



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-FT-LED-10L-30-IL.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] LED-11762  
[TESTLAB] LSI INDUSTRIES, INC.  
[ISSUE DATE] 06/10/2020  
[TEST DATE] 04/27/20  
[MANUFACT] LSI INDUSTRIES, INC.  
[LUMCAT] ENM4-PT-FT-LED-10L-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 III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6881
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	77
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	4867
Maximum Candela Angle	40H 65V
Maximum Candela (<90 Degrees Vertical)	4867
Maximum Candela Angle (<90 Degrees Vertical)	40H 65V
Maximum Candela At 90 Degrees Vertical	20 (0.3% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	607 (8.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	384.9	N.A.	5.6
FM - Front-Medium (30-60)	3130.0	N.A.	45.5
FH - Front-High (60-80)	2269.2	N.A.	33.0
FVH - Front-Very High (80-90)	82.8	N.A.	1.2
BL - Back-Low (0-30)	261.6	N.A.	3.8
BM - Back-Medium (30-60)	616.6	N.A.	9.0
BH - Back-High (60-80)	108.0	N.A.	1.6
BVH - Back-Very High (80-90)	5.6	N.A.	0.1
UL - Uplight-Low (90-100)	5.2	N.A.	0.1
UH - Uplight-High (100-180)	17.1	N.A.	0.2
Total	6881.0	N.A.	100.0
BUG Rating	B1-U2-G2		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>0</b></u>	<u><b>5</b></u>	<u><b>15</b></u>	<u><b>25</b></u>	<u><b>35</b></u>	<u><b>40</b></u>	<u><b>45</b></u>	<u><b>55</b></u>	<u><b>65</b></u>	<u><b>75</b></u>
<b>0.0</b>	681	681	681	681	681	681	681	681	681	681
<b>2.5</b>	664	673	673	675	674	678	681	685	683	678
<b>5.0</b>	626	624	639	652	652	645	650	635	628	626
<b>7.5</b>	594	604	613	604	585	595	589	625	655	657
<b>10.0</b>	591	595	593	583	587	600	616	633	641	656
<b>12.5</b>	642	627	624	601	608	619	623	639	675	692
<b>15.0</b>	677	662	670	671	675	665	661	680	712	735
<b>17.5</b>	720	710	703	719	740	735	747	736	755	795
<b>20.0</b>	795	796	804	804	803	818	825	823	817	867
<b>22.5</b>	879	893	916	947	928	924	928	935	906	957
<b>25.0</b>	1013	1017	1027	1056	1118	1101	1080	1087	1042	1042
<b>27.5</b>	1250	1218	1237	1224	1261	1291	1276	1253	1202	1155
<b>30.0</b>	1416	1434	1438	1452	1447	1474	1480	1472	1359	1276
<b>32.5</b>	1793	1718	1679	1670	1697	1696	1699	1693	1537	1425
<b>35.0</b>	1974	1991	1935	1949	1927	1950	1919	1911	1761	1560
<b>37.5</b>	2272	2273	2181	2198	2216	2217	2159	2157	1965	1746
<b>40.0</b>	2464	2468	2479	2471	2474	2469	2438	2368	2202	1908
<b>42.5</b>	2613	2618	2652	2679	2734	2688	2676	2635	2432	2045
<b>45.0</b>	2768	2788	2807	2859	2980	2934	2944	2840	2638	2208
<b>47.5</b>	2950	2970	2987	3050	3186	3183	3193	3087	2862	2380
<b>50.0</b>	3122	3140	3177	3277	3420	3462	3488	3341	3105	2536
<b>52.5</b>	3267	3291	3351	3490	3688	3772	3768	3635	3324	2653
<b>55.0</b>	3391	3416	3494	3678	3967	4046	4030	3920	3471	2734
<b>57.5</b>	3503	3535	3658	3872	4232	4302	4323	4125	3547	2726
<b>60.0</b>	3594	3629	3788	4086	4455	4555	4550	4241	3550	2627
<b>62.5</b>	3615	3649	3887	4289	4658	4766	4708	4239	3429	2431
<b>65.0</b>	3335	3370	3716	4268	4749	4867	4765	4082	3160	2113
<b>67.5</b>	2814	2821	3255	3903	4519	4671	4552	3784	2743	1722
<b>70.0</b>	1665	1665	2236	3164	3905	4101	3969	3250	2203	1215
<b>72.5</b>	669	726	1027	1765	2796	3100	3155	2497	1519	771
<b>75.0</b>	503	536	689	963	1403	1606	1866	1591	940	506
<b>77.5</b>	406	432	567	751	865	892	902	888	600	362
<b>80.0</b>	327	352	475	596	607	578	535	434	379	242
<b>82.5</b>	244	264	347	389	334	295	245	184	187	158
<b>85.0</b>	135	145	176	176	128	119	100	82	88	90
<b>87.5</b>	50	51	60	57	41	37	30	27	26	33
<b>90.0</b>	15	16	20	17	12	10	7	5	4	5
<b>92.5</b>	7	7	5	4	4	4	4	4	4	4
<b>95.0</b>	2	1	2	2	4	4	4	4	4	4
<b>97.5</b>	2	2	2	2	3	3	4	4	4	4
<b>100.0</b>	1	1	2	2	3	3	3	4	3	4
<b>102.5</b>	2	2	2	2	3	3	3	3	3	4
<b>105.0</b>	2	2	2	2	3	3	3	3	3	3
<b>107.5</b>	2	2	2	2	3	3	3	3	3	3
<b>110.0</b>	2	2	2	2	3	3	3	3	3	4
<b>112.5</b>	2	2	2	3	3	3	4	3	3	4
<b>115.0</b>	2	2	2	3	3	4	4	4	4	4
<b>117.5</b>	3	3	3	3	4	4	4	4	4	4
<b>120.0</b>	3	3	3	3	4	4	4	4	4	4
<b>122.5</b>	4	4	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	4	4	4	4	5
<b>130.0</b>	4	4	4	4	4	4	4	4	4	5

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**CANDELA TABULATION - (Cont.)**

132.5	4	4	4	4	4	4	4	4	4	5
135.0	4	4	4	4	4	4	4	4	4	4
137.5	2	2	2	3	3	3	4	4	4	4
140.0	0	0	1	2	2	2	2	3	3	3
142.5	0	0	1	2	2	2	2	2	2	3
145.0	0	0	1	2	2	2	2	2	2	3
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</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	681	681	681	681	681	681	681	681	681	681
2.5	682	686	680	678	681	681	685	689	677	663
5.0	632	637	630	645	649	655	662	666	661	645
7.5	651	662	666	682	661	627	600	616	610	632
10.0	666	648	659	667	642	635	617	615	592	616
12.5	686	700	715	707	667	624	625	646	627	625
15.0	758	748	751	717	668	678	672	629	584	528
17.5	792	795	785	774	708	701	667	564	471	416
20.0	886	869	863	779	735	715	584	468	398	376
22.5	965	952	943	861	781	678	504	414	383	374
25.0	1066	1051	1030	920	823	624	451	401	385	387
27.5	1155	1137	1101	1004	846	562	442	407	414	431
30.0	1233	1235	1173	1041	814	552	451	426	454	476
32.5	1346	1293	1215	1059	778	553	465	449	491	556
35.0	1438	1406	1280	1070	730	561	479	466	537	615
37.5	1567	1491	1371	1045	700	563	480	481	566	644
40.0	1653	1538	1400	1018	680	559	472	476	567	585
42.5	1733	1576	1408	983	650	548	451	443	500	442
45.0	1822	1630	1443	940	618	521	415	372	369	310
47.5	1905	1667	1461	895	582	473	355	289	253	219
50.0	1969	1676	1442	860	534	408	288	219	177	160
52.5	2006	1679	1421	830	463	324	214	158	128	121
55.0	2017	1667	1387	786	375	229	147	110	93	90
57.5	1975	1613	1327	718	280	150	103	77	67	66
60.0	1856	1511	1216	608	195	111	79	57	48	47
62.5	1655	1329	1051	490	141	90	62	43	33	33
65.0	1394	1085	822	359	112	74	50	33	24	24
67.5	1051	803	538	221	90	61	39	27	18	16
70.0	690	528	319	129	68	46	31	22	14	13
72.5	406	301	195	84	46	33	24	18	12	8
75.0	290	205	133	61	34	24	20	13	6	4
77.5	205	142	91	45	26	20	15	8	4	2

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**CANDELA TABULATION - (Cont.)**

80.0	125	92	64	33	21	17	12	5	2	2
82.5	83	62	45	24	17	14	11	5	2	2
85.0	55	39	25	15	14	13	9	5	2	1
87.5	25	15	12	9	10	9	7	4	1	1
90.0	5	4	5	9	10	9	6	4	2	1
92.5	4	4	6	9	11	9	7	5	2	2
95.0	4	4	6	9	10	9	7	5	2	2
97.5	4	3	5	7	8	7	6	5	3	2
100.0	4	3	4	5	6	6	5	5	3	2
102.5	4	3	4	5	5	5	5	5	4	3
105.0	4	3	4	4	5	5	5	4	4	3
107.5	4	4	4	4	5	5	5	4	4	3
110.0	4	4	4	4	5	5	5	4	4	3
112.5	4	4	4	4	5	5	5	4	4	3
115.0	4	4	4	5	5	5	5	5	4	4
117.5	4	4	4	5	5	5	5	5	4	4
120.0	4	4	5	5	5	5	5	5	5	4
122.5	4	5	5	5	5	5	5	5	5	4
125.0	5	5	5	5	5	5	5	5	5	5
127.5	5	5	5	5	5	5	5	5	5	5
130.0	5	5	5	5	5	5	5	5	5	5
132.5	5	5	5	5	5	5	5	5	5	5
135.0	5	5	5	5	5	5	5	5	4	4
137.5	4	4	4	4	4	4	4	4	3	2
140.0	3	3	3	4	4	3	3	3	2	2
142.5	3	3	3	3	3	3	3	2	2	1
145.0	3	3	3	3	3	3	2	2	2	1
147.5	3	3	3	3	3	3	2	2	1	1
150.0	3	3	3	3	3	3	2	2	1	1
152.5	3	3	3	3	3	2	2	2	1	0
155.0	2	3	3	3	3	2	2	2	1	0
157.5	2	2	3	3	2	2	2	2	1	0
160.0	2	2	2	2	2	2	2	1	1	0
162.5	2	2	2	2	2	2	2	1	0	0
165.0	2	2	2	2	2	2	2	1	0	0
167.5	2	2	2	2	2	2	1	1	0	0
170.0	2	2	2	2	2	2	1	1	0	0
172.5	2	2	2	2	2	2	1	1	0	0
175.0	2	2	2	2	2	2	1	1	0	0
177.5	2	2	2	2	2	2	1	1	0	0
180.0	1	1	1	1	1	1	1	1	1	1

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

	<u>175</u>	<u>180</u>
0.0	681	681
2.5	670	669
5.0	638	641
7.5	633	625
10.0	637	625
12.5	630	621
15.0	537	535
17.5	408	407
20.0	380	384
22.5	381	388
25.0	411	423

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**CANDELA TABULATION - (Cont.)**

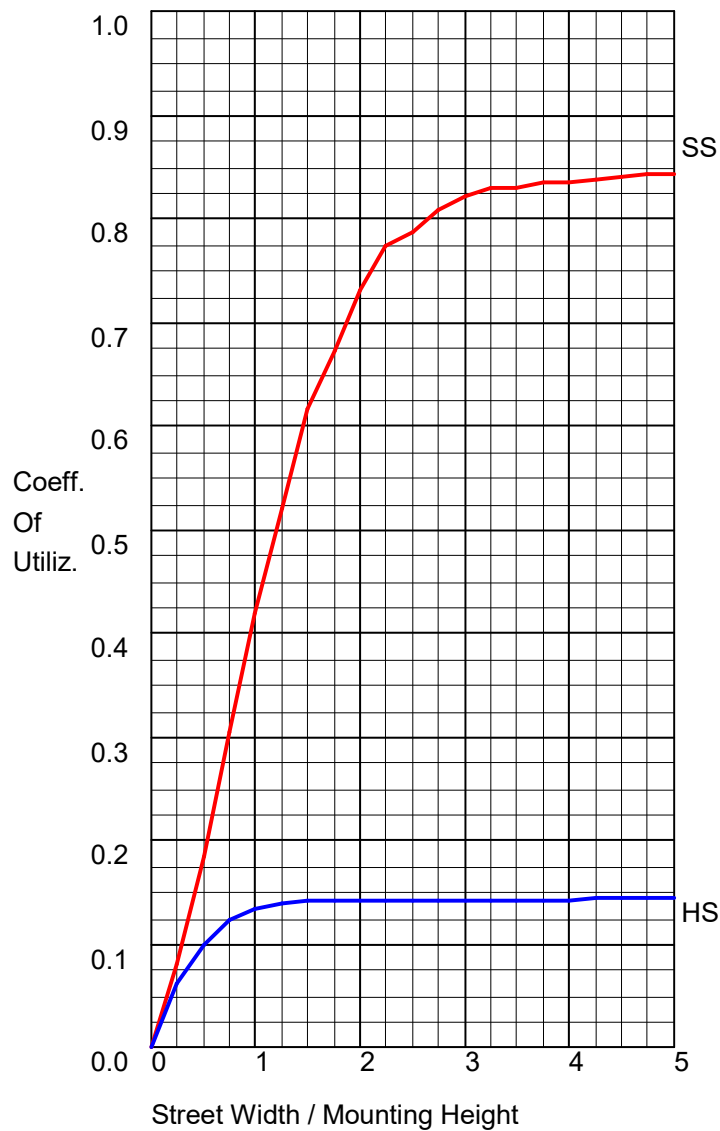
27.5	459	475
30.0	516	519
32.5	603	606
35.0	642	646
37.5	633	622
40.0	523	508
42.5	388	379
45.0	290	287
47.5	220	221
50.0	169	171
52.5	130	129
55.0	100	100
57.5	76	77
60.0	58	59
62.5	44	45
65.0	33	34
67.5	24	24
70.0	17	18
72.5	10	11
75.0	4	5
77.5	1	2
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	1	1
97.5	2	2
100.0	2	2
102.5	2	2
105.0	2	2
107.5	2	2
110.0	2	3
112.5	3	3
115.0	3	3
117.5	3	3
120.0	4	4
122.5	4	4
125.0	4	4
127.5	4	4
130.0	4	4
132.5	4	4
135.0	3	3
137.5	2	2
140.0	1	1
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

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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>	1	1

### COEFFICIENTS OF UTILIZATION

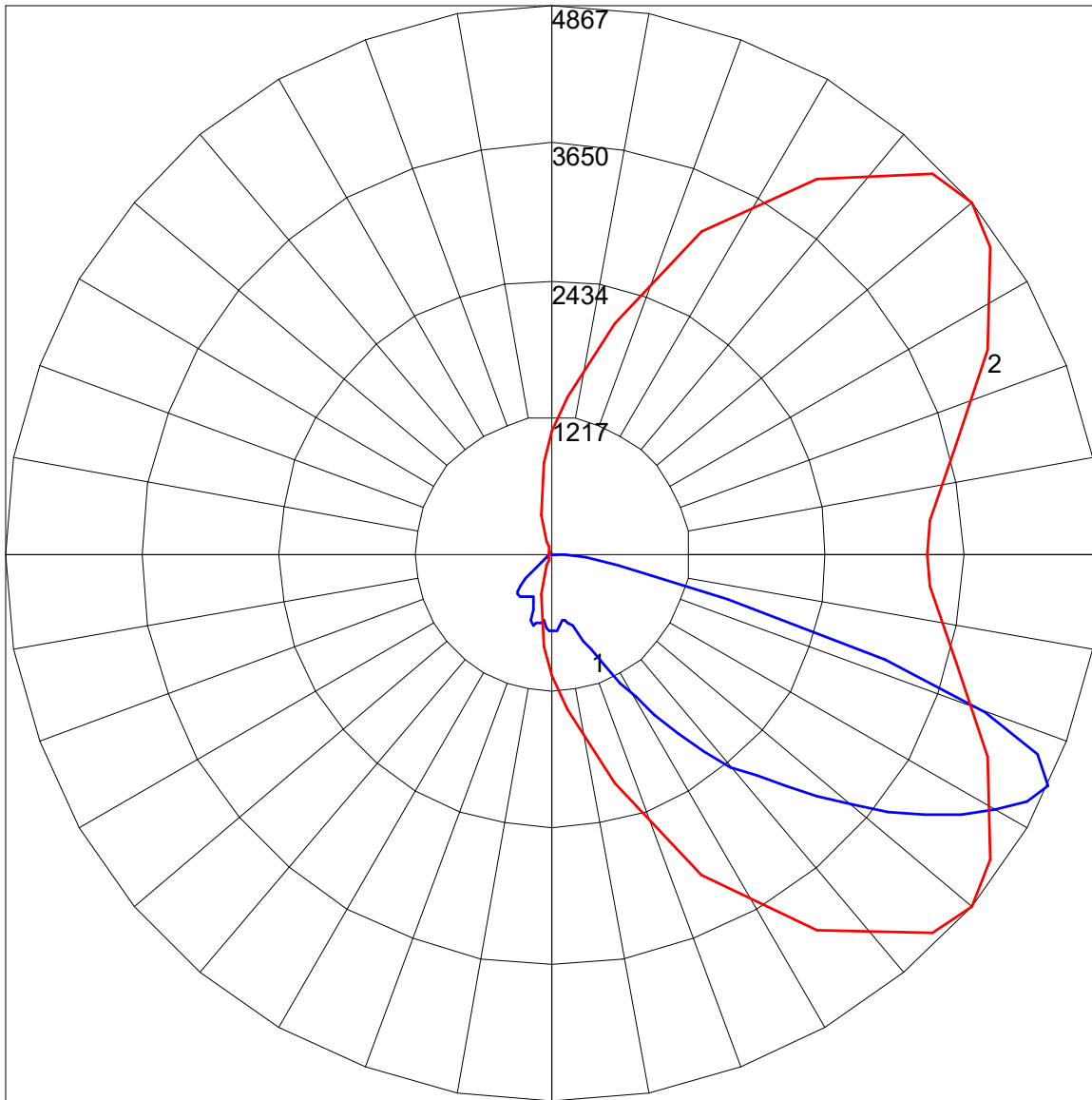


### FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	5866.9	85.3
Downward House Side	991.8	14.4
Downward Total	6858.7	99.7
Upward Street Side	10.1	0.1
Upward House Side	12.3	0.2
Upward Total	22.4	0.3
Total Flux	6881.1	100.0

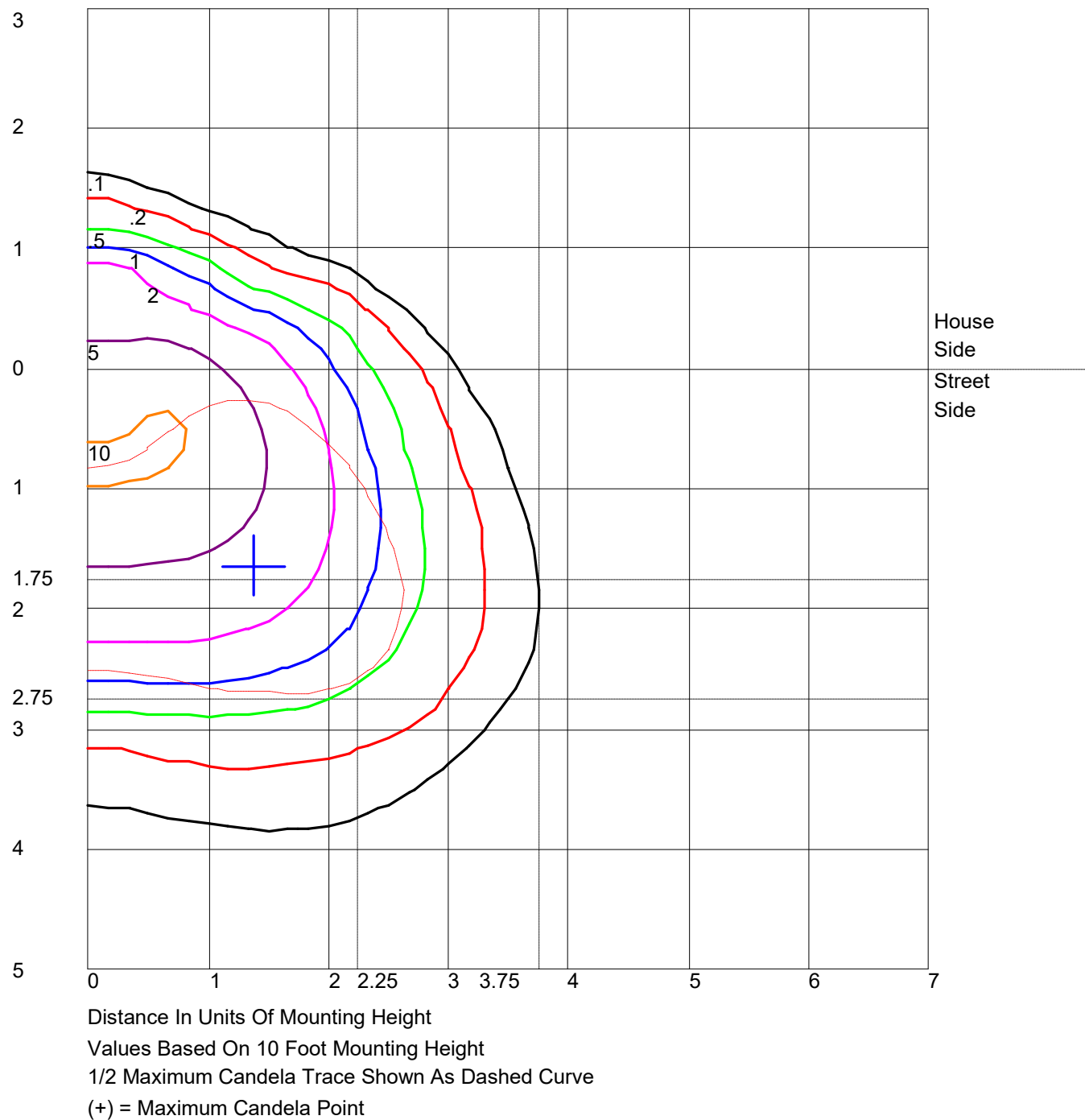


POLAR GRAPH

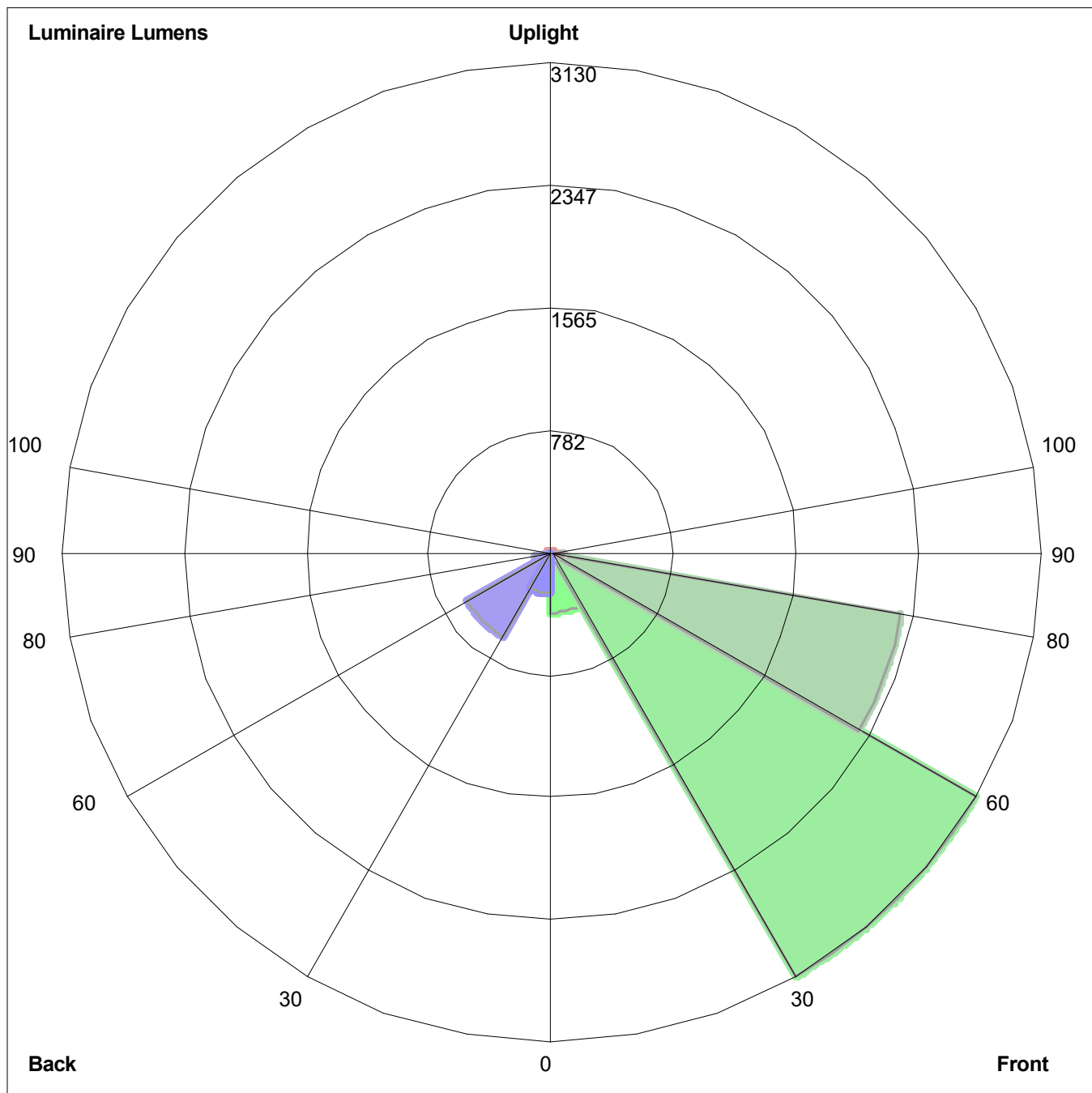


Maximum Candela = 4867 Located At Horizontal Angle = 40, Vertical Angle = 65  
# 1 - Vertical Plane Through Horizontal Angles (40 - 220) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=384.9, Medium= 3130.0, High=2269.2, Very High=82.8  
Back: Low=261.6, Medium=616.6, High=108.0, Very High=5.6  
Uplight: Low=5.2, High=17.1

BUG Rating : B1-U2-G2