



## IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-5W-LED-18L-30-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11752

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/24/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-5W-LED-18L-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	10326
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	69
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	7429
Maximum Candela Angle	47.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	7429
Maximum Candela Angle (<90 Degrees Vertical)	47.5H 67.5V
Maximum Candela At 90 Degrees Vertical	14 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	333 (3.2% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	577.3	N.A.	5.6
FM - Front-Medium (30-60)	4683.0	N.A.	45.4
FH - Front-High (60-80)	3014.3	N.A.	29.2
FVH - Front-Very High (80-90)	37.3	N.A.	0.4
BL - Back-Low (0-30)	327.9	N.A.	3.2
BM - Back-Medium (30-60)	1227.1	N.A.	11.9
BH - Back-High (60-80)	430.5	N.A.	4.2
BVH - Back-Very High (80-90)	7.1	N.A.	0.1
UL - Uplight-Low (90-100)	5.3	N.A.	0.1
UH - Uplight-High (100-180)	16.3	N.A.	0.2
Total	10326.1	N.A.	100.0
BUG Rating	B2-U2-G2		

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**CANDELA TABULATION**

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>47.5</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	602	602	602	602	602	602	602	602	602	602
2.5	614	617	623	625	621	619	619	617	609	603
5.0	615	627	633	633	652	612	612	612	596	583
7.5	645	655	677	624	635	619	621	621	645	638
10.0	712	706	735	667	693	702	720	698	676	686
12.5	815	853	796	786	820	798	809	802	771	755
15.0	924	970	934	976	994	944	952	951	900	872
17.5	1041	1079	1055	1101	1138	1176	1170	1104	1061	1039
20.0	1262	1281	1255	1287	1338	1366	1358	1343	1250	1185
22.5	1440	1438	1480	1541	1554	1581	1621	1610	1475	1393
25.0	1645	1599	1687	1781	1868	1852	1867	1879	1733	1568
27.5	1893	1979	2063	2035	2153	2202	2205	2152	1990	1829
30.0	2241	2192	2247	2402	2410	2558	2587	2489	2310	2077
32.5	2678	2684	2621	2638	2818	2874	2866	2877	2668	2374
35.0	3083	3032	2971	3047	3104	3257	3175	3238	2977	2738
37.5	3448	3484	3359	3354	3480	3581	3508	3579	3322	2913
40.0	3747	3783	3719	3734	3810	3873	3852	3879	3625	3250
42.5	3976	3989	3947	3958	4073	4085	4090	4141	3861	3452
45.0	4168	4174	4133	4200	4308	4354	4374	4325	4057	3621
47.5	4324	4356	4356	4391	4502	4549	4534	4505	4240	3832
50.0	4467	4520	4554	4530	4651	4702	4694	4690	4441	4084
52.5	4621	4646	4715	4662	4809	4886	4903	4892	4671	4279
55.0	4763	4828	4915	4920	5025	5222	5255	5248	4986	4555
57.5	4984	5035	5168	5206	5438	5729	5755	5677	5201	4694
60.0	4966	5008	5248	5388	5751	6188	6177	6036	5305	4755
62.5	4445	4550	4955	5316	5982	6624	6593	6345	5352	4704
65.0	3498	3617	4148	4743	5969	7059	6987	6547	5259	4560
67.5	1910	2056	2668	3640	5269	7345	7429	6781	5223	4280
70.0	410	426	713	1836	3786	6458	6799	6249	4352	3195
72.5	189	194	234	415	1443	4184	4623	4332	2840	1907
75.0	118	120	133	172	355	1446	1962	2087	1415	864
77.5	61	63	68	89	149	304	386	743	676	406
80.0	44	44	46	52	73	112	127	211	333	230
82.5	38	39	41	45	53	64	67	94	173	183
85.0	30	30	32	36	45	53	56	66	96	148
87.5	21	21	23	25	30	36	37	46	67	85
90.0	10	10	10	10	10	10	8	5	8	14
92.5	2	2	2	3	4	4	4	4	4	4
95.0	1	1	1	1	2	4	4	4	4	4
97.5	1	1	1	1	2	2	2	3	3	4
100.0	1	1	1	1	2	2	2	2	3	3
102.5	1	1	1	1	1	2	2	2	2	3
105.0	1	2	1	1	2	2	2	2	2	3
107.5	2	2	1	2	2	2	2	2	2	3
110.0	3	2	2	2	2	2	2	2	3	3
112.5	3	3	3	2	3	3	3	2	3	4
115.0	4	4	3	3	3	3	3	3	3	4
117.5	4	4	4	3	3	3	4	3	4	4
120.0	5	4	4	3	4	4	4	4	4	4
122.5	5	5	4	4	4	4	4	4	4	4
125.0	5	5	5	4	4	4	4	4	4	5
127.5	5	5	5	5	4	4	4	4	4	5
130.0	5	5	5	5	4	4	4	4	4	5

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

132.5	5	5	5	5	4	4	4	4	4	5
135.0	5	5	5	4	4	4	4	4	4	5
137.5	2	3	2	2	3	3	2	2	3	4
140.0	0	1	1	1	1	1	1	1	1	2
142.5	0	1	1	1	1	1	1	1	1	2
145.0	0	1	1	1	1	1	1	1	1	2
147.5	0	0	1	1	1	1	1	1	1	2
150.0	1	1	1	1	1	1	1	1	1	2
152.5	0	1	1	1	1	1	1	1	1	2
155.0	0	1	1	1	1	1	1	1	1	2
157.5	1	1	1	1	1	1	1	1	1	1
160.0	1	1	1	1	1	1	1	1	1	1
162.5	1	1	1	1	1	1	1	1	1	1
165.0	0	1	1	1	1	1	1	1	1	1
167.5	0	1	1	1	1	1	1	1	1	1
170.0	1	1	1	1	1	1	1	1	1	1
172.5	1	1	1	1	1	1	1	1	1	1
175.0	1	1	1	1	1	1	1	1	1	1
177.5	1	1	1	1	1	1	1	1	1	1
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	602	602	602	602	602	602	602	602	602	602
2.5	600	599	601	599	594	588	591	592	589	580
5.0	581	577	565	562	566	563	548	550	542	532
7.5	604	610	595	594	565	531	503	508	489	499
10.0	643	625	614	627	550	535	506	489	475	481
12.5	711	701	683	642	572	543	521	530	525	540
15.0	788	769	736	673	601	583	595	605	596	583
17.5	915	868	828	738	657	667	683	663	634	630
20.0	1058	1004	955	828	754	769	755	723	704	676
22.5	1267	1152	1088	937	883	886	840	805	743	709
25.0	1417	1331	1230	1040	1069	1010	945	858	797	678
27.5	1612	1493	1402	1206	1253	1140	1035	908	741	563
30.0	1858	1694	1581	1417	1455	1333	1183	859	567	391
32.5	2035	1908	1756	1654	1668	1534	1210	653	369	266
35.0	2322	2113	1970	1903	1893	1733	1079	436	247	197
37.5	2566	2372	2218	2191	2131	1802	783	287	187	163
40.0	2738	2559	2394	2478	2385	1645	501	208	155	139
42.5	2935	2735	2560	2711	2586	1287	310	170	133	118
45.0	3154	2953	2776	2960	2665	827	222	142	114	100
47.5	3336	3149	2996	3227	2513	506	171	120	96	80
50.0	3588	3403	3258	3519	2103	333	136	101	78	61
52.5	3832	3690	3552	3836	1532	234	112	81	59	43
55.0	4072	3940	3924	4095	977	165	92	61	43	29
57.5	4247	4031	4153	4078	661	117	73	43	28	16
60.0	4318	4060	4216	3617	535	94	55	28	16	6
62.5	4227	3998	4201	2838	501	86	40	16	9	4
65.0	4044	3836	4044	1866	504	111	27	9	7	3
67.5	3677	3498	3719	1043	492	159	19	8	6	4
70.0	2668	2526	2661	512	379	207	19	7	7	5
72.5	1502	1395	1481	185	163	200	16	8	5	3
75.0	654	594	619	101	69	82	15	7	2	1
77.5	287	259	256	62	34	39	10	5	1	1

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**CANDELA TABULATION - (Cont.)**

80.0	175	151	125	37	23	21	8	5	0	1
82.5	133	111	80	24	18	14	8	5	0	1
85.0	95	73	43	15	13	12	8	5	0	1
87.5	55	29	12	10	12	11	8	5	0	1
90.0	10	4	8	11	13	12	10	6	1	1
92.5	5	4	8	11	14	13	10	7	1	2
95.0	4	3	6	10	12	12	9	6	1	2
97.5	4	3	5	8	10	10	7	5	1	2
100.0	4	4	5	5	8	8	5	5	2	1
102.5	3	4	5	5	5	5	5	4	2	1
105.0	3	4	4	5	5	5	5	4	2	1
107.5	3	4	4	5	5	5	5	4	3	2
110.0	4	4	4	5	5	5	5	4	3	2
112.5	4	4	5	5	5	5	5	4	3	2
115.0	4	4	5	5	5	5	5	4	3	2
117.5	4	5	5	5	5	5	5	4	4	3
120.0	4	5	5	5	5	5	5	5	4	3
122.5	5	5	5	5	5	5	5	5	4	4
125.0	5	5	5	5	5	5	5	5	5	4
127.5	5	5	5	5	5	5	5	5	5	4
130.0	5	5	5	5	5	5	5	5	5	5
132.5	5	5	5	5	5	5	5	5	5	4
135.0	5	5	5	5	5	5	5	5	4	4
137.5	4	4	4	5	5	5	4	4	4	3
140.0	3	3	3	4	4	4	4	3	2	1
142.5	2	3	3	3	4	4	3	3	2	1
145.0	2	3	3	3	4	4	3	2	2	1
147.5	2	3	3	3	4	4	3	2	1	1
150.0	2	3	3	3	3	4	3	2	1	1
152.5	2	3	3	3	3	3	3	2	1	1
155.0	2	2	3	3	3	3	3	2	1	1
157.5	2	2	2	3	3	3	3	2	1	1
160.0	2	2	2	2	3	3	2	1	1	1
162.5	1	2	2	2	2	2	2	1	1	0
165.0	1	1	2	2	2	2	2	1	1	0
167.5	1	1	1	2	2	2	2	1	1	0
170.0	1	1	1	2	2	2	1	1	1	0
172.5	1	1	1	2	2	2	1	1	1	0
175.0	1	1	1	1	1	1	1	1	1	0
177.5	1	1	1	1	1	1	1	1	0	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	602	602
2.5	574	572
5.0	519	518
7.5	487	481
10.0	491	468
12.5	546	534
15.0	598	572
17.5	633	606
20.0	676	645
22.5	672	652
25.0	619	604

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-5W-LED-18L-30-IL.IES**

**CANDELA TABULATION - (Cont.)**

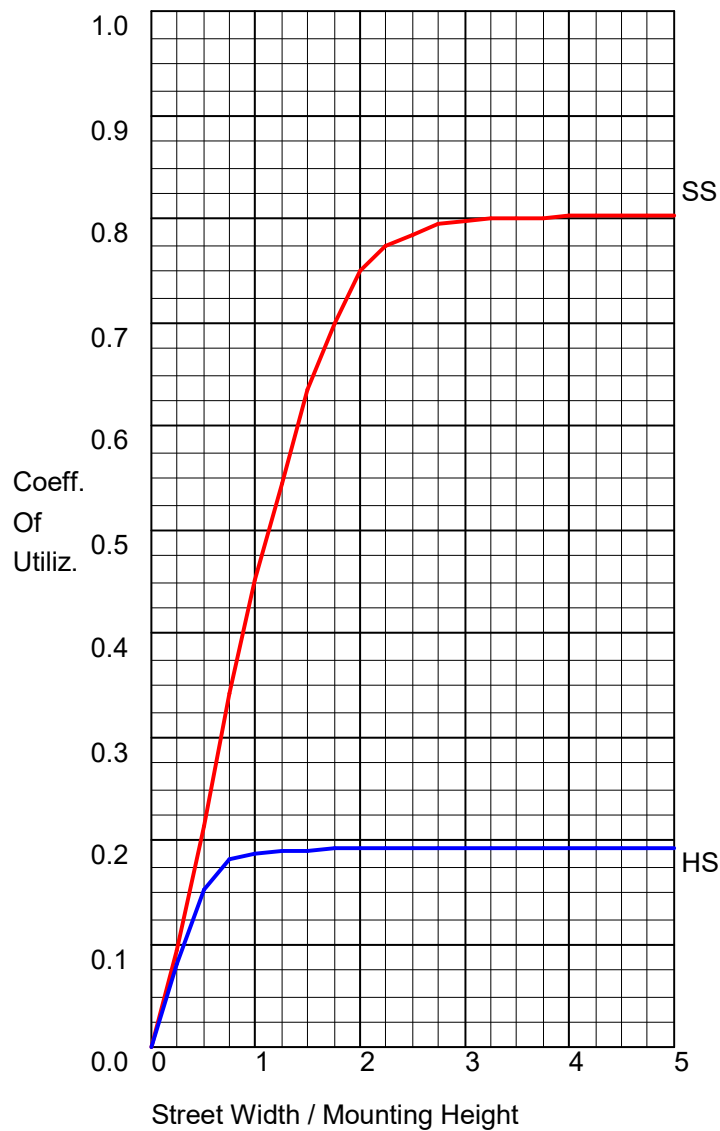
27.5	483	461
30.0	327	318
32.5	233	227
35.0	183	183
37.5	156	154
40.0	134	134
42.5	114	114
45.0	94	92
47.5	73	73
50.0	55	54
52.5	37	36
55.0	24	23
57.5	11	11
60.0	4	4
62.5	1	1
65.0	1	0
67.5	2	1
70.0	3	3
72.5	0	0
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	1	0
97.5	1	0
100.0	1	1
102.5	1	1
105.0	1	1
107.5	1	1
110.0	1	1
112.5	1	1
115.0	2	2
117.5	2	2
120.0	3	3
122.5	3	3
125.0	4	4
127.5	4	4
130.0	4	4
132.5	4	4
135.0	4	4
137.5	2	2
140.0	1	1
142.5	1	1
145.0	1	0
147.5	1	0
150.0	1	1
152.5	1	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 : ENM4-PT-5W-LED-18L-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>	1	1

COEFFICIENTS OF UTILIZATION

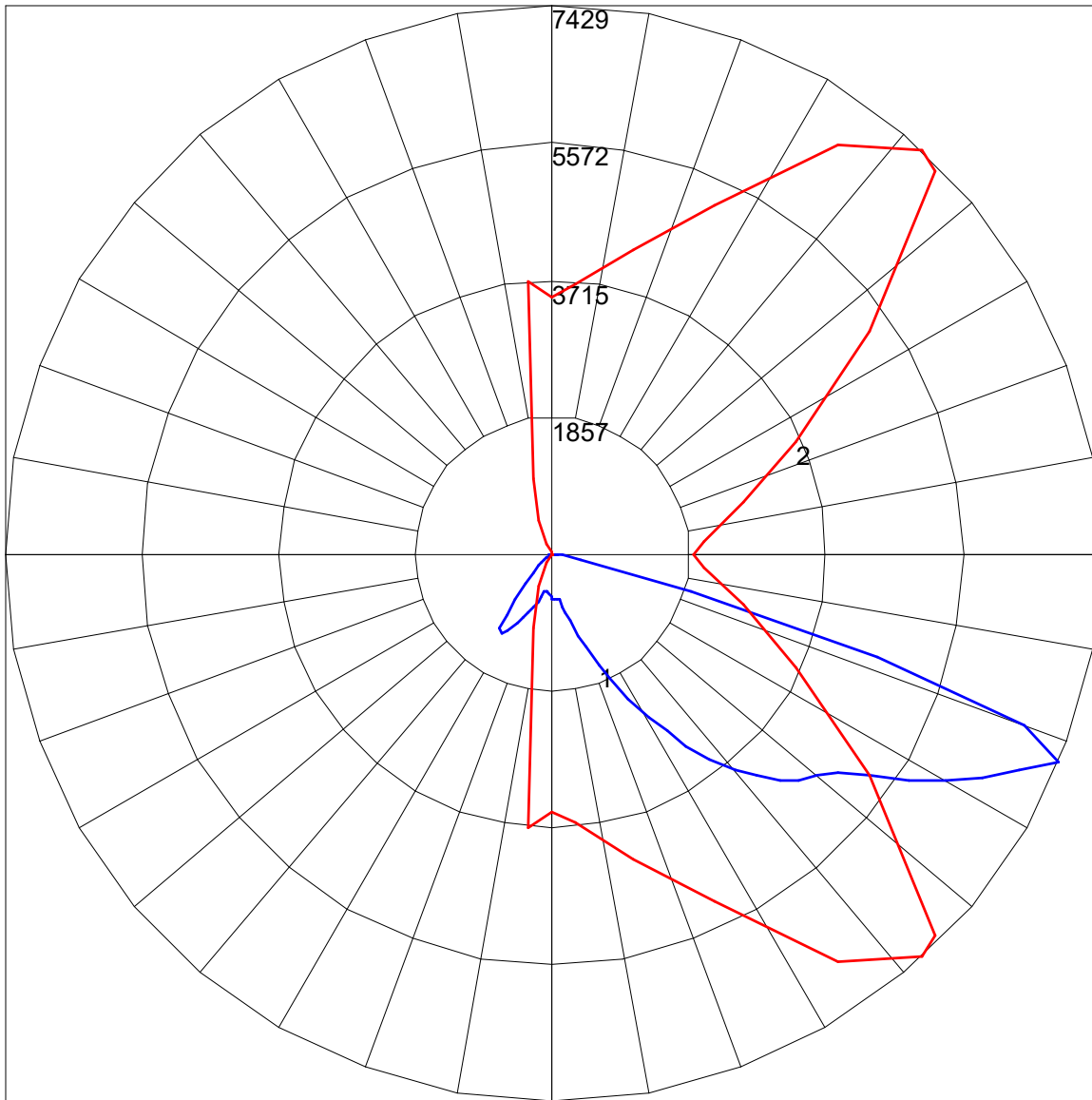


FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	8311.9	80.5
Downward House Side	1992.6	19.3
Downward Total	10304.5	99.8
Upward Street Side	8.9	0.1
Upward House Side	12.7	0.1
Upward Total	21.6	0.2
Total Flux	10326.1	100.0

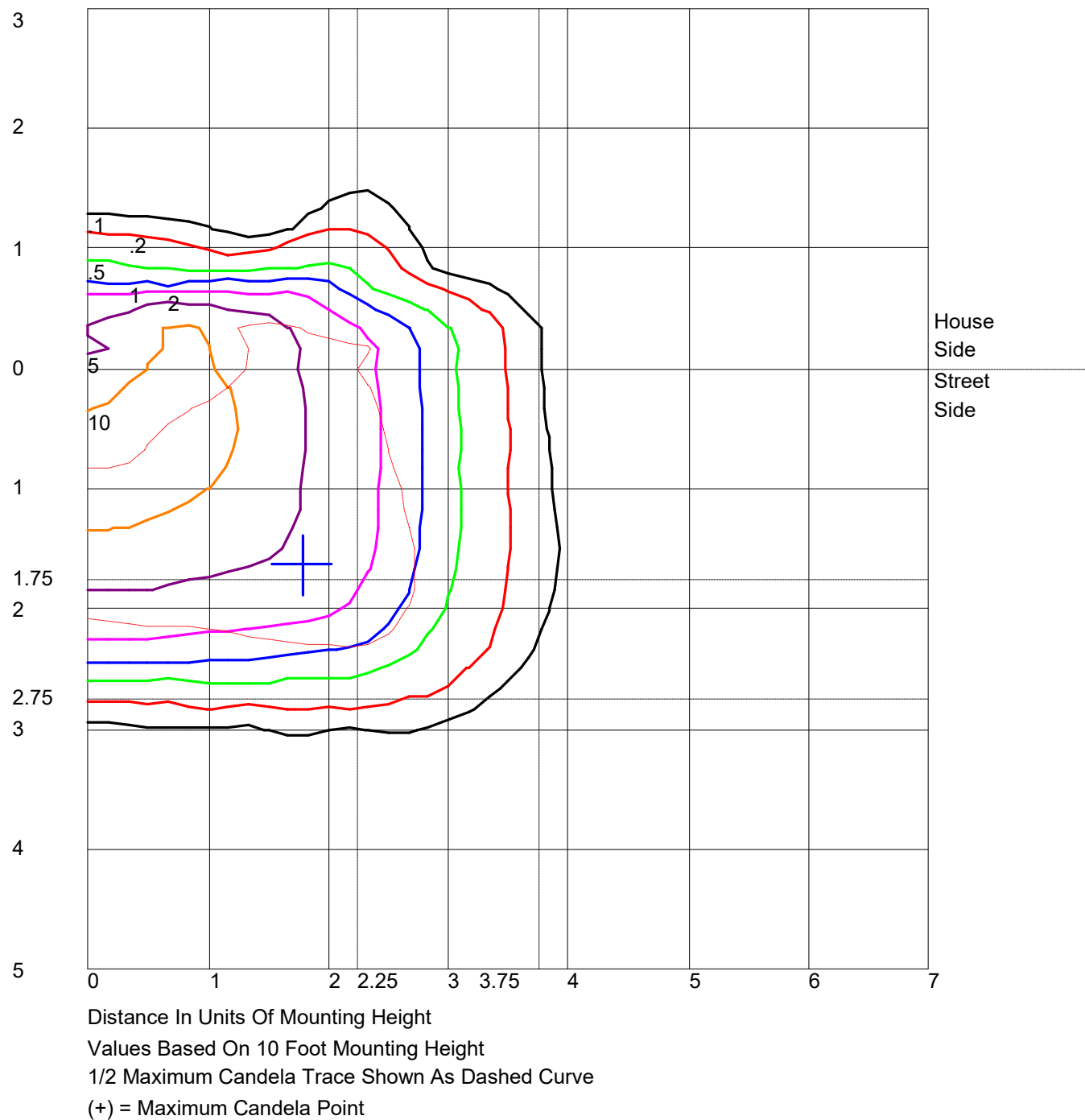


POLAR GRAPH

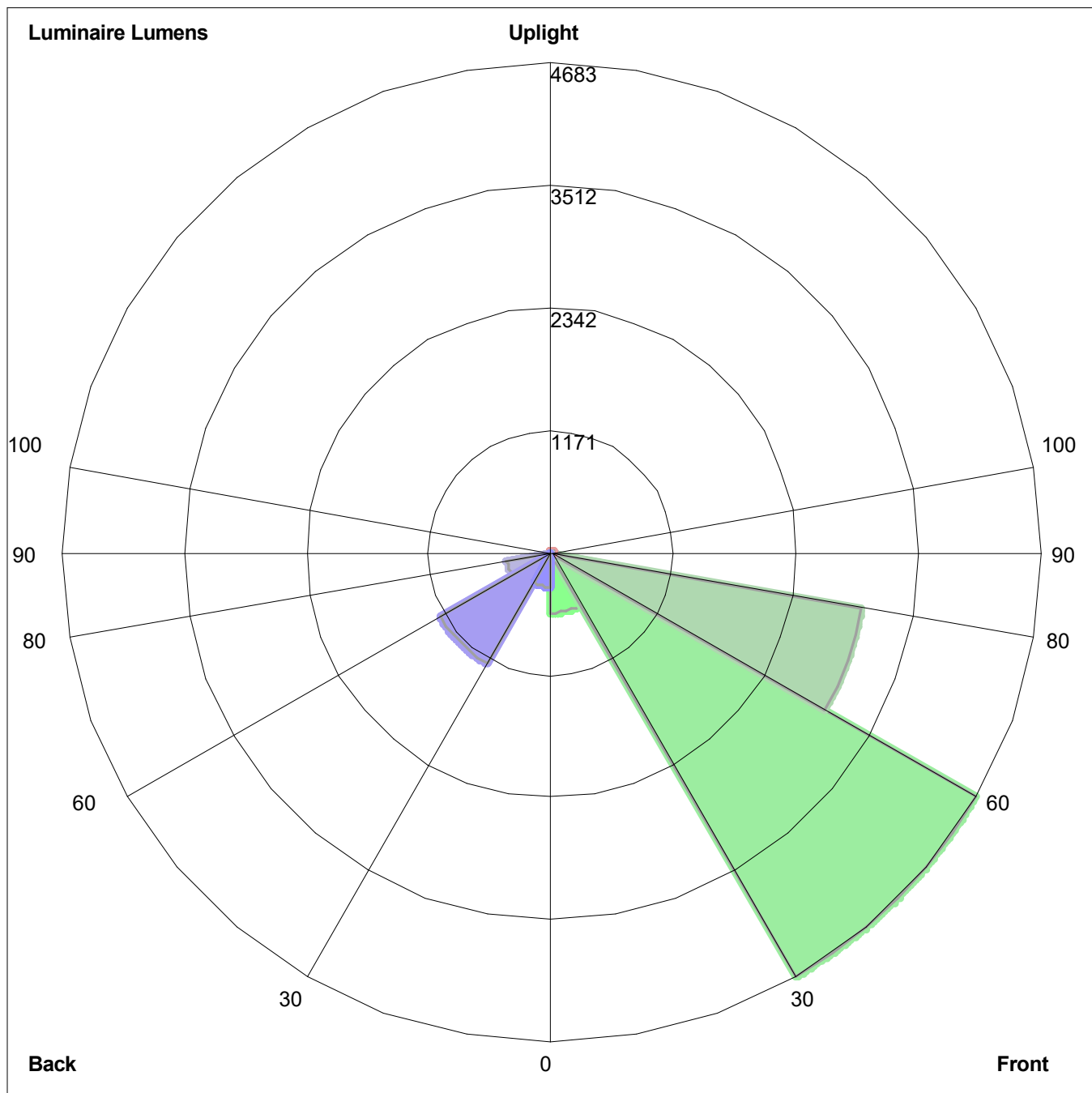


Maximum Candela = 7429 Located At Horizontal Angle = 47.5, Vertical Angle = 67.5  
# 1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
 Front: Low=577.3, Medium= 4683.0, High=3014.3, Very High=37.3  
 Back: Low=327.9, Medium=1227.1, High=430.5, Very High=7.1  
 Uplight: Low=5.3, High=16.3

BUG Rating : B2-U2-G2