



## IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-3-LED-18L-30.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11675

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/02/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-3-LED-18L-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	17098
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	148.6
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	16348
Maximum Candela Angle	57.5H 65V
Maximum Candela (<90 Degrees Vertical)	16348
Maximum Candela Angle (<90 Degrees Vertical)	57.5H 65V
Maximum Candela At 90 Degrees Vertical	74 (0.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1078 (6.3% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : ENM4-PT-3-LED-18L-30.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	512.7	N.A.	3.0
FM - Front-Medium (30-60)	7346.6	N.A.	43.0
FH - Front-High (60-80)	5547.4	N.A.	32.4
FVH - Front-Very High (80-90)	133.9	N.A.	0.8
BL - Back-Low (0-30)	491.5	N.A.	2.9
BM - Back-Medium (30-60)	1996.1	N.A.	11.7
BH - Back-High (60-80)	934.6	N.A.	5.5
BVH - Back-Very High (80-90)	89.6	N.A.	0.5
UL - Uplight-Low (90-100)	14.6	N.A.	0.1
UH - Uplight-High (100-180)	31.2	N.A.	0.2
Total	17098.2	N.A.	100.0
BUG Rating	B2-U2-G3		

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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	844	844	844	844	844	844	844	844	844	844
2.5	816	821	817	812	818	821	835	833	835	834
5.0	739	741	757	771	787	764	763	762	764	773
7.5	706	718	737	727	724	715	741	754	789	783
10.0	713	707	710	700	714	757	771	775	782	795
12.5	744	746	743	719	750	771	792	793	811	829
15.0	791	789	789	801	822	814	842	850	863	876
17.5	853	853	838	861	876	906	894	904	919	946
20.0	989	983	962	963	979	1001	1017	1014	1009	1023
22.5	1103	1129	1139	1172	1160	1176	1203	1203	1150	1157
25.0	1391	1349	1392	1432	1447	1451	1501	1472	1428	1354
27.5	1833	1871	1872	1805	1820	1897	1872	1858	1819	1683
30.0	2412	2366	2322	2354	2308	2407	2376	2345	2282	2033
32.5	3073	3045	2883	2858	2913	2981	2964	2953	2806	2496
35.0	3594	3578	3499	3479	3497	3642	3590	3569	3330	2904
37.5	4337	4273	4140	4097	4130	4278	4176	4155	3792	3265
40.0	4961	4943	4877	4827	4820	4882	4688	4653	4200	3589
42.5	5664	5654	5594	5539	5504	5452	5232	5117	4583	3825
45.0	6569	6559	6525	6458	6284	6128	5694	5585	4920	4052
47.5	7729	7713	7733	7740	7274	6845	6196	6059	5273	4317
50.0	9143	9128	9214	9159	8562	7675	6818	6607	5708	4664
52.5	10574	10707	10824	10739	10096	8705	7577	7334	6403	5179
55.0	11328	11343	11739	12080	11755	10034	8620	8403	7320	5907
57.5	11111	11151	11741	12510	13040	11656	10017	9890	8585	7115
60.0	9076	9214	10515	11946	13409	13329	12032	11858	10375	8515
62.5	5550	5662	6869	9477	12740	14249	14483	14310	12337	9734
65.0	2759	2843	3628	5547	10132	13994	16321	16348	13445	10093
67.5	1382	1417	1714	2811	6044	11904	16093	16271	13926	9200
70.0	833	856	1043	1541	3136	7690	13546	13976	12147	6772
72.5	489	486	662	1051	1899	4042	8956	9687	7690	3743
75.0	337	350	450	779	1322	2171	4506	4982	4068	1529
77.5	252	262	354	661	1041	1318	2108	2308	1751	650
80.0	181	191	276	557	838	853	987	1078	900	342
82.5	124	134	213	393	630	538	463	503	450	215
85.0	94	100	159	299	354	299	223	238	237	135
87.5	86	90	117	213	212	113	91	88	92	71
90.0	49	44	63	74	67	28	25	25	22	17
92.5	14	14	16	16	9	9	11	11	10	9
95.0	6	6	5	5	5	7	9	9	9	8
97.5	5	5	5	5	5	6	7	7	7	7
100.0	5	5	5	5	5	5	6	6	6	6
102.5	5	5	5	5	5	5	5	5	5	5
105.0	4	4	4	5	5	5	5	5	5	5
107.5	4	4	4	5	5	5	5	5	5	5
110.0	5	4	5	5	5	5	5	5	5	5
112.5	5	5	5	5	5	5	5	5	5	6
115.0	5	5	5	5	5	6	5	5	5	6
117.5	5	5	5	5	6	6	5	5	5	6
120.0	6	5	5	6	6	6	5	5	6	7
122.5	6	6	6	6	6	6	6	6	6	7
125.0	6	6	6	6	6	6	6	6	6	7
127.5	6	6	6	6	6	7	6	6	6	7
130.0	7	7	6	7	6	7	6	6	6	7

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**CANDELA TABULATION - (Cont.)**

132.5	7	7	6	6	6	7	6	6	6	7
135.0	5	5	5	5	6	6	5	5	6	7
137.5	3	3	4	5	5	5	5	5	5	5
140.0	1	1	2	3	4	4	4	4	4	5
142.5	1	1	2	3	3	4	4	4	4	5
145.0	1	1	2	3	3	3	4	4	4	5
147.5	1	1	2	3	3	3	3	3	4	4
150.0	1	1	2	3	3	3	3	3	4	4
152.5	1	1	2	3	3	3	3	3	4	4
155.0	1	1	2	2	3	3	3	3	3	4
157.5	1	1	2	2	2	2	3	3	3	4
160.0	1	1	2	2	2	2	2	3	3	3
162.5	1	1	2	2	2	2	2	2	3	3
165.0	1	1	2	2	2	2	3	3	3	3
167.5	0	1	2	2	3	3	3	3	3	3
170.0	1	1	2	3	3	3	3	3	3	3
172.5	0	1	2	3	3	3	3	3	3	3
175.0	1	1	2	3	3	3	3	3	3	3
177.5	1	1	2	3	3	3	3	3	3	3
180.0	3	3	3	3	3	3	3	3	3	3

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	844	844	844	844	844	844	844	844	844	844
2.5	842	847	849	847	855	859	873	873	866	852
5.0	780	780	783	814	836	845	871	881	878	862
7.5	802	804	821	866	849	836	823	849	849	870
10.0	802	803	819	858	837	872	868	876	876	904
12.5	842	855	888	885	883	888	913	985	987	1032
15.0	890	904	904	904	895	962	1011	1079	1103	1091
17.5	945	937	950	958	947	1059	1140	1163	1164	1168
20.0	1023	1015	1024	972	1006	1129	1174	1233	1253	1253
22.5	1146	1112	1122	1071	1117	1218	1277	1286	1281	1307
25.0	1329	1279	1256	1137	1277	1321	1304	1324	1342	1367
27.5	1557	1453	1413	1272	1392	1400	1364	1388	1420	1447
30.0	1834	1695	1585	1383	1459	1519	1446	1453	1476	1510
32.5	2083	1912	1741	1493	1538	1622	1575	1539	1590	1696
35.0	2394	2136	1900	1585	1569	1691	1665	1645	1748	1868
37.5	2643	2325	2011	1630	1586	1728	1707	1770	1907	2078
40.0	2816	2429	2044	1645	1586	1743	1726	1804	2116	2182
42.5	2958	2508	2055	1599	1532	1724	1712	1821	2286	2154
45.0	3109	2592	2074	1547	1467	1657	1677	1775	2474	2040
47.5	3298	2719	2125	1508	1403	1588	1625	1725	2528	1939
50.0	3576	2926	2232	1490	1336	1521	1569	1679	2493	1894
52.5	3989	3214	2399	1499	1282	1460	1509	1616	2339	1866
55.0	4504	3602	2645	1518	1230	1387	1439	1534	2101	1826
57.5	5291	4130	2893	1519	1168	1290	1360	1427	1794	1745
60.0	6270	4627	2888	1442	1091	1169	1254	1285	1471	1702
62.5	6952	4834	2546	1261	999	1046	1128	1148	1193	1647
65.0	6789	4474	1956	1048	906	935	993	1042	991	1570
67.5	5578	3701	1386	852	802	822	883	947	864	1425
70.0	3423	2292	879	693	688	698	766	863	788	1208
72.5	1554	998	523	540	560	591	652	772	686	908
75.0	593	444	341	421	470	502	555	605	491	618
77.5	296	238	260	357	400	430	413	376	301	398

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**CANDELA TABULATION - (Cont.)**

80.0	179	159	213	308	339	307	253	283	220	289
82.5	126	114	177	265	251	199	184	206	137	209
85.0	77	76	141	205	161	140	132	110	65	128
87.5	37	39	97	127	94	76	52	47	28	61
90.0	13	9	34	50	39	35	24	15	6	8
92.5	8	8	16	27	34	30	22	11	3	2
95.0	7	7	15	25	31	28	20	11	3	2
97.5	6	7	13	21	26	24	17	10	4	2
100.0	5	7	10	17	22	20	15	9	4	2
102.5	6	7	9	15	18	17	14	9	5	3
105.0	6	7	9	13	15	15	12	8	5	3
107.5	6	7	9	11	13	13	12	8	5	3
110.0	6	8	9	10	12	12	11	8	5	4
112.5	7	8	9	10	12	12	11	9	5	4
115.0	7	8	9	10	12	12	11	9	6	5
117.5	7	8	9	10	12	12	11	9	6	5
120.0	7	9	9	10	12	12	11	9	6	5
122.5	8	9	9	11	13	13	12	10	7	5
125.0	8	9	10	11	12	13	12	10	7	5
127.5	8	9	9	10	12	13	12	10	7	6
130.0	8	9	9	10	12	12	12	10	7	6
132.5	8	9	9	10	11	12	11	9	7	5
135.0	8	8	9	10	10	10	9	8	6	5
137.5	6	7	7	8	9	9	8	6	5	3
140.0	5	6	6	7	7	7	6	5	3	2
142.5	5	5	6	6	7	6	5	5	3	1
145.0	5	5	5	6	6	6	5	4	2	1
147.5	5	5	5	5	6	6	5	4	2	0
150.0	5	5	5	5	6	5	5	4	2	0
152.5	5	5	5	5	5	5	5	3	1	0
155.0	5	5	5	5	5	5	5	3	1	0
157.5	4	5	5	5	5	5	4	2	1	0
160.0	4	5	5	5	5	5	4	2	0	0
162.5	4	4	5	5	5	5	3	2	0	0
165.0	4	4	5	5	5	4	3	2	0	0
167.5	4	4	4	5	5	4	3	2	0	0
170.0	4	4	5	5	5	4	3	2	0	0
172.5	4	4	4	5	5	4	3	2	0	0
175.0	4	4	4	4	4	4	3	2	1	0
177.5	4	4	4	4	4	4	3	2	1	0
180.0	3	3	3	3	3	3	3	3	3	3

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

	<u>175.0</u>	<u>180.0</u>
0.0	844	844
2.5	852	855
5.0	859	873
7.5	872	886
10.0	934	940
12.5	1042	1050
15.0	1132	1159
17.5	1205	1220
20.0	1282	1288
22.5	1301	1344
25.0	1383	1403

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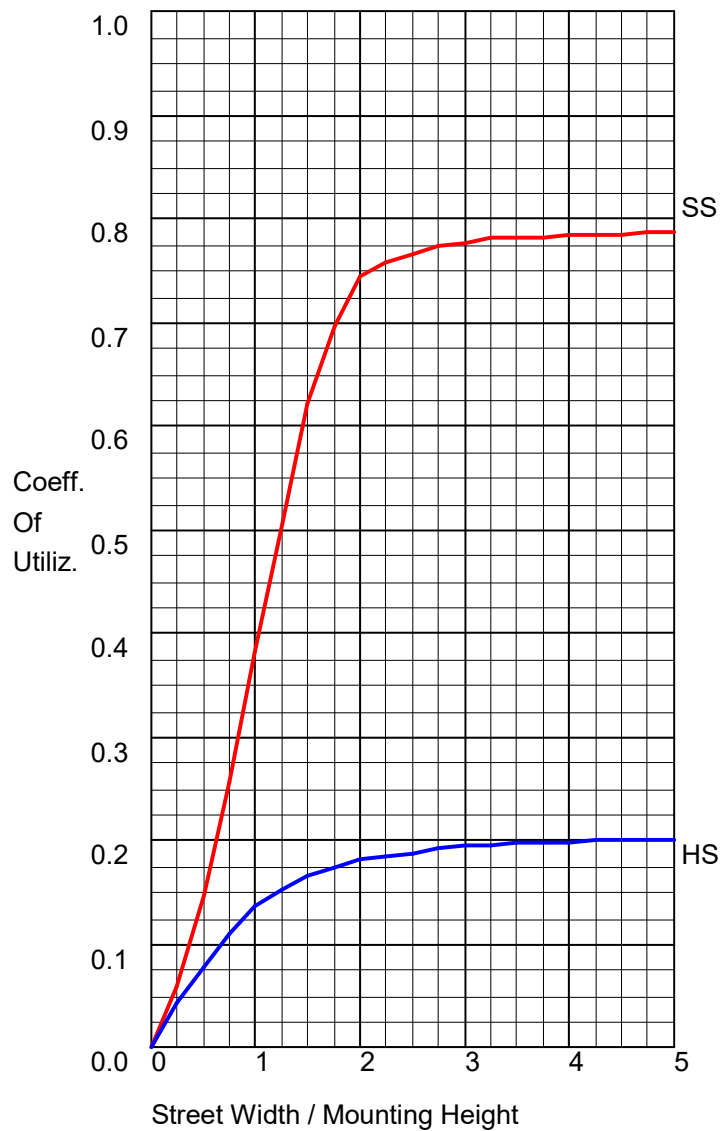
**CANDELA TABULATION - (Cont.)**

<b>27.5</b>	1448	1477
<b>30.0</b>	1539	1584
<b>32.5</b>	1727	1752
<b>35.0</b>	1936	1953
<b>37.5</b>	2094	2090
<b>40.0</b>	1970	1934
<b>42.5</b>	1740	1699
<b>45.0</b>	1582	1537
<b>47.5</b>	1490	1437
<b>50.0</b>	1416	1360
<b>52.5</b>	1346	1274
<b>55.0</b>	1251	1162
<b>57.5</b>	1176	1061
<b>60.0</b>	1169	1008
<b>62.5</b>	1213	1009
<b>65.0</b>	1304	1073
<b>67.5</b>	1428	1209
<b>70.0</b>	1514	1385
<b>72.5</b>	1378	1415
<b>75.0</b>	1116	1323
<b>77.5</b>	928	1119
<b>80.0</b>	694	809
<b>82.5</b>	482	544
<b>85.0</b>	336	367
<b>87.5</b>	242	361
<b>90.0</b>	12	1
<b>92.5</b>	0	0
<b>95.0</b>	0	0
<b>97.5</b>	0	0
<b>100.0</b>	0	0
<b>102.5</b>	1	0
<b>105.0</b>	1	0
<b>107.5</b>	1	1
<b>110.0</b>	2	1
<b>112.5</b>	2	2
<b>115.0</b>	3	2
<b>117.5</b>	3	3
<b>120.0</b>	4	3
<b>122.5</b>	4	4
<b>125.0</b>	4	4
<b>127.5</b>	5	4
<b>130.0</b>	5	5
<b>132.5</b>	5	4
<b>135.0</b>	3	3
<b>137.5</b>	1	1
<b>140.0</b>	0	0
<b>142.5</b>	0	0
<b>145.0</b>	0	0
<b>147.5</b>	0	0
<b>150.0</b>	0	0
<b>152.5</b>	0	0
<b>155.0</b>	0	0
<b>157.5</b>	0	0
<b>160.0</b>	0	0
<b>162.5</b>	0	0
<b>165.0</b>	0	0

**IES ROAD REPORT****PHOTOMETRIC FILENAME : ENM4-PT-3-LED-18L-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>	3	3

COEFFICIENTS OF UTILIZATION

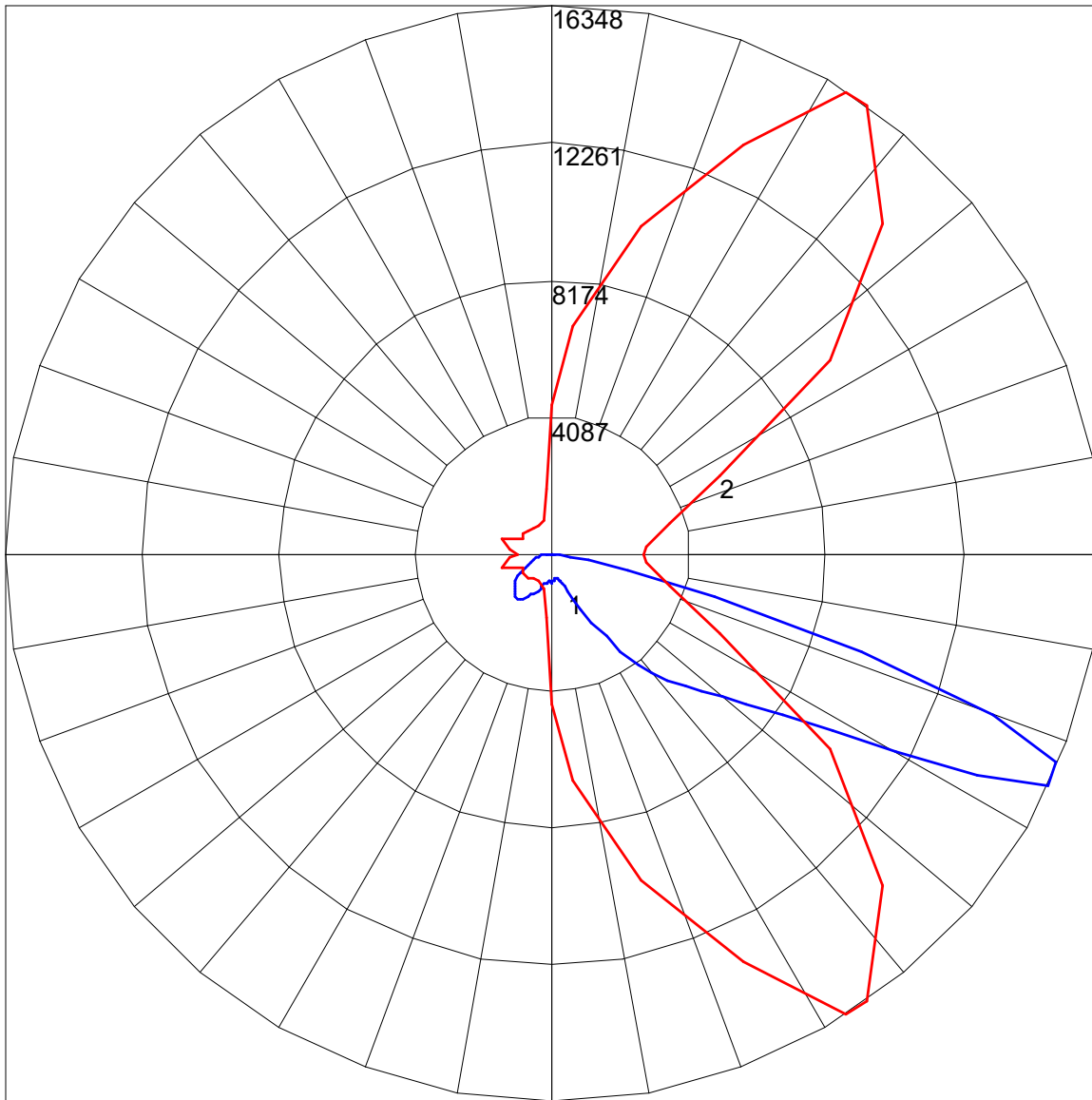


FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	13540.6	79.2
Downward House Side	3511.8	20.5
Downward Total	17052.4	99.7
Upward Street Side	19.0	0.1
Upward House Side	26.9	0.2
Upward Total	45.9	0.3
Total Flux	17098.3	100.0

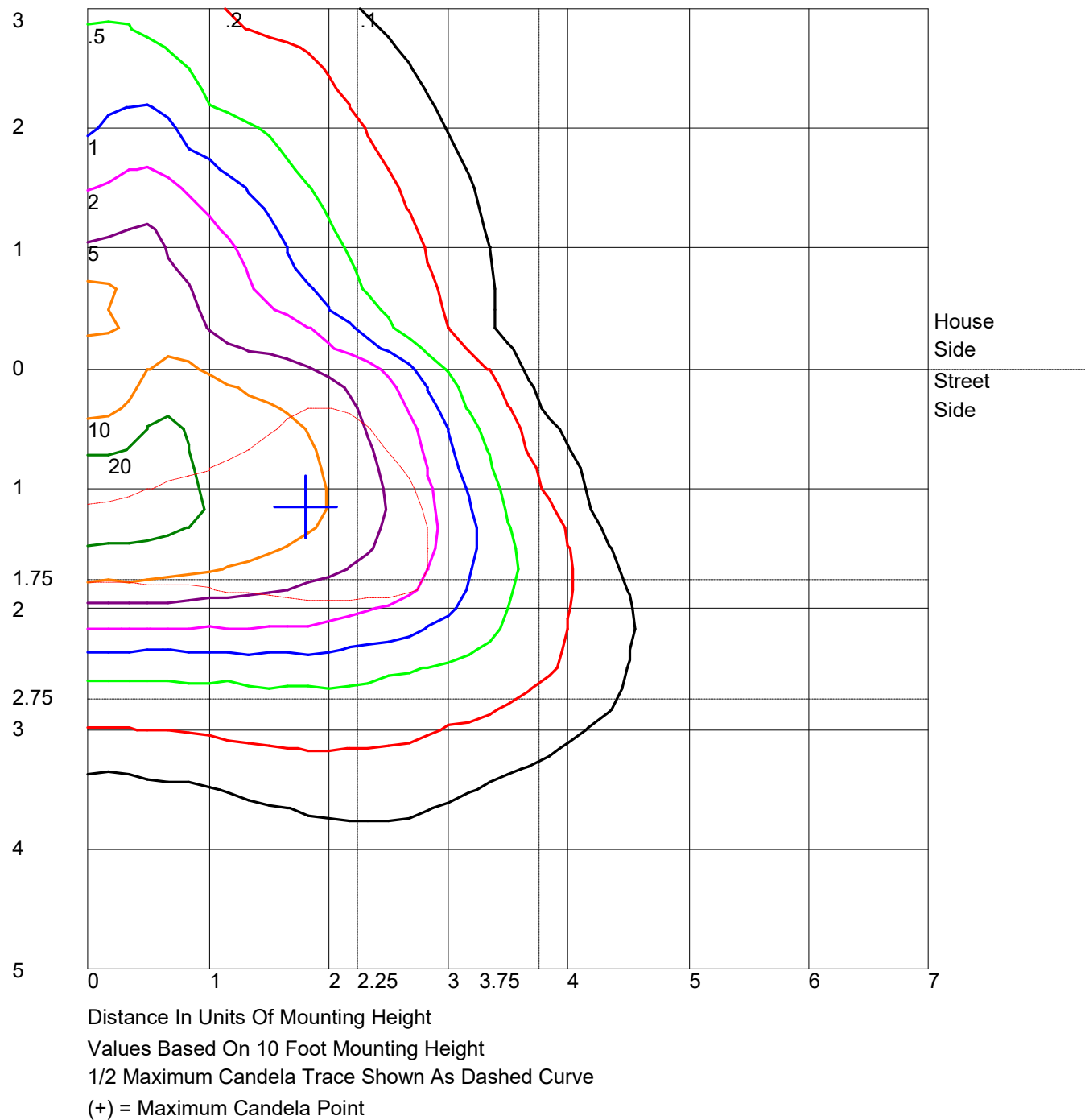


POLAR GRAPH

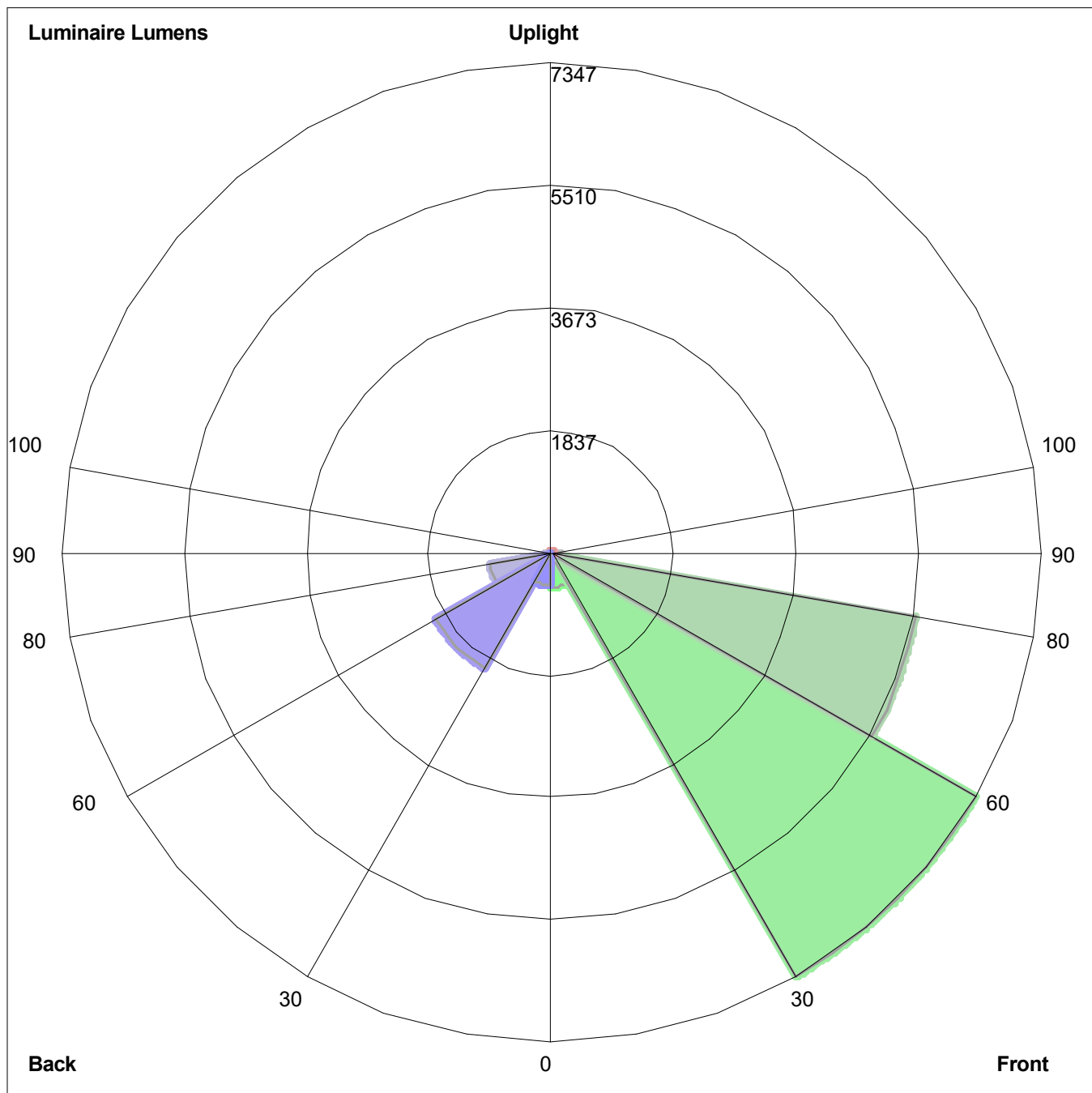


Maximum Candela = 16348 Located At Horizontal Angle = 57.5, Vertical Angle = 65  
# 1 - Vertical Plane Through Horizontal Angles (57.5 - 237.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=512.7, Medium=7346.6, High=5547.4, Very High=133.9  
Back: Low=491.5, Medium=1996.1, High=934.6, Very High=89.6  
Uplight: Low=14.6, High=31.2

BUG Rating : B2-U2-G3