



## IES ROAD REPORT

PHOTOMETRIC FILENAME : LXM4-PT-3-LED-18L-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-18L-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	15447
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	16872
Maximum Candela Angle	57.5H 60V
Maximum Candela (<90 Degrees Vertical)	16872
Maximum Candela Angle (<90 Degrees Vertical)	57.5H 60V
Maximum Candela At 90 Degrees Vertical	41 (0.3% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	721 (4.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : LXM4-PT-3-LED-18L-40-IL.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	574.3	N.A.	3.7
FM - Front-Medium (30-60)	9155.4	N.A.	59.3
FH - Front-High (60-80)	4023.3	N.A.	26.0
FVH - Front-Very High (80-90)	95.8	N.A.	0.6
BL - Back-Low (0-30)	278.0	N.A.	1.8
BM - Back-Medium (30-60)	1047.6	N.A.	6.8
BH - Back-High (60-80)	207.2	N.A.	1.3
BVH - Back-Very High (80-90)	22.8	N.A.	0.1
UL - Uplight-Low (90-100)	10.5	N.A.	0.1
UH - Uplight-High (100-180)	32.5	N.A.	0.2
Total	15447.4	N.A.	100.0
BUG Rating	B2-U2-G2		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : LXM4-PT-3-LED-18L-40-IL.IES**

**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>0.0</b></u>	<u><b>5.0</b></u>	<u><b>15.0</b></u>	<u><b>25.0</b></u>	<u><b>35.0</b></u>	<u><b>45.0</b></u>	<u><b>55.0</b></u>	<u><b>57.5</b></u>	<u><b>65.0</b></u>	<u><b>75.0</b></u>
<b>0.0</b>	750	750	750	750	750	750	750	750	750	750
<b>2.5</b>	738	734	732	729	743	741	740	739	742	735
<b>5.0</b>	753	732	741	741	736	721	708	709	705	703
<b>7.5</b>	724	717	729	725	712	706	719	716	718	721
<b>10.0</b>	716	716	736	698	730	729	762	758	758	753
<b>12.5</b>	785	784	768	760	778	771	798	800	809	795
<b>15.0</b>	841	831	835	847	877	868	868	868	873	881
<b>17.5</b>	889	907	891	922	962	1004	957	954	953	963
<b>20.0</b>	1031	1061	1053	1043	1077	1124	1130	1135	1086	1081
<b>22.5</b>	1193	1189	1233	1245	1300	1342	1407	1406	1340	1292
<b>25.0</b>	1505	1481	1516	1574	1643	1692	1805	1808	1752	1599
<b>27.5</b>	2090	2097	2115	2061	2138	2251	2351	2339	2381	2107
<b>30.0</b>	2748	2723	2691	2753	2810	2988	3077	3100	3081	2742
<b>32.5</b>	3550	3554	3396	3349	3530	3718	3919	3929	3947	3387
<b>35.0</b>	4302	4271	4181	4273	4221	4610	4773	4819	4681	4046
<b>37.5</b>	5383	5362	5094	5047	5140	5317	5549	5535	5350	4459
<b>40.0</b>	6346	6352	6210	6017	5964	6125	6285	6198	5878	4931
<b>42.5</b>	7474	7574	7360	7035	6878	6929	6830	6820	6289	5344
<b>45.0</b>	8716	8839	8725	8276	7938	7808	7453	7399	6755	5841
<b>47.5</b>	9950	10048	9993	9635	9281	8840	8203	8146	7429	6627
<b>50.0</b>	10869	10977	11259	11075	10582	10056	9386	9254	8475	7627
<b>52.5</b>	10810	11028	11748	12260	12336	11646	11003	10883	10040	8778
<b>55.0</b>	10098	10208	11103	12375	13289	13397	13561	13501	12182	9697
<b>57.5</b>	8146	8351	9620	11440	13432	14690	15951	15980	13725	9983
<b>60.0</b>	5237	5496	6977	9414	12475	14951	16815	16872	14040	9535
<b>62.5</b>	2781	2876	4031	6507	10267	13767	16182	16223	13480	8568
<b>65.0</b>	1493	1541	2061	3724	7149	11320	14521	14626	11827	6759
<b>67.5</b>	866	879	1133	1983	4299	7665	11325	11591	9068	4354
<b>70.0</b>	572	606	765	1309	2389	4336	7632	7794	5972	2467
<b>72.5</b>	422	447	554	966	1585	2174	4068	4410	3236	1077
<b>75.0</b>	289	307	400	757	1219	1245	1836	2035	1368	525
<b>77.5</b>	205	216	300	623	959	824	818	900	705	330
<b>80.0</b>	158	166	233	491	721	539	425	450	431	246
<b>82.5</b>	124	130	185	389	480	322	257	255	284	193
<b>85.0</b>	90	93	138	283	292	159	158	156	161	130
<b>87.5</b>	54	58	97	161	108	59	59	56	60	61
<b>90.0</b>	12	13	22	41	22	13	11	10	9	9
<b>92.5</b>	4	4	7	9	7	8	9	8	7	7
<b>95.0</b>	3	2	4	6	7	7	7	7	7	6
<b>97.5</b>	2	2	4	6	6	7	7	6	5	5
<b>100.0</b>	2	2	4	6	6	7	6	6	5	5
<b>102.5</b>	3	2	4	6	7	7	6	6	5	5
<b>105.0</b>	3	2	4	6	7	7	6	6	5	5
<b>107.5</b>	3	3	4	6	7	7	6	5	5	5
<b>110.0</b>	4	3	4	6	7	7	6	6	5	5
<b>112.5</b>	4	4	5	7	7	7	6	6	6	6
<b>115.0</b>	4	4	5	7	7	7	7	6	6	6
<b>117.5</b>	5	5	5	7	7	8	7	6	6	7
<b>120.0</b>	5	5	6	7	8	8	7	7	6	7
<b>122.5</b>	6	6	7	7	8	8	7	7	7	7
<b>125.0</b>	7	7	7	7	8	8	7	7	7	7
<b>127.5</b>	7	7	7	7	8	9	7	7	7	7
<b>130.0</b>	7	7	7	7	9	9	7	7	7	8

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : LXM4-PT-3-LED-18L-40-IL-IES**

**CANDELA TABULATION - (Cont.)**

132.5	7	7	7	8	8	9	8	7	7	8
135.0	6	6	6	7	7	7	7	7	7	7
137.5	3	2	4	5	6	6	5	5	5	6
140.0	1	1	3	4	4	5	4	4	4	5
142.5	1	1	3	4	4	4	4	4	4	4
145.0	1	1	3	4	4	4	4	4	4	4
147.5	1	1	2	4	4	4	4	4	4	4
150.0	1	1	2	4	4	4	4	4	4	4
152.5	1	1	2	4	4	4	4	4	4	4
155.0	0	1	2	4	4	4	4	4	4	4
157.5	0	1	2	3	4	4	3	3	4	4
160.0	0	1	2	3	4	3	3	3	3	4
162.5	0	1	2	3	3	3	3	3	3	3
165.0	0	1	2	4	4	3	3	3	3	3
167.5	0	1	2	4	4	4	3	3	3	3
170.0	0	1	2	4	4	4	3	3	3	3
172.5	0	1	2	4	4	4	3	3	3	3
175.0	1	1	2	4	4	4	3	3	3	3
177.5	1	1	2	4	4	4	3	3	3	3
180.0	2	2	2	2	2	2	2	2	2	2

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	750	750	750	750	750	750	750	750	750	750
2.5	741	745	743	743	751	760	752	752	750	753
5.0	711	711	713	700	729	737	742	739	735	723
7.5	709	711	715	726	720	709	693	678	664	674
10.0	739	729	726	768	730	708	647	626	577	570
12.5	774	768	769	769	728	683	607	536	501	480
15.0	813	794	794	801	739	637	547	491	458	438
17.5	887	859	868	808	713	578	517	480	453	426
20.0	973	934	902	839	672	550	496	480	460	424
22.5	1166	1089	1046	899	658	550	501	487	472	438
25.0	1433	1313	1220	954	677	586	503	493	523	504
27.5	1830	1617	1464	1015	750	632	510	517	628	646
30.0	2290	1990	1711	1064	788	660	541	561	771	815
32.5	2678	2300	1915	1100	796	679	560	620	910	1035
35.0	3071	2553	2075	1113	777	683	577	634	1067	1291
37.5	3410	2812	2209	1131	744	674	572	643	1284	1618
40.0	3752	3042	2355	1145	711	645	561	625	1501	1627
42.5	4136	3300	2499	1165	679	611	530	580	1622	1288
45.0	4706	3740	2720	1197	643	567	485	531	1315	958
47.5	5501	4270	2992	1238	602	501	425	480	860	712
50.0	6321	4838	3336	1263	547	410	344	410	487	546
52.5	7043	5312	3514	1239	446	297	251	310	319	437
55.0	7372	5425	3445	1130	349	223	189	212	224	354
57.5	7268	5122	3062	959	284	187	155	150	156	285
60.0	6745	4508	2407	744	242	166	132	115	115	230
62.5	5642	3511	1648	538	208	145	110	89	88	190
65.0	3745	2307	1017	370	173	121	90	70	65	156
67.5	2145	1348	601	254	143	97	69	55	49	127
70.0	973	682	343	182	115	77	51	42	35	97
72.5	418	353	240	150	91	62	42	35	24	72
75.0	260	243	201	135	75	53	37	25	16	54
77.5	197	190	169	123	67	47	33	21	11	39

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : LXM4-PT-3-LED-18L-40-IL.IES**

**CANDELA TABULATION - (Cont.)**

80.0	176	160	140	109	59	43	30	18	9	31
82.5	130	119	116	91	52	41	29	17	8	26
85.0	79	75	85	65	45	38	27	16	7	22
87.5	39	35	44	41	37	33	25	14	7	18
90.0	9	7	14	24	30	28	21	13	5	10
92.5	7	5	11	20	25	24	18	12	4	4
95.0	7	4	10	17	22	22	17	11	4	4
97.5	6	5	8	14	18	18	14	9	4	3
100.0	6	5	8	11	14	14	12	9	5	4
102.5	6	5	7	9	12	12	11	9	5	4
105.0	6	6	7	9	11	11	10	9	6	4
107.5	6	6	7	9	10	10	10	9	6	4
110.0	6	7	8	9	10	10	10	9	7	4
112.5	6	7	8	9	10	10	10	9	7	4
115.0	7	7	8	9	10	10	10	9	7	5
117.5	7	7	8	9	10	10	10	9	7	5
120.0	7	8	9	9	10	10	10	9	8	6
122.5	7	8	9	9	10	10	11	9	8	6
125.0	8	9	9	10	10	10	11	10	8	7
127.5	8	9	9	9	10	10	11	10	9	7
130.0	8	9	9	10	10	11	11	10	9	7
132.5	8	9	9	9	10	11	11	10	8	7
135.0	8	8	9	9	10	10	10	9	8	6
137.5	7	7	7	8	9	9	9	9	7	5
140.0	6	6	7	7	8	8	8	7	6	4
142.5	5	6	6	7	7	8	7	7	5	4
145.0	5	5	6	7	7	7	7	7	4	3
147.5	5	5	6	7	7	7	7	6	4	3
150.0	5	5	6	6	7	7	7	6	4	2
152.5	5	5	5	6	7	7	7	5	4	2
155.0	4	5	5	6	6	7	6	5	4	1
157.5	4	5	5	5	6	6	5	4	3	1
160.0	4	4	4	5	5	5	5	4	2	1
162.5	4	4	4	4	5	4	4	4	1	1
165.0	4	4	4	4	4	4	4	3	1	0
167.5	4	4	4	4	4	4	4	3	1	0
170.0	3	4	4	4	4	4	4	3	1	0
172.5	3	4	4	4	4	4	4	3	1	0
175.0	3	4	4	4	4	4	4	3	1	0
177.5	3	3	3	3	4	3	3	2	1	0
180.0	2	2	2	2	2	2	2	2	2	2

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

	<u>175.0</u>	<u>180.0</u>
0.0	750	750
2.5	754	755
5.0	717	719
7.5	657	651
10.0	549	548
12.5	476	472
15.0	440	433
17.5	420	420
20.0	414	408
22.5	406	396
25.0	438	420

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : LXM4-PT-3-LED-18L-40-IL.IES**

**CANDELA TABULATION - (Cont.)**

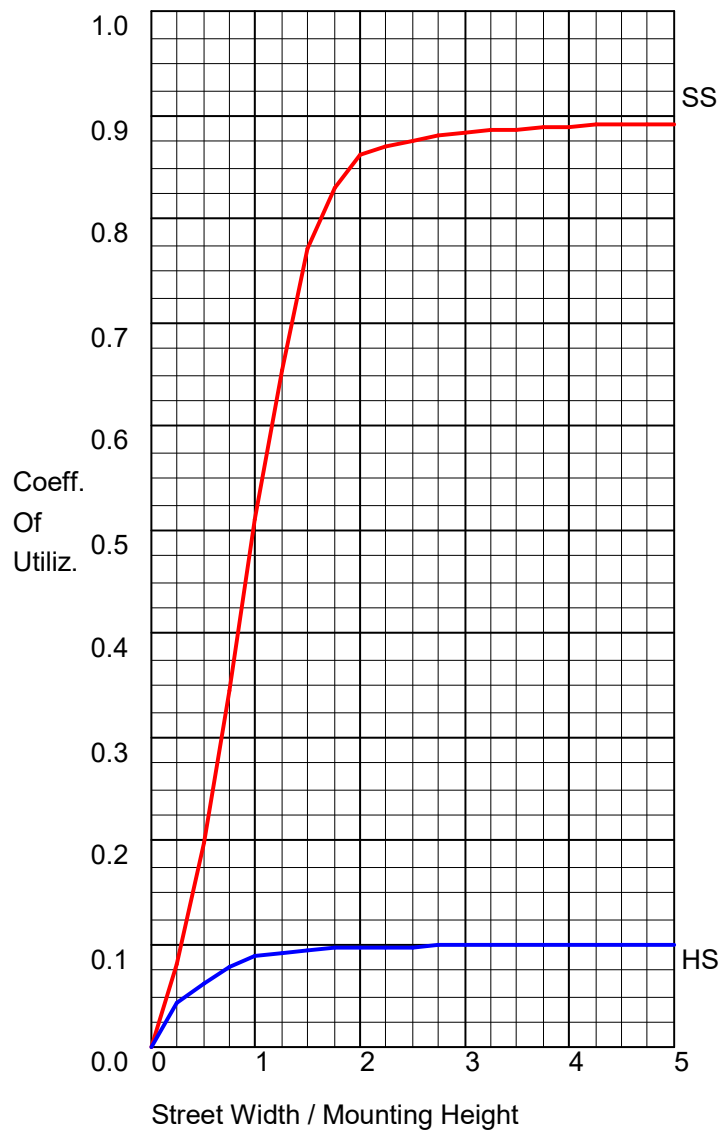
27.5	518	499
30.0	635	621
32.5	814	776
35.0	1007	960
37.5	1028	946
40.0	821	729
42.5	611	524
45.0	455	406
47.5	369	323
50.0	316	263
52.5	292	227
55.0	287	211
57.5	294	218
60.0	308	241
62.5	321	271
65.0	326	294
67.5	310	296
70.0	279	283
72.5	244	249
75.0	190	198
77.5	148	161
80.0	119	134
82.5	97	107
85.0	75	82
87.5	57	63
90.0	26	31
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	1	0
105.0	1	0
107.5	1	0
110.0	1	1
112.5	2	1
115.0	2	2
117.5	3	3
120.0	4	4
122.5	4	4
125.0	5	4
127.5	6	5
130.0	6	6
132.5	6	5
135.0	4	4
137.5	3	3
140.0	1	1
142.5	1	1
145.0	1	0
147.5	1	0
150.0	1	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**  
**PHOTOMETRIC FILENAME : LXM4-PT-3-LED-18L-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>	2	2

### COEFFICIENTS OF UTILIZATION

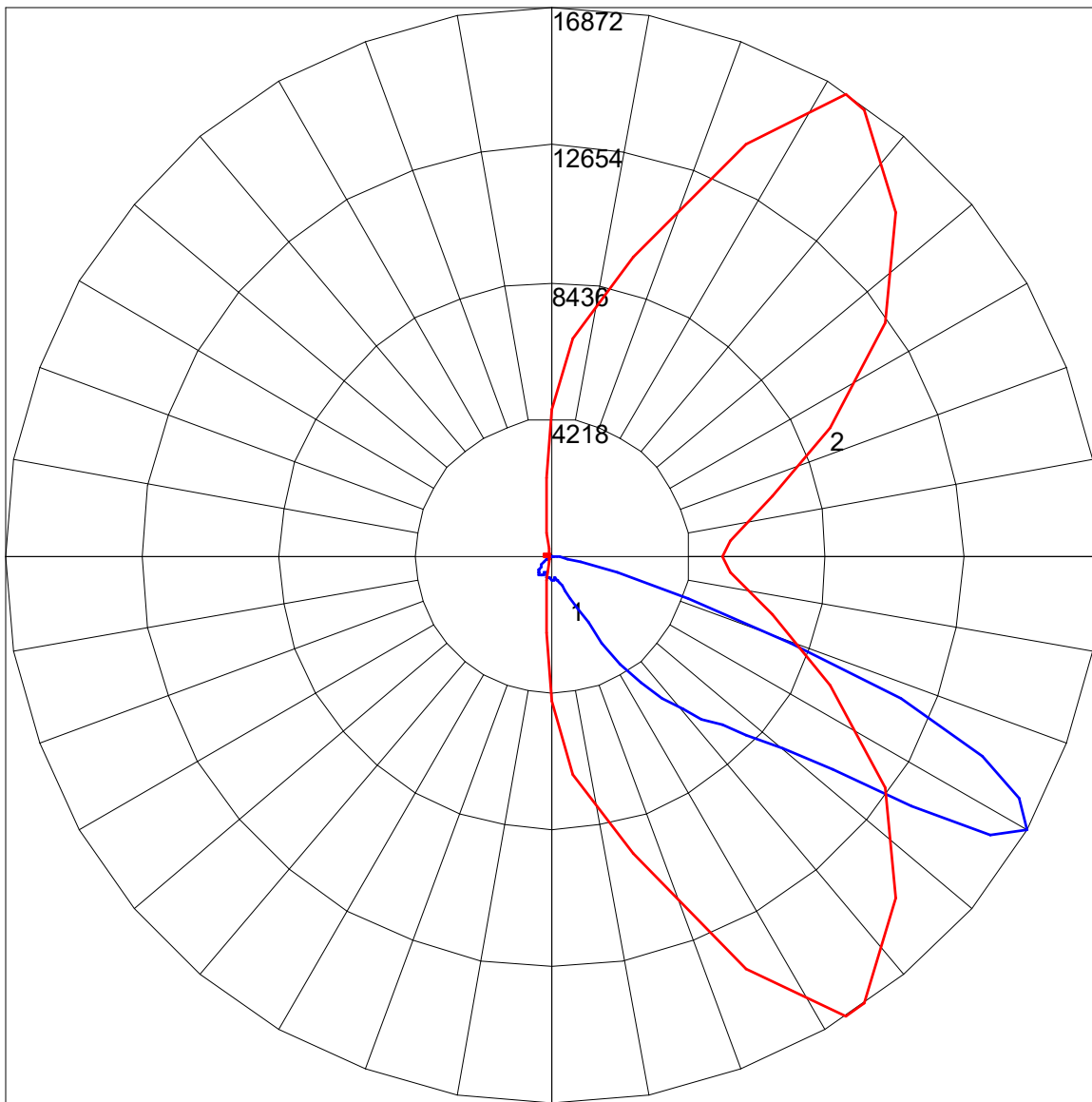


### FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	13848.8	89.7
Downward House Side	1555.5	10.1
Downward Total	15404.3	99.7
Upward Street Side	18.2	0.1
Upward House Side	24.8	0.2
Upward Total	43.0	0.3
Total Flux	15447.3	100.0

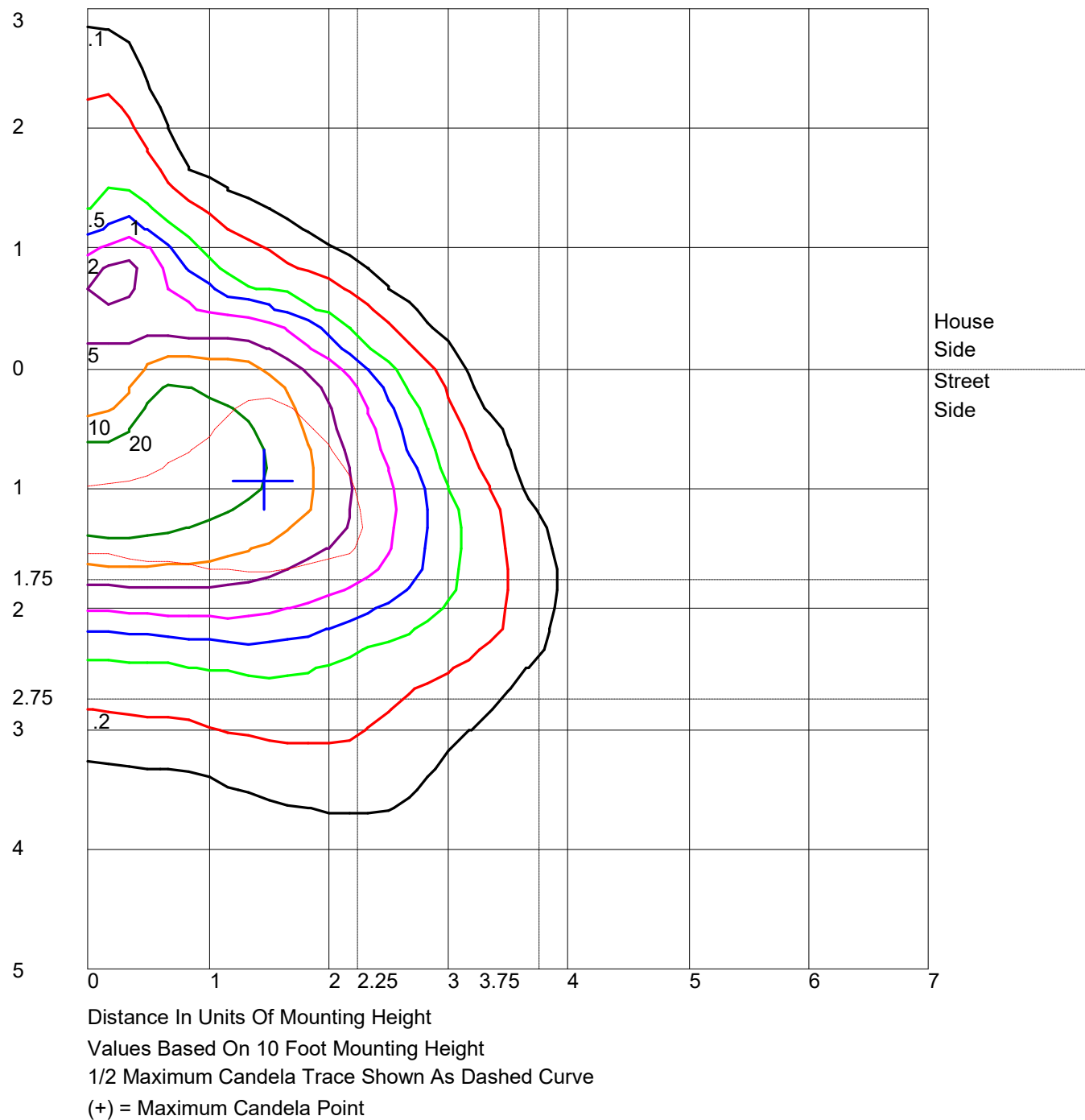


POLAR GRAPH

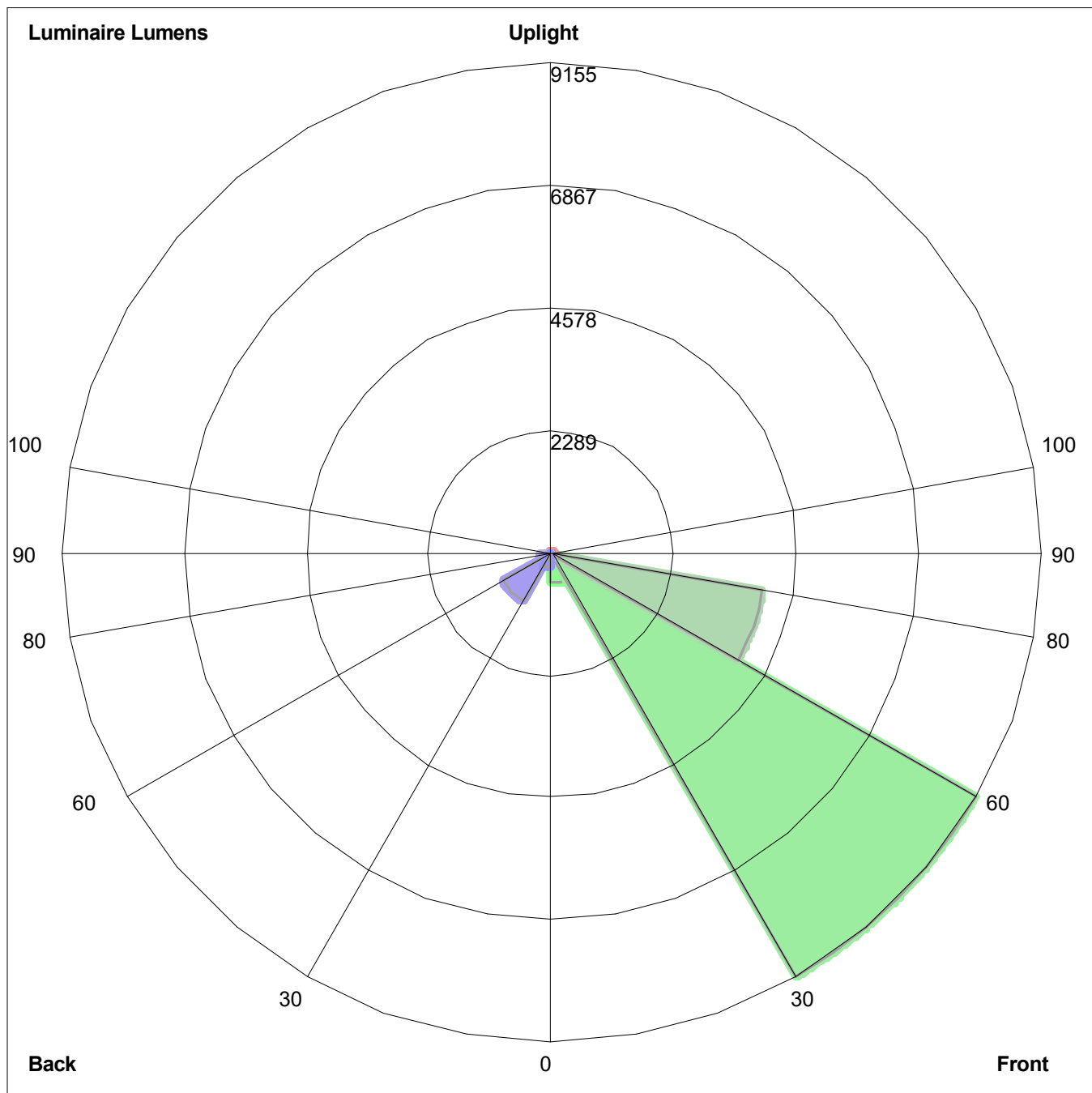


Maximum Candela = 16872 Located At Horizontal Angle = 57.5, Vertical Angle = 60  
# 1 - Vertical Plane Through Horizontal Angles (57.5 - 237.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=574.3, Medium=9155.4, High=4023.3, Very High=95.8  
Back: Low=278.0, Medium=1047.6, High=207.2, Very High=22.8  
Uplight: Low=10.5, High=32.5

BUG Rating : B2-U2-G2