



## IES ROAD REPORT

PHOTOMETRIC FILENAME : LXM4-PT-3-LED-10L-40-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11759

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/20

[TEST DATE] 04/26/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] LXM4-PT-3-LED-10L-40-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 II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8517
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	77
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	9303
Maximum Candela Angle	57.5H 60V
Maximum Candela (<90 Degrees Vertical)	9303
Maximum Candela Angle (<90 Degrees Vertical)	57.5H 60V
Maximum Candela At 90 Degrees Vertical	22 (0.3% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	397 (4.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	316.7	N.A.	3.7
FM - Front-Medium (30-60)	5048.0	N.A.	59.3
FH - Front-High (60-80)	2218.4	N.A.	26.0
FVH - Front-Very High (80-90)	52.8	N.A.	0.6
BL - Back-Low (0-30)	153.3	N.A.	1.8
BM - Back-Medium (30-60)	577.6	N.A.	6.8
BH - Back-High (60-80)	114.2	N.A.	1.3
BVH - Back-Very High (80-90)	12.5	N.A.	0.1
UL - Uplight-Low (90-100)	5.8	N.A.	0.1
UH - Uplight-High (100-180)	17.9	N.A.	0.2
Total	8517.2	N.A.	100.0
BUG Rating	B1-U2-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>55.0</b>	<b>57.5</b>	<b>65.0</b>	<b>75.0</b>
<b>0.0</b>	413	413	413	413	413	413	413	413	413	413
<b>2.5</b>	407	405	404	402	410	409	408	407	409	405
<b>5.0</b>	415	404	409	409	406	397	391	391	389	388
<b>7.5</b>	399	395	402	400	393	389	396	395	396	397
<b>10.0</b>	395	395	406	385	403	402	420	418	418	415
<b>12.5</b>	433	432	424	419	429	425	440	441	446	438
<b>15.0</b>	464	458	460	467	484	479	479	478	482	486
<b>17.5</b>	490	500	491	508	531	553	528	526	525	531
<b>20.0</b>	569	585	580	575	594	620	623	626	599	596
<b>22.5</b>	658	655	680	687	717	740	776	775	739	712
<b>25.0</b>	830	817	836	868	906	933	995	997	966	882
<b>27.5</b>	1152	1156	1166	1137	1179	1241	1296	1289	1313	1162
<b>30.0</b>	1515	1501	1484	1518	1549	1648	1697	1709	1699	1512
<b>32.5</b>	1957	1960	1873	1846	1947	2050	2161	2166	2176	1868
<b>35.0</b>	2372	2355	2305	2356	2327	2542	2632	2657	2581	2231
<b>37.5</b>	2968	2957	2809	2783	2834	2932	3060	3052	2950	2458
<b>40.0</b>	3499	3502	3424	3318	3288	3377	3465	3417	3241	2719
<b>42.5</b>	4121	4176	4058	3879	3792	3820	3766	3760	3468	2947
<b>45.0</b>	4806	4873	4811	4563	4377	4305	4109	4080	3724	3220
<b>47.5</b>	5486	5540	5510	5313	5117	4874	4523	4491	4096	3654
<b>50.0</b>	5993	6053	6208	6106	5834	5545	5175	5102	4673	4205
<b>52.5</b>	5960	6081	6478	6760	6802	6421	6067	6000	5536	4840
<b>55.0</b>	5567	5628	6122	6823	7327	7387	7477	7444	6717	5346
<b>57.5</b>	4491	4604	5304	6308	7406	8100	8795	8811	7567	5504
<b>60.0</b>	2888	3030	3847	5190	6878	8244	9271	9303	7741	5257
<b>62.5</b>	1534	1586	2223	3588	5661	7591	8922	8945	7432	4724
<b>65.0</b>	823	850	1136	2053	3942	6241	8006	8064	6521	3727
<b>67.5</b>	478	485	625	1094	2370	4226	6244	6391	5000	2401
<b>70.0</b>	316	334	422	722	1317	2391	4208	4298	3293	1360
<b>72.5</b>	233	247	306	533	874	1199	2243	2432	1784	594
<b>75.0</b>	159	169	221	417	672	687	1012	1122	754	290
<b>77.5</b>	113	119	165	344	529	454	451	496	389	182
<b>80.0</b>	87	92	128	270	397	297	235	248	237	136
<b>82.5</b>	68	71	102	215	265	178	142	140	156	107
<b>85.0</b>	50	51	76	156	161	88	87	86	89	71
<b>87.5</b>	30	32	53	89	59	33	32	31	33	34
<b>90.0</b>	7	7	12	22	12	7	6	6	5	5
<b>92.5</b>	2	2	4	5	4	4	5	4	4	4
<b>95.0</b>	2	1	2	3	4	4	4	4	4	3
<b>97.5</b>	1	1	2	3	3	4	4	3	3	3
<b>100.0</b>	1	1	2	3	3	4	3	3	3	3
<b>102.5</b>	2	1	2	3	4	4	3	3	3	3
<b>105.0</b>	2	1	2	3	4	4	3	3	3	3
<b>107.5</b>	2	2	2	3	4	4	3	3	3	3
<b>110.0</b>	2	2	2	3	4	4	3	3	3	3
<b>112.5</b>	2	2	3	4	4	4	3	3	3	3
<b>115.0</b>	2	2	3	4	4	4	4	3	3	3
<b>117.5</b>	3	3	3	4	4	4	4	3	3	4
<b>120.0</b>	3	3	3	4	4	4	4	4	3	4
<b>122.5</b>	3	3	4	4	4	4	4	4	4	4
<b>125.0</b>	4	4	4	4	4	4	4	4	4	4
<b>127.5</b>	4	4	4	4	4	5	4	4	4	4
<b>130.0</b>	4	4	4	4	5	5	4	4	4	4

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**CANDELA TABULATION - (Cont.)**

132.5	4	4	4	4	4	5	4	4	4	4
135.0	3	3	3	4	4	4	4	4	4	4
137.5	2	1	2	3	3	3	3	3	3	3
140.0	0	0	2	2	2	3	2	2	2	3
142.5	0	0	2	2	2	2	2	2	2	2
145.0	0	0	2	2	2	2	2	2	2	2
147.5	0	0	1	2	2	2	2	2	2	2
150.0	0	0	1	2	2	2	2	2	2	2
152.5	0	0	1	2	2	2	2	2	2	2
155.0	0	0	1	2	2	2	2	2	2	2
157.5	0	0	1	2	2	2	2	2	2	2
160.0	0	0	1	2	2	2	2	2	2	2
162.5	0	0	1	2	2	2	2	2	2	2
165.0	0	0	1	2	2	2	2	2	2	2
167.5	0	0	1	2	2	2	2	2	2	2
170.0	0	0	1	2	2	2	2	2	2	2
172.5	0	0	1	2	2	2	2	2	2	2
175.0	0	0	1	2	2	2	2	2	2	2
177.5	0	0	1	2	2	2	2	2	2	2
180.0	1	1	1	1	1	1	1	1	1	1

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	413	413	413	413	413	413	413	413	413	413
2.5	409	411	410	410	414	419	415	415	414	415
5.0	392	392	393	386	402	407	409	407	405	399
7.5	391	392	394	401	397	391	382	374	366	371
10.0	408	402	401	423	403	390	357	345	318	314
12.5	427	424	424	424	401	377	335	296	276	265
15.0	448	438	438	442	407	351	302	271	253	242
17.5	489	474	479	445	393	319	285	265	250	235
20.0	537	515	498	463	371	303	273	265	254	234
22.5	643	600	577	496	363	303	276	269	260	241
25.0	790	724	673	526	373	323	277	272	288	278
27.5	1009	892	807	560	413	348	281	285	346	356
30.0	1263	1097	943	587	434	364	298	309	425	449
32.5	1477	1268	1056	606	439	374	309	342	502	571
35.0	1693	1408	1144	614	428	377	318	349	588	712
37.5	1880	1550	1218	624	410	371	316	355	708	892
40.0	2069	1677	1298	631	392	356	309	345	827	897
42.5	2280	1820	1378	642	374	337	292	320	894	710
45.0	2595	2062	1500	660	355	312	267	293	725	528
47.5	3033	2354	1650	683	332	276	234	265	474	393
50.0	3485	2667	1840	696	302	226	190	226	269	301
52.5	3883	2929	1937	683	246	164	138	171	176	241
55.0	4065	2991	1899	623	192	123	104	117	123	195
57.5	4008	2824	1688	529	157	103	85	83	86	157
60.0	3719	2486	1327	410	134	92	73	63	63	127
62.5	3111	1936	909	297	115	80	61	49	48	105
65.0	2065	1272	561	204	95	67	49	39	36	86
67.5	1183	743	331	140	79	53	38	30	27	70
70.0	537	376	189	101	63	42	28	23	20	53
72.5	230	195	132	83	50	34	23	19	13	40
75.0	144	134	111	75	41	29	20	14	9	30
77.5	109	105	93	68	37	26	18	12	6	22

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**CANDELA TABULATION - (Cont.)**

80.0	97	88	77	60	33	24	16	10	5	17
82.5	72	66	64	50	29	22	16	9	4	14
85.0	43	41	47	36	25	21	15	9	4	12
87.5	22	19	24	23	20	18	14	8	4	10
90.0	5	4	8	13	16	16	12	7	3	6
92.5	4	3	6	11	14	13	10	6	2	2
95.0	4	2	6	10	12	12	9	6	2	2
97.5	3	3	4	8	10	10	8	5	2	2
100.0	3	3	4	6	8	8	6	5	3	2
102.5	3	3	4	5	7	7	6	5	3	2
105.0	3	3	4	5	6	6	6	5	3	2
107.5	3	3	4	5	6	6	6	5	3	2
110.0	3	4	4	5	6	6	6	5	4	2
112.5	3	4	4	5	6	6	6	5	4	2
115.0	4	4	4	5	6	6	6	5	4	3
117.5	4	4	4	5	6	6	6	5	4	3
120.0	4	4	5	5	6	6	6	5	4	3
122.5	4	4	5	5	6	6	6	5	4	3
125.0	4	5	5	6	6	6	6	6	4	4
127.5	4	5	5	5	6	6	6	6	5	4
130.0	4	5	5	6	6	6	6	6	5	4
132.5	4	5	5	5	6	6	6	6	4	4
135.0	4	4	5	5	6	6	6	5	4	3
137.5	4	4	4	4	5	5	5	5	4	3
140.0	3	3	4	4	4	4	4	4	3	2
142.5	3	3	3	4	4	4	4	4	3	2
145.0	3	3	3	4	4	4	4	4	2	2
147.5	3	3	3	4	4	4	4	3	2	2
150.0	3	3	3	3	4	4	4	3	2	1
152.5	3	3	3	3	4	4	4	3	2	1
155.0	2	3	3	3	3	4	3	3	2	1
157.5	2	3	3	3	3	3	3	2	2	1
160.0	2	2	2	3	3	3	3	2	1	0
162.5	2	2	2	2	3	2	2	2	1	0
165.0	2	2	2	2	2	2	2	2	1	0
167.5	2	2	2	2	2	2	2	2	1	0
170.0	2	2	2	2	2	2	2	2	1	0
172.5	2	2	2	2	2	2	2	2	1	0
175.0	2	2	2	2	2	2	2	2	1	0
177.5	2	2	2	2	2	2	2	1	1	0
180.0	1	1	1	1	1	1	1	1	1	1

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

	<u>175.0</u>	<u>180.0</u>
0.0	413	413
2.5	416	417
5.0	395	397
7.5	362	359
10.0	303	302
12.5	263	260
15.0	243	239
17.5	232	231
20.0	228	225
22.5	224	218
25.0	241	231

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

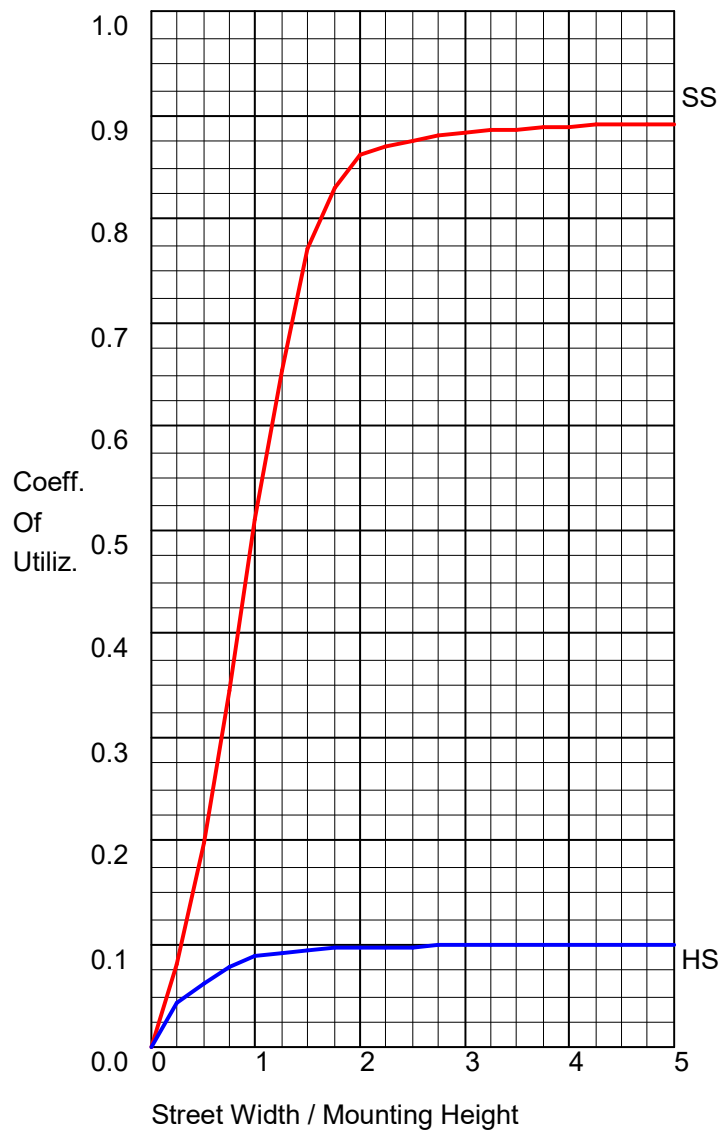
27.5	286	275
30.0	350	342
32.5	449	428
35.0	555	529
37.5	567	522
40.0	452	402
42.5	337	289
45.0	251	224
47.5	203	178
50.0	174	145
52.5	161	125
55.0	158	116
57.5	162	120
60.0	170	133
62.5	177	150
65.0	180	162
67.5	171	163
70.0	154	156
72.5	134	137
75.0	105	109
77.5	82	89
80.0	66	74
82.5	53	59
85.0	41	45
87.5	32	35
90.0	14	17
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	0	0
110.0	1	0
112.5	1	1
115.0	1	1
117.5	2	2
120.0	2	2
122.5	2	2
125.0	3	2
127.5	3	3
130.0	3	3
132.5	3	3
135.0	2	2
137.5	2	2
140.0	1	1
142.5	1	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

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**PHOTOMETRIC FILENAME : LXM4-PT-3-LED-10L-40-IL.IES**

**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>	1	1

### COEFFICIENTS OF UTILIZATION

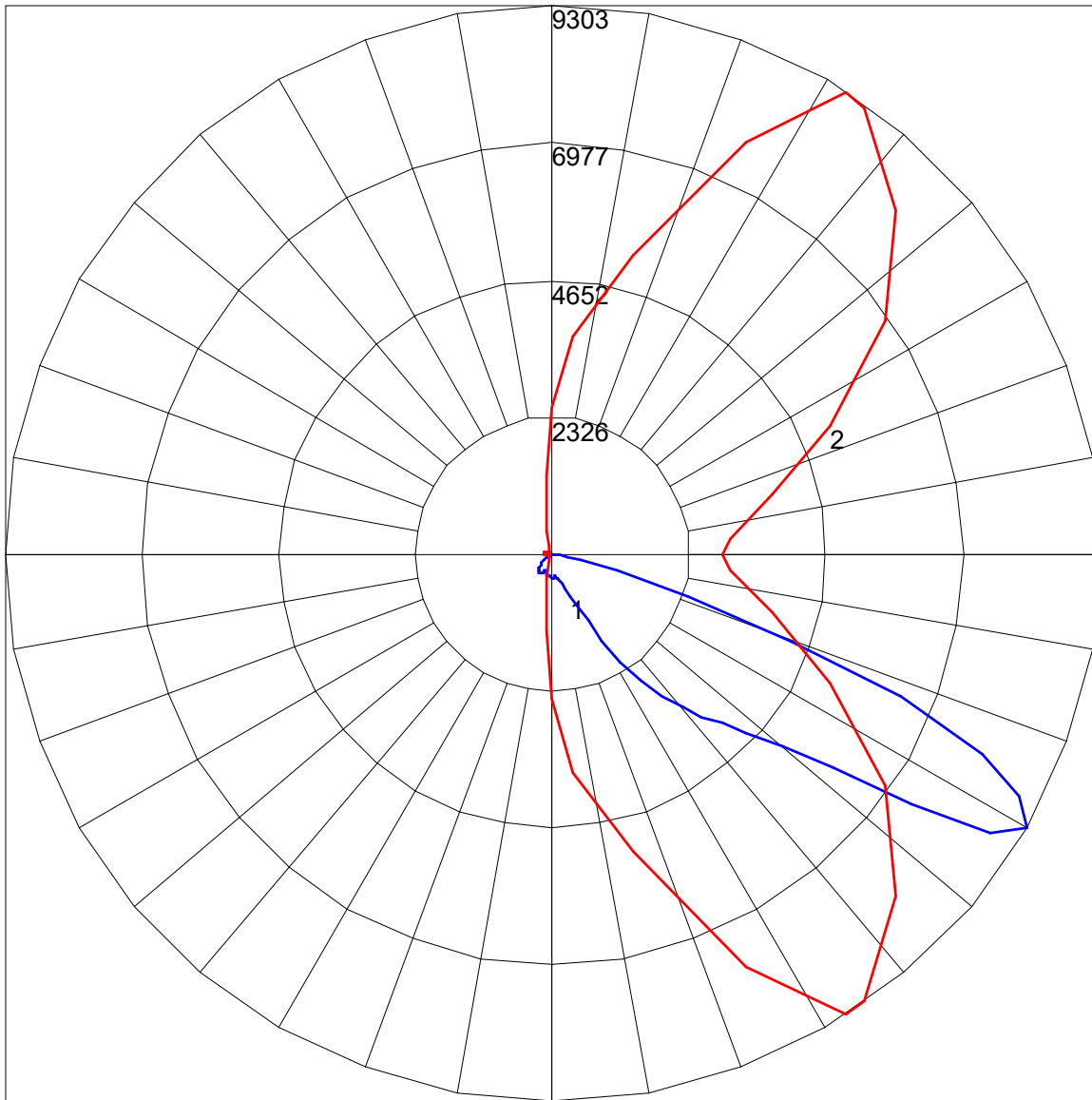


### FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	7635.9	89.7
Downward House Side	857.6	10.1
Downward Total	8493.5	99.7
Upward Street Side	9.9	0.1
Upward House Side	13.8	0.2
Upward Total	23.7	0.3
Total Flux	8517.2	100.0

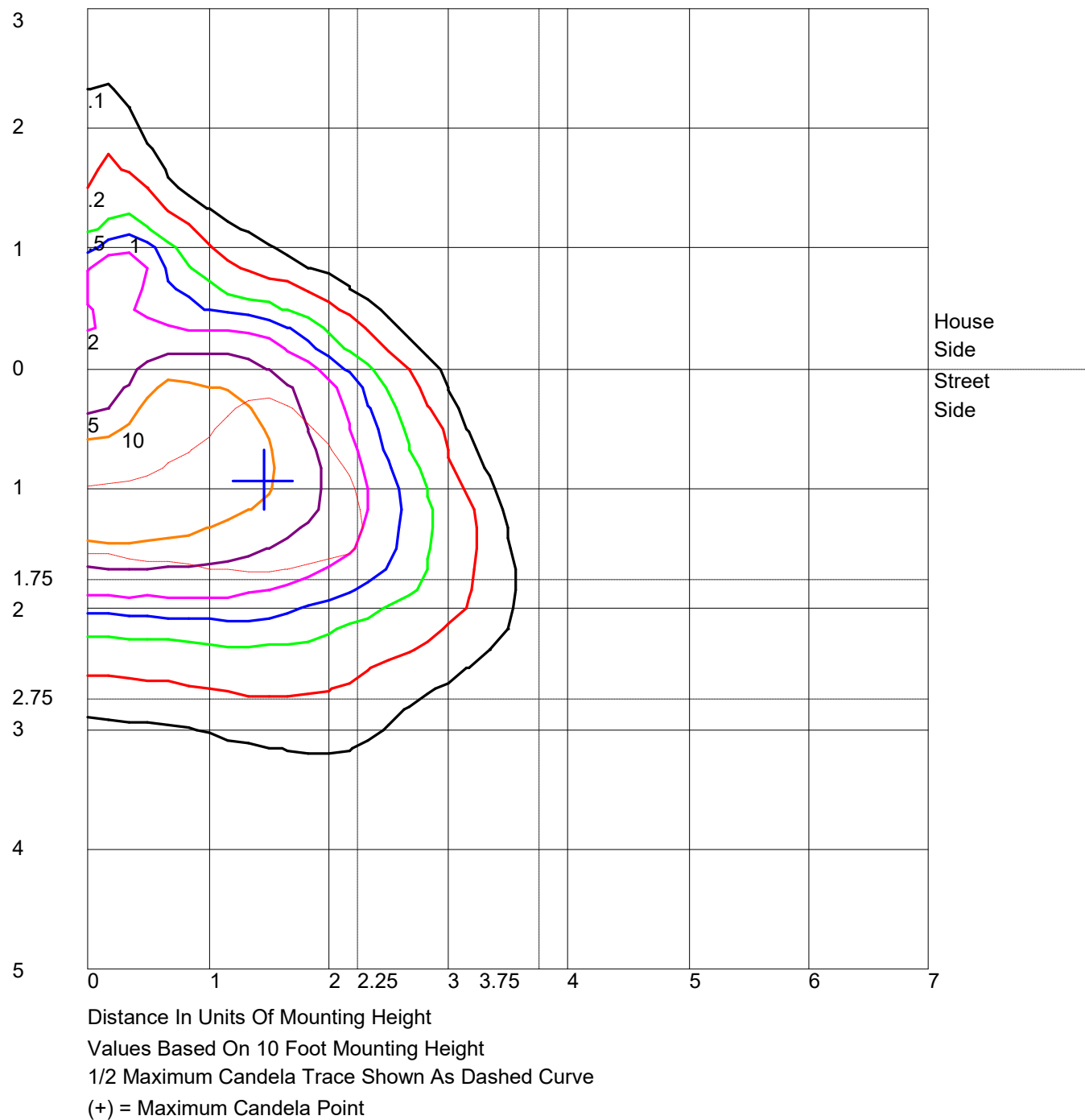


POLAR GRAPH

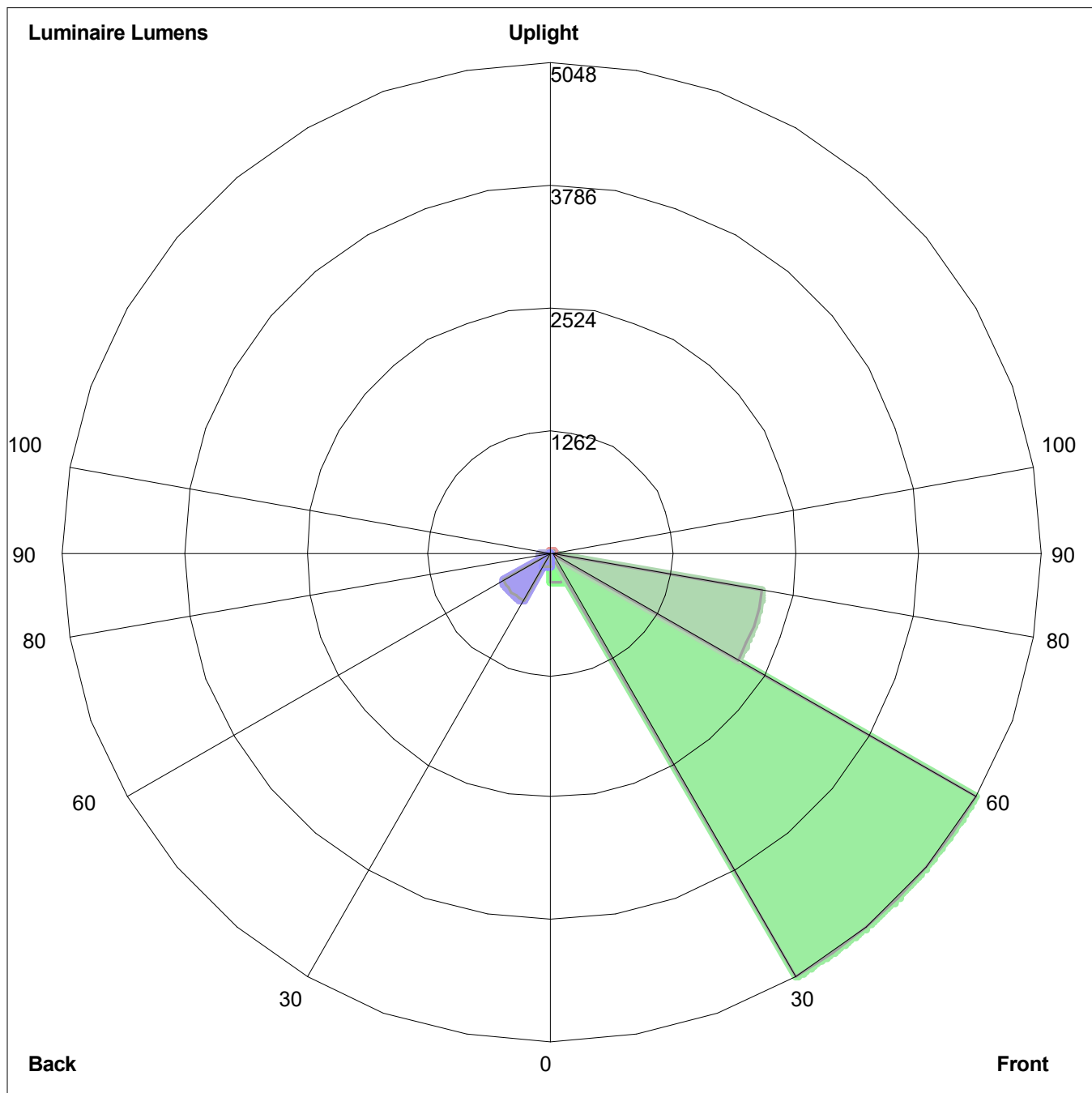


Maximum Candela = 9303 Located At Horizontal Angle = 57.5, Vertical Angle = 60  
# 1 - Vertical Plane Through Horizontal Angles (57.5 - 237.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=316.7, Medium= 5048.0, High=2218.4, Very High=52.8  
Back: Low=153.3, Medium=577.6, High=114.2, Very High=12.5  
Uplight: Low=5.8, High=17.9

BUG Rating : B1-U2-G2