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

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12640
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/26/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-3-50-70CRI-IH
[_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 III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	11864
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	10433
Maximum Candela Angle	50H 67.5V
Maximum Candela (<90 Degrees Vertical)	10433
Maximum Candela Angle (<90 Degrees Vertical)	50H 67.5V
Maximum Candela At 90 Degrees Vertical	173 (1.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	891 (7.5% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	460.9	N.A.	3.9
FM - Front-Medium (30-60)	5039.2	N.A.	42.5
FH - Front-High (60-80)	4577.2	N.A.	38.6
FVH - Front-Very High (80-90)	152.3	N.A.	1.3
BL - Back-Low (0-30)	193.3	N.A.	1.6
BM - Back-Medium (30-60)	610.9	N.A.	5.1
BH - Back-High (60-80)	320.4	N.A.	2.7
BVH - Back-Very High (80-90)	85.0	N.A.	0.7
UL - Uplight-Low (90-100)	134.7	N.A.	1.1
UH - Uplight-High (100-180)	290.1	N.A.	2.4
Total	11864.0	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	50	55	65	75
0.0	577	577	577	577	577	577	577	577	577	577
2.5	595	593	588	587	587	587	583	583	579	579
5.0	672	673	666	661	662	654	643	628	596	581
7.5	677	683	672	689	712	709	697	681	656	611
10.0	725	734	747	730	741	714	704	716	696	652
12.5	760	761	763	769	764	779	765	756	757	705
15.0	831	815	825	834	821	821	807	817	786	769
17.5	864	880	871	869	915	887	874	888	878	829
20.0	965	978	982	1008	981	1012	1019	999	965	921
22.5	1136	1115	1127	1137	1148	1123	1123	1148	1125	1037
25.0	1244	1265	1328	1377	1335	1335	1317	1340	1306	1257
27.5	1564	1617	1628	1599	1665	1583	1598	1563	1582	1417
30.0	1934	1942	2001	2028	1960	1994	1943	1871	1802	1654
32.5	2530	2522	2537	2454	2438	2358	2392	2225	2108	1909
35.0	2921	2905	2919	3013	2901	2826	2779	2657	2378	2092
37.5	3232	3256	3282	3432	3494	3320	3200	2980	2576	2269
40.0	3583	3578	3644	3836	3946	3856	3650	3309	2809	2376
42.5	3968	3978	4056	4250	4402	4349	4111	3651	3062	2456
45.0	4487	4512	4624	4801	4876	4770	4555	4044	3223	2555
47.5	5124	5109	5275	5475	5463	5204	4946	4541	3332	2769
50.0	5767	5749	5948	6192	6162	5703	5353	4892	3610	2934
52.5	6461	6456	6613	6899	6919	6296	5814	5231	4002	3154
55.0	7199	7233	7354	7660	7629	6959	6386	5678	4565	3591
57.5	7963	7948	8104	8484	8470	7704	7103	6251	5172	4026
60.0	7846	7944	8292	9021	9257	8647	7954	6999	5808	4536
62.5	6769	6946	7509	8564	9701	9487	8916	7993	6631	5181
65.0	4369	4499	5524	7347	8941	10258	9931	9162	7498	5786
67.5	1463	1535	2363	4788	7864	9644	10433	10045	7940	6217
70.0	914	943	1154	2031	5825	8493	9503	10304	7808	5796
72.5	654	678	801	1248	2701	6849	7858	8611	7499	4695
75.0	476	498	602	875	1521	3719	4902	5307	5833	1992
77.5	323	337	441	673	1012	1628	1774	2583	1725	740
80.0	216	234	314	507	699	872	854	891	672	449
82.5	163	180	248	407	464	496	458	434	398	338
85.0	124	140	198	332	342	296	268	244	245	266
87.5	93	108	157	262	223	176	164	164	174	197
90.0	66	76	115	153	117	122	128	134	146	159
92.5	40	45	65	79	95	113	119	125	137	149
95.0	46	47	67	80	95	113	119	124	138	141
97.5	53	49	68	82	95	112	117	121	134	118
100.0	56	51	69	83	95	110	116	116	123	99
102.5	59	52	69	83	95	107	112	109	107	77
105.0	60	55	68	84	95	105	107	100	90	65
107.5	61	57	67	84	94	99	98	88	72	59
110.0	62	59	66	84	92	92	86	75	59	54
112.5	62	61	65	83	88	80	73	63	52	52
115.0	62	62	64	80	81	69	62	55	46	51
117.5	62	62	63	75	72	60	55	50	43	49
120.0	62	62	60	68	63	54	51	47	42	48
122.5	61	60	56	60	57	51	48	45	42	46
125.0	59	58	52	53	53	48	46	45	42	46
127.5	55	54	49	49	51	47	46	45	43	46
130.0	51	51	48	46	48	47	46	46	44	47

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CANDELA TABULATION - (Cont.)

132.5	49	48	46	44	46	47	46	46	45	48
135.0	48	47	46	43	45	45	45	43	45	49
137.5	47	47	46	43	41	40	39	39	42	47
140.0	45	45	42	38	34	32	32	34	38	42
142.5	39	39	36	31	27	25	26	27	31	36
145.0	32	31	30	25	19	18	19	20	23	29
147.5	25	24	20	16	13	11	11	12	16	20
150.0	16	16	14	12	7	6	6	8	11	13
152.5	12	12	9	5	4	3	4	4	6	9
155.0	4	4	2	2	2	2	2	2	4	5
157.5	1	1	1	1	1	2	2	2	3	4
160.0	0	1	1	1	1	2	2	2	2	3
162.5	0	1	1	1	1	2	2	2	2	3
165.0	0	1	1	1	1	2	2	2	2	3
167.5	0	1	1	1	2	2	2	2	2	3
170.0	0	1	1	1	2	2	2	2	2	3
172.5	0	1	1	1	2	2	2	2	2	3
175.0	1	1	1	1	2	2	2	2	2	3
177.5	1	1	1	1	2	2	2	2	2	3
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	577	577	577	577	577	577	577	577	577	577
2.5	581	579	580	578	573	575	569	570	569	565
5.0	584	588	582	577	571	563	551	528	505	493
7.5	587	588	584	579	561	516	476	457	443	426
10.0	604	612	601	580	517	472	436	412	389	374
12.5	628	632	625	578	484	440	399	372	361	351
15.0	676	658	657	569	476	421	380	361	336	326
17.5	722	691	680	562	467	407	370	338	325	325
20.0	804	758	729	573	463	404	356	342	326	319
22.5	910	825	793	581	464	401	363	341	333	338
25.0	1061	942	865	608	471	408	369	348	341	342
27.5	1186	1086	931	636	485	419	380	361	359	377
30.0	1410	1166	1033	658	492	431	394	375	385	428
32.5	1546	1269	1093	699	502	439	399	397	447	530
35.0	1655	1353	1117	700	500	440	406	426	525	675
37.5	1756	1410	1139	693	498	436	411	452	639	814
40.0	1829	1472	1203	681	487	425	417	474	712	779
42.5	1925	1574	1211	668	462	416	416	476	703	562
45.0	1992	1603	1258	665	422	397	395	437	602	415
47.5	2067	1672	1346	646	362	359	351	389	481	335
50.0	2232	1815	1371	627	311	309	307	336	375	297
52.5	2386	1973	1461	619	271	265	264	281	304	277
55.0	2759	2230	1606	598	252	241	234	246	257	263
57.5	3197	2549	1766	563	241	224	218	222	229	248
60.0	3615	2805	1964	511	224	214	208	209	211	235
62.5	3924	2979	2146	423	212	207	199	198	198	224
65.0	4021	2944	1998	338	204	198	192	187	191	241
67.5	3832	2418	1404	261	199	191	186	190	221	297
70.0	3107	1595	790	210	190	184	190	214	280	375
72.5	1733	813	304	193	183	179	201	248	275	244
75.0	579	336	247	185	176	183	186	199	157	175
77.5	370	251	198	180	174	184	170	156	147	152

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CANDELA TABULATION - (Cont.)

80.0	288	219	174	177	169	174	167	154	146	146
82.5	241	183	166	177	166	156	163	154	147	147
85.0	211	146	154	171	162	153	165	156	150	148
87.5	166	126	148	171	160	153	167	160	153	146
90.0	131	110	154	173	163	153	169	161	153	142
92.5	117	106	152	173	163	151	166	162	156	147
95.0	111	130	144	169	158	146	159	157	153	144
97.5	99	140	138	155	149	134	151	149	148	136
100.0	101	131	131	138	139	124	143	143	143	128
102.5	100	118	120	121	128	118	135	137	138	119
105.0	92	105	109	107	115	112	128	131	132	107
107.5	82	92	96	96	103	106	121	126	126	96
110.0	74	82	87	89	93	99	114	120	119	86
112.5	67	73	78	83	86	94	107	115	111	77
115.0	62	68	72	78	82	92	102	109	102	69
117.5	58	63	67	75	79	88	97	102	92	62
120.0	55	59	63	71	76	86	93	95	83	58
122.5	52	56	60	68	75	83	90	89	73	55
125.0	51	55	58	66	73	81	86	82	63	52
127.5	51	53	57	65	72	79	81	74	56	50
130.0	51	53	57	64	70	76	76	66	51	48
132.5	52	54	57	64	68	70	69	59	47	46
135.0	53	55	58	63	64	62	58	51	45	46
137.5	52	54	56	59	58	53	45	39	39	42
140.0	48	51	52	52	49	42	32	29	31	34
142.5	41	43	44	43	38	31	23	20	23	26
145.0	33	34	35	32	28	21	15	13	15	18
147.5	24	25	25	23	18	13	9	9	10	11
150.0	15	15	15	15	13	9	6	5	6	7
152.5	11	11	11	10	8	6	5	4	2	2
155.0	6	7	7	6	6	5	4	2	2	1
157.5	5	5	5	5	5	5	4	2	1	1
160.0	4	4	4	5	5	5	4	2	1	0
162.5	4	4	4	5	5	4	3	2	1	0
165.0	4	4	4	5	5	4	3	2	1	0
167.5	4	4	4	5	5	4	3	2	1	0
170.0	4	4	4	4	5	4	3	2	1	0
172.5	4	4	4	4	4	4	3	2	1	0
175.0	4	4	4	4	4	4	3	2	1	0
177.5	4	4	4	4	4	4	3	2	1	0
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	577	577
2.5	564	564
5.0	492	489
7.5	422	420
10.0	368	367
12.5	345	345
15.0	319	316
17.5	318	317
20.0	315	312
22.5	331	329
25.0	344	342

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CANDELA TABULATION - (Cont.)

27.5	373	372
30.0	438	427
32.5	517	500
35.0	649	624
37.5	713	672
40.0	558	519
42.5	373	357
45.0	310	298
47.5	277	270
50.0	259	252
52.5	245	241
55.0	233	233
57.5	225	230
60.0	220	231
62.5	217	233
65.0	262	283
67.5	336	343
70.0	216	194
72.5	188	171
75.0	162	136
77.5	127	92
80.0	115	77
82.5	211	212
85.0	150	107
87.5	102	71
90.0	84	51
92.5	89	66
95.0	89	78
97.5	86	87
100.0	84	92
102.5	83	94
105.0	80	93
107.5	78	89
110.0	75	84
112.5	72	78
115.0	69	73
117.5	66	68
120.0	63	64
122.5	59	60
125.0	56	57
127.5	53	53
130.0	50	51
132.5	48	48
135.0	46	46
137.5	45	45
140.0	36	36
142.5	28	28
145.0	19	19
147.5	12	12
150.0	8	8
152.5	3	3
155.0	0	0
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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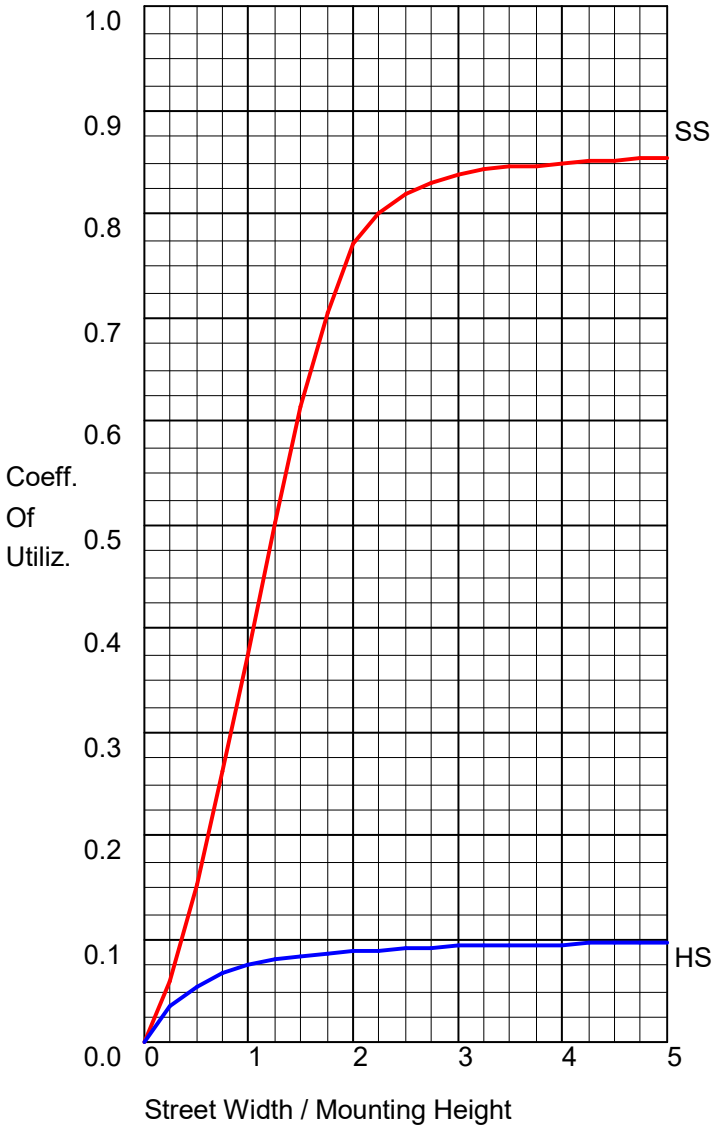
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	10229.5	86.2
Downward House Side	1209.7	10.2
Downward Total	11439.2	96.4
Upward Street Side	182.8	1.5
Upward House Side	242.0	2.0
Upward Total	424.8	3.6
Total Flux	11864.0	100.0

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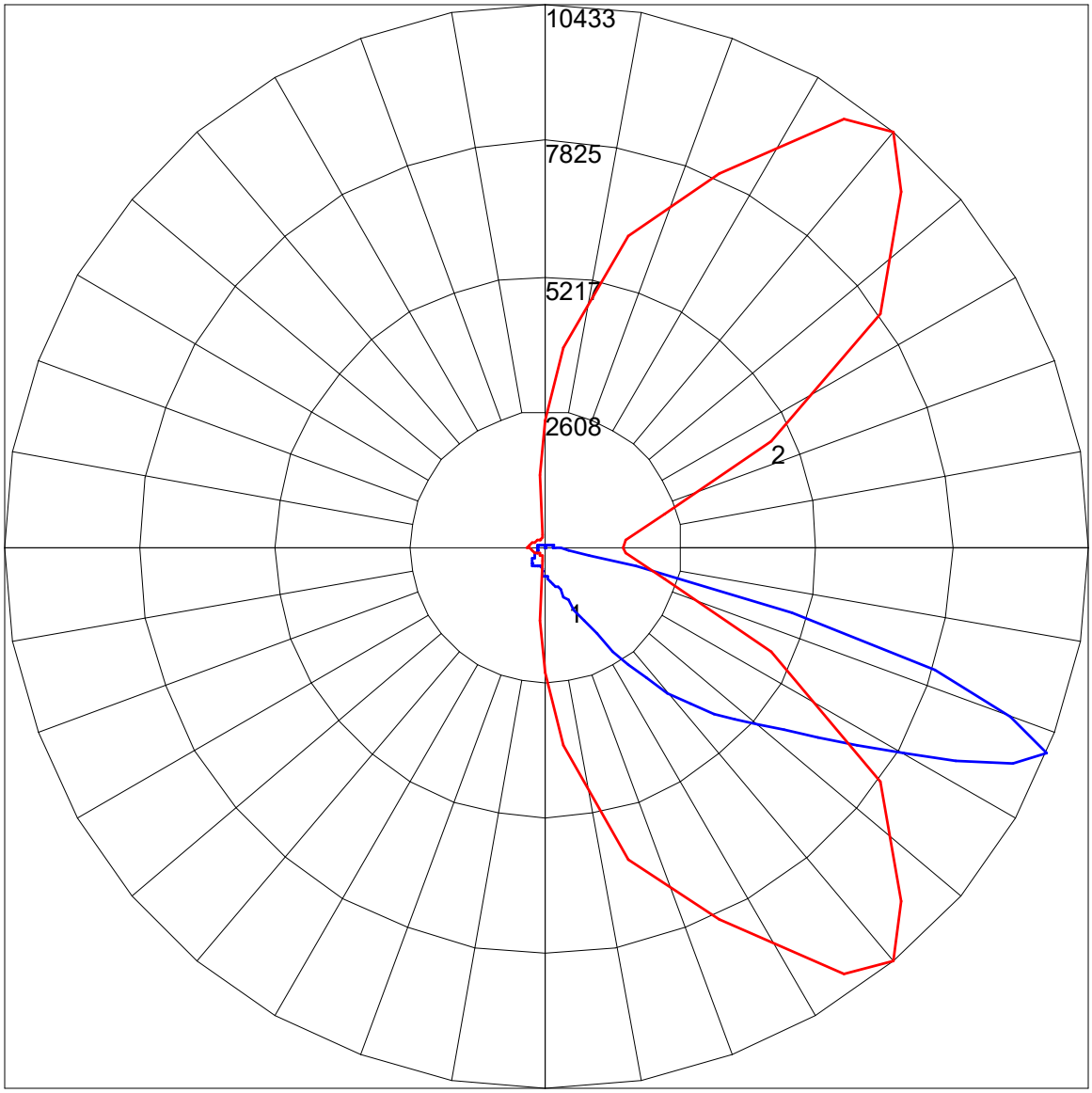
POLAR GRAPH



Maximum Candela = 10433 Located At Horizontal Angle = 50, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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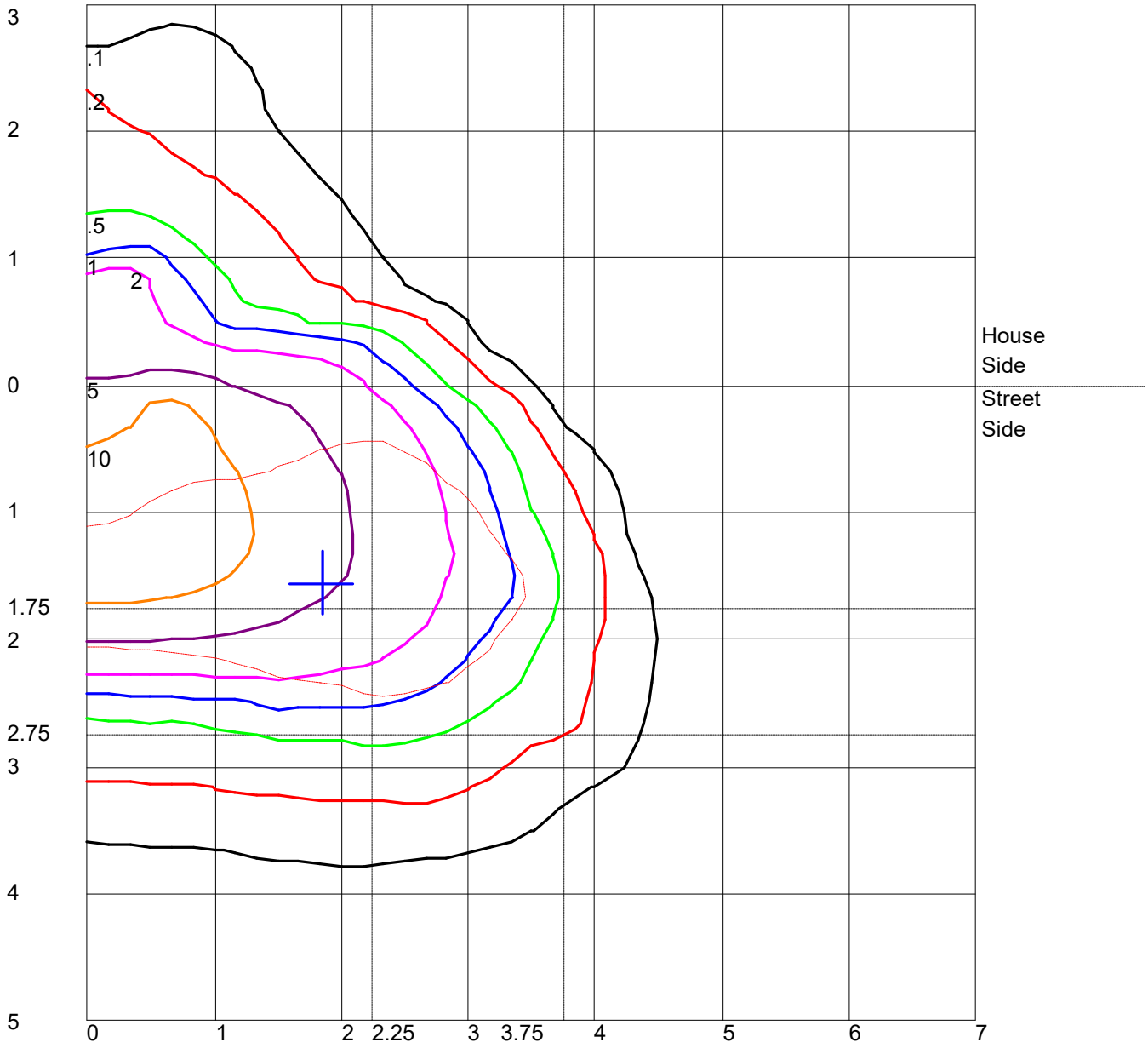
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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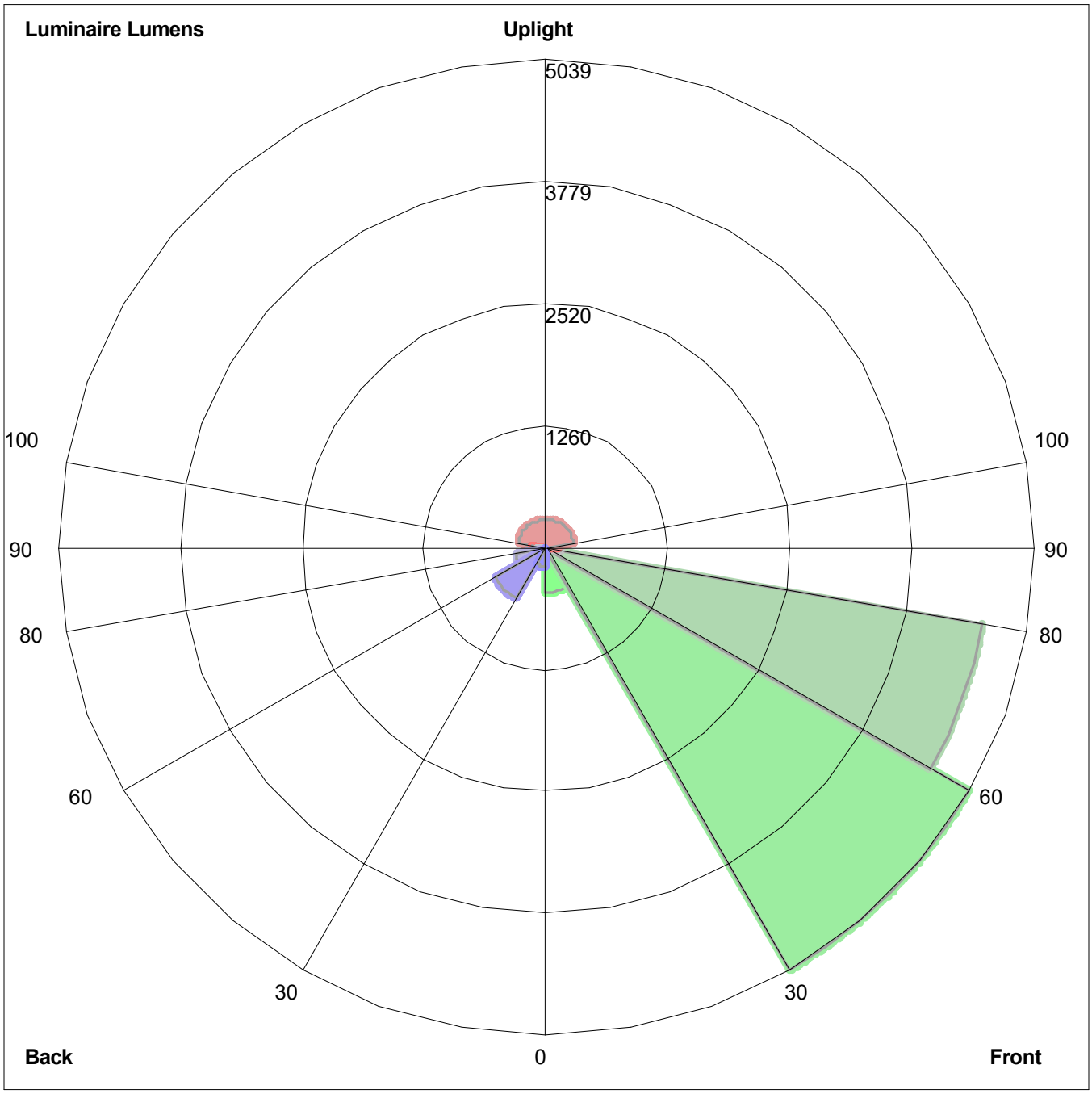
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=460.9, Medium=5039.2, High=4577.2, Very High=152.3
Back: Low=193.3, Medium=610.9, High=320.4, Very High=85.0
Uplight: Low=134.7, High=290.1

BUG Rating : B1-U3-G2

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