IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-FT-50-70CRI-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-50-70CRI-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] 5000

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7297
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	72
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	5831
Maximum Candela Angle	30H 67.5V
Maximum Candela (<90 Degrees Vertical)	5831
Maximum Candela Angle (<90 Degrees Vertical)	30H 67.5V
Maximum Candela At 90 Degrees Vertical	103 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1017 (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)	593.4	N.A.	8.1
FM - Front-Medium (30-60)	2930.5	N.A.	40.2
FH - Front-High (60-80)	2741.5	N.A.	37.6
FVH - Front-Very High (80-90)	117.1	N.A.	1.6
BL - Back-Low (0-30)	125.3	N.A.	1.7
BM - Back-Medium (30-60)	272.8	N.A.	3.7
BH - Back-High (60-80)	151.4	N.A.	2.1
BVH - Back-Very High (80-90)	49.2	N.A.	0.7
UL - Uplight-Low (90-100)	86.0	N.A.	1.2
UH - Uplight-High (100-180)	229.7	N.A.	3.1
Total	7296.9	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	557	557	557	557	557	557	557	557	557	557
2.5	653	651	632	629	629	630	622	606	591	577
5.0	720	717	697	720	716	729	744	716	678	635
7.5	989	963	953	942	921	891	828	760	736	690
10.0	1056	1043	1040	1066	1050	1057	1011	941	806	770
12.5	1169	1128	1168	1181	1165	1147	1108	1073	970	831
15.0	1192	1176	1175	1192	1208	1241	1259	1192	1165	949
17.5	1334	1296	1333	1342	1340	1313	1333	1360	1308	1132
20.0	1496	1489	1496	1460	1471	1490	1440	1478	1457	1268
22.5	1619	1619	1658	1673	1642	1602	1634	1580	1591	1443
25.0	1778	1794	1833	1770	1789	1831	1747	1700	1721	1558
27.5	1859	1864	1869	1940	1965	1931	1954	1854	1786	1707
30.0	1851	1882	1944	1987	1998	2086	2078	2000	1853	1855
32.5	1771	1779	1868	2044	2122	2173	2257	2137	1981	1939
35.0	1709	1704	1781	1970	2076	2232	2412	2261	2078	1970
37.5	1650	1653	1724	1901	2016	2186	2560	2460	2226	1983
40.0	1649	1650	1720	1889	1999	2156	2593	2628	2399	2029
42.5	1760	1745	1811	1950	2035	2177	2612	2871	2494	2155
45.0	1978	1972	2018	2118	2155	2270	2642	3015	2636	2277
47.5	2311	2306	2356	2418	2396	2464	2724	3127	2888	2452
50.0	2701	2679	2746	2844	2770	2761	2860	3217	3123	2724
52.5	2887	2893	3024	3234	3180	3129	3012	3309	3266	2813
55.0	2970	2973	3128	3451	3484	3446	3184	3282	3197	2924
57.5	3437	3417	3407	3567	3605	3609	3370	3098	3100	3049
60.0	4346	4384	4247	4042	3881	3676	3299	2813	2898	3234
62.5	4933	4998	5048	5067	4774	4219	2972	2537	2576	3295
65.0	5041	5128	5286	5653	5607	5274	3088	2223	2119	3057
67.5	4771	4833	5097	5694	5831	5775	4404	1830	1613	2443
70.0	3672	3703	4283	5034	5341	5575	5009	2166	1147	1698
72.5	1435	1607	2362	3601	4444	5134	4626	2988	745	905
75.0	511	557	949	1548	2082	3083	4394	2644	517	430
77.5	376	389	506	830	1007	1386	2198	1653	486	228
80.0	264	271	318	458	539	704	981	1017	518	176
82.5	146	153	171	211	247	315	484	508	345	211
85.0	79	86	98	120	145	185	274	345	243	176
87.5	43	48	62	83	96	103	141	169	143	116
90.0	31	33	46	56	62	66	84	98	93	95
92.5	34	34	46	56	60	65	74	77	83	92
95.0	38	35	48	58	62	67	76	79	85	87
97.5	41	37	49	58	62	67	76	79	83	73
100.0	43	39	50	59	63	67	76	76	76	60
102.5	45	41	50	60	63	67	75	72	66	50
105.0	46	43	51	61	64	68	72	65	55	47
107.5	48	46	51	62	65	67	67	56	48	45
110.0	49	48	51	62	65	66	61	49	43	43
112.5	49	49	52	62	63	63	55	45	41	43
115.0	51	51	52	60	60	58	49	43	39	42
117.5	52	52	52	57	56	53	47	42	38	42
120.0	52	52	51	53	52	50	45	41	38	41
122.5	52	52	49	49	49	48	45	41	38	41
125.0	51	50	47	48	48	47	44	41	38	40
127.5	49	49	46	46	47	46	44	42	39	41
130.0	48	48	46	45	46	46	45	42	41	42

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CANDELA TABULATION - (Cont.)

132.5	48	48	46	45	46	46	44	41	41	43
135.0	48	48	47	45	45	44	41	39	41	44
137.5	48	47	45	41	39	38	34	34	38	43
140.0	42	42	39	35	32	31	28	29	32	38
142.5	35	34	31	28	25	22	21	23	27	32
145.0	28	26	23	19	17	15	15	16	20	25
147.5	18	18	16	13	12	10	7	10	14	18
150.0	13	13	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	557	557	557	557	557	557	557	557	557	557
2.5	566	566	560	550	533	513	497	493	488	483
5.0	592	578	561	518	486	493	487	467	456	443
7.5	623	595	570	505	495	463	430	394	355	314
10.0	672	631	580	531	476	421	328	249	216	185
12.5	768	705	619	571	473	326	234	174	148	141
15.0	844	764	679	599	429	261	164	138	132	129
17.5	948	847	743	613	372	194	135	127	125	122
20.0	1054	916	818	613	309	147	129	120	118	119
22.5	1142	1046	886	608	232	134	123	114	113	110
25.0	1264	1091	939	580	168	130	119	109	105	106
27.5	1377	1169	1015	533	144	126	115	103	99	97
30.0	1414	1239	1038	446	140	121	109	98	92	92
32.5	1521	1276	1069	376	137	117	104	92	92	96
35.0	1574	1329	1091	316	134	113	97	92	99	108
37.5	1626	1418	1096	244	130	109	92	98	109	111
40.0	1690	1462	1102	191	125	103	93	109	112	96
42.5	1824	1488	1121	162	120	98	104	115	92	70
45.0	1883	1577	1114	153	115	102	118	102	74	58
47.5	1957	1597	1121	153	112	112	120	84	67	55
50.0	2093	1621	1073	168	137	122	105	76	66	56
52.5	2125	1696	1049	144	144	157	94	75	75	99
55.0	2247	1774	987	128	108	155	110	89	137	170
57.5	2425	1853	989	120	103	103	138	147	183	157
60.0	2645	2065	1018	114	102	92	135	181	134	66
62.5	2781	2117	985	107	99	89	140	140	82	66
65.0	2816	2047	847	104	95	109	122	90	86	70
67.5	2527	1727	642	102	89	110	87	90	86	72
70.0	1895	1125	352	97	92	98	91	95	82	72
72.5	953	519	171	94	92	96	92	86	83	75
75.0	417	272	127	93	98	95	90	87	84	79
77.5	277	191	110	92	97	89	92	89	86	82

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CANDELA TABULATION - (Cont.)

80.0	203	157	99	98	93	90	94	90	86	83
82.5	153	124	90	105	98	92	98	92	89	85
85.0	123	88	88	110	101	95	101	95	91	87
87.5	95	63	85	108	102	96	105	99	92	88
90.0	73	51	89	103	100	92	103	100	96	90
92.5	62	62	88	104	103	93	105	103	100	93
95.0	63	80	83	103	102	91	103	105	103	97
97.5	66	84	80	95	95	85	98	99	100	96
100.0	69	80	77	84	89	80	92	94	96	92
102.5	67	75	72	74	83	78	88	91	92	86
105.0	62	69	68	67	77	77	85	88	90	80
107.5	58	64	65	63	72	76	84	87	88	74
110.0	55	60	61	60	67	74	82	86	86	68
112.5	52	56	58	59	63	72	81	85	83	63
115.0	50	53	55	58	61	70	79	84	80	59
117.5	48	51	53	56	59	68	76	82	76	56
120.0	46	49	51	55	58	67	75	79	70	54
122.5	45	47	49	54	58	65	72	74	65	53
125.0	43	46	48	53	57	64	70	69	59	52
127.5	43	45	48	53	57	63	67	65	54	51
130.0	44	46	48	53	56	62	63	59	51	50
132.5	45	46	49	53	55	60	60	55	48	49
135.0	46	48	50	53	53	53	55	52	47	48
137.5	47	49	50	51	49	45	45	44	46	48
140.0	43	45	46	45	42	37	34	35	39	45
142.5	36	38	38	37	33	29	25	27	31	36
145.0	29	30	30	29	25	21	18	19	23	28
147.5	20	20	20	20	17	13	12	13	16	20
150.0	12	13	13	12	10	6	6	8	11	13
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	557	557
2.5	483	483
5.0	437	442
7.5	298	301
10.0	171	174
12.5	135	133
15.0	128	128
17.5	120	119
20.0	117	117
22.5	109	109
25.0	103	103

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CANDELA TABULATION - (Cont.)

27.5	94	95
30.0	92	92
32.5	100	100
35.0	111	111
37.5	111	110
40.0	88	85
42.5	66	63
45.0	57	56
47.5	54	53
50.0	59	59
52.5	122	132
55.0	177	182
57.5	108	107
60.0	52	56
62.5	51	54
65.0	52	53
67.5	49	49
70.0	49	45
72.5	49	41
75.0	49	37
77.5	51	34
80.0	53	31
82.5	55	30
85.0	54	30
87.5	55	31
90.0	57	34
92.5	59	41
95.0	63	51
97.5	63	58
100.0	62	63
102.5	59	65
105.0	58	64
107.5	57	63
110.0	56	62
112.5	57	60
115.0	58	59
117.5	57	58
120.0	57	58
122.5	56	57
125.0	56	56
127.5	55	55
130.0	53	53
132.5	51	51
135.0	49	50
137.5	49	49
140.0	47	48
142.5	39	39
145.0	30	31
147.5	22	22
150.0	14	15
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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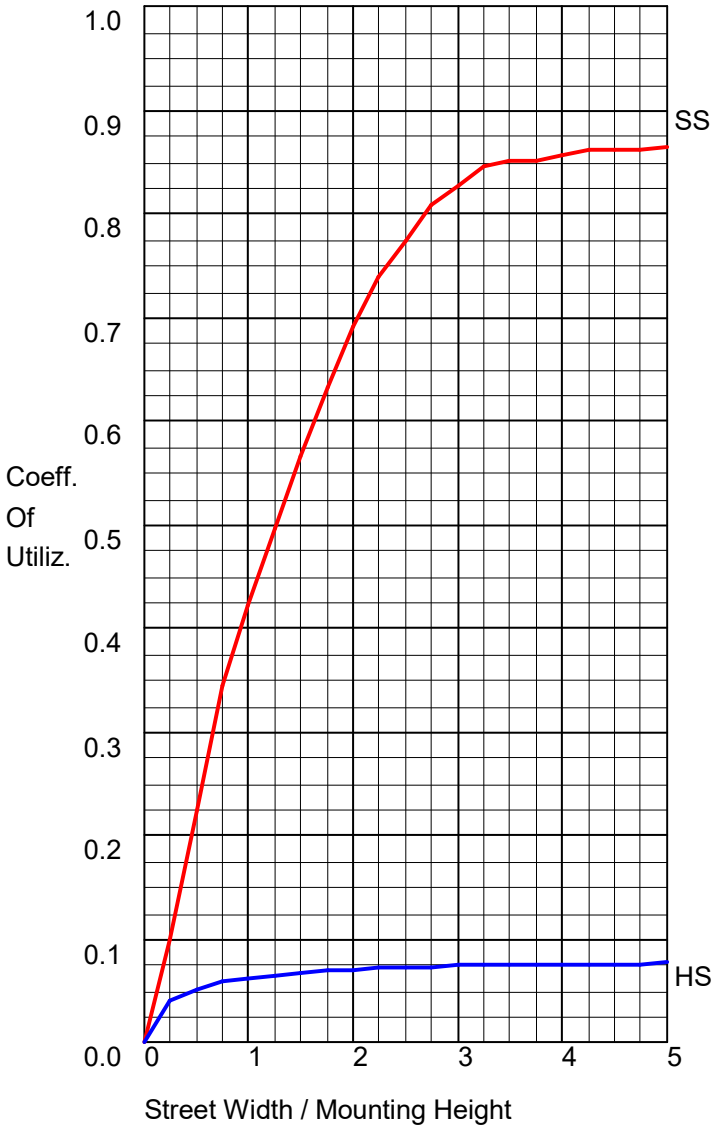
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	6382.6	87.5
Downward House Side	598.6	8.2
Downward Total	6981.2	95.7
Upward Street Side	136.4	1.9
Upward House Side	179.3	2.5
Upward Total	315.7	4.3
Total Flux	7296.9	100.0

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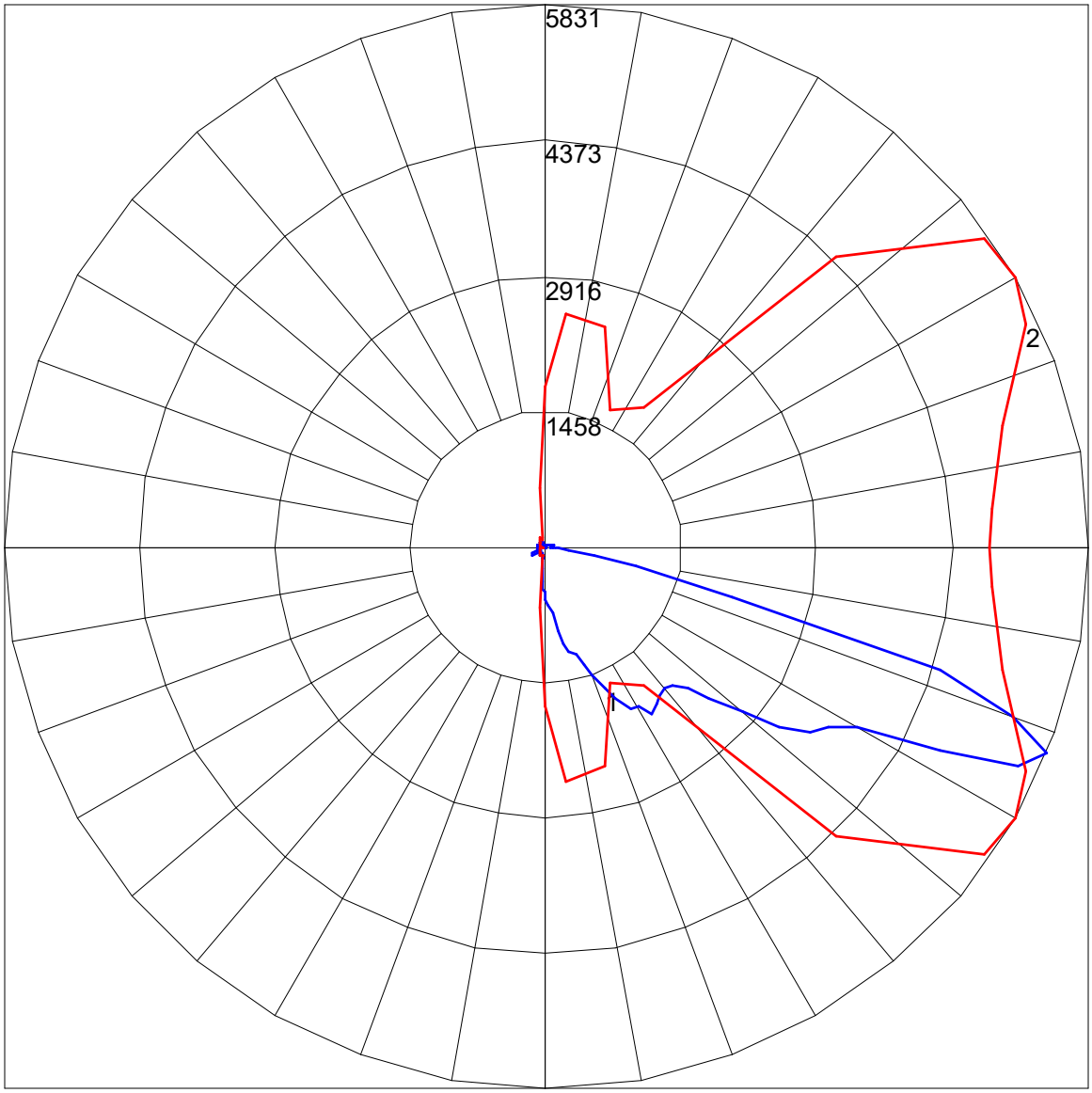
POLAR GRAPH



Maximum Candela = 5831 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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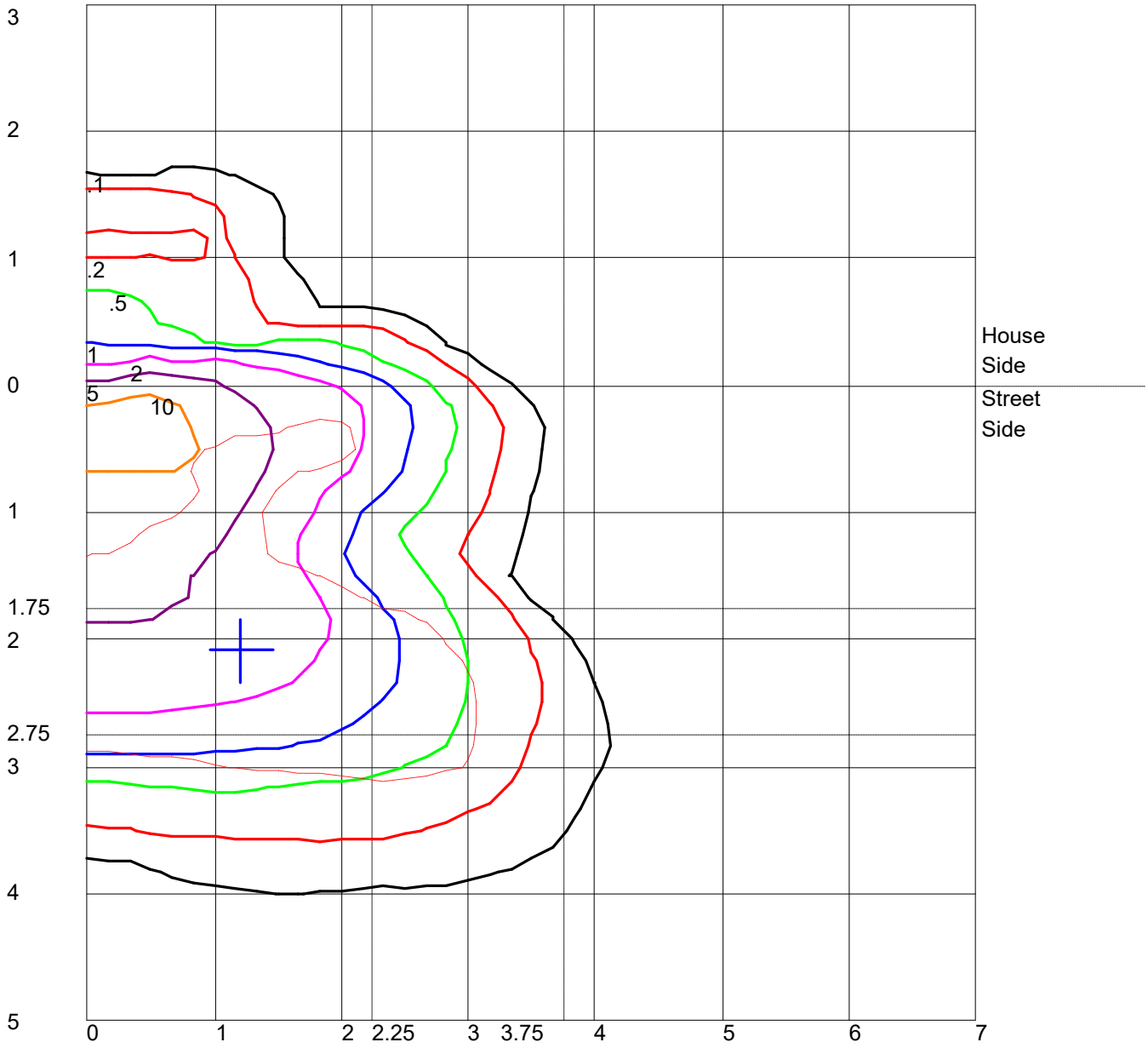
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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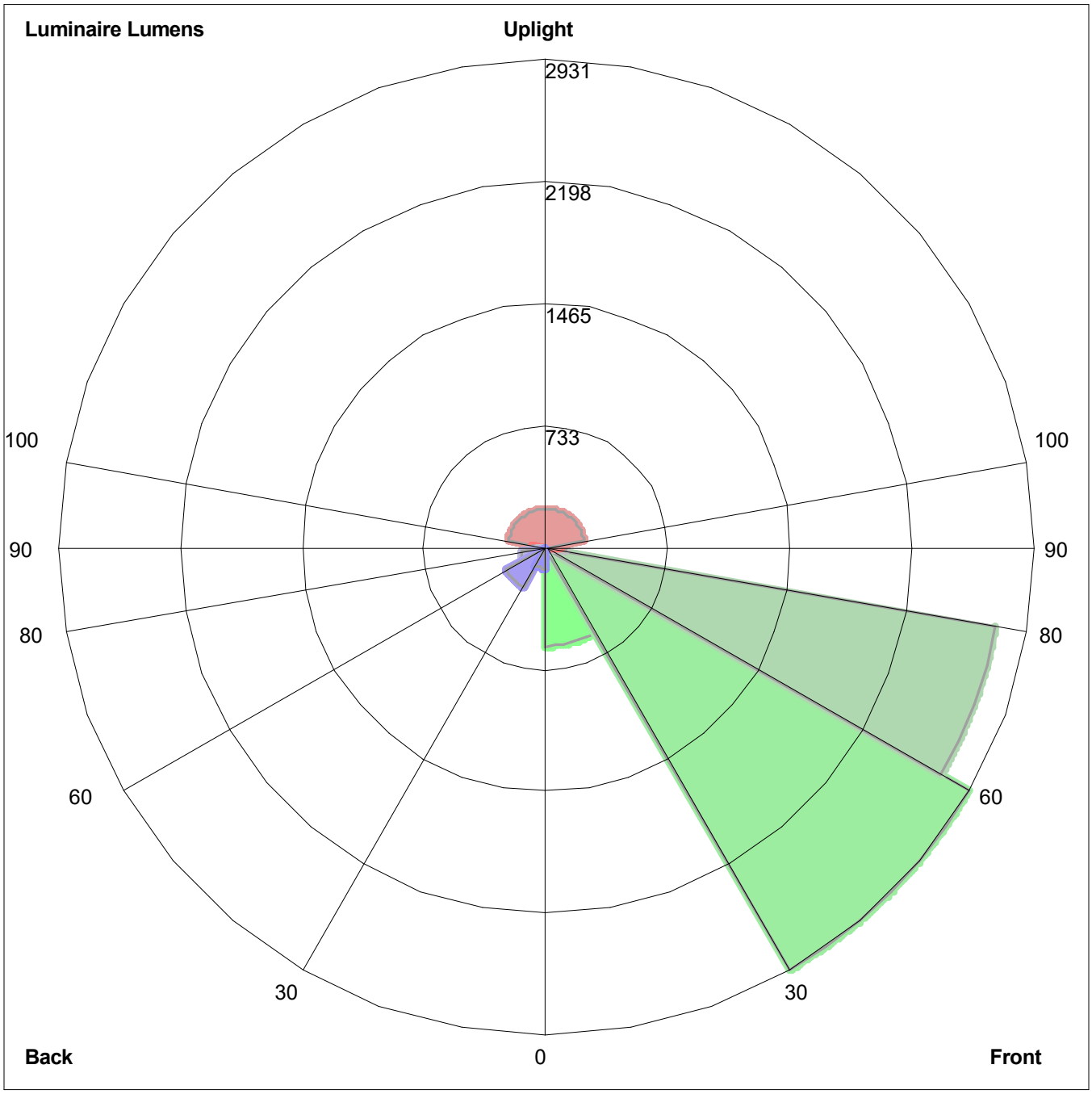
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=593.4, Medium=2930.5, High=2741.5, Very High=117.1
Back: Low=125.3, Medium=272.8, High=151.4, Very High=49.2
Uplight: Low=86.0, High=229.7

BUG Rating : B1-U3-G2

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