



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-2-LED-10L-40.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11670

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/01/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-2-LED-10L-40

[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 II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	10044
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	130
Total Luminaire Watts	77.4
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	8106
Maximum Candela Angle	82.5H 65V
Maximum Candela (<90 Degrees Vertical)	8106
Maximum Candela Angle (<90 Degrees Vertical)	82.5H 65V
Maximum Candela At 90 Degrees Vertical	13 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	529 (5.3% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-10L-40.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	545.1	N.A.	5.4
FM - Front-Medium (30-60)	3777.5	N.A.	37.6
FH - Front-High (60-80)	1969.7	N.A.	19.6
FVH - Front-Very High (80-90)	44.3	N.A.	0.4
BL - Back-Low (0-30)	429.7	N.A.	4.3
BM - Back-Medium (30-60)	2277.2	N.A.	22.7
BH - Back-High (60-80)	927.9	N.A.	9.2
BVH - Back-Very High (80-90)	57.0	N.A.	0.6
UL - Uplight-Low (90-100)	4.4	N.A.	0.0
UH - Uplight-High (100-180)	11.5	N.A.	0.1
Total	10044.3	N.A.	100.0
BUG Rating	B2-U2-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	82.5
0.0	870	870	870	870	870	870	870	870	870	870
2.5	888	889	874	872	876	879	876	866	846	848
5.0	852	865	859	865	858	851	846	824	828	821
7.5	865	876	859	875	833	866	851	847	869	841
10.0	893	886	879	875	880	900	915	894	895	889
12.5	985	963	953	942	934	961	985	994	960	970
15.0	1025	995	1020	1036	1037	1055	1063	1089	1080	1021
17.5	1065	1041	1074	1070	1133	1160	1163	1191	1196	1151
20.0	1178	1153	1183	1164	1163	1243	1284	1293	1335	1325
22.5	1196	1229	1255	1289	1295	1330	1425	1433	1497	1502
25.0	1309	1321	1334	1363	1437	1443	1545	1591	1622	1676
27.5	1538	1505	1521	1522	1548	1614	1694	1770	1813	1867
30.0	1716	1746	1734	1720	1729	1769	1866	1934	2060	2072
32.5	2206	2124	2040	1941	1971	1983	2045	2106	2271	2264
35.0	2516	2528	2378	2325	2220	2219	2261	2343	2431	2549
37.5	3076	3059	2830	2666	2562	2546	2523	2505	2666	2761
40.0	3321	3314	3241	3078	2927	2942	2786	2781	2838	2970
42.5	3506	3497	3430	3347	3342	3246	3138	3043	2965	3119
45.0	3587	3601	3537	3503	3547	3560	3461	3317	3119	3317
47.5	3515	3532	3512	3549	3654	3806	3854	3687	3329	3577
50.0	3308	3308	3359	3417	3638	4012	4288	4213	3631	3898
52.5	2879	2924	2992	3123	3484	4053	4762	4780	4032	4337
55.0	2314	2324	2447	2650	3098	3896	5083	5455	4552	4886
57.5	1730	1735	1825	2042	2465	3415	5234	6132	5182	5558
60.0	1219	1226	1282	1409	1766	2706	5084	6694	5946	6470
62.5	855	859	863	925	1176	1861	4470	6985	6700	7387
65.0	620	623	623	654	786	1168	3508	6771	7293	8106
67.5	461	459	465	491	568	757	2474	5855	7211	7820
70.0	345	345	350	378	439	541	1503	4172	6010	5836
72.5	211	227	232	278	341	418	854	2473	3871	2982
75.0	124	136	128	165	231	319	513	1482	1833	1069
77.5	105	118	98	108	128	199	337	897	936	493
80.0	103	110	88	81	89	128	190	529	499	273
82.5	97	98	70	57	60	89	104	272	279	166
85.0	77	73	50	38	38	55	63	80	126	87
87.5	28	28	24	18	15	19	20	21	25	29
90.0	6	6	6	4	2	1	1	2	4	4
92.5	4	4	4	3	1	1	0	1	3	3
95.0	4	4	3	2	1	1	0	0	1	1
97.5	3	3	3	2	1	1	0	0	1	1
100.0	3	3	3	2	1	1	0	0	0	1
102.5	3	3	2	2	1	1	0	0	0	1
105.0	3	3	2	2	1	1	0	0	0	1
107.5	3	3	3	2	1	1	0	0	0	1
110.0	3	3	3	2	1	1	0	0	1	1
112.5	3	3	3	3	2	1	0	0	1	1
115.0	4	4	3	3	2	1	0	0	1	1
117.5	4	4	4	3	2	1	1	1	1	1
120.0	5	5	4	4	3	2	1	1	1	2
122.5	5	5	5	4	3	2	1	1	2	2
125.0	5	5	5	5	4	3	1	1	2	3
127.5	6	5	5	5	4	3	1	1	2	3
130.0	6	6	5	5	4	3	1	1	2	3

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CANDELA TABULATION - (Cont.)

132.5	6	6	6	5	4	3	2	1	2	3
135.0	5	5	4	4	3	2	1	1	2	2
137.5	2	2	2	2	1	1	0	0	1	1
140.0	1	1	1	0	0	0	0	0	0	0
142.5	1	1	0	0	0	0	0	0	0	0
145.0	1	1	0	0	0	0	0	0	0	0
147.5	1	1	0	0	0	0	0	0	0	0
150.0	1	0	0	0	0	0	0	0	0	0
152.5	1	0	0	0	0	0	0	0	0	0
155.0	1	1	0	0	0	0	0	0	0	0
157.5	1	1	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
162.5	1	1	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	1	1	0	0	0	0	0	0	0	0
177.5	1	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>85.0</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	870	870	870	870	870	870	870	870	870	870
2.5	852	859	857	856	860	852	852	853	861	863
5.0	822	826	819	778	811	807	814	804	810	792
7.5	832	840	842	832	820	792	741	745	756	764
10.0	894	870	841	851	806	786	748	741	705	726
12.5	936	946	920	904	845	784	751	767	743	761
15.0	1044	1032	1003	944	858	828	798	795	777	753
17.5	1137	1120	1085	1007	897	865	851	818	799	782
20.0	1296	1254	1211	1080	962	914	856	852	851	847
22.5	1463	1412	1373	1191	1060	978	908	890	912	957
25.0	1643	1596	1535	1342	1208	1032	945	960	1005	1073
27.5	1860	1814	1738	1543	1346	1081	1019	1068	1165	1238
30.0	2046	2010	1917	1687	1463	1181	1151	1204	1296	1386
32.5	2297	2248	2134	1872	1571	1330	1322	1351	1481	1635
35.0	2531	2515	2390	2069	1654	1472	1503	1545	1676	1823
37.5	2766	2754	2635	2277	1813	1636	1658	1749	1826	2011
40.0	2989	2964	2832	2492	1939	1806	1829	1897	1961	2099
42.5	3172	3161	3018	2613	2038	1942	1948	1997	1982	2055
45.0	3389	3393	3224	2712	2111	2004	1977	1975	1909	1929
47.5	3657	3666	3479	2781	2158	2011	1921	1862	1767	1724
50.0	4007	4000	3756	2838	2190	1969	1812	1686	1552	1492
52.5	4423	4399	4038	2882	2178	1880	1667	1494	1335	1270
55.0	4953	4893	4359	2898	2152	1760	1505	1321	1160	1088
57.5	5603	5474	4675	2895	2104	1646	1357	1191	1029	978
60.0	6412	6097	4951	2843	2032	1528	1250	1082	920	871
62.5	7330	6624	4983	2679	1902	1398	1138	988	791	740
65.0	7828	6543	4606	2318	1664	1218	990	848	641	581
67.5	7197	5472	3546	1712	1308	966	778	672	483	425
70.0	5208	3626	2270	1115	891	685	583	496	355	316
72.5	2537	1723	1185	718	624	498	437	366	261	223
75.0	887	686	607	490	438	371	331	256	173	151
77.5	412	343	351	351	328	289	233	177	133	122

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CANDELA TABULATION - (Cont.)

80.0	246	214	214	256	259	210	160	138	120	126
82.5	139	123	123	198	191	134	120	130	164	169
85.0	72	65	67	119	92	90	98	132	174	149
87.5	25	23	24	33	37	41	42	59	72	55
90.0	4	4	5	7	11	13	13	10	4	5
92.5	3	3	5	7	10	12	12	9	4	5
95.0	2	2	4	6	9	10	10	7	3	4
97.5	1	1	3	5	7	8	7	6	2	4
100.0	1	1	3	4	6	6	5	4	2	3
102.5	1	1	2	4	4	5	4	3	2	3
105.0	1	1	2	3	4	4	3	3	2	3
107.5	1	1	2	3	3	3	3	2	2	3
110.0	1	1	2	3	3	3	3	3	2	3
112.5	1	2	2	3	3	3	3	3	3	3
115.0	1	2	2	3	3	4	3	3	3	4
117.5	1	2	2	3	4	4	4	3	3	4
120.0	2	2	3	4	4	4	4	4	4	4
122.5	2	3	3	4	4	4	4	4	4	5
125.0	3	4	4	4	4	4	4	5	5	5
127.5	3	4	4	4	4	4	4	5	5	6
130.0	3	4	4	4	4	4	4	5	6	6
132.5	3	4	4	4	4	4	4	5	6	6
135.0	2	3	3	4	4	4	4	4	5	6
137.5	1	1	1	2	2	3	3	3	4	4
140.0	0	0	0	1	1	1	2	2	2	3
142.5	0	0	0	0	1	1	2	2	2	2
145.0	0	0	0	0	1	1	2	2	2	2
147.5	0	0	0	0	1	1	2	2	2	2
150.0	0	0	0	0	1	1	2	2	2	2
152.5	0	0	0	0	1	1	2	2	2	2
155.0	0	0	0	0	1	1	2	2	2	2
157.5	0	0	0	0	1	1	2	2	2	2
160.0	0	0	0	0	1	1	2	2	2	1
162.5	0	0	0	0	1	1	2	2	2	1
165.0	0	0	0	0	1	1	1	2	2	1
167.5	0	0	0	0	0	1	1	1	1	1
170.0	0	0	0	0	0	1	1	1	1	1
172.5	0	0	0	0	0	1	1	1	1	1
175.0	0	0	0	0	0	1	1	1	1	1
177.5	0	0	0	0	0	1	1	1	1	1
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles
Angles

	<u>175.0</u>	<u>180.0</u>
0.0	870	870
2.5	866	862
5.0	803	801
7.5	765	785
10.0	729	740
12.5	760	785
15.0	780	803
17.5	821	818
20.0	903	881
22.5	970	990
25.0	1099	1115

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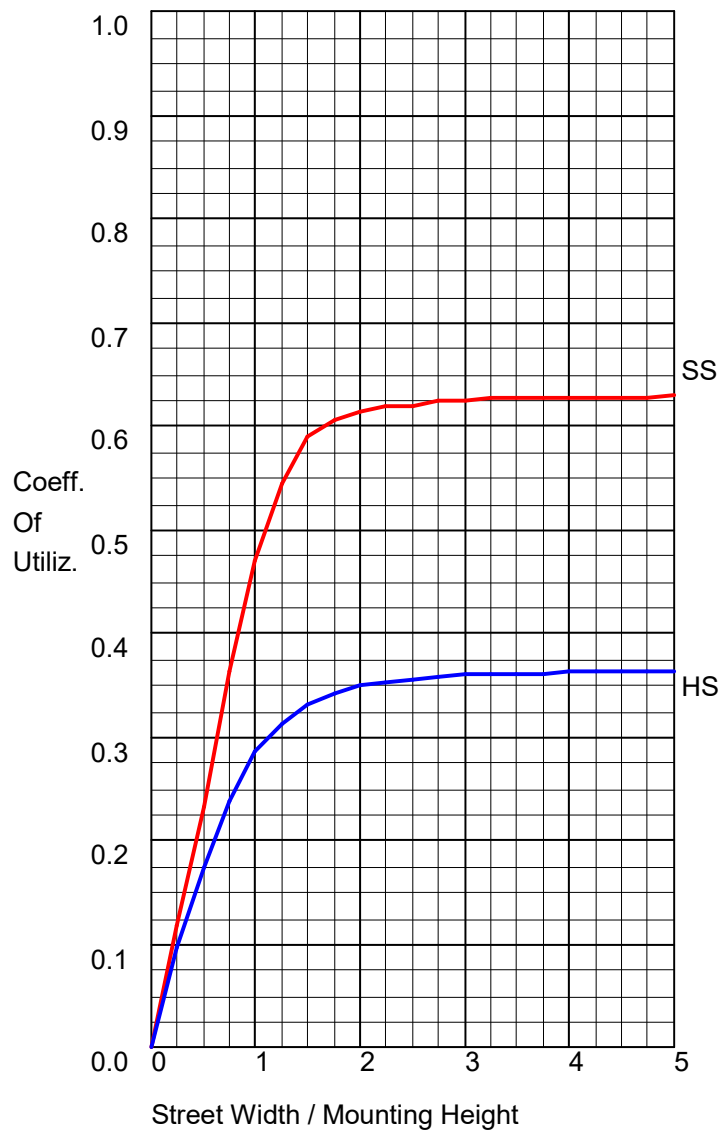
CANDELA TABULATION - (Cont.)

27.5	1261	1288
30.0	1443	1476
32.5	1703	1709
35.0	1903	1898
37.5	2111	2103
40.0	2154	2150
42.5	2101	2090
45.0	1949	1930
47.5	1732	1717
50.0	1473	1471
52.5	1239	1233
55.0	1075	1064
57.5	970	959
60.0	853	840
62.5	710	695
65.0	547	533
67.5	407	395
70.0	308	305
72.5	222	217
75.0	173	172
77.5	148	148
80.0	154	158
82.5	194	197
85.0	157	161
87.5	47	48
90.0	4	4
92.5	4	4
95.0	4	3
97.5	3	3
100.0	3	3
102.5	3	3
105.0	3	3
107.5	3	3
110.0	3	3
112.5	3	3
115.0	4	4
117.5	4	4
120.0	4	4
122.5	5	5
125.0	5	5
127.5	6	6
130.0	6	6
132.5	6	6
135.0	5	6
137.5	4	4
140.0	3	3
142.5	2	3
145.0	2	2
147.5	2	2
150.0	2	2
152.5	2	2
155.0	2	2
157.5	2	2
160.0	1	1
162.5	1	1
165.0	1	1

IES ROAD REPORT**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-10L-40.IES****CANDELA TABULATION - (Cont.)**

167.5	1	1
170.0	1	1
172.5	1	1
175.0	1	1
177.5	1	1
180.0	0	0

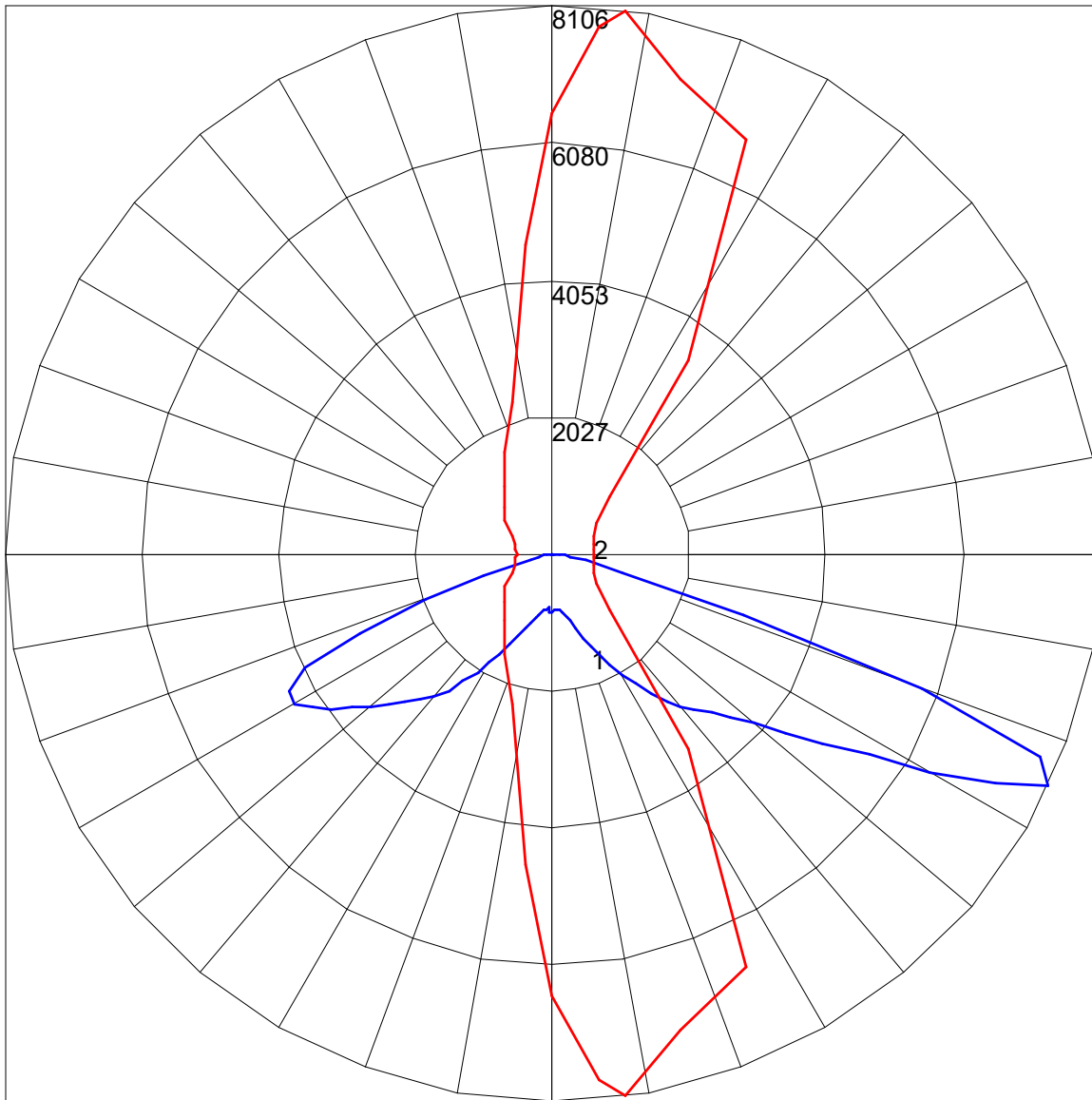
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

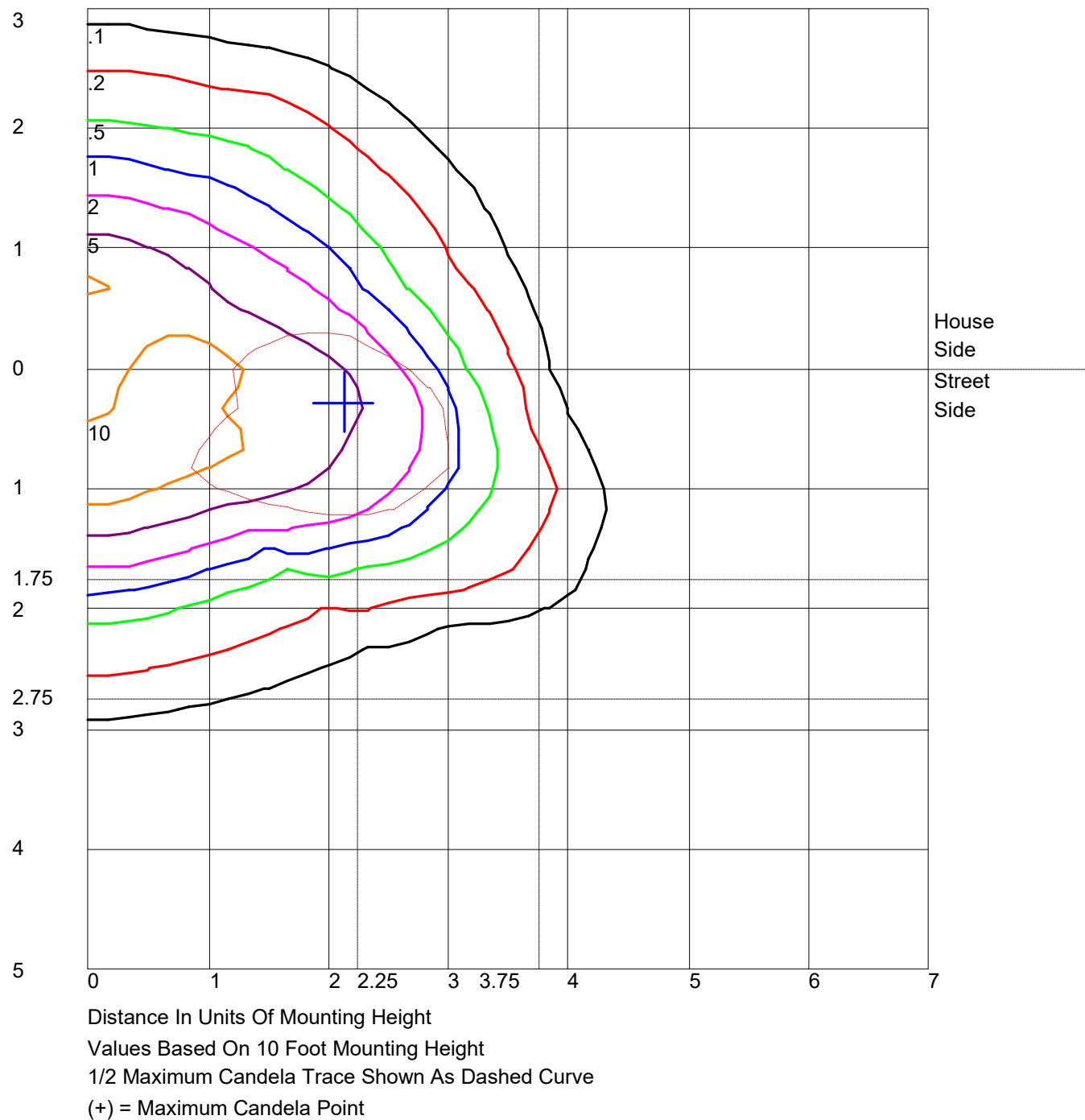
	Lumens	Percent Of Luminaire
Downward Street Side	6336.6	63.1
Downward House Side	3691.8	36.8
Downward Total	10028.4	99.8
Upward Street Side	4.9	0.0
Upward House Side	10.9	0.1
Upward Total	15.8	0.2
Total Flux	10044.2	100.0

POLAR GRAPH

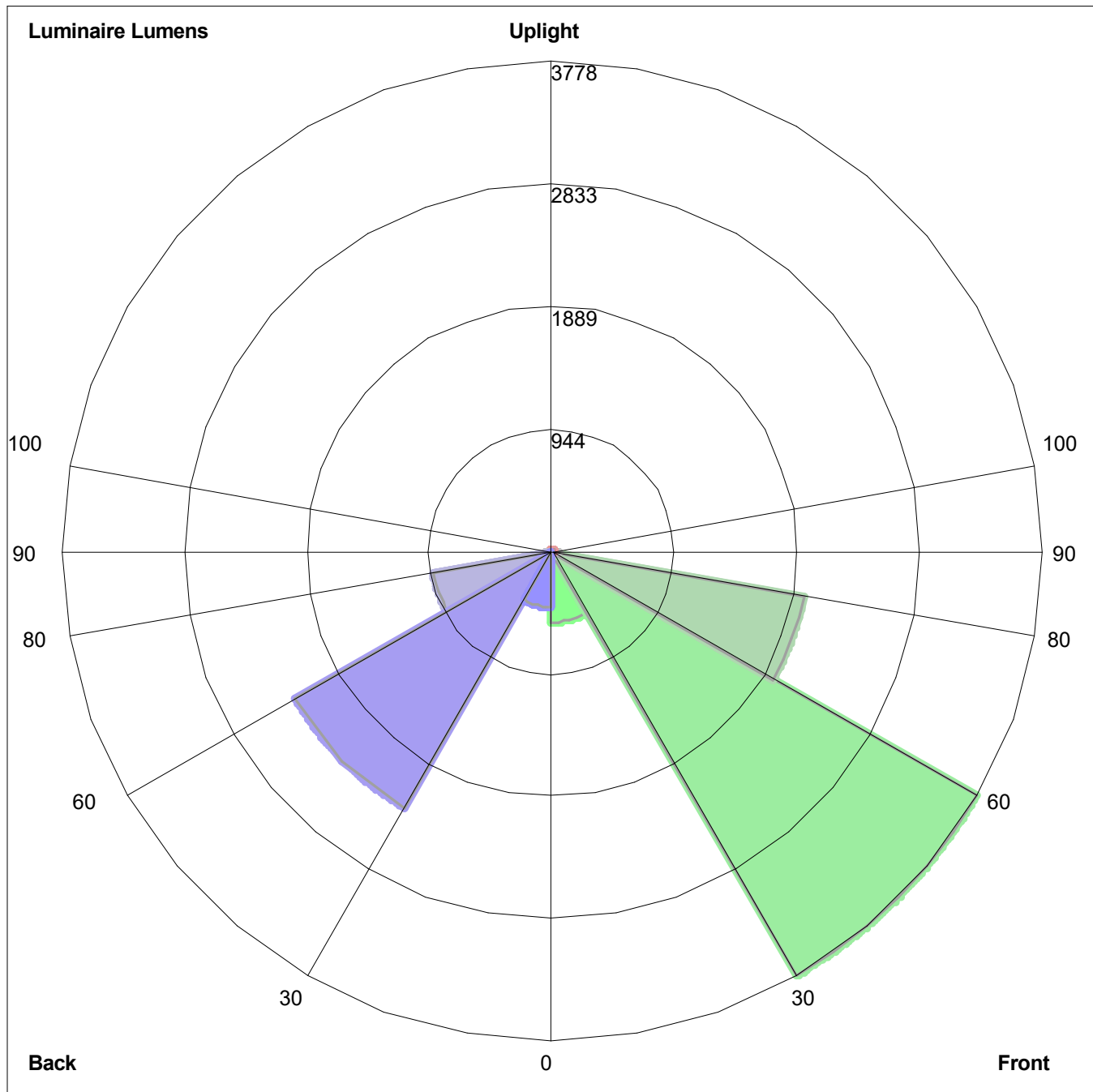


Maximum Candela = 8106 Located At Horizontal Angle = 82.5, Vertical Angle = 65
1 - Vertical Plane Through Horizontal Angles (82.5 - 262.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=545.1, Medium=3777.5, High=1969.7, Very High=44.3
Back: Low=429.7, Medium=2277.2, High=927.9, Very High=57.0
Uplight: Low=4.4, High=11.5

BUG Rating : B2-U2-G2