



## IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-40-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11747

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/23/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-2-LED-05L-40-IL

[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.

[OTHER] TEST PROCEDURE: IESNA LM-79-08

[SEARCH\_SOURCETYPE] LED

[SEARCH\_APPLICATION] Outdoor

[FACTORED] SCALED FROM ORIGINAL TEST DATA

### CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3790
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	39
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	3898
Maximum Candela Angle	80H 57.5V
Maximum Candela (<90 Degrees Vertical)	3898
Maximum Candela Angle (<90 Degrees Vertical)	80H 57.5V
Maximum Candela At 90 Degrees Vertical	4 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	151 (4.0% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-40-IL.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	295.3	N.A.	7.8
FM - Front-Medium (30-60)	2147.4	N.A.	56.7
FH - Front-High (60-80)	687.6	N.A.	18.1
FVH - Front-Very High (80-90)	15.0	N.A.	0.4
BL - Back-Low (0-30)	159.4	N.A.	4.2
BM - Back-Medium (30-60)	397.1	N.A.	10.5
BH - Back-High (60-80)	80.4	N.A.	2.1
BVH - Back-Very High (80-90)	2.7	N.A.	0.1
UL - Uplight-Low (90-100)	1.2	N.A.	0.0
UH - Uplight-High (100-180)	3.7	N.A.	0.1
Total	3789.8	N.A.	100.0
BUG Rating	B1-U1-G1		

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**CANDELA TABULATION**

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>5</u>	<u>15</u>	<u>25</u>	<u>35</u>	<u>45</u>	<u>55</u>	<u>65</u>	<u>75</u>	<u>80</u>
<b>0.0</b>	388	388	388	388	388	388	388	388	388	388
<b>2.5</b>	395	396	396	399	400	400	402	394	392	387
<b>5.0</b>	397	399	409	406	417	391	390	381	370	366
<b>7.5</b>	406	412	423	402	408	392	398	413	402	389
<b>10.0</b>	429	430	445	413	425	431	435	429	417	404
<b>12.5</b>	466	490	468	458	469	462	467	459	457	457
<b>15.0</b>	503	525	514	527	541	516	521	510	515	500
<b>17.5</b>	536	557	548	560	575	601	574	585	594	566
<b>20.0</b>	610	625	626	615	634	642	667	655	669	661
<b>22.5</b>	662	667	683	700	706	708	764	766	794	787
<b>25.0</b>	763	740	759	774	793	785	866	927	935	931
<b>27.5</b>	869	894	902	870	883	905	975	1120	1173	1132
<b>30.0</b>	1009	991	977	986	1001	1044	1127	1358	1419	1393
<b>32.5</b>	1188	1203	1134	1089	1131	1175	1343	1657	1739	1711
<b>35.0</b>	1378	1350	1303	1270	1252	1364	1546	1893	2058	2003
<b>37.5</b>	1572	1552	1477	1411	1451	1500	1729	2069	2194	2216
<b>40.0</b>	1650	1650	1618	1599	1619	1674	1871	2135	2292	2276
<b>42.5</b>	1672	1673	1667	1680	1753	1823	2046	2185	2330	2358
<b>45.0</b>	1621	1627	1635	1692	1821	1980	2229	2327	2438	2511
<b>47.5</b>	1496	1503	1530	1612	1784	2034	2411	2558	2616	2717
<b>50.0</b>	1320	1313	1356	1446	1654	1991	2582	2819	2826	2946
<b>52.5</b>	1084	1093	1140	1242	1456	1851	2706	3094	3110	3308
<b>55.0</b>	833	842	890	1008	1210	1608	2716	3325	3434	3669
<b>57.5</b>	594	604	648	750	950	1325	2544	3380	3656	3898
<b>60.0</b>	414	422	459	532	684	978	2214	3219	3694	3865
<b>62.5</b>	300	302	332	374	459	664	1798	2808	3477	3548
<b>65.0</b>	212	215	237	283	333	427	1352	2334	2949	2950
<b>67.5</b>	144	147	158	199	255	293	915	1768	2346	2278
<b>70.0</b>	88	90	94	132	186	217	557	1213	1602	1472
<b>72.5</b>	67	66	67	83	128	159	308	740	930	717
<b>75.0</b>	45	46	46	54	86	113	166	451	453	277
<b>77.5</b>	30	31	31	33	55	80	99	259	240	153
<b>80.0</b>	20	21	22	21	30	51	63	142	151	107
<b>82.5</b>	19	19	18	17	18	26	37	72	99	83
<b>85.0</b>	14	14	13	13	14	18	22	35	51	50
<b>87.5</b>	9	8	8	8	8	11	13	18	18	18
<b>90.0</b>	3	3	2	2	2	2	2	2	2	2
<b>92.5</b>	1	1	1	1	1	0	0	0	0	0
<b>95.0</b>	1	1	1	1	0	0	0	0	0	0
<b>97.5</b>	1	1	1	1	0	0	0	0	0	0
<b>100.0</b>	1	1	1	1	0	0	0	0	0	0
<b>102.5</b>	1	1	1	1	0	0	0	0	0	0
<b>105.0</b>	1	1	1	1	0	0	0	0	0	0
<b>107.5</b>	1	1	1	1	0	0	0	0	0	0
<b>110.0</b>	1	1	1	1	1	0	0	0	0	0
<b>112.5</b>	1	1	1	1	1	0	0	0	0	0
<b>115.0</b>	1	1	1	1	1	0	0	0	0	0
<b>117.5</b>	2	1	1	1	1	0	0	0	0	0
<b>120.0</b>	2	2	1	1	1	0	0	0	0	0
<b>122.5</b>	2	2	2	1	1	1	0	0	1	1
<b>125.0</b>	2	2	2	1	1	1	0	0	1	1
<b>127.5</b>	2	2	2	2	1	1	0	1	1	1
<b>130.0</b>	2	2	2	2	1	1	0	1	1	1

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**CANDELA TABULATION - (Cont.)**

132.5	3	3	2	2	1	1	0	1	1	1
135.0	2	2	2	2	1	1	0	1	1	1
137.5	1	1	1	1	1	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
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</u>	<u>90</u>	<u>95</u>	<u>105</u>	<u>115</u>	<u>125</u>	<u>135</u>	<u>145</u>	<u>155</u>	<u>165</u>
0.0	388	388	388	388	388	388	388	388	388	388
2.5	388	386	388	387	384	384	386	387	381	380
5.0	371	368	362	359	362	360	354	356	350	343
7.5	387	385	377	377	359	341	315	319	314	324
10.0	401	390	379	384	343	331	317	308	293	306
12.5	434	426	420	395	353	331	315	324	328	344
15.0	480	468	442	398	349	343	345	360	372	364
17.5	543	510	483	424	362	360	387	397	393	391
20.0	618	590	543	451	383	403	405	414	391	355
22.5	740	670	632	512	424	433	423	377	308	256
25.0	877	817	741	557	491	463	385	284	207	153
27.5	1074	962	873	626	541	454	300	184	125	104
30.0	1320	1164	1023	701	585	404	214	122	100	91
32.5	1558	1395	1184	774	607	332	144	103	89	84
35.0	1840	1627	1363	855	588	249	120	93	84	78
37.5	2065	1859	1512	915	531	172	108	87	76	70
40.0	2150	1970	1581	963	452	134	98	80	67	61
42.5	2268	2067	1642	968	326	118	89	72	58	50
45.0	2428	2203	1722	938	197	106	80	62	47	40
47.5	2628	2365	1801	849	144	94	69	50	38	32
50.0	2861	2524	1857	703	124	84	56	40	31	25
52.5	3140	2640	1874	516	112	73	45	31	24	18
55.0	3428	2665	1817	347	103	61	35	23	18	13
57.5	3508	2540	1650	249	95	50	26	17	13	8
60.0	3349	2275	1408	206	92	41	19	11	7	4
62.5	2908	1907	1124	170	88	32	14	6	4	2
65.0	2346	1454	816	130	77	25	9	3	3	1
67.5	1672	1007	514	93	58	19	6	2	2	1
70.0	996	606	288	65	40	12	5	3	2	2
72.5	433	302	158	48	25	8	5	3	2	1
75.0	185	159	98	34	14	6	5	4	2	1
77.5	117	109	64	22	9	6	5	4	2	1

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**CANDELA TABULATION - (Cont.)**

80.0	92	77	41	13	7	6	6	4	2	1
82.5	66	47	25	6	6	6	5	4	2	1
85.0	38	24	11	3	4	5	5	4	2	1
87.5	14	6	2	2	3	5	4	3	2	1
90.0	1	1	1	1	3	4	4	3	2	1
92.5	0	0	1	1	3	4	4	2	1	1
95.0	0	0	1	1	2	3	3	2	1	1
97.5	0	0	1	1	2	2	2	1	1	1
100.0	0	0	1	1	1	1	1	1	1	1
102.5	0	0	1	1	1	1	1	1	1	1
105.0	0	0	1	1	1	1	1	1	1	1
107.5	0	0	1	1	1	1	1	1	1	1
110.0	0	0	1	1	1	1	1	1	1	1
112.5	0	1	1	1	1	1	1	1	1	1
115.0	0	1	1	1	1	1	1	1	1	1
117.5	1	1	1	1	1	1	1	1	1	1
120.0	1	1	1	1	1	1	1	1	1	1
122.5	1	1	1	1	1	1	1	1	1	1
125.0	1	1	1	1	1	1	1	1	1	1
127.5	1	1	1	1	1	1	1	2	2	2
130.0	1	1	1	1	1	1	1	2	2	2
132.5	1	1	1	1	1	1	2	2	2	2
135.0	1	1	1	1	1	1	1	2	2	2
137.5	0	1	1	1	1	1	1	1	1	1
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	1	1	1	1
147.5	0	0	0	0	0	1	1	1	1	1
150.0	0	0	0	0	1	1	1	1	1	1
152.5	0	0	0	0	1	1	1	1	1	1
155.0	0	0	0	0	1	1	1	1	1	1
157.5	0	0	0	0	1	1	1	1	1	1
160.0	0	0	0	0	0	1	1	1	1	1
162.5	0	0	0	0	0	1	1	1	1	1
165.0	0	0	0	0	0	0	1	1	1	1
167.5	0	0	0	0	0	0	1	1	1	1
170.0	0	0	0	0	0	0	0	1	1	1
172.5	0	0	0	0	0	0	0	1	1	1
175.0	0	0	0	0	0	0	0	1	1	1
177.5	0	0	0	0	0	0	0	0	1	0
180.0	0	0	0	0	0	0	0	0	0	0

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

	<u>175</u>	<u>180</u>
0.0	388	388
2.5	376	369
5.0	338	333
7.5	321	315
10.0	314	299
12.5	351	342
15.0	392	385
17.5	409	397
20.0	350	333
22.5	234	231
25.0	135	132

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

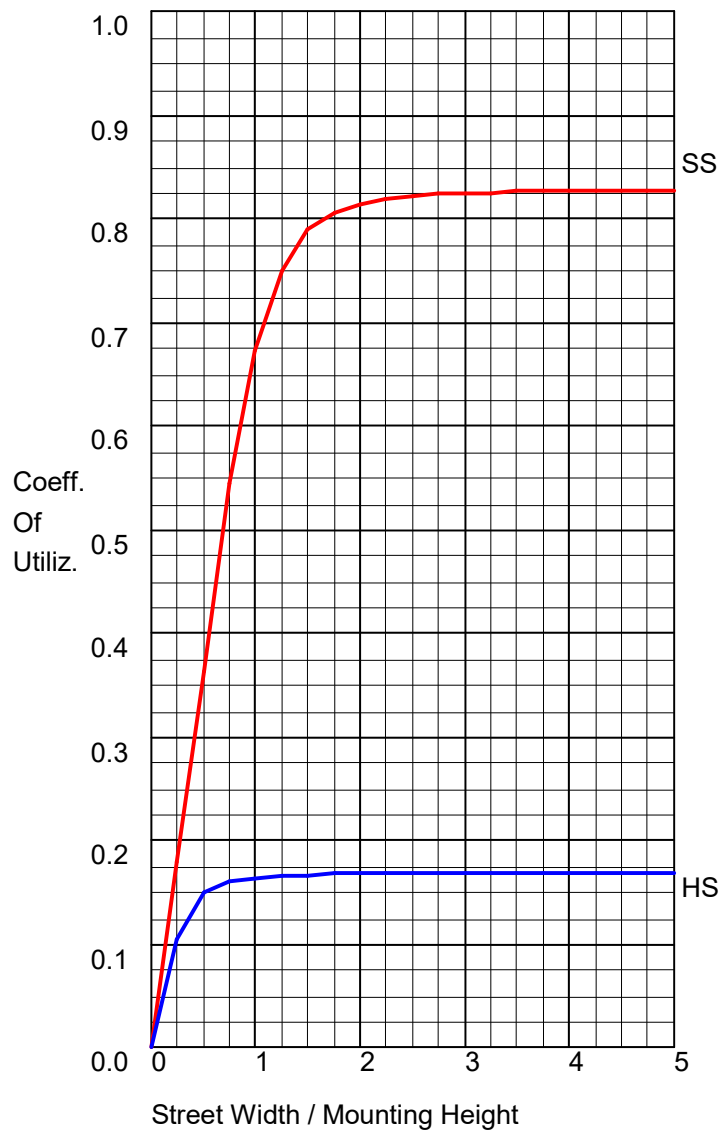
27.5	100	99
30.0	89	89
32.5	85	85
35.0	78	78
37.5	70	71
40.0	60	59
42.5	48	47
45.0	38	38
47.5	29	29
50.0	22	22
52.5	16	16
55.0	11	11
57.5	6	6
60.0	3	3
62.5	1	1
65.0	1	1
67.5	1	1
70.0	1	1
72.5	1	0
75.0	0	0
77.5	1	0
80.0	1	1
82.5	1	1
85.0	1	1
87.5	1	1
90.0	1	1
92.5	1	1
95.0	1	0
97.5	1	0
100.0	1	0
102.5	1	1
105.0	0	0
107.5	0	1
110.0	1	1
112.5	1	0
115.0	1	1
117.5	1	1
120.0	1	1
122.5	1	1
125.0	1	1
127.5	2	2
130.0	2	2
132.5	2	2
135.0	2	2
137.5	1	1
140.0	1	1
142.5	1	1
145.0	1	1
147.5	1	1
150.0	1	1
152.5	1	1
155.0	1	1
157.5	1	1
160.0	0	0
162.5	0	0
165.0	0	0

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**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-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>	0	0

### COEFFICIENTS OF UTILIZATION

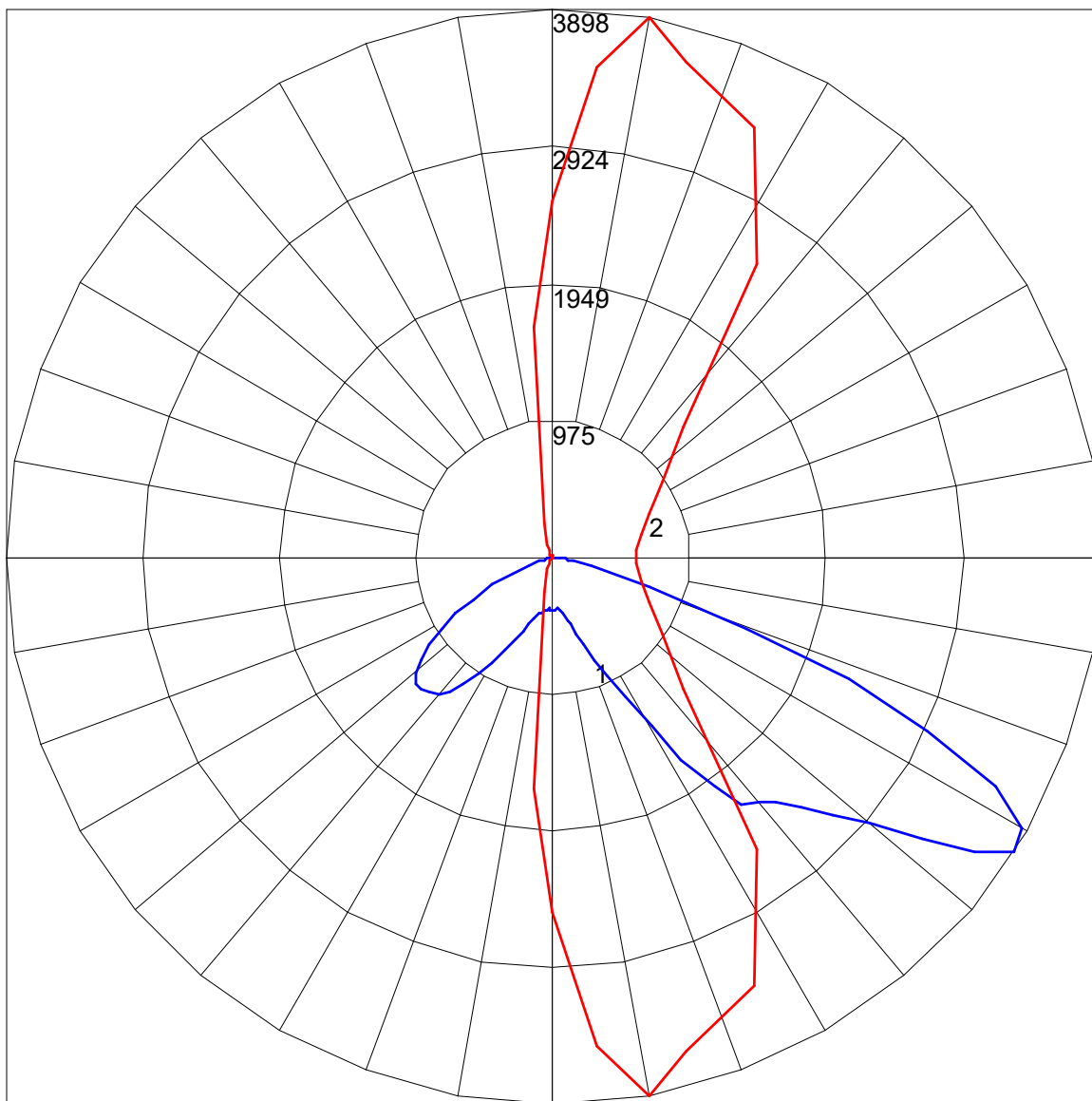


### FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	3145.3	83.0
Downward House Side	639.6	16.9
Downward Total	3784.9	99.9
Upward Street Side	1.6	0.0
Upward House Side	3.4	0.1
Upward Total	5.0	0.1
Total Flux	3789.9	100.0

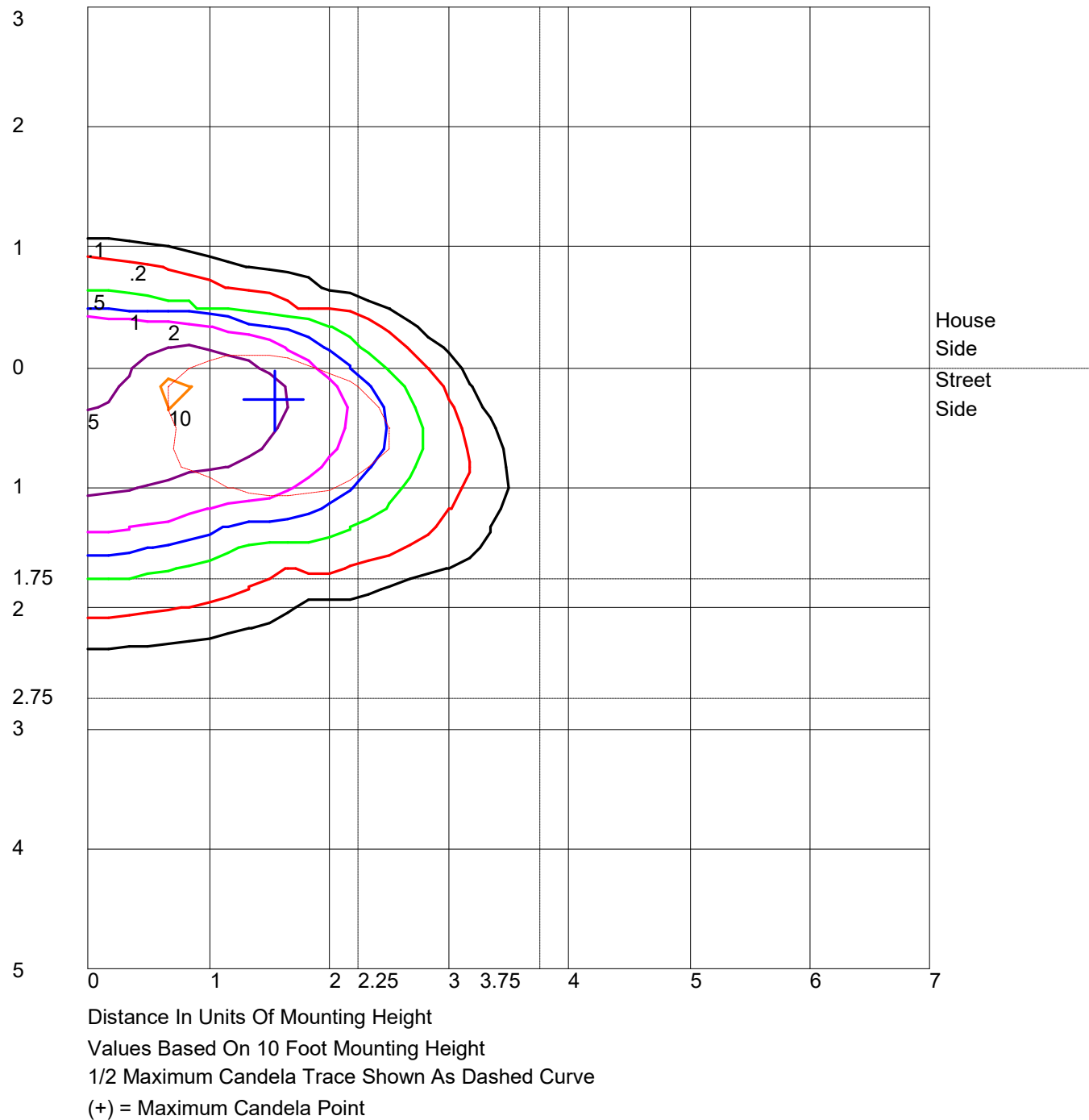


POLAR GRAPH

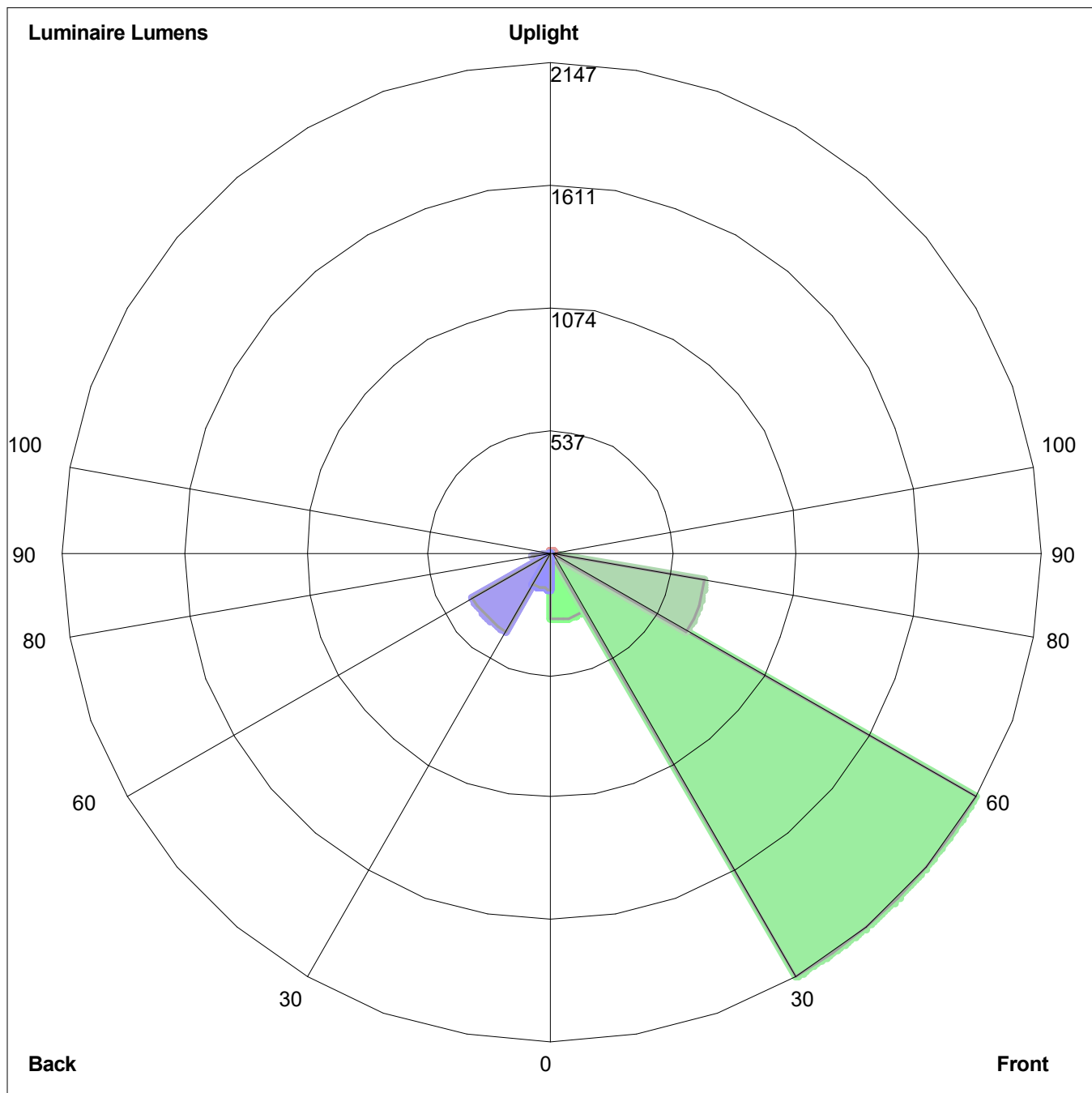


Maximum Candela = 3898 Located At Horizontal Angle = 80, Vertical Angle = 57.5  
# 1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (57.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=295.3, Medium=2147.4, High=687.6, Very High=15.0  
Back: Low=159.4, Medium=397.1, High=80.4, Very High=2.7  
Uplight: Low=1.2, High=3.7

BUG Rating : B1-U1-G1