



## IES ROAD REPORT

PHOTOMETRIC FILENAME : LXM4-PT-5W-LED-10L-50-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11751

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/20

[TEST DATE] 04/24/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] LXM4-PT-5W-LED-10L-50-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

### CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6473
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	84
Total Luminaire Watts	77
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	4680
Maximum Candela Angle	47.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	4680
Maximum Candela Angle (<90 Degrees Vertical)	47.5H 67.5V
Maximum Candela At 90 Degrees Vertical	8 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	210 (3.2% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	362.9	N.A.	5.6
FM - Front-Medium (30-60)	2925.7	N.A.	45.2
FH - Front-High (60-80)	1903.2	N.A.	29.4
FVH - Front-Very High (80-90)	23.3	N.A.	0.4
BL - Back-Low (0-30)	206.2	N.A.	3.2
BM - Back-Medium (30-60)	764.5	N.A.	11.8
BH - Back-High (60-80)	270.9	N.A.	4.2
BVH - Back-Very High (80-90)	4.4	N.A.	0.1
UL - Uplight-Low (90-100)	3.1	N.A.	0.0
UH - Uplight-High (100-180)	9.0	N.A.	0.1
Total	6473.2	N.A.	100.0
BUG Rating	B1-U1-G2		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<b>0.0</b>	<b>5.0</b>	<b>15.0</b>	<b>25.0</b>	<b>35.0</b>	<b>45.0</b>	<b>47.5</b>	<b>55.0</b>	<b>65.0</b>	<b>75.0</b>
<b>0.0</b>	382	382	382	382	382	382	382	382	382	382
<b>2.5</b>	394	390	395	396	396	393	392	393	386	383
<b>5.0</b>	395	398	401	399	410	388	385	386	380	372
<b>7.5</b>	406	415	429	397	403	389	394	392	407	405
<b>10.0</b>	448	448	466	421	440	442	456	445	428	433
<b>12.5</b>	512	539	505	496	517	503	512	503	484	479
<b>15.0</b>	575	615	591	614	625	596	600	594	570	551
<b>17.5</b>	658	681	673	700	717	733	734	691	674	657
<b>20.0</b>	801	804	805	820	839	851	850	837	780	749
<b>22.5</b>	901	903	937	974	970	995	1017	1006	914	875
<b>25.0</b>	1034	1004	1068	1124	1167	1163	1169	1178	1083	987
<b>27.5</b>	1194	1245	1299	1276	1355	1375	1382	1347	1245	1145
<b>30.0</b>	1411	1378	1408	1488	1504	1601	1620	1559	1440	1308
<b>32.5</b>	1688	1691	1631	1639	1756	1796	1798	1807	1677	1488
<b>35.0</b>	1942	1882	1855	1890	1942	2045	2004	2044	1869	1714
<b>37.5</b>	2188	2173	2092	2085	2153	2248	2198	2250	2081	1832
<b>40.0</b>	2336	2367	2316	2314	2377	2415	2416	2426	2282	2027
<b>42.5</b>	2462	2496	2473	2472	2548	2554	2553	2586	2420	2159
<b>45.0</b>	2594	2617	2586	2630	2686	2722	2725	2697	2535	2266
<b>47.5</b>	2695	2727	2728	2742	2800	2830	2833	2807	2645	2386
<b>50.0</b>	2792	2828	2847	2822	2892	2917	2935	2919	2768	2554
<b>52.5</b>	2896	2926	2947	2917	3009	3041	3057	3059	2909	2679
<b>55.0</b>	2986	3022	3073	3067	3141	3241	3274	3266	3102	2862
<b>57.5</b>	3109	3168	3229	3242	3380	3537	3590	3555	3247	2953
<b>60.0</b>	3099	3135	3301	3359	3607	3855	3864	3773	3318	2981
<b>62.5</b>	2820	2868	3109	3322	3747	4115	4112	3955	3351	2958
<b>65.0</b>	2276	2294	2611	2985	3737	4394	4371	4102	3314	2897
<b>67.5</b>	1300	1318	1654	2264	3323	4622	4680	4278	3342	2746
<b>70.0</b>	280	272	419	1106	2354	4138	4365	4026	2840	2061
<b>72.5</b>	119	123	150	253	923	2680	2938	2796	1835	1237
<b>75.0</b>	71	75	84	112	227	927	1232	1355	909	559
<b>77.5</b>	37	38	44	57	93	183	241	446	420	262
<b>80.0</b>	27	27	28	33	45	69	79	128	210	143
<b>82.5</b>	24	24	25	28	33	40	42	60	108	115
<b>85.0</b>	19	19	20	23	28	34	35	42	59	93
<b>87.5</b>	14	13	14	15	18	22	24	29	43	54
<b>90.0</b>	6	6	6	5	6	6	5	4	5	6
<b>92.5</b>	2	2	1	2	2	2	2	2	2	2
<b>95.0</b>	1	1	1	1	1	2	2	2	2	2
<b>97.5</b>	1	1	1	1	1	1	1	2	2	2
<b>100.0</b>	1	1	1	1	1	1	1	1	1	2
<b>102.5</b>	1	1	1	1	1	1	1	1	1	2
<b>105.0</b>	1	1	1	1	1	1	1	1	1	2
<b>107.5</b>	1	1	1	1	1	1	1	1	1	2
<b>110.0</b>	1	1	1	1	1	1	1	1	1	2
<b>112.5</b>	2	2	1	1	1	1	1	1	2	2
<b>115.0</b>	2	2	2	2	2	2	2	2	2	2
<b>117.5</b>	2	2	2	2	2	2	2	2	2	2
<b>120.0</b>	2	2	2	2	2	2	2	2	2	2
<b>122.5</b>	3	3	2	2	2	2	2	2	2	2
<b>125.0</b>	3	3	3	2	2	2	2	2	2	3
<b>127.5</b>	3	3	3	2	2	2	2	2	2	3
<b>130.0</b>	3	3	3	3	2	2	2	2	2	3

**IES ROAD REPORT**  
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**CANDELA TABULATION - (Cont.)**

132.5	3	3	3	3	2	2	2	2	2	3
135.0	3	3	3	2	2	2	2	2	2	2
137.5	2	2	1	1	1	1	1	1	2	2
140.0	0	0	0	0	1	1	1	1	1	1
142.5	0	0	0	0	1	1	1	1	1	1
145.0	0	0	0	0	0	1	0	1	1	1
147.5	0	0	0	0	1	1	1	1	1	1
150.0	0	0	0	0	1	1	0	1	1	1
152.5	0	0	0	0	1	0	1	1	1	1
155.0	0	0	0	0	0	0	0	1	1	1
157.5	0	0	0	0	0	0	0	1	1	1
160.0	0	0	0	0	0	0	0	0	1	1
162.5	0	0	0	0	0	0	0	0	0	1
165.0	0	0	0	0	0	0	0	0	0	1
167.5	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>85.0</u>	<u>90.0</u>	<u>95.0</u>	<u>105.0</u>	<u>115.0</u>	<u>125.0</u>	<u>135.0</u>	<u>145.0</u>	<u>155.0</u>	<u>165.0</u>
0.0	382	382	382	382	382	382	382	382	382	382
2.5	381	381	382	379	376	374	374	377	375	371
5.0	368	368	358	355	360	356	346	351	343	337
7.5	382	383	377	378	358	335	318	321	311	316
10.0	404	394	389	399	347	338	323	309	299	305
12.5	450	443	431	403	363	344	330	335	333	342
15.0	502	484	467	423	380	372	377	382	376	368
17.5	579	552	522	463	411	420	435	420	401	397
20.0	672	646	601	517	469	482	474	460	445	426
22.5	799	732	686	593	548	557	529	509	468	446
25.0	890	838	775	656	657	635	596	542	498	425
27.5	1010	940	884	757	777	716	648	570	460	351
30.0	1168	1058	998	885	914	832	740	538	347	241
32.5	1275	1183	1103	1032	1046	956	747	407	231	165
35.0	1455	1324	1232	1202	1193	1085	669	274	155	124
37.5	1603	1479	1377	1378	1336	1126	482	181	118	103
40.0	1715	1597	1488	1557	1493	1018	301	131	98	88
42.5	1832	1712	1601	1687	1608	799	189	107	84	75
45.0	1971	1847	1741	1839	1654	526	137	88	71	63
47.5	2091	1974	1870	2009	1560	320	107	76	60	50
50.0	2234	2130	2030	2191	1313	207	85	63	48	39
52.5	2390	2287	2199	2371	961	147	70	50	37	27
55.0	2548	2446	2419	2539	598	104	58	39	27	18
57.5	2658	2525	2586	2540	402	75	46	28	18	10
60.0	2689	2549	2631	2234	331	59	35	18	10	4
62.5	2657	2517	2628	1729	313	55	25	10	5	2
65.0	2567	2417	2556	1142	314	68	17	5	4	2
67.5	2336	2219	2371	660	311	99	12	4	4	2
70.0	1673	1596	1714	335	246	129	13	4	4	2
72.5	960	911	956	117	109	127	10	5	3	2
75.0	417	388	403	64	44	51	8	4	1	1
77.5	191	172	165	39	21	25	6	3	0	0

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**CANDELA TABULATION - (Cont.)**

80.0	112	97	79	23	14	13	5	3	0	0
82.5	83	69	51	15	12	8	5	3	0	0
85.0	58	44	27	9	8	7	5	3	0	0
87.5	34	17	7	6	7	7	5	3	0	1
90.0	5	2	5	7	8	7	5	4	0	1
92.5	3	2	5	7	8	8	6	4	1	1
95.0	2	2	4	6	7	7	5	3	1	1
97.5	2	2	3	5	6	6	4	3	1	1
100.0	2	2	3	3	5	4	3	3	1	1
102.5	2	2	3	3	3	3	3	2	1	1
105.0	2	2	2	3	3	3	3	2	1	1
107.5	2	2	2	3	3	3	3	2	2	1
110.0	2	2	2	3	3	3	3	2	2	1
112.5	2	2	2	3	3	3	3	2	2	1
115.0	2	2	3	3	3	3	3	2	2	1
117.5	2	3	3	3	3	3	3	2	2	1
120.0	2	3	3	3	3	3	3	2	2	2
122.5	2	3	3	3	3	3	3	3	2	2
125.0	3	3	3	3	3	3	3	3	2	2
127.5	3	3	3	3	3	3	3	3	3	2
130.0	3	3	3	3	3	3	3	3	3	2
132.5	3	3	3	3	3	3	3	3	3	2
135.0	3	3	3	3	3	3	3	3	2	2
137.5	2	2	2	2	3	3	2	2	2	1
140.0	2	2	2	2	2	2	2	2	1	1
142.5	1	2	2	2	2	2	2	2	1	1
145.0	1	2	2	2	2	2	2	1	1	1
147.5	1	2	2	2	2	2	2	1	1	1
150.0	1	2	2	2	2	2	2	1	1	0
152.5	1	2	2	2	2	2	2	1	1	0
155.0	1	1	2	2	2	2	2	1	1	0
157.5	1	1	1	2	2	2	1	1	1	0
160.0	1	1	1	1	1	2	1	1	0	0
162.5	1	1	1	1	1	1	1	1	0	0
165.0	1	1	1	1	1	1	1	1	0	0
167.5	1	1	1	1	1	1	1	1	0	0
170.0	1	1	1	1	1	1	1	0	0	0
172.5	1	1	1	1	1	1	1	0	0	0
175.0	1	1	1	1	1	1	1	0	0	0
177.5	1	1	1	1	1	1	1	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

**Vert. Horizontal Angles**  
**Angles**

	<u>175.0</u>	<u>180.0</u>
0.0	382	382
2.5	363	363
5.0	330	326
7.5	309	303
10.0	311	298
12.5	347	334
15.0	376	361
17.5	400	379
20.0	426	404
22.5	424	408
25.0	385	380

IES ROAD REPORT  
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CANDELA TABULATION - (Cont.)

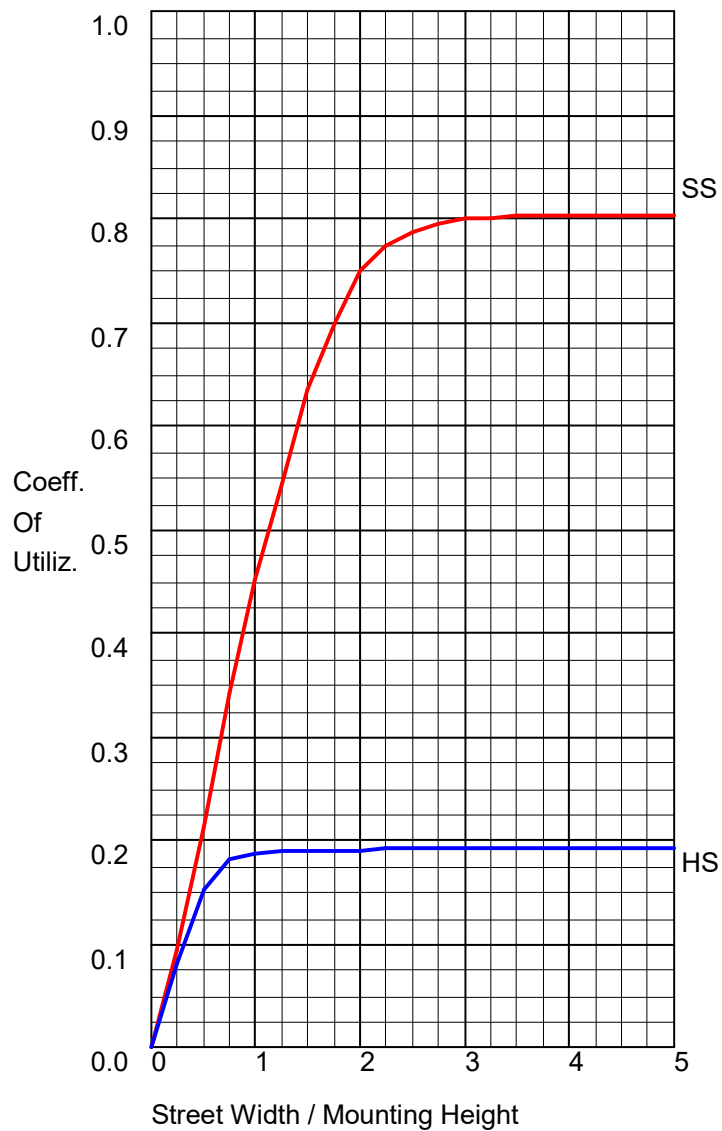
27.5	299	292
30.0	205	192
32.5	143	140
35.0	114	114
37.5	98	98
40.0	84	84
42.5	71	71
45.0	59	59
47.5	47	46
50.0	35	35
52.5	23	23
55.0	15	14
57.5	7	6
60.0	2	2
62.5	1	0
65.0	0	0
67.5	1	1
70.0	2	2
72.5	0	0
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	0	0
105.0	0	0
107.5	1	1
110.0	1	1
112.5	1	1
115.0	1	1
117.5	1	1
120.0	1	2
122.5	2	2
125.0	2	2
127.5	2	2
130.0	2	2
132.5	2	2
135.0	2	2
137.5	1	1
140.0	0	0
142.5	0	0
145.0	0	0
147.5	0	0
150.0	0	0
152.5	0	0
155.0	0	0
157.5	0	0
160.0	0	0
162.5	0	0
165.0	0	0

**IES ROAD REPORT**  
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**CANDELA TABULATION - (Cont.)**

<b>167.5</b>	0	0
<b>170.0</b>	0	0
<b>172.5</b>	0	0
<b>175.0</b>	0	0
<b>177.5</b>	0	0
<b>180.0</b>	0	0

COEFFICIENTS OF UTILIZATION

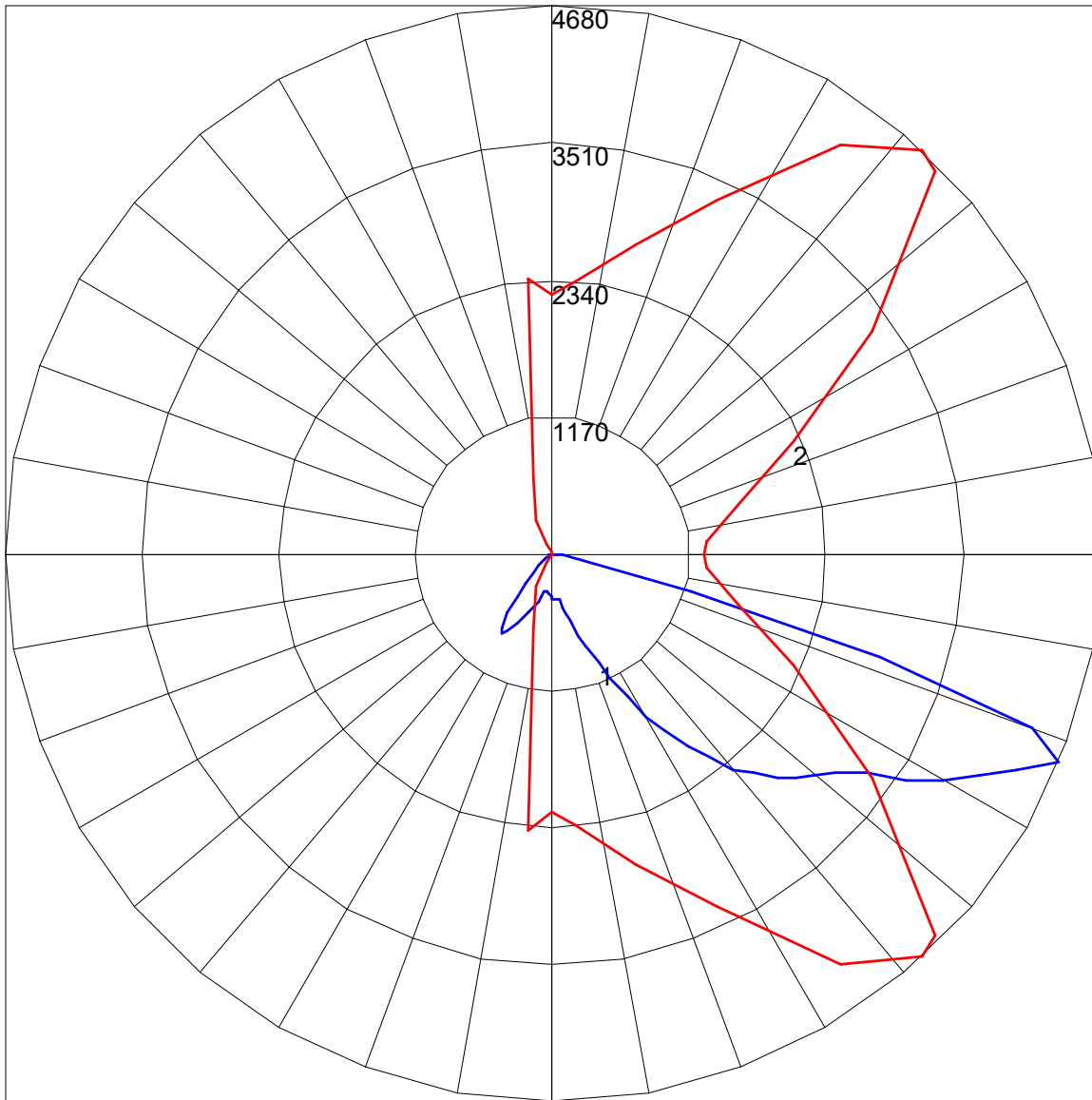


FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	5215.1	80.6
Downward House Side	1246.0	19.2
Downward Total	6461.1	99.8
Upward Street Side	4.8	0.1
Upward House Side	7.3	0.1
Upward Total	12.1	0.2
Total Flux	6473.2	100.0

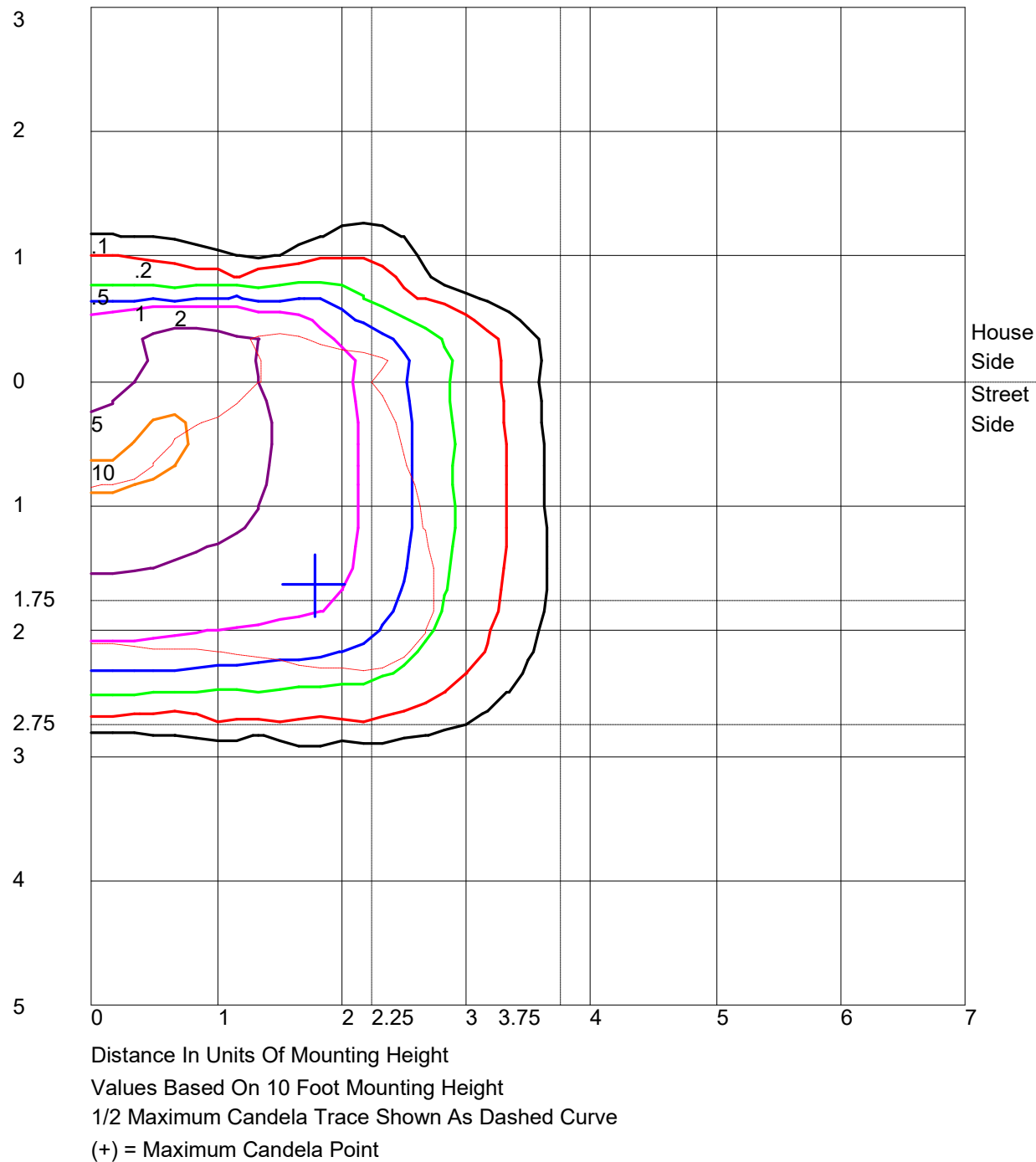


POLAR GRAPH

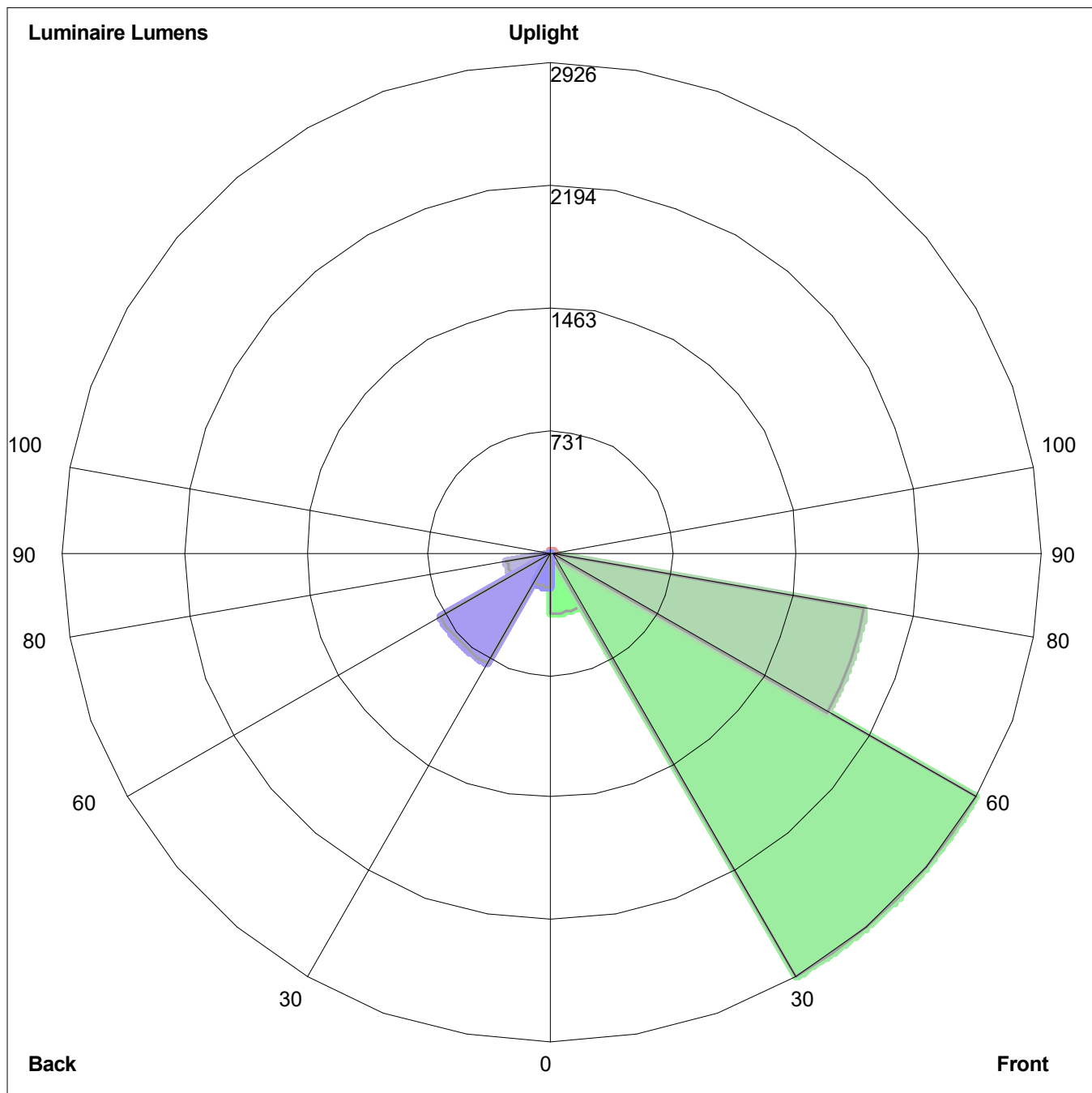


Maximum Candela = 4680 Located At Horizontal Angle = 47.5, Vertical Angle = 67.5  
# 1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=362.9, Medium=2925.7, High=1903.2, Very High=23.3  
Back: Low=206.2, Medium=764.5, High=270.9, Very High=4.4  
Uplight: Low=3.1, High=9.0

BUG Rating : B1-U1-G2