IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-3-30-70CRI-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-3-30-70CRI-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] 3000

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	11577
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	10181
Maximum Candela Angle	50H 67.5V
Maximum Candela (<90 Degrees Vertical)	10181
Maximum Candela Angle (<90 Degrees Vertical)	50H 67.5V
Maximum Candela At 90 Degrees Vertical	169 (1.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	870 (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)	449.7	N.A.	3.9
FM - Front-Medium (30-60)	4917.4	N.A.	42.5
FH - Front-High (60-80)	4466.5	N.A.	38.6
FVH - Front-Very High (80-90)	148.6	N.A.	1.3
BL - Back-Low (0-30)	188.7	N.A.	1.6
BM - Back-Medium (30-60)	596.2	N.A.	5.1
BH - Back-High (60-80)	312.6	N.A.	2.7
BVH - Back-Very High (80-90)	83.0	N.A.	0.7
UL - Uplight-Low (90-100)	131.4	N.A.	1.1
UH - Uplight-High (100-180)	283.2	N.A.	2.4
Total	11577.3	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	563	563	563	563	563	563	563	563	563	563
2.5	581	579	574	573	573	573	569	569	565	565
5.0	656	657	650	645	646	638	628	613	582	566
7.5	661	666	656	672	695	692	680	664	640	596
10.0	708	716	729	712	723	697	687	699	679	637
12.5	741	742	744	751	745	760	747	737	738	688
15.0	811	795	805	814	801	801	787	797	767	751
17.5	843	858	850	848	893	866	853	867	856	809
20.0	942	954	958	984	957	988	995	975	942	899
22.5	1109	1088	1099	1110	1120	1095	1095	1120	1097	1012
25.0	1214	1235	1296	1344	1303	1303	1286	1308	1274	1227
27.5	1527	1577	1589	1560	1624	1545	1559	1526	1544	1383
30.0	1888	1895	1953	1979	1913	1946	1896	1826	1758	1614
32.5	2468	2461	2476	2394	2379	2301	2334	2171	2057	1863
35.0	2851	2835	2849	2940	2830	2757	2711	2592	2321	2041
37.5	3154	3177	3203	3349	3409	3239	3122	2908	2514	2214
40.0	3497	3492	3556	3743	3851	3763	3562	3229	2741	2319
42.5	3872	3882	3958	4148	4295	4244	4011	3563	2988	2396
45.0	4378	4403	4512	4685	4758	4655	4445	3946	3145	2493
47.5	5000	4986	5147	5343	5330	5078	4826	4431	3252	2702
50.0	5627	5610	5804	6042	6013	5565	5224	4774	3523	2863
52.5	6305	6300	6453	6732	6751	6144	5673	5105	3905	3078
55.0	7025	7058	7176	7474	7445	6791	6231	5541	4455	3504
57.5	7770	7756	7908	8279	8266	7518	6931	6100	5047	3929
60.0	7656	7752	8092	8803	9033	8437	7761	6830	5667	4426
62.5	6605	6778	7327	8357	9467	9257	8700	7800	6470	5056
65.0	4263	4391	5390	7169	8724	10010	9691	8940	7317	5646
67.5	1428	1498	2306	4672	7674	9411	10181	9802	7748	6067
70.0	892	920	1126	1982	5684	8288	9274	10055	7619	5656
72.5	638	662	782	1217	2635	6683	7668	8403	7318	4582
75.0	465	486	588	854	1484	3629	4783	5179	5691	1944
77.5	315	329	430	657	988	1589	1731	2520	1683	722
80.0	211	229	306	494	682	851	833	870	656	438
82.5	159	176	242	397	453	484	446	423	389	330
85.0	121	136	193	324	334	289	261	238	239	259
87.5	91	106	154	255	218	172	160	160	170	192
90.0	64	74	112	150	114	119	125	131	142	156
92.5	39	44	63	77	93	110	116	122	133	145
95.0	45	46	65	78	93	110	116	121	134	137
97.5	52	48	66	80	93	109	114	118	131	115
100.0	55	50	67	81	93	108	113	113	120	97
102.5	58	51	67	81	93	105	109	107	105	75
105.0	59	54	66	82	93	103	105	98	87	63
107.5	60	56	65	82	92	97	96	85	70	58
110.0	60	58	64	82	90	89	84	73	58	53
112.5	60	60	63	81	85	78	71	61	51	51
115.0	60	60	62	78	79	67	60	54	45	50
117.5	60	60	61	73	70	59	54	49	42	48
120.0	60	60	59	66	61	53	50	46	41	47
122.5	60	59	55	59	56	50	47	44	41	45
125.0	58	57	51	52	52	47	45	44	41	45
127.5	54	53	48	48	50	46	45	44	42	45
130.0	50	50	47	45	47	46	45	45	43	46

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CANDELA TABULATION - (Cont.)

132.5	48	47	45	43	45	46	45	45	44	47
135.0	47	46	45	42	44	44	44	42	44	48
137.5	46	46	45	42	40	39	38	38	41	46
140.0	44	44	41	37	34	32	32	34	37	41
142.5	38	38	36	31	26	24	25	26	30	36
145.0	32	31	29	24	18	17	18	19	22	28
147.5	24	23	19	15	12	11	11	12	15	19
150.0	15	15	13	12	7	6	6	8	11	12
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	563	563	563	563	563	563	563	563	563	563
2.5	566	565	565	564	559	561	555	556	555	551
5.0	570	574	568	563	557	549	538	516	493	481
7.5	573	574	570	565	547	503	465	445	432	416
10.0	590	597	587	565	504	461	425	402	379	365
12.5	613	616	610	564	472	429	390	363	352	343
15.0	660	642	641	555	465	411	371	352	328	318
17.5	705	674	663	548	456	397	361	330	317	317
20.0	784	739	711	559	452	395	348	334	318	311
22.5	888	806	774	567	453	392	354	333	325	330
25.0	1035	919	844	593	460	398	360	340	333	334
27.5	1157	1060	908	620	473	409	371	352	350	368
30.0	1376	1138	1008	642	480	421	384	366	375	418
32.5	1508	1239	1067	682	490	428	390	387	436	517
35.0	1615	1320	1090	683	488	429	397	416	513	659
37.5	1714	1376	1112	676	486	425	401	441	623	794
40.0	1785	1436	1174	664	475	415	407	463	695	760
42.5	1879	1536	1182	652	451	406	406	465	686	548
45.0	1944	1564	1228	649	412	388	385	426	588	405
47.5	2017	1631	1313	631	353	350	343	379	469	326
50.0	2178	1771	1337	612	303	301	300	327	366	290
52.5	2328	1925	1426	604	264	258	257	275	297	271
55.0	2692	2176	1567	584	246	235	229	240	251	256
57.5	3119	2488	1723	549	235	219	213	217	224	242
60.0	3527	2737	1916	498	219	209	203	204	205	229
62.5	3829	2907	2094	413	206	202	194	193	193	219
65.0	3924	2873	1950	330	199	193	187	182	186	235
67.5	3740	2360	1370	254	194	186	181	185	216	290
70.0	3032	1556	771	205	185	180	185	208	274	366
72.5	1691	793	297	188	179	175	196	242	269	238
75.0	565	327	241	180	172	179	181	194	154	171
77.5	361	245	193	176	170	180	166	153	143	148

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CANDELA TABULATION - (Cont.)

80.0	281	214	170	173	165	170	163	151	142	142
82.5	235	179	162	173	162	153	159	151	143	143
85.0	205	142	151	167	158	149	161	153	146	144
87.5	162	123	144	167	156	149	163	156	149	142
90.0	128	108	151	169	159	150	165	157	150	138
92.5	114	104	148	169	159	147	162	158	153	143
95.0	108	127	140	165	155	142	156	154	150	140
97.5	97	136	134	152	145	131	147	145	144	132
100.0	99	128	128	134	135	121	139	139	139	125
102.5	98	115	117	118	125	115	132	133	134	116
105.0	89	103	107	105	112	109	125	128	129	105
107.5	80	90	94	94	101	104	118	123	123	94
110.0	72	80	84	86	91	97	111	117	116	84
112.5	65	71	76	81	84	92	105	112	108	75
115.0	60	66	70	76	80	89	100	107	100	67
117.5	57	61	65	73	77	85	95	100	90	60
120.0	54	58	61	69	74	84	91	93	81	57
122.5	51	55	59	66	73	81	87	86	71	54
125.0	50	54	57	64	71	79	84	80	61	51
127.5	50	52	56	63	70	77	79	72	55	49
130.0	50	52	56	62	68	74	74	64	50	47
132.5	51	53	56	62	66	68	67	58	46	45
135.0	52	54	57	61	62	60	57	50	44	45
137.5	51	53	55	58	57	52	44	38	38	41
140.0	47	50	51	51	48	41	32	28	30	34
142.5	40	42	43	42	37	31	22	19	22	25
145.0	33	34	35	32	27	20	14	12	14	17
147.5	23	24	24	22	17	12	9	9	10	11
150.0	14	14	14	14	12	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	563	563
2.5	550	550
5.0	480	477
7.5	412	410
10.0	359	358
12.5	337	337
15.0	311	308
17.5	310	309
20.0	307	304
22.5	323	321
25.0	336	334

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CANDELA TABULATION - (Cont.)

27.5	364	363
30.0	427	417
32.5	504	488
35.0	634	609
37.5	696	656
40.0	544	507
42.5	364	349
45.0	302	291
47.5	271	263
50.0	253	246
52.5	239	235
55.0	228	228
57.5	220	225
60.0	215	226
62.5	212	228
65.0	255	277
67.5	327	335
70.0	211	189
72.5	183	167
75.0	158	132
77.5	124	90
80.0	112	75
82.5	205	206
85.0	146	105
87.5	100	69
90.0	82	50
92.5	86	64
95.0	86	76
97.5	84	84
100.0	82	90
102.5	81	92
105.0	78	91
107.5	76	86
110.0	73	82
112.5	70	76
115.0	67	71
117.5	64	66
120.0	61	62
122.5	58	59
125.0	55	56
127.5	52	52
130.0	49	50
132.5	47	47
135.0	45	45
137.5	44	44
140.0	36	36
142.5	27	27
145.0	18	18
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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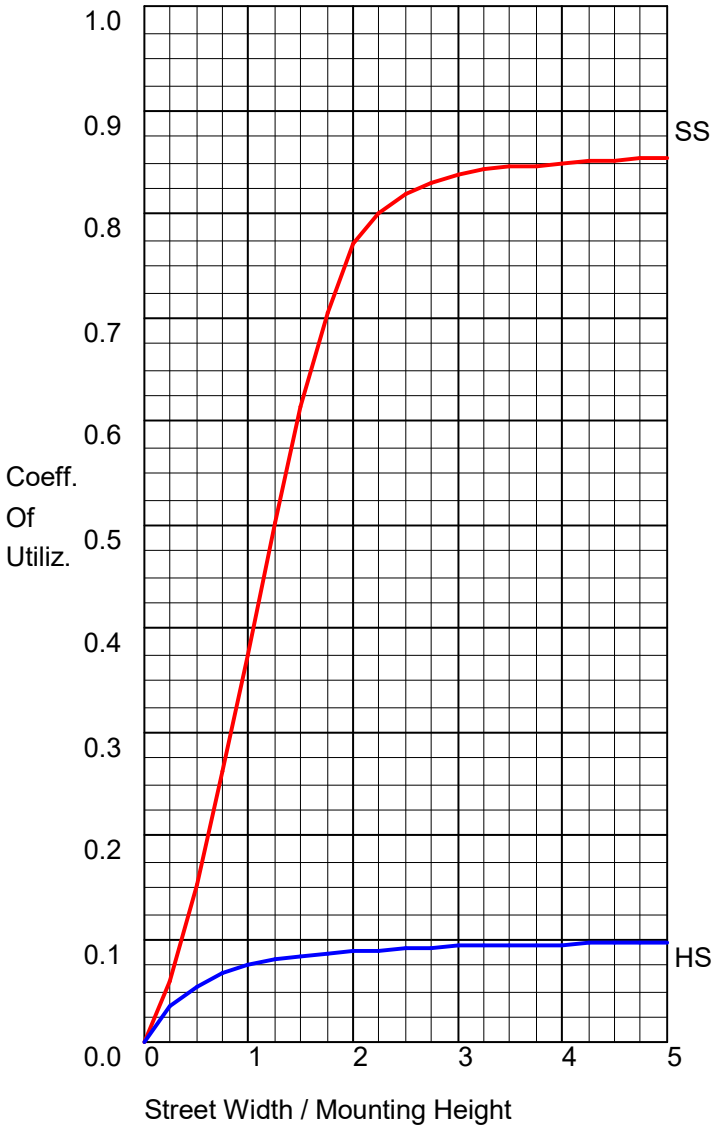
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	9982.1	86.2
Downward House Side	1180.4	10.2
Downward Total	11162.5	96.4
Upward Street Side	178.5	1.5
Upward House Side	236.1	2.0
Upward Total	414.6	3.6
Total Flux	11577.1	100.0

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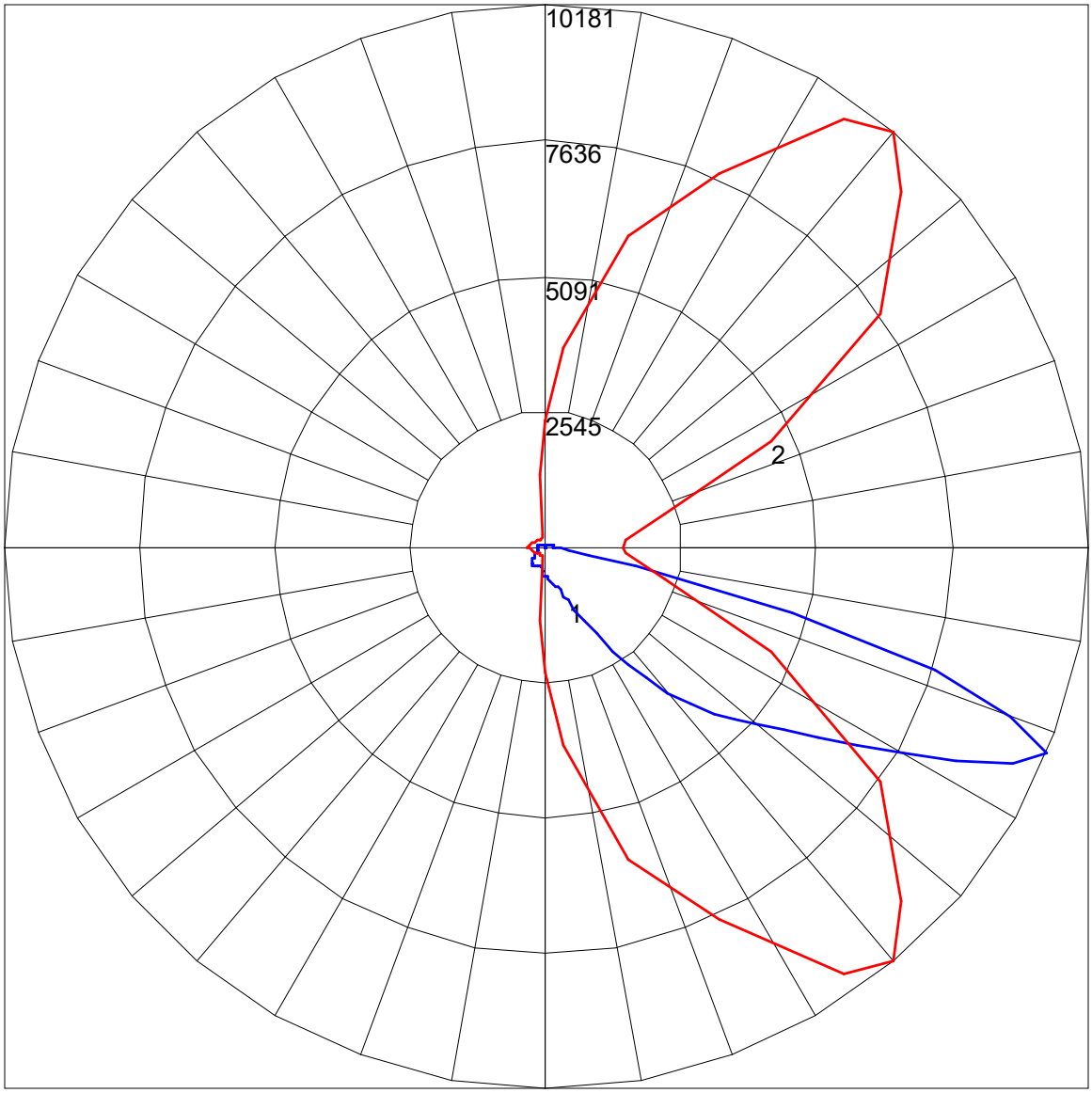
POLAR GRAPH



Maximum Candela = 10181 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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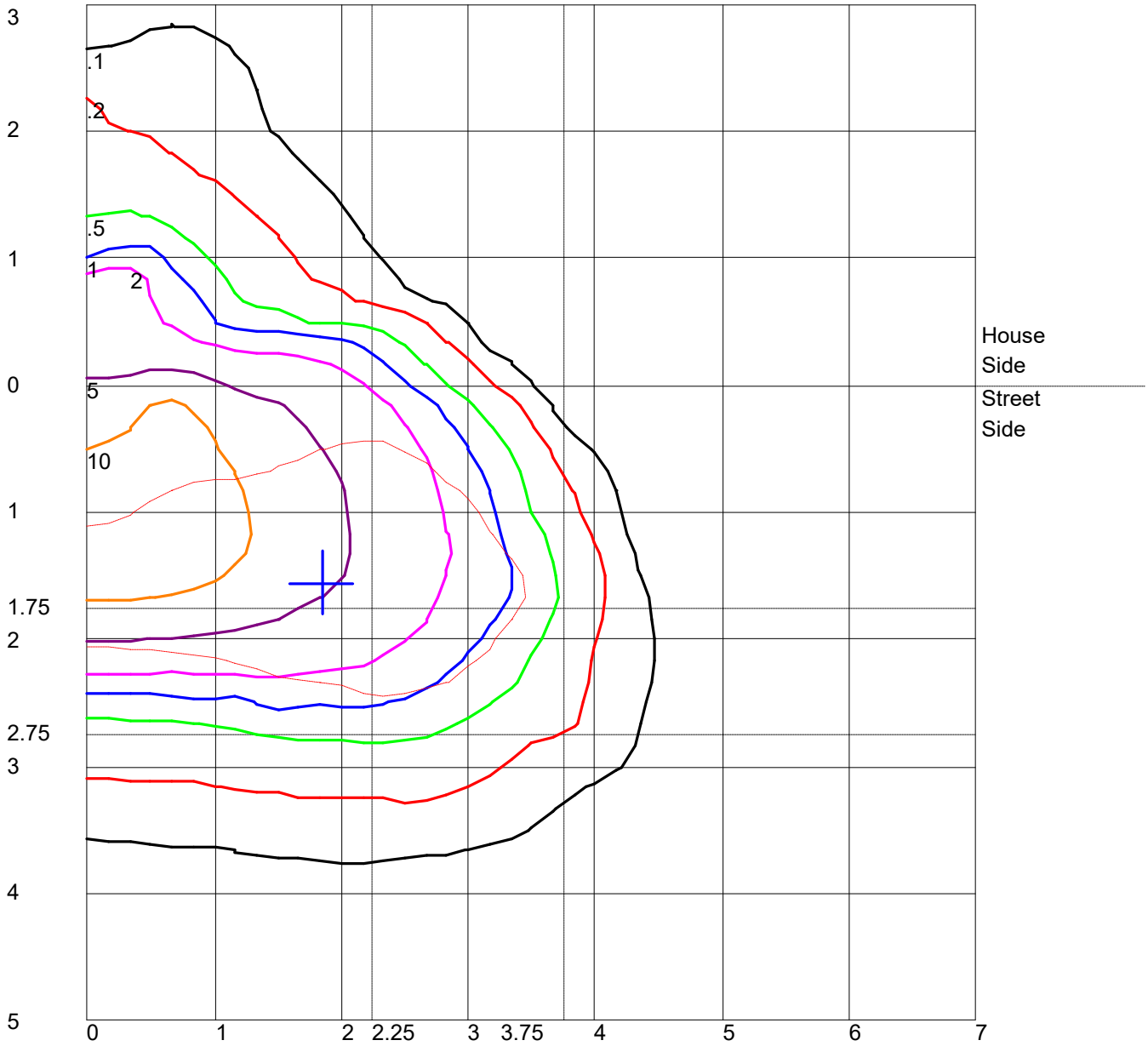
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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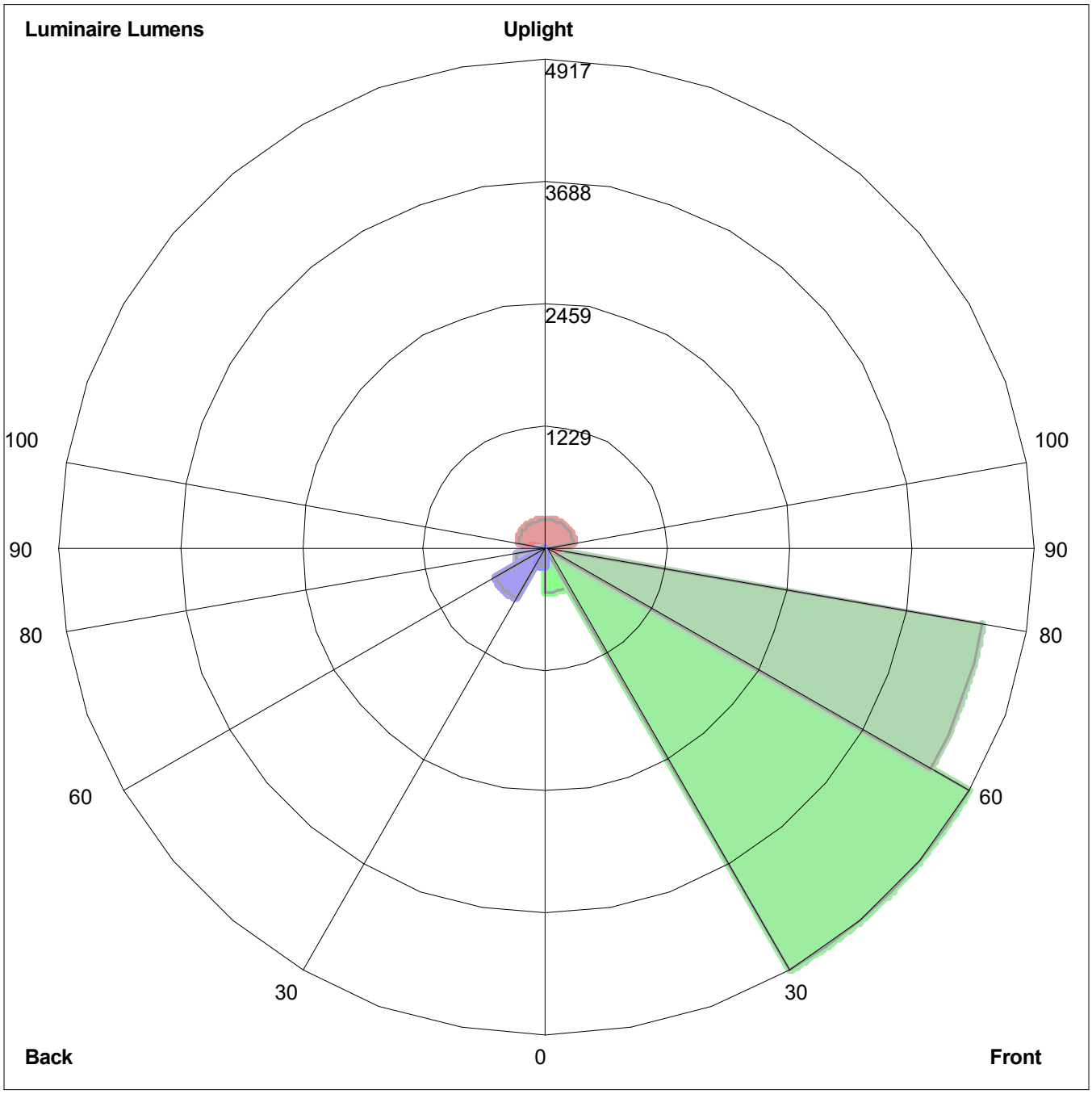
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=449.7, Medium=4917.4, High=4466.5, Very High=148.6
Back: Low=188.7, Medium=596.2, High=312.6, Very High=83.0
Uplight: Low=131.4, High=283.2

BUG Rating : B1-U3-G2

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