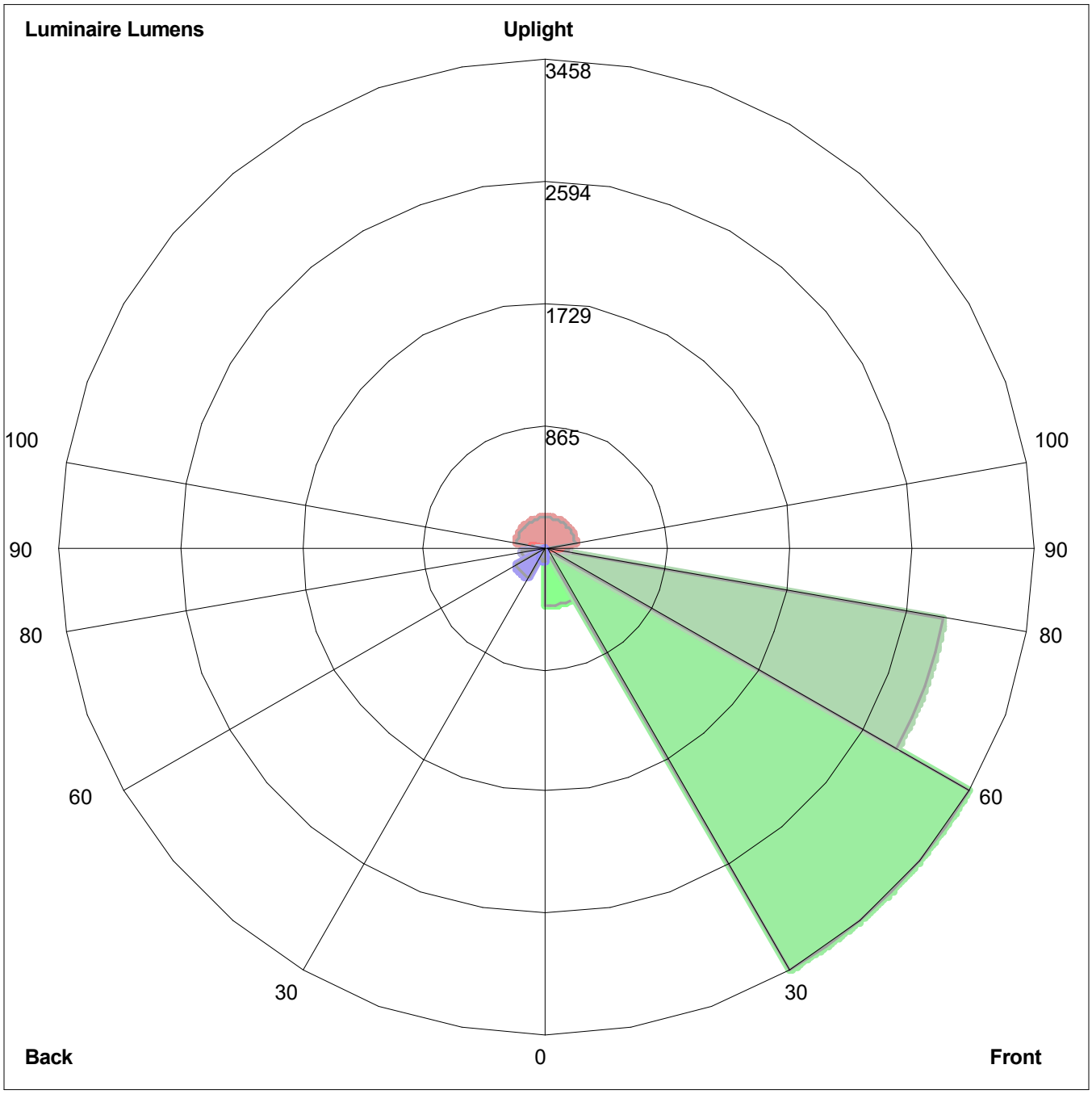
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=411.7, Medium=3458.1, High=2866.9, Very High=165.4
Back: Low=92.6, Medium=251.0, High=168.8, Very High=53.4
Uplight: Low=96.0, High=210.8

BUG Rating : B1-U3-G2

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