



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-PT-3-LED-10L-30.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] LED-11678  
[TESTLAB] LSI INDUSTRIES, INC.  
[ISSUE DATE] 06/10/2020  
[TEST DATE] 04/02/20  
[MANUFACT] LSI INDUSTRIES, INC.  
[LUMCAT] ENM4-PT-3-LED-10L-30  
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER] TEST PROCEDURE: IESNA LM-79-08  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Outdoor

**CHARACTERISTICS**

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9367
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	77.3
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	9198
Maximum Candela Angle	57.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	9198
Maximum Candela Angle (<90 Degrees Vertical)	57.5H 67.5V
Maximum Candela At 90 Degrees Vertical	42 (0.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	803 (8.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : ENM4-PT-3-LED-10L-30.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	272.7	N.A.	2.9
FM - Front-Medium (30-60)	3829.6	N.A.	40.9
FH - Front-High (60-80)	3248.2	N.A.	34.7
FVH - Front-Very High (80-90)	79.5	N.A.	0.8
BL - Back-Low (0-30)	272.3	N.A.	2.9
BM - Back-Medium (30-60)	1077.9	N.A.	11.5
BH - Back-High (60-80)	512.2	N.A.	5.5
BVH - Back-Very High (80-90)	49.2	N.A.	0.5
UL - Uplight-Low (90-100)	8.5	N.A.	0.1
UH - Uplight-High (100-180)	17.5	N.A.	0.2
Total	9367.6	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>55.0</u>	<u>57.5</u>	<u>65.0</u>	<u>75.0</u>
0.0	464	464	464	464	464	464	464	464	464	464
2.5	451	452	446	445	448	450	458	458	460	457
5.0	403	406	412	421	433	421	420	419	420	423
7.5	384	391	402	395	392	391	404	413	433	432
10.0	385	384	385	381	389	413	422	424	429	435
12.5	401	402	401	387	405	419	431	433	442	460
15.0	423	421	423	430	442	435	455	462	471	481
17.5	456	453	446	458	469	486	482	490	501	517
20.0	531	526	513	510	520	532	548	547	547	557
22.5	596	604	606	620	613	620	642	636	618	622
25.0	733	713	731	753	762	767	785	773	755	726
27.5	963	978	971	947	953	994	973	966	948	889
30.0	1261	1239	1203	1238	1208	1265	1236	1220	1175	1061
32.5	1626	1610	1520	1490	1541	1570	1547	1525	1450	1299
35.0	1893	1899	1857	1819	1849	1927	1863	1841	1723	1512
37.5	2258	2224	2163	2174	2196	2254	2178	2162	1966	1700
40.0	2559	2542	2545	2539	2549	2578	2462	2440	2190	1876
42.5	2886	2882	2880	2891	2915	2877	2758	2705	2394	1993
45.0	3325	3350	3332	3336	3314	3249	3000	2948	2583	2108
47.5	4001	3968	3963	3957	3790	3609	3282	3186	2757	2229
50.0	4752	4725	4753	4710	4439	4024	3573	3448	2975	2387
52.5	5503	5482	5546	5520	5217	4540	3910	3777	3263	2613
55.0	6109	6125	6237	6278	6030	5222	4368	4214	3631	2931
57.5	6218	6266	6551	6873	6933	6033	5044	4861	4172	3447
60.0	5586	5636	6204	6768	7522	7008	6009	5812	5019	4170
62.5	3735	3828	4467	5745	7246	7791	7263	7070	6084	4968
65.0	1912	1885	2333	3591	6205	7880	8538	8467	7092	5539
67.5	839	881	1077	1792	3978	6955	9099	9198	7721	5519
70.0	473	496	615	949	2021	5078	8113	8525	7401	4375
72.5	266	284	379	618	1171	2692	5880	6409	5142	2596
75.0	188	197	254	433	791	1393	3069	3454	2874	1070
77.5	138	144	195	357	588	818	1508	1702	1229	446
80.0	100	106	150	289	471	512	693	803	626	222
82.5	69	71	116	210	341	331	293	328	295	128
85.0	51	53	87	161	204	187	139	141	135	80
87.5	43	45	63	117	122	72	47	49	50	42
90.0	23	26	34	40	42	18	13	13	11	10
92.5	7	7	9	9	5	5	6	6	6	5
95.0	4	4	3	3	3	4	5	5	5	5
97.5	3	3	3	3	3	4	4	5	5	4
100.0	3	3	2	3	3	3	4	4	4	4
102.5	2	3	2	3	3	3	3	3	3	4
105.0	2	2	2	3	3	3	3	3	3	4
107.5	2	2	2	3	3	3	3	3	3	4
110.0	2	2	2	3	3	3	3	3	3	4
112.5	3	3	3	3	3	3	3	3	3	4
115.0	3	3	3	3	3	3	3	3	3	4
117.5	3	3	3	3	3	4	3	3	3	4
120.0	3	3	3	3	4	4	3	3	4	4
122.5	4	4	4	4	4	4	3	3	4	4
125.0	4	4	4	4	4	4	3	3	4	4
127.5	3	4	4	4	4	4	4	4	4	4
130.0	4	4	4	4	4	4	4	4	4	4

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**CANDELA TABULATION - (Cont.)**

132.5	4	4	4	4	4	4	4	4	4	4
135.0	3	4	3	3	4	4	3	3	4	4
137.5	2	2	2	2	3	3	3	3	3	3
140.0	0	1	1	2	2	2	2	2	2	3
142.5	0	0	1	1	2	2	2	2	2	3
145.0	0	1	1	1	2	2	2	2	2	3
147.5	0	1	1	1	1	1	2	2	2	2
150.0	0	1	1	1	1	1	2	2	2	2
152.5	0	1	1	1	1	1	1	2	2	2
155.0	0	1	1	1	1	1	1	1	2	2
157.5	0	0	1	1	1	1	1	1	2	2
160.0	1	0	1	1	1	1	1	1	1	2
162.5	0	0	1	1	1	1	1	1	1	2
165.0	0	0	1	1	1	1	1	1	1	2
167.5	0	0	1	1	1	1	1	1	1	2
170.0	0	0	1	1	1	1	1	1	2	2
172.5	0	0	1	1	1	2	2	2	1	2
175.0	0	0	1	1	2	2	2	2	1	2
177.5	0	0	1	1	2	2	2	2	2	2
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	464	464	464	464	464	464	464	464	464	464
2.5	461	467	467	467	471	474	480	487	480	470
5.0	427	429	430	449	461	470	485	485	488	477
7.5	442	442	452	481	471	461	455	471	466	485
10.0	440	445	453	478	466	485	484	487	487	503
12.5	466	472	489	493	491	491	509	546	546	575
15.0	490	499	502	504	498	536	561	599	614	607
17.5	522	519	527	535	529	592	635	646	647	649
20.0	561	558	564	539	563	630	652	683	697	693
22.5	623	609	614	592	629	681	708	714	709	725
25.0	715	691	680	624	711	738	722	735	744	758
27.5	829	778	761	695	770	779	756	767	787	802
30.0	964	897	853	752	806	843	804	804	815	834
32.5	1095	1010	932	812	850	899	873	848	876	937
35.0	1253	1124	1010	861	870	937	926	905	959	1034
37.5	1374	1225	1069	885	880	957	946	976	1018	1145
40.0	1462	1272	1085	892	877	964	955	987	1117	1185
42.5	1527	1305	1085	864	847	950	940	997	1211	1164
45.0	1598	1338	1089	832	805	910	918	970	1323	1070
47.5	1679	1387	1101	804	763	868	890	947	1352	1013
50.0	1794	1466	1137	785	725	828	857	928	1337	995
52.5	1960	1577	1204	784	693	792	826	894	1279	986
55.0	2167	1753	1331	792	664	756	787	849	1174	975
57.5	2550	2014	1480	802	632	711	742	783	1011	934
60.0	3066	2293	1523	781	592	651	690	699	833	917
62.5	3629	2555	1402	705	547	584	623	615	663	898
65.0	3916	2508	1109	594	500	520	542	553	532	867
67.5	3489	2216	821	483	442	455	480	501	452	813
70.0	2350	1497	520	392	374	391	419	456	413	688
72.5	1094	671	302	300	309	324	352	404	364	512
75.0	405	288	192	234	257	275	296	319	253	326
77.5	191	147	138	194	217	233	214	202	165	224

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**CANDELA TABULATION - (Cont.)**

80.0	108	89	114	166	186	167	134	152	119	160
82.5	73	62	93	141	138	109	102	118	77	111
85.0	46	42	75	109	88	78	73	60	35	70
87.5	22	22	53	71	49	42	30	25	15	33
90.0	7	5	19	30	22	19	14	8	4	5
92.5	5	5	10	16	19	17	12	6	2	1
95.0	5	5	9	14	18	16	12	6	2	1
97.5	4	5	7	12	15	14	10	5	2	1
100.0	4	4	6	10	13	12	8	5	2	1
102.5	4	5	5	8	10	10	7	5	2	1
105.0	4	5	5	7	8	8	7	5	3	2
107.5	4	5	5	6	7	7	6	5	3	2
110.0	4	5	5	5	6	6	6	5	3	2
112.5	4	5	5	5	6	6	6	5	3	2
115.0	4	5	5	5	6	6	6	5	3	2
117.5	4	5	5	5	6	6	6	5	4	3
120.0	5	5	5	5	6	7	6	5	4	3
122.5	5	5	5	6	7	7	6	5	4	3
125.0	5	5	5	5	6	7	6	5	4	3
127.5	5	5	5	5	6	7	6	5	4	3
130.0	5	5	5	5	6	6	6	5	4	3
132.5	5	5	5	5	6	6	5	5	4	3
135.0	5	5	5	5	5	5	5	4	3	2
137.5	4	4	5	5	5	5	5	4	2	1
140.0	3	4	4	4	4	4	4	3	2	1
142.5	3	3	3	4	4	4	3	2	1	0
145.0	3	3	3	4	4	4	3	2	1	0
147.5	3	3	3	4	4	3	3	2	1	0
150.0	3	3	3	3	4	3	3	2	1	0
152.5	3	3	3	3	3	3	2	1	0	0
155.0	3	3	3	3	3	3	2	1	0	0
157.5	2	3	3	3	3	3	2	1	0	0
160.0	2	2	3	3	3	3	2	1	0	0
162.5	2	2	3	3	3	2	2	1	0	0
165.0	2	2	2	3	2	2	2	1	0	0
167.5	2	2	2	3	3	2	2	1	0	0
170.0	2	2	2	3	3	2	2	1	0	0
172.5	2	2	2	2	3	2	2	1	0	0
175.0	2	2	2	2	3	2	2	1	0	0
177.5	2	2	2	2	2	2	2	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	464	464
2.5	471	473
5.0	474	482
7.5	487	496
10.0	517	524
12.5	576	585
15.0	629	646
17.5	673	678
20.0	711	717
22.5	721	747
25.0	771	785

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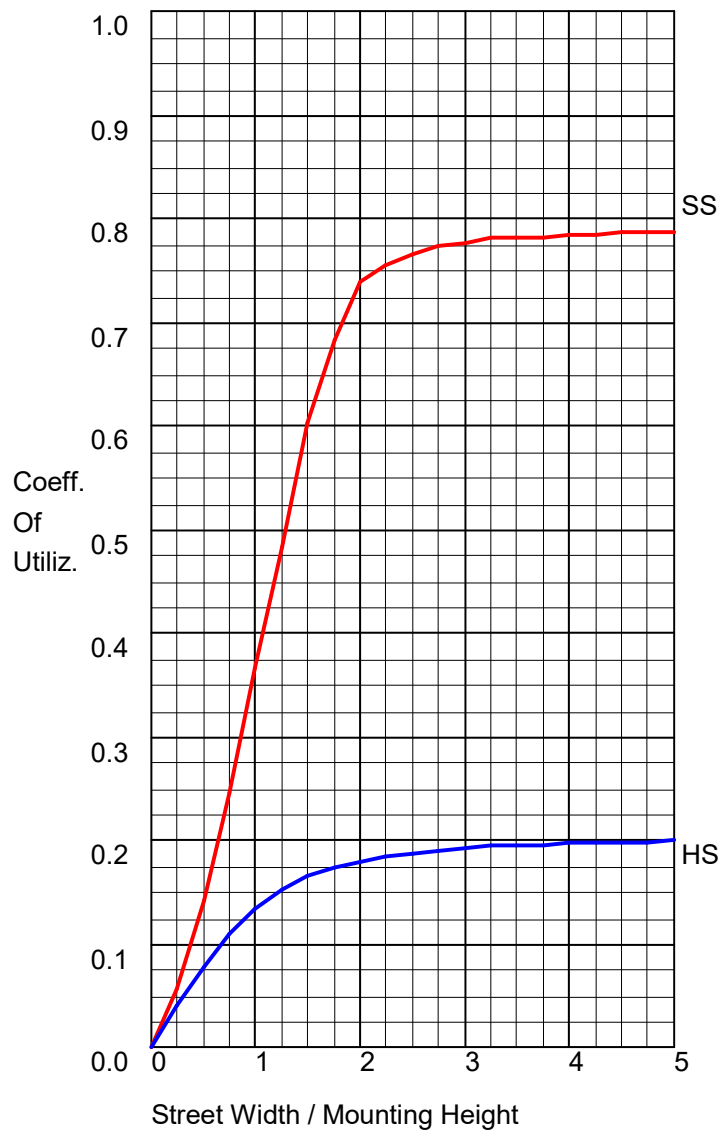
**CANDELA TABULATION - (Cont.)**

27.5	804	818
30.0	852	875
32.5	956	970
35.0	1083	1096
37.5	1165	1164
40.0	1098	1079
42.5	944	922
45.0	856	836
47.5	811	784
50.0	774	745
52.5	737	705
55.0	682	643
57.5	628	576
60.0	612	535
62.5	617	509
65.0	661	518
67.5	744	584
70.0	800	703
72.5	754	755
75.0	624	730
77.5	523	627
80.0	395	464
82.5	276	315
85.0	190	213
87.5	125	163
90.0	9	2
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	0	0
105.0	0	0
107.5	0	0
110.0	1	1
112.5	1	1
115.0	1	1
117.5	1	1
120.0	1	1
122.5	2	2
125.0	2	2
127.5	2	2
130.0	2	2
132.5	2	2
135.0	1	2
137.5	0	0
140.0	0	0
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

**IES ROAD REPORT****PHOTOMETRIC FILENAME : ENM4-PT-3-LED-10L-30.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

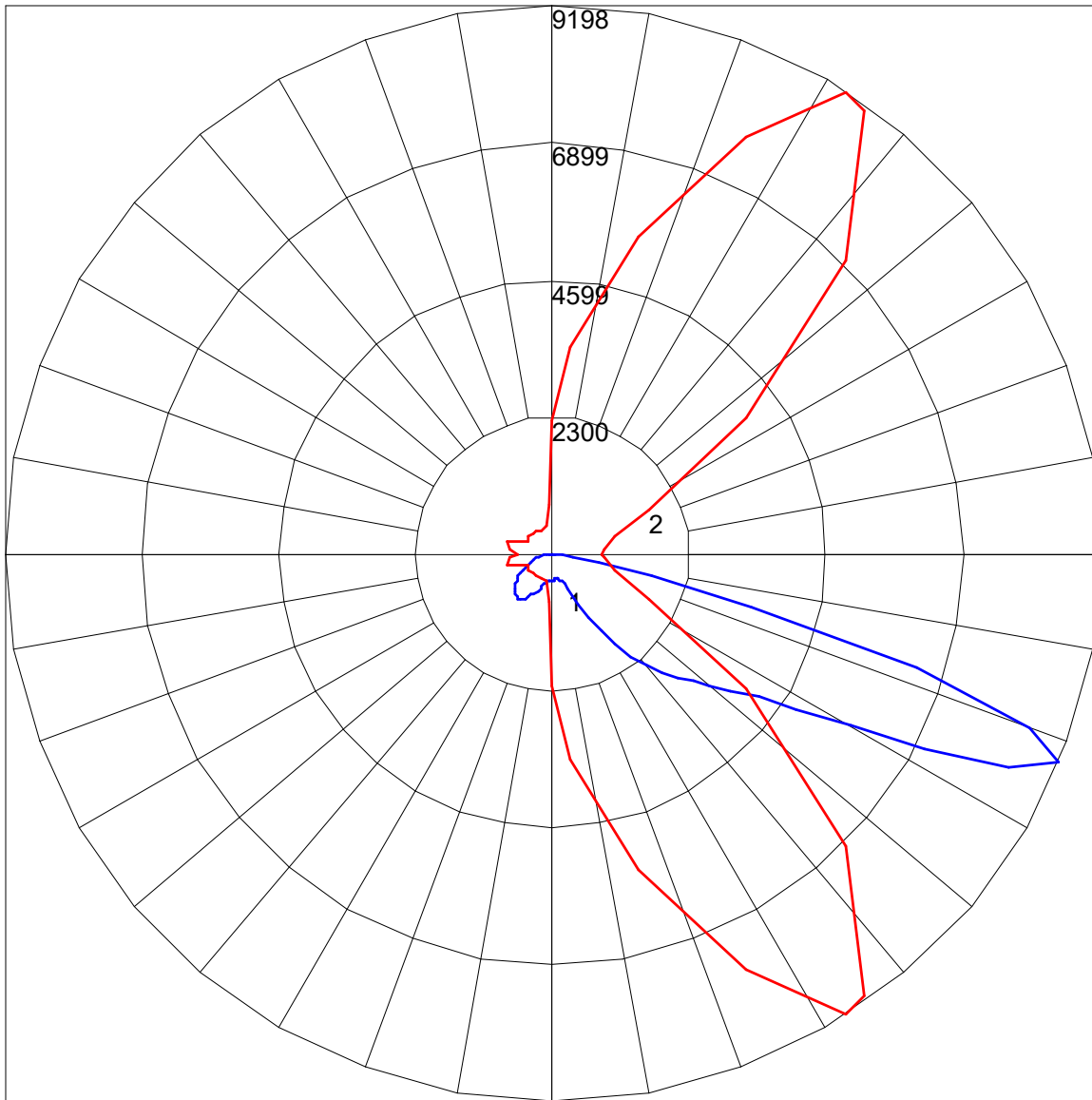


### FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	7430.0	79.3
Downward House Side	1911.6	20.4
Downward Total	9341.6	99.7
Upward Street Side	11.2	0.1
Upward House Side	14.8	0.2
Upward Total	26.0	0.3
Total Flux	9367.6	100.0

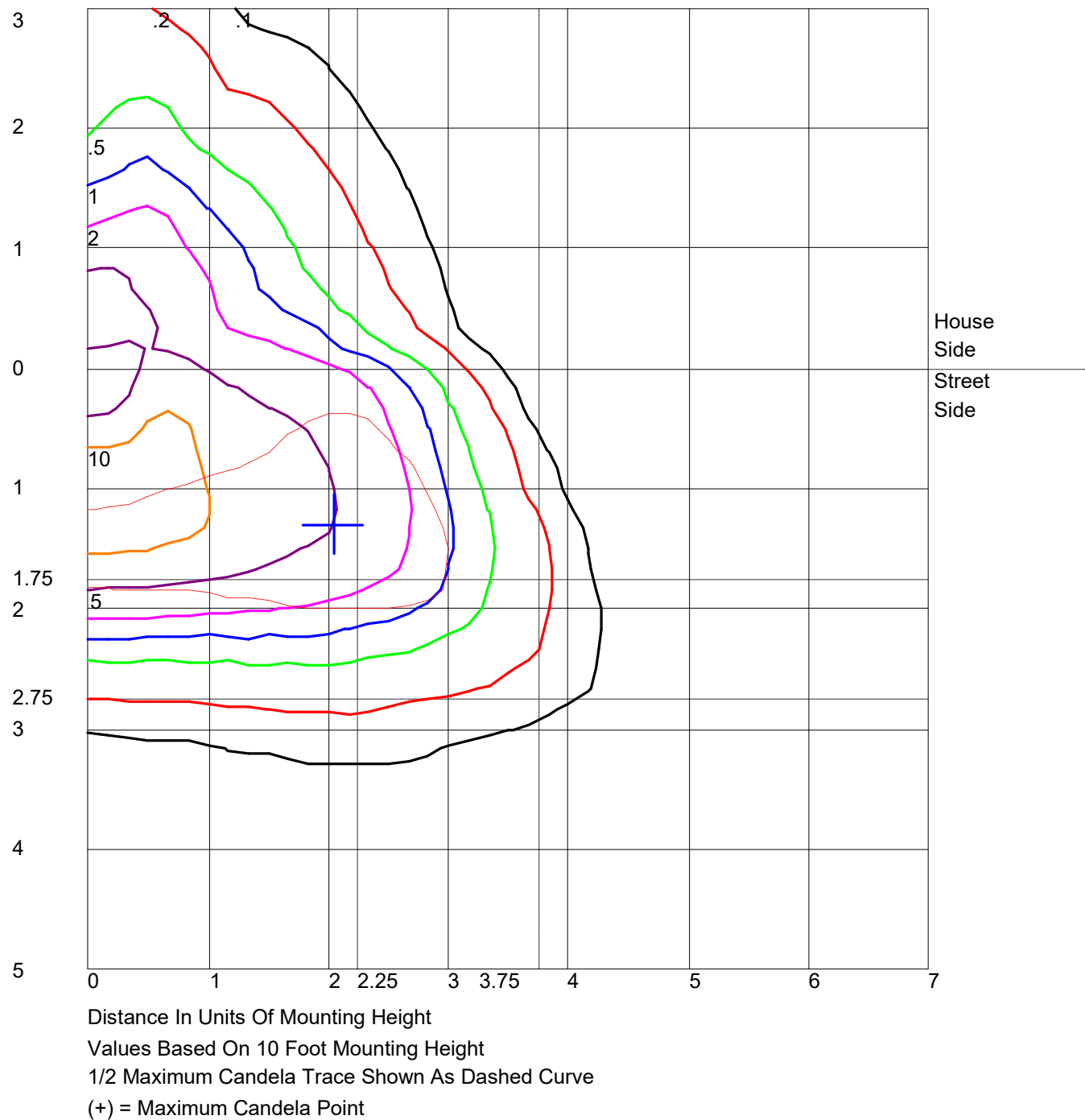


POLAR GRAPH

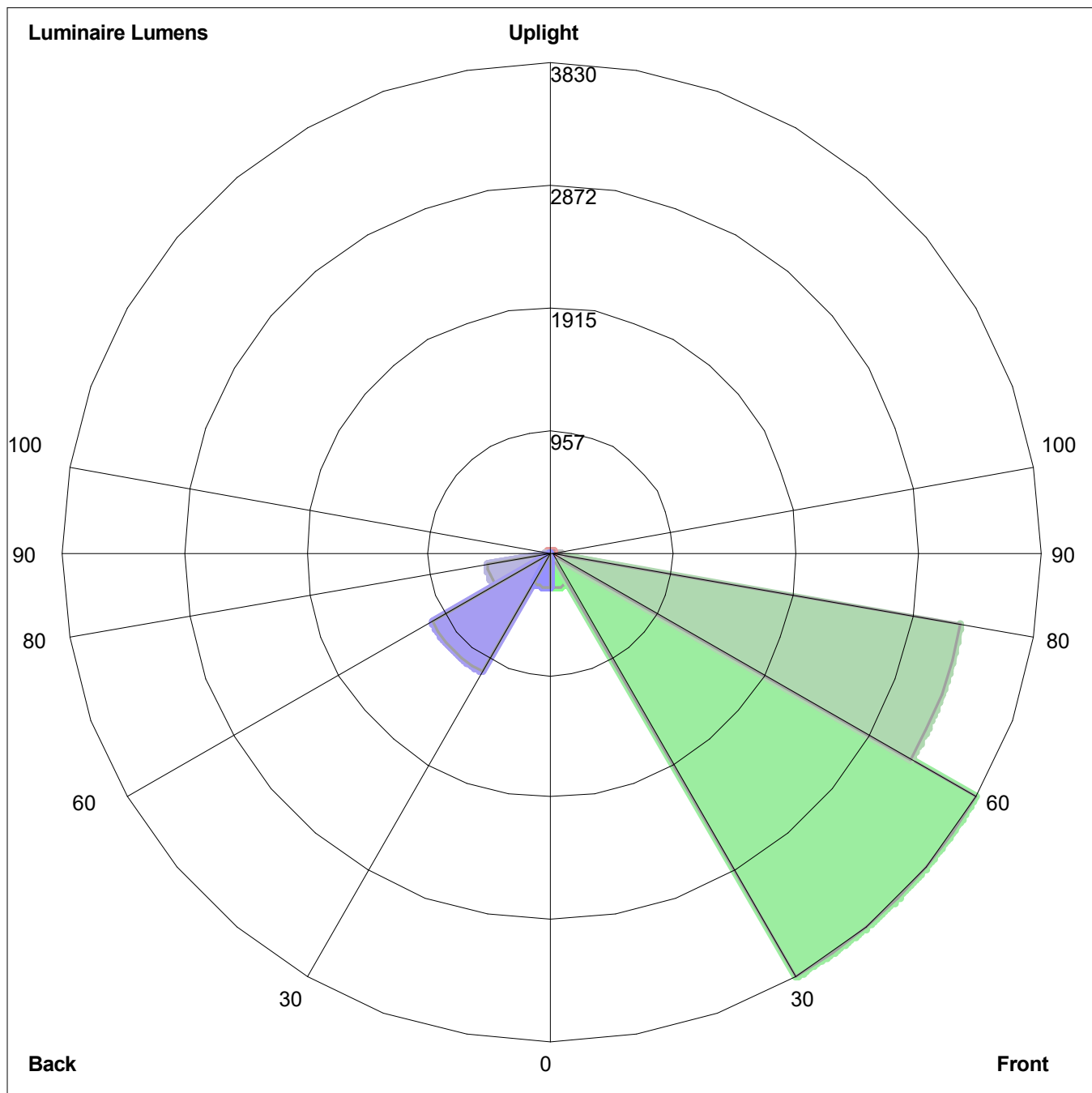


Maximum Candela = 9198 Located At Horizontal Angle = 57.5, Vertical Angle = 67.5  
# 1 - Vertical Plane Through Horizontal Angles (57.5 - 237.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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 ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=272.7, Medium=3829.6, High=3248.2, Very High=79.5  
Back: Low=272.3, Medium=1077.9, High=512.2, Very High=49.2  
Uplight: Low=8.5, High=17.5

BUG Rating : B2-U2-G2