



## IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-30-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-30-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	3430
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	39
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	3527
Maximum Candela Angle	80H 57.5V
Maximum Candela (<90 Degrees Vertical)	3527
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	137 (4.0% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-30-IL.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	267.2	N.A.	7.8
FM - Front-Medium (30-60)	1943.2	N.A.	56.7
FH - Front-High (60-80)	622.2	N.A.	18.1
FVH - Front-Very High (80-90)	13.5	N.A.	0.4
BL - Back-Low (0-30)	144.2	N.A.	4.2
BM - Back-Medium (30-60)	359.3	N.A.	10.5
BH - Back-High (60-80)	72.8	N.A.	2.1
BVH - Back-Very High (80-90)	2.5	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	3429.8	N.A.	100.0
BUG Rating	B1-U1-G1		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-30-IL.IES**

**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>	351	351	351	351	351	351	351	351	351	351
<b>2.5</b>	357	358	358	361	362	362	364	357	355	350
<b>5.0</b>	359	361	370	367	377	354	353	345	335	331
<b>7.5</b>	367	373	383	364	369	355	360	374	364	352
<b>10.0</b>	388	389	403	374	385	390	394	388	377	366
<b>12.5</b>	422	443	423	414	424	418	423	415	414	414
<b>15.0</b>	455	475	465	477	490	467	471	461	466	452
<b>17.5</b>	485	504	496	507	520	544	519	529	538	512
<b>20.0</b>	552	566	566	557	574	581	604	593	605	598
<b>22.5</b>	599	604	618	633	639	641	691	693	718	712
<b>25.0</b>	690	670	687	700	718	710	784	839	846	842
<b>27.5</b>	786	809	816	787	799	819	882	1013	1061	1024
<b>30.0</b>	913	897	884	892	906	945	1020	1229	1284	1261
<b>32.5</b>	1075	1089	1026	985	1023	1063	1215	1499	1574	1548
<b>35.0</b>	1247	1222	1179	1149	1133	1234	1399	1713	1862	1813
<b>37.5</b>	1423	1404	1337	1277	1313	1357	1565	1872	1985	2005
<b>40.0</b>	1493	1493	1464	1447	1465	1515	1693	1932	2074	2060
<b>42.5</b>	1513	1514	1508	1520	1586	1650	1851	1977	2108	2134
<b>45.0</b>	1467	1472	1480	1531	1648	1792	2017	2106	2206	2272
<b>47.5</b>	1354	1360	1384	1459	1614	1841	2182	2315	2367	2459
<b>50.0</b>	1194	1188	1227	1308	1497	1802	2336	2551	2557	2666
<b>52.5</b>	981	989	1032	1124	1318	1675	2449	2800	2814	2993
<b>55.0</b>	754	762	805	912	1095	1455	2458	3009	3107	3320
<b>57.5</b>	538	547	586	679	860	1199	2302	3059	3308	3527
<b>60.0</b>	375	382	415	481	619	885	2003	2913	3343	3497
<b>62.5</b>	271	273	300	338	415	601	1627	2541	3146	3211
<b>65.0</b>	192	195	214	256	301	386	1223	2112	2669	2669
<b>67.5</b>	130	133	143	180	231	265	828	1600	2123	2061
<b>70.0</b>	80	81	85	119	168	196	504	1098	1450	1332
<b>72.5</b>	61	60	61	75	116	144	279	670	842	649
<b>75.0</b>	41	42	42	49	78	102	150	408	410	251
<b>77.5</b>	27	28	28	30	50	72	90	234	217	138
<b>80.0</b>	18	19	20	19	27	46	57	128	137	97
<b>82.5</b>	17	17	16	15	16	24	33	65	90	75
<b>85.0</b>	13	13	12	12	13	16	20	32	46	45
<b>87.5</b>	8	7	7	7	7	10	12	16	16	16
<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

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-30-IL.IES**

**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	351	351	351	351	351	351	351	351	351	351
2.5	351	349	351	350	347	347	349	350	345	344
5.0	336	333	328	325	328	326	320	322	317	310
7.5	350	348	341	341	325	309	285	289	284	293
10.0	363	353	343	347	310	300	287	279	265	277
12.5	393	385	380	357	319	300	285	293	297	311
15.0	434	423	400	360	316	310	312	326	337	329
17.5	491	461	437	384	328	326	350	359	356	354
20.0	559	534	491	408	347	365	366	375	354	321
22.5	670	606	572	463	384	392	383	341	279	232
25.0	794	739	671	504	444	419	348	257	187	138
27.5	972	871	790	566	490	411	271	167	113	94
30.0	1194	1053	926	634	529	366	194	110	90	82
32.5	1410	1262	1071	700	549	300	130	93	81	76
35.0	1665	1472	1233	774	532	225	109	84	76	71
37.5	1869	1682	1368	828	481	156	98	79	69	63
40.0	1946	1783	1431	871	409	121	89	72	61	55
42.5	2052	1870	1486	876	295	107	81	65	52	45
45.0	2197	1993	1558	849	178	96	72	56	43	36
47.5	2378	2140	1630	768	130	85	62	45	34	29
50.0	2589	2284	1680	636	112	76	51	36	28	23
52.5	2841	2389	1696	467	101	66	41	28	22	16
55.0	3102	2412	1644	314	93	55	32	21	16	12
57.5	3174	2298	1493	225	86	45	24	15	12	7
60.0	3031	2059	1274	186	83	37	17	10	6	4
62.5	2631	1726	1017	154	80	29	13	5	4	2
65.0	2123	1316	738	118	70	23	8	3	3	1
67.5	1513	911	465	84	52	17	5	2	2	1
70.0	901	548	261	59	36	11	5	3	2	2
72.5	392	273	143	43	23	7	5	3	2	1
75.0	167	144	89	31	13	5	5	4	2	1
77.5	106	99	58	20	8	5	5	4	2	1

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-30-IL.IES**

**CANDELA TABULATION - (Cont.)**

80.0	83	70	37	12	6	5	5	4	2	1
82.5	60	43	23	5	5	5	5	4	2	1
85.0	34	22	10	3	4	5	5	4	2	1
87.5	13	5	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	351	351
2.5	340	334
5.0	306	301
7.5	290	285
10.0	284	271
12.5	318	309
15.0	355	348
17.5	370	359
20.0	317	301
22.5	212	209
25.0	122	119

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-30-IL.IES**

**CANDELA TABULATION - (Cont.)**

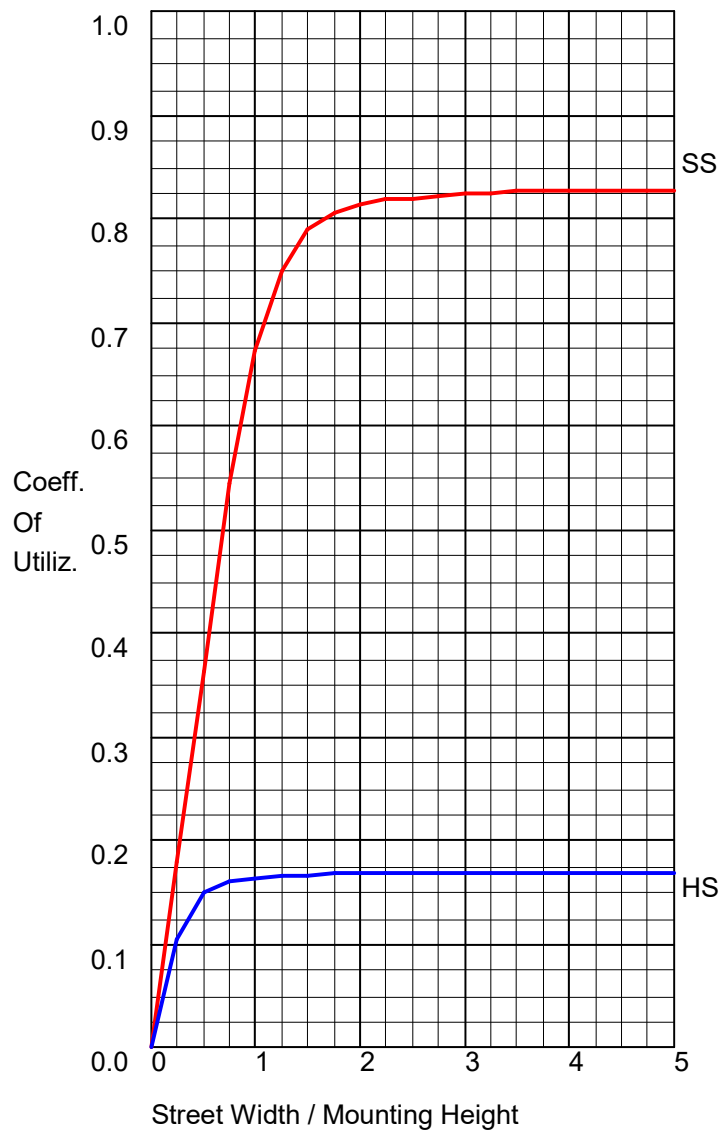
27.5	90	90
30.0	81	81
32.5	77	77
35.0	71	71
37.5	63	64
40.0	54	53
42.5	43	43
45.0	34	34
47.5	26	26
50.0	20	20
52.5	14	14
55.0	10	10
57.5	5	5
60.0	3	3
62.5	1	1
65.0	1	1
67.5	1	1
70.0	1	1
72.5	1	0
75.0	0	0
77.5	1	0
80.0	1	1
82.5	1	1
85.0	1	1
87.5	1	1
90.0	1	1
92.5	1	1
95.0	1	0
97.5	1	0
100.0	1	0
102.5	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

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-05L-30-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

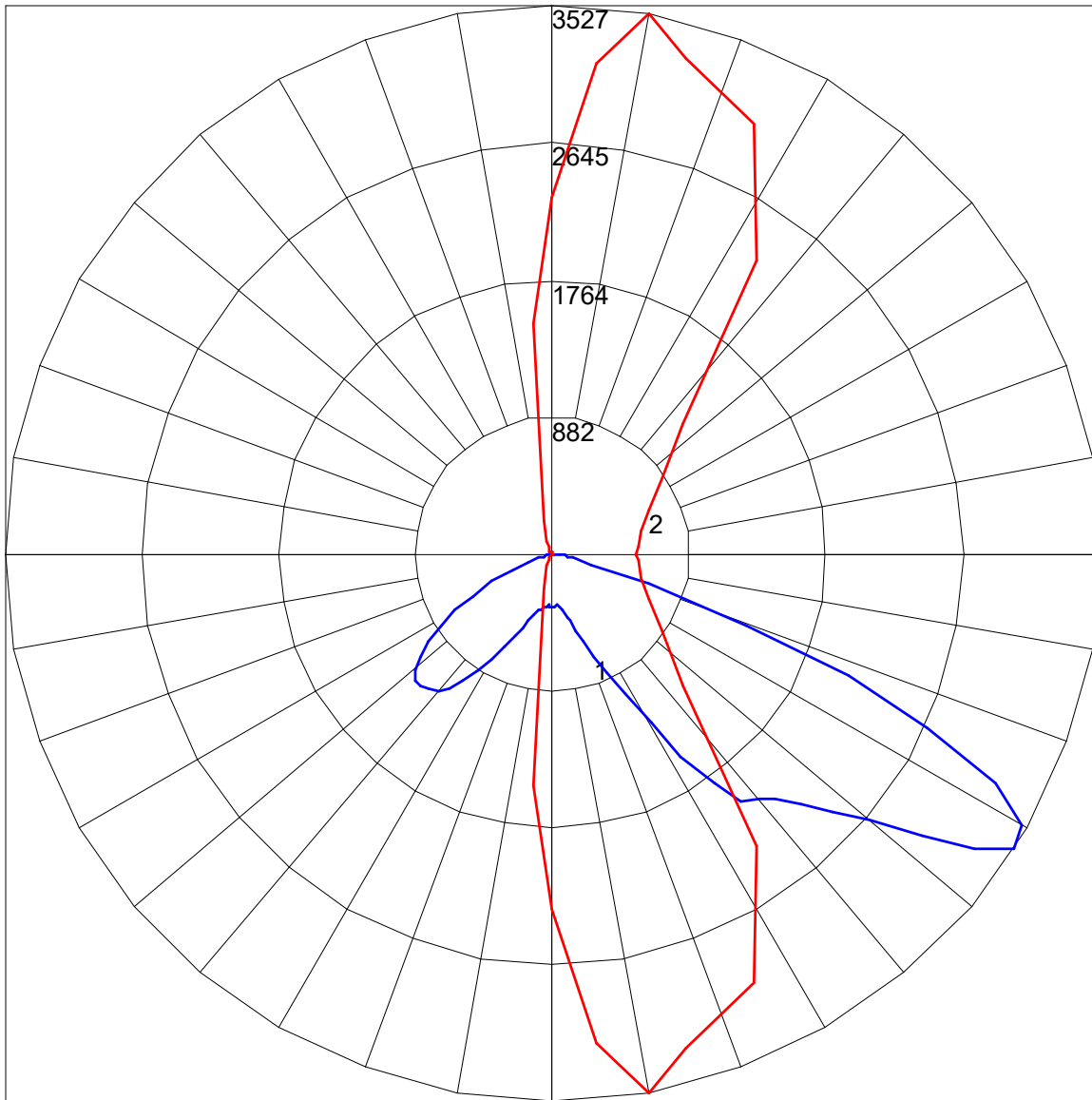


### FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	2846.1	83.0
Downward House Side	578.9	16.9
Downward Total	3425.0	99.9
Upward Street Side	1.6	0.0
Upward House Side	3.4	0.1
Upward Total	5.0	0.1
Total Flux	3430.0	100.0

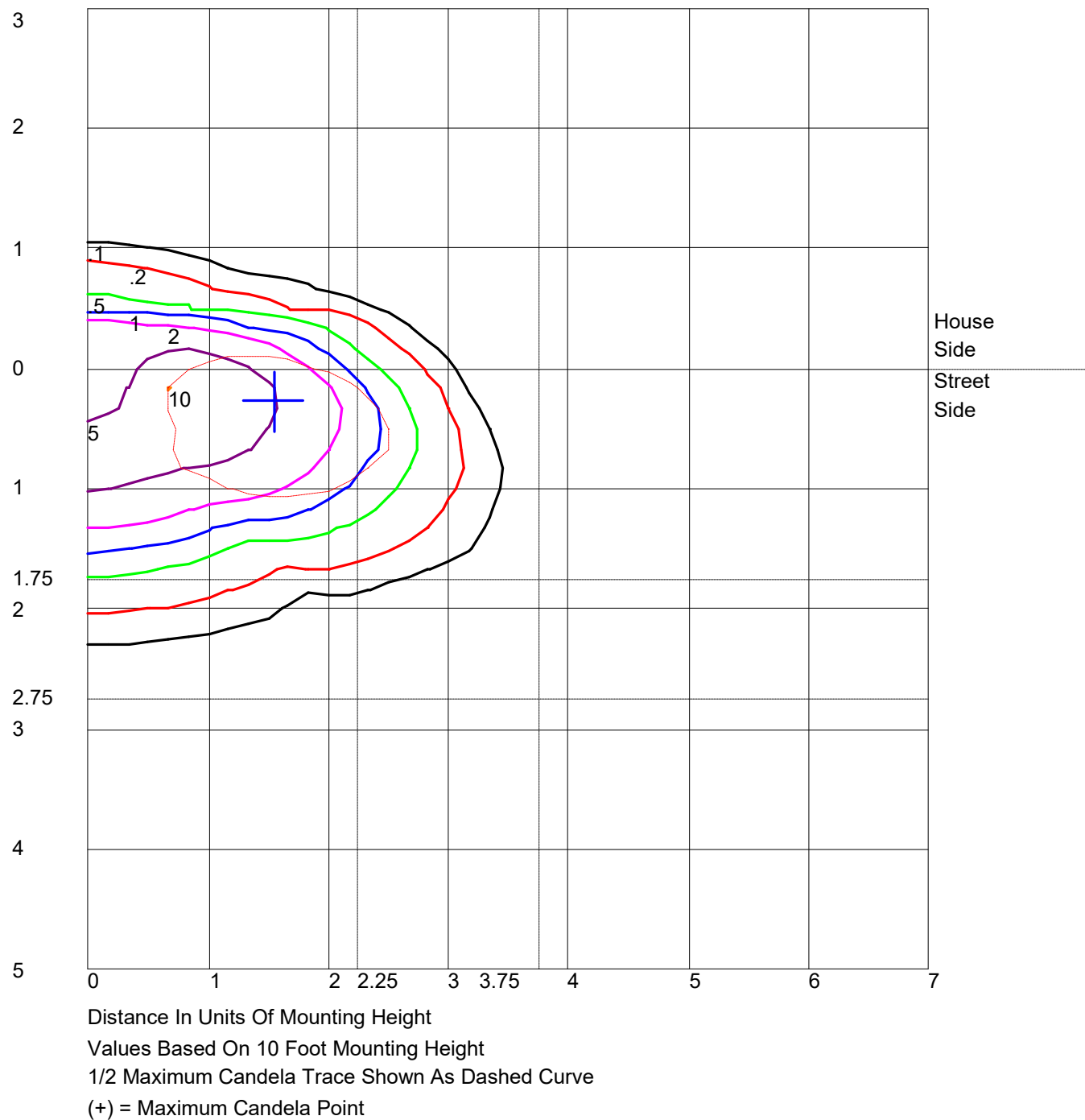


POLAR GRAPH

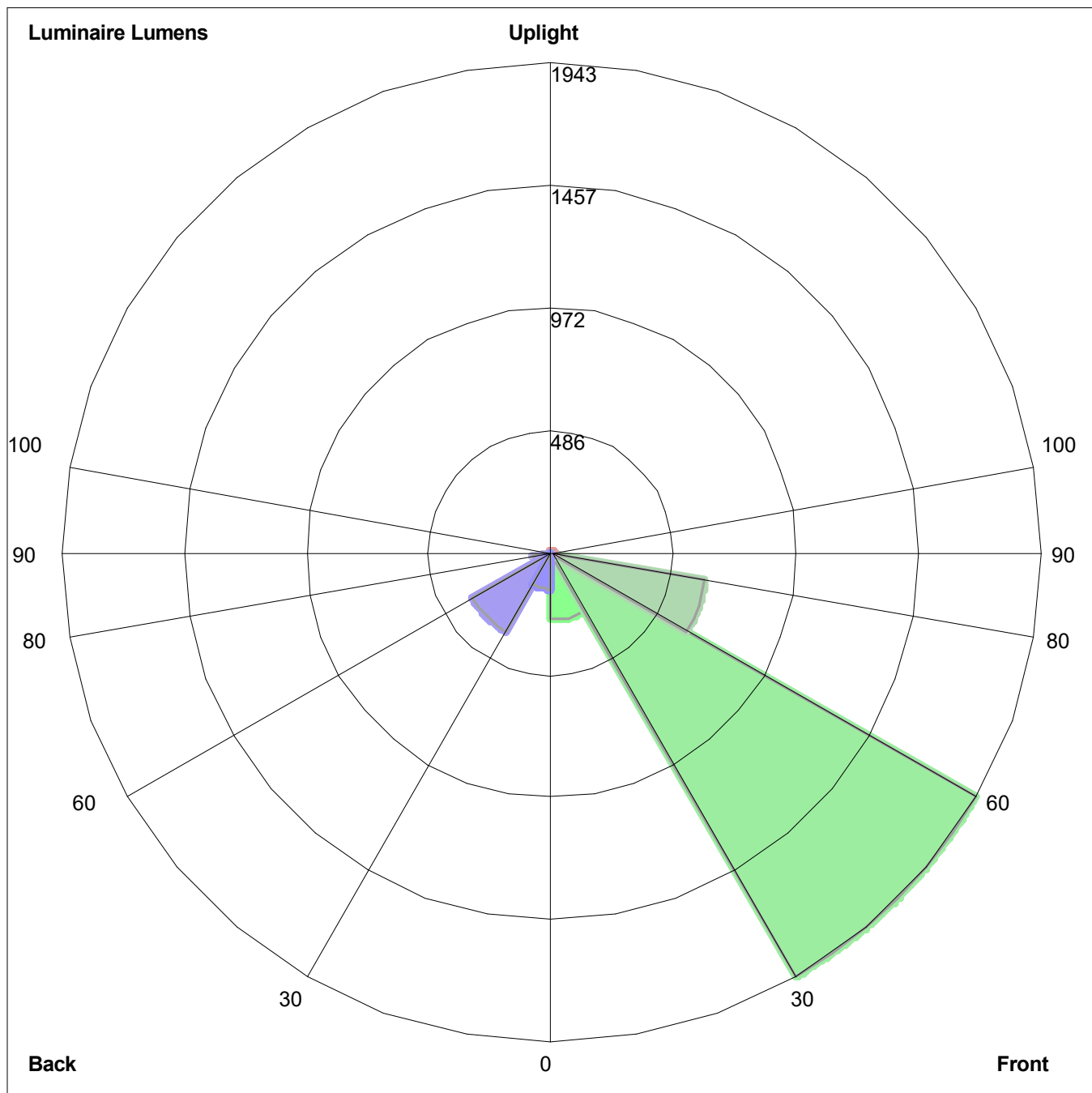


Maximum Candela = 3527 Located At Horizontal Angle = 80, Vertical Angle = 57.5  
# 1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (57.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=267.2, Medium=1943.2, High=622.2, Very High=13.5  
Back: Low=144.2, Medium=359.3, High=72.8, Very High=2.5  
Uplight: Low=1.2, High=3.7

BUG Rating : B1-U1-G1