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

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12643
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/29/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-FT-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 IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7121
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	70
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	5690
Maximum Candela Angle	30H 67.5V
Maximum Candela (<90 Degrees Vertical)	5690
Maximum Candela Angle (<90 Degrees Vertical)	30H 67.5V
Maximum Candela At 90 Degrees Vertical	101 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	993 (13.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	579.1	N.A.	8.1
FM - Front-Medium (30-60)	2859.6	N.A.	40.2
FH - Front-High (60-80)	2675.2	N.A.	37.6
FVH - Front-Very High (80-90)	114.2	N.A.	1.6
BL - Back-Low (0-30)	122.2	N.A.	1.7
BM - Back-Medium (30-60)	266.2	N.A.	3.7
BH - Back-High (60-80)	147.7	N.A.	2.1
BVH - Back-Very High (80-90)	48.0	N.A.	0.7
UL - Uplight-Low (90-100)	84.0	N.A.	1.2
UH - Uplight-High (100-180)	224.2	N.A.	3.1
Total	7120.4	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	543	543	543	543	543	543	543	543	543	543
2.5	638	636	616	614	614	614	607	591	577	563
5.0	703	700	680	703	699	711	726	699	662	619
7.5	965	940	930	919	899	870	808	741	718	673
10.0	1030	1018	1015	1040	1024	1031	987	918	786	752
12.5	1141	1100	1140	1152	1137	1119	1081	1047	947	811
15.0	1163	1147	1146	1163	1179	1211	1229	1163	1137	926
17.5	1302	1264	1301	1310	1308	1281	1301	1327	1276	1105
20.0	1459	1453	1459	1425	1435	1454	1406	1442	1422	1238
22.5	1579	1579	1618	1632	1602	1563	1595	1542	1552	1408
25.0	1735	1750	1789	1727	1745	1787	1705	1659	1679	1521
27.5	1814	1818	1824	1893	1917	1885	1907	1809	1743	1666
30.0	1806	1837	1897	1939	1950	2035	2028	1952	1808	1810
32.5	1728	1736	1823	1994	2071	2121	2202	2085	1933	1892
35.0	1668	1663	1738	1922	2026	2178	2353	2206	2028	1922
37.5	1610	1613	1682	1855	1967	2133	2498	2400	2172	1935
40.0	1609	1610	1678	1843	1951	2104	2530	2564	2341	1980
42.5	1718	1703	1768	1903	1985	2125	2549	2802	2434	2103
45.0	1930	1924	1969	2067	2103	2215	2578	2942	2572	2222
47.5	2255	2250	2299	2360	2338	2404	2659	3051	2818	2393
50.0	2635	2614	2680	2776	2703	2694	2791	3140	3047	2659
52.5	2817	2823	2950	3156	3103	3053	2939	3229	3187	2745
55.0	2899	2901	3052	3367	3400	3362	3107	3203	3119	2853
57.5	3354	3334	3325	3480	3518	3522	3288	3023	3025	2975
60.0	4241	4278	4144	3944	3787	3587	3219	2745	2827	3156
62.5	4814	4877	4926	4945	4658	4117	2900	2476	2514	3215
65.0	4919	5004	5159	5517	5472	5146	3014	2169	2068	2983
67.5	4656	4716	4973	5556	5690	5636	4297	1786	1574	2384
70.0	3583	3614	4179	4912	5211	5440	4888	2113	1119	1657
72.5	1400	1568	2305	3514	4337	5010	4514	2916	727	883
75.0	498	543	926	1510	2032	3008	4288	2580	504	420
77.5	367	379	493	810	982	1353	2145	1613	474	223
80.0	257	264	310	446	526	687	957	993	505	172
82.5	142	150	167	205	241	307	472	495	337	205
85.0	77	84	96	117	141	180	267	337	237	172
87.5	42	47	60	81	94	101	137	165	139	113
90.0	30	33	45	55	60	64	82	96	91	93
92.5	34	34	45	55	59	63	72	75	81	89
95.0	37	35	47	57	60	65	74	77	83	84
97.5	40	36	48	57	60	65	74	77	81	71
100.0	42	38	49	58	61	65	74	74	74	59
102.5	44	40	49	59	61	65	73	70	64	49
105.0	45	42	50	60	62	66	70	63	54	46
107.5	47	45	50	60	63	65	65	55	47	44
110.0	48	47	50	60	63	64	60	48	42	42
112.5	48	48	51	60	61	61	54	44	40	42
115.0	50	50	51	59	59	57	48	42	38	41
117.5	51	51	51	56	55	52	46	41	37	41
120.0	51	51	50	52	51	49	44	40	37	40
122.5	51	51	48	48	48	47	44	40	37	40
125.0	50	49	46	47	47	46	43	40	37	39
127.5	48	48	45	45	46	45	43	41	38	40
130.0	47	47	45	44	45	45	44	41	40	41

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CANDELA TABULATION - (Cont.)

132.5	47	47	45	44	45	45	43	40	40	42
135.0	47	47	46	44	44	43	40	38	40	43
137.5	47	46	44	40	38	37	34	34	37	42
140.0	41	41	38	35	32	30	27	28	32	37
142.5	35	34	31	27	24	21	20	22	26	32
145.0	27	25	22	18	16	14	14	15	19	24
147.5	17	17	15	12	12	10	7	10	13	17
150.0	12	12	11	8	5	4	4	5	8	11
152.5	5	5	4	2	2	2	2	3	5	6
155.0	1	1	1	1	1	1	2	2	3	4
157.5	0	1	1	1	1	1	2	2	2	3
160.0	0	1	1	1	1	1	2	2	2	2
162.5	0	1	1	1	1	1	2	2	2	2
165.0	0	1	1	1	1	1	2	2	2	2
167.5	0	1	1	1	2	2	2	2	2	2
170.0	0	1	1	2	2	2	2	2	2	2
172.5	0	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	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	543	543	543	543	543	543	543	543	543	543
2.5	552	552	546	537	520	500	485	481	476	471
5.0	578	564	547	505	474	481	475	456	445	432
7.5	608	581	556	493	483	452	420	384	347	306
10.0	656	615	565	518	465	411	320	243	211	180
12.5	750	688	604	557	462	318	229	170	144	137
15.0	824	746	662	585	419	254	160	134	129	126
17.5	926	827	725	598	363	189	132	124	122	119
20.0	1028	894	798	598	301	143	126	117	115	116
22.5	1115	1021	864	593	227	131	120	111	110	108
25.0	1234	1065	916	565	164	127	116	107	103	104
27.5	1344	1141	991	520	140	123	112	101	97	95
30.0	1380	1209	1013	435	136	118	107	96	89	90
32.5	1484	1245	1044	367	133	114	102	89	90	94
35.0	1536	1297	1065	308	131	110	95	89	97	106
37.5	1587	1384	1070	238	127	107	90	96	107	108
40.0	1649	1427	1075	186	122	101	91	107	109	94
42.5	1780	1452	1094	158	117	96	102	112	90	68
45.0	1838	1539	1087	149	112	100	115	100	72	57
47.5	1910	1558	1094	149	109	109	117	82	65	54
50.0	2042	1582	1047	164	133	119	103	74	64	55
52.5	2074	1655	1023	140	140	154	92	73	73	97
55.0	2193	1731	963	125	106	152	108	86	133	166
57.5	2367	1808	965	117	101	101	134	143	179	154
60.0	2581	2015	994	111	100	89	132	177	131	64
62.5	2714	2066	961	105	97	86	136	136	80	64
65.0	2748	1998	827	102	93	107	119	87	84	68
67.5	2466	1685	627	100	86	108	84	87	84	70
70.0	1849	1097	344	95	90	96	88	93	80	70
72.5	930	507	167	92	89	94	89	84	81	73
75.0	407	265	124	91	96	93	87	84	82	77
77.5	271	186	108	90	95	86	90	86	84	80

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CANDELA TABULATION - (Cont.)

80.0	198	154	97	96	91	87	92	87	84	81
82.5	150	121	87	103	96	89	96	90	86	83
85.0	120	85	85	108	99	93	99	93	88	84
87.5	93	61	83	106	100	94	103	97	90	85
90.0	71	50	86	101	98	90	101	98	94	87
92.5	60	60	85	102	101	91	103	101	98	91
95.0	61	78	81	101	100	88	101	103	101	95
97.5	64	82	78	93	93	83	96	97	98	94
100.0	67	78	75	82	86	78	90	92	94	89
102.5	65	73	70	72	81	76	85	88	90	84
105.0	60	67	66	65	75	75	83	85	87	78
107.5	57	62	63	61	70	74	82	84	85	72
110.0	54	59	60	59	65	72	80	84	84	66
112.5	51	55	57	58	61	70	79	83	81	61
115.0	49	52	54	57	60	68	77	82	78	58
117.5	47	50	52	55	58	66	74	80	74	55
120.0	45	48	50	54	57	65	73	77	68	53
122.5	44	46	48	53	57	63	70	72	63	52
125.0	42	45	47	52	56	62	68	67	58	51
127.5	42	44	47	52	56	61	65	63	53	50
130.0	43	45	47	52	55	60	61	58	50	49
132.5	44	45	48	52	54	59	59	54	47	48
135.0	45	47	49	52	52	52	54	51	46	47
137.5	46	48	49	50	48	44	44	43	45	47
140.0	42	44	45	44	41	36	34	35	38	44
142.5	36	37	37	36	33	28	24	26	31	36
145.0	28	29	29	28	24	20	17	18	22	27
147.5	19	19	19	19	16	12	12	12	15	19
150.0	12	12	12	12	10	6	6	8	11	12
152.5	7	7	7	7	6	4	3	4	6	9
155.0	5	5	5	4	4	3	2	2	2	4
157.5	3	3	3	3	3	2	2	2	2	2
160.0	2	2	2	3	2	2	2	1	1	1
162.5	2	2	2	2	2	2	2	1	1	1
165.0	2	2	2	2	2	2	2	1	1	1
167.5	2	2	2	2	2	2	2	1	1	1
170.0	2	2	2	2	2	2	2	1	1	1
172.5	2	2	2	2	2	2	1	1	1	1
175.0	2	2	2	2	2	2	1	1	1	0
177.5	2	2	2	2	2	2	1	1	1	0
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	543	543
2.5	471	471
5.0	426	431
7.5	291	294
10.0	167	170
12.5	132	130
15.0	125	125
17.5	117	116
20.0	114	114
22.5	107	107
25.0	101	101

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CANDELA TABULATION - (Cont.)

27.5	92	93
30.0	90	90
32.5	98	98
35.0	108	108
37.5	108	108
40.0	85	83
42.5	64	61
45.0	56	55
47.5	53	52
50.0	58	58
52.5	119	129
55.0	173	178
57.5	106	105
60.0	51	55
62.5	50	53
65.0	51	52
67.5	48	48
70.0	48	44
72.5	48	40
75.0	48	36
77.5	50	34
80.0	52	31
82.5	54	29
85.0	53	29
87.5	54	31
90.0	56	34
92.5	58	40
95.0	61	50
97.5	61	57
100.0	60	61
102.5	58	63
105.0	57	62
107.5	56	61
110.0	55	60
112.5	56	59
115.0	57	58
117.5	56	57
120.0	56	57
122.5	55	56
125.0	55	55
127.5	54	54
130.0	52	52
132.5	50	50
135.0	48	49
137.5	48	48
140.0	46	47
142.5	38	38
145.0	29	30
147.5	21	21
150.0	13	14
152.5	9	9
155.0	5	5
157.5	2	2
160.0	1	0
162.5	1	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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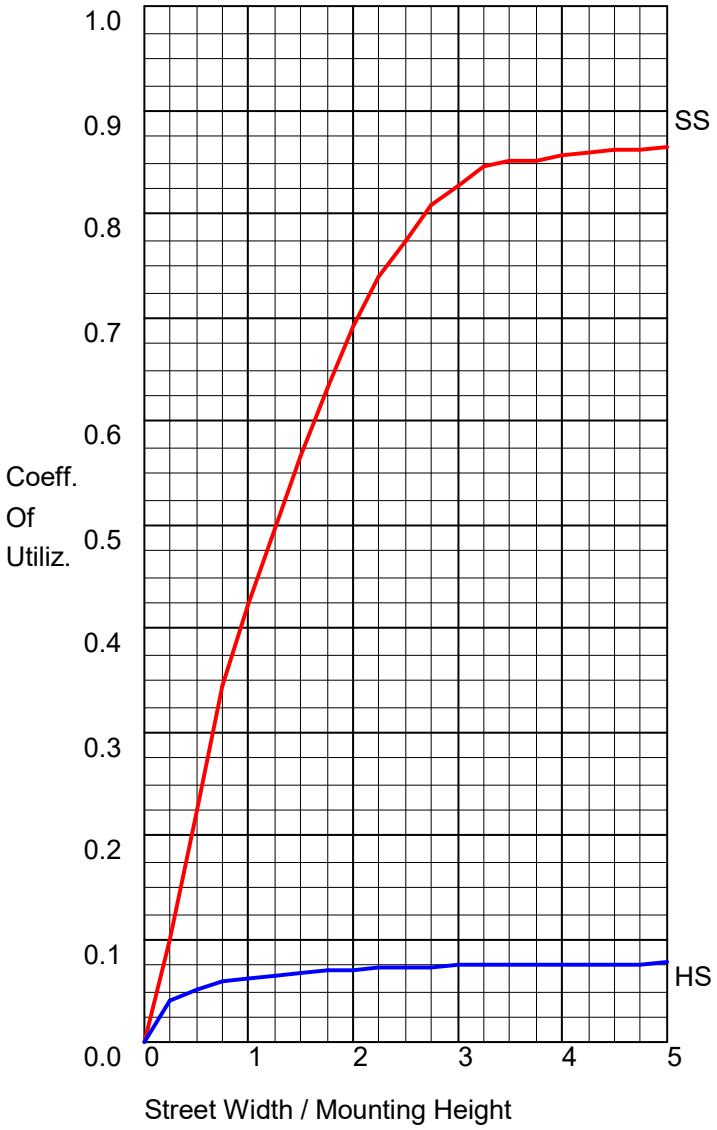
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	6228.2	87.5
Downward House Side	584.2	8.2
Downward Total	6812.4	95.7
Upward Street Side	133.2	1.9
Upward House Side	175.0	2.5
Upward Total	308.2	4.3
Total Flux	7120.6	100.0

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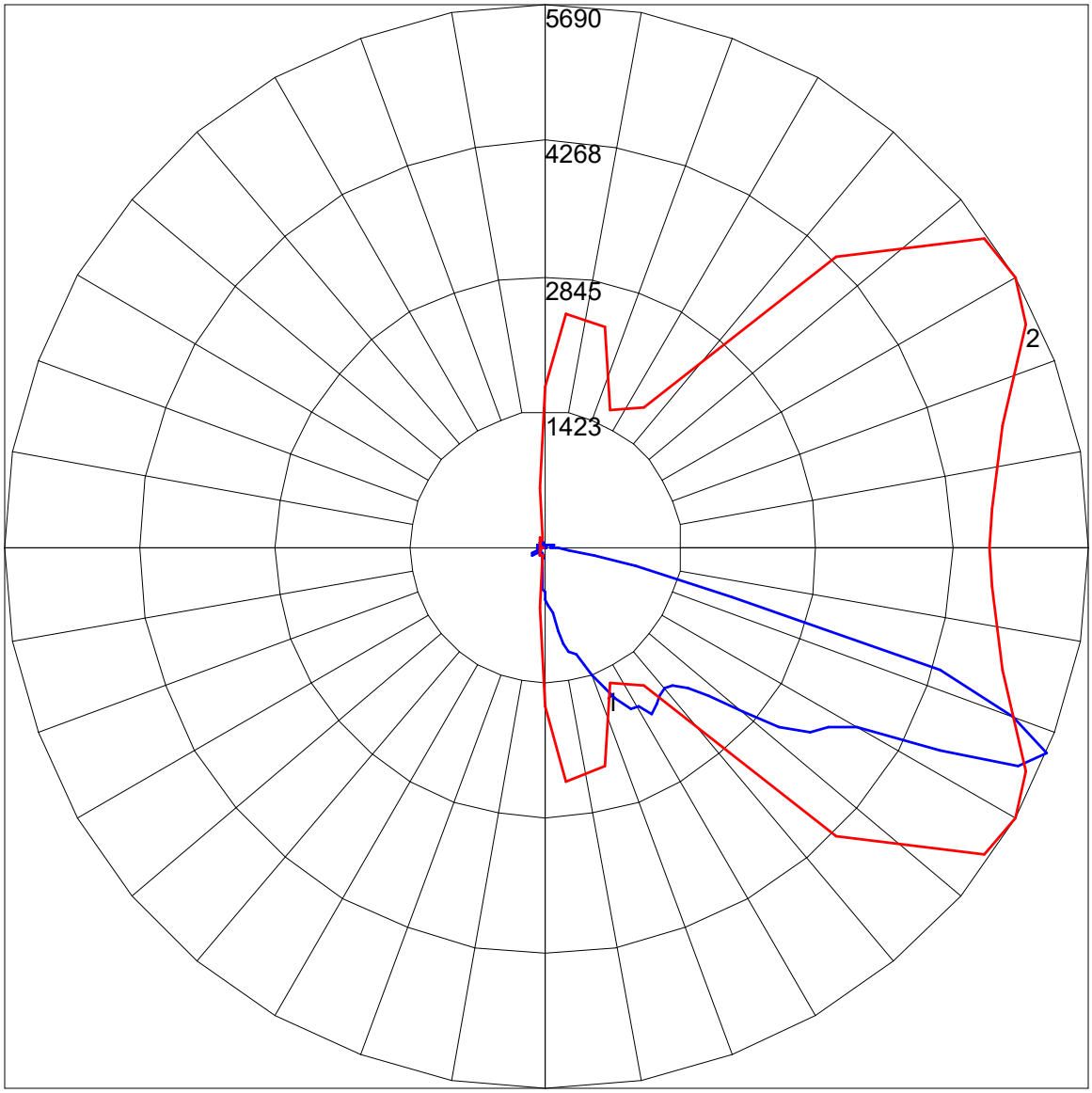
POLAR GRAPH



Maximum Candela = 5690 Located At Horizontal Angle = 30, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (30 - 210) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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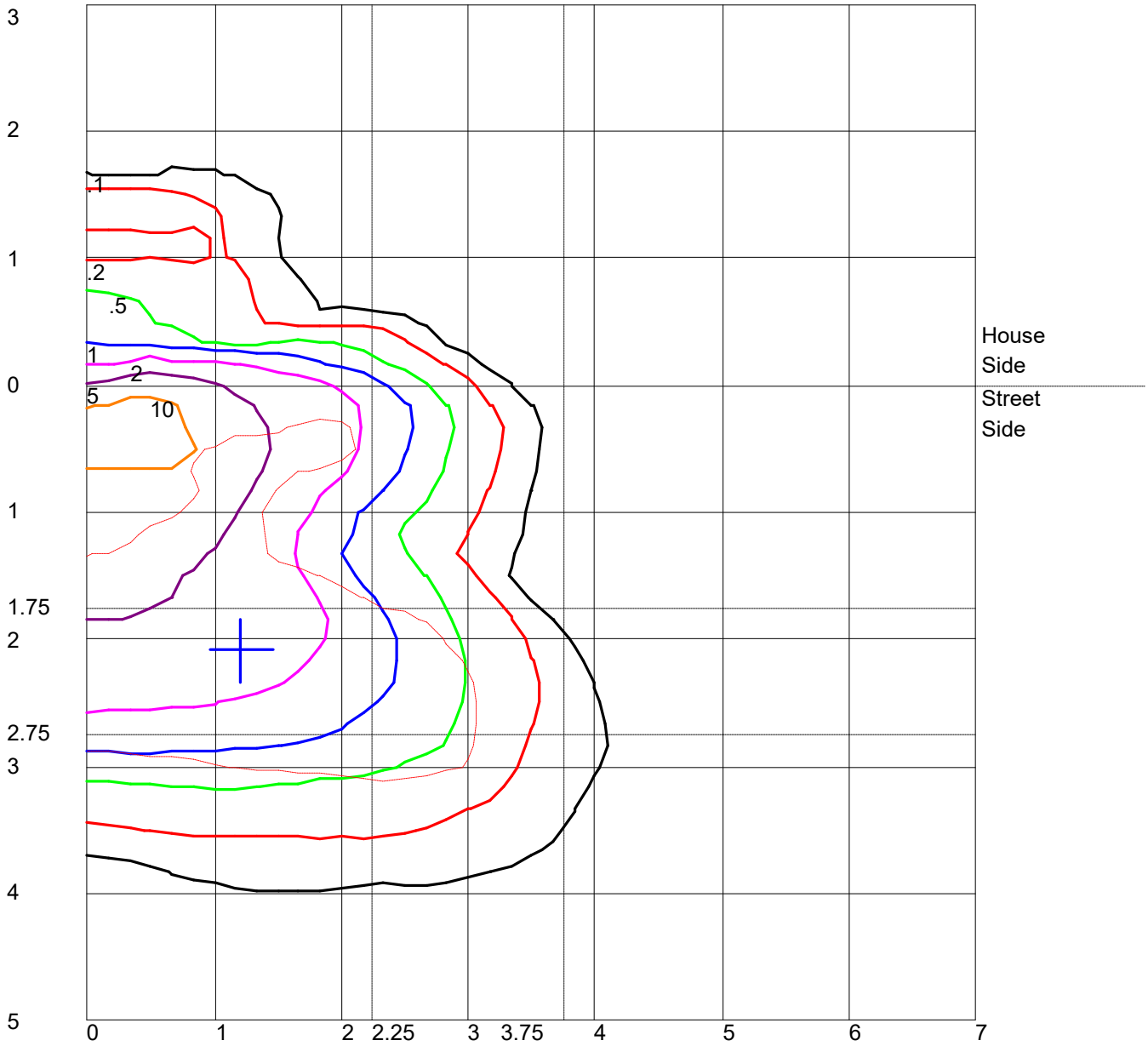
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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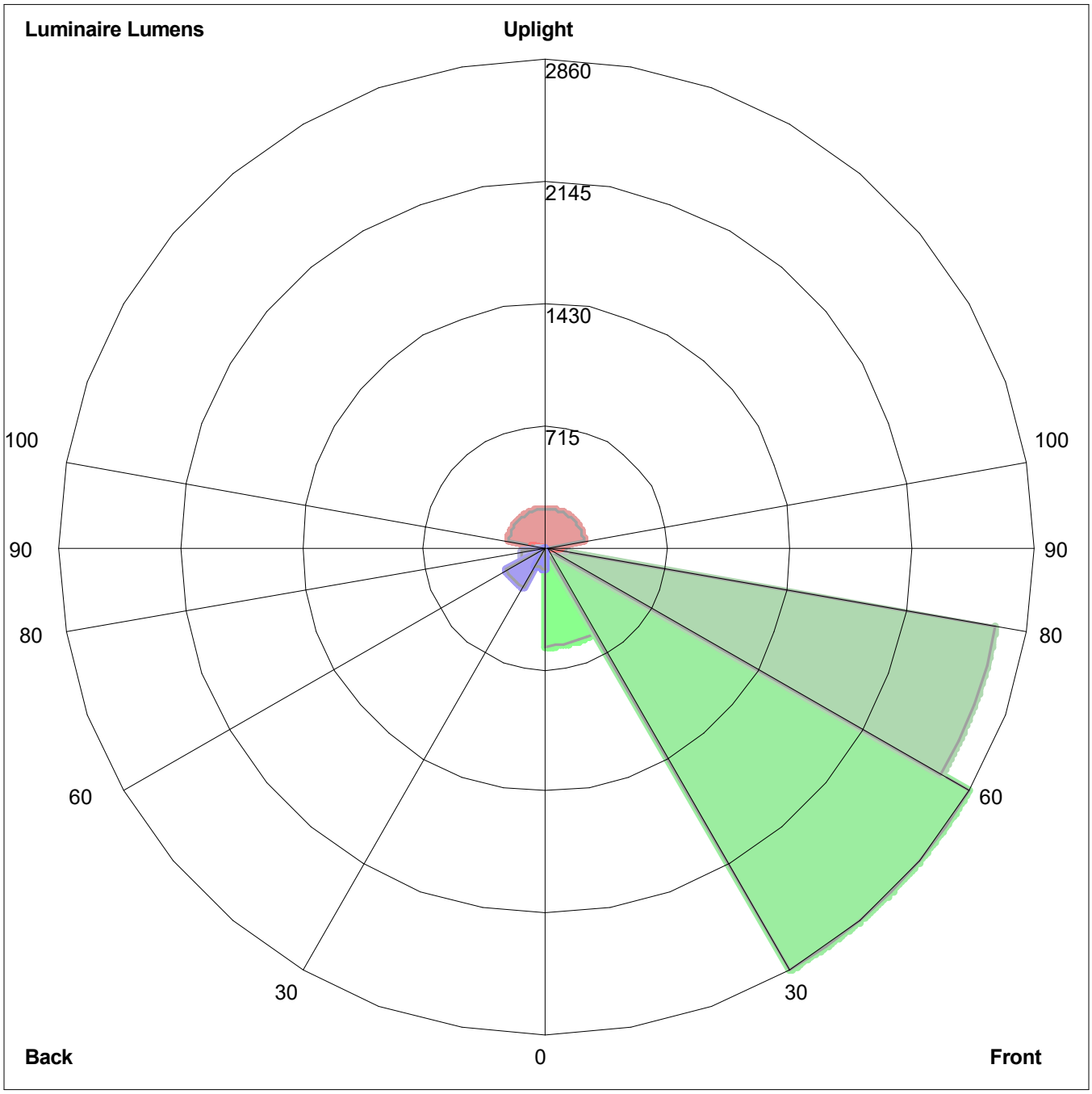
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=579.1, Medium=2859.6, High=2675.2, Very High=114.2
Back: Low=122.2, Medium=266.2, High=147.7, Very High=48.0
Uplight: Low=84.0, High=224.2

BUG Rating : B1-U3-G2

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