



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-5W-LED-10L-40-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-10L-40-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	6166
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	77
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	4437
Maximum Candela Angle	47.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	4437
Maximum Candela Angle (<90 Degrees Vertical)	47.5H 67.5V
Maximum Candela At 90 Degrees Vertical	8 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	199 (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)	344.8	N.A.	5.6
FM - Front-Medium (30-60)	2796.6	N.A.	45.4
FH - Front-High (60-80)	1800.2	N.A.	29.2
FVH - Front-Very High (80-90)	22.3	N.A.	0.4
BL - Back-Low (0-30)	195.8	N.A.	3.2
BM - Back-Medium (30-60)	732.8	N.A.	11.9
BH - Back-High (60-80)	257.0	N.A.	4.2
BVH - Back-Very High (80-90)	4.2	N.A.	0.1
UL - Uplight-Low (90-100)	3.2	N.A.	0.1
UH - Uplight-High (100-180)	9.3	N.A.	0.2
Total	6166.2	N.A.	100.0
BUG Rating	B1-U1-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	359	359	359	359	359	359	359	359	359	359
2.5	367	369	372	374	370	369	370	369	364	360
5.0	367	374	378	378	389	366	366	365	356	349
7.5	385	391	404	373	379	369	371	371	385	381
10.0	425	422	439	399	414	419	430	417	404	410
12.5	487	510	476	469	490	477	483	479	460	451
15.0	552	580	558	583	593	563	568	568	538	521
17.5	622	645	630	658	679	702	699	659	634	621
20.0	754	764	749	769	799	816	811	802	746	707
22.5	860	859	884	920	929	944	968	962	881	832
25.0	982	955	1008	1064	1115	1106	1115	1122	1035	937
27.5	1131	1182	1232	1215	1286	1316	1317	1285	1189	1092
30.0	1338	1309	1342	1434	1439	1528	1545	1487	1379	1240
32.5	1599	1603	1565	1576	1683	1716	1711	1718	1593	1417
35.0	1841	1810	1774	1820	1854	1945	1896	1934	1778	1636
37.5	2059	2081	2006	2003	2078	2139	2095	2138	1984	1740
40.0	2237	2259	2221	2230	2275	2313	2300	2316	2165	1941
42.5	2375	2382	2357	2363	2432	2439	2442	2473	2305	2061
45.0	2489	2492	2468	2508	2572	2600	2612	2583	2423	2163
47.5	2582	2601	2601	2622	2688	2717	2708	2690	2532	2288
50.0	2668	2700	2720	2705	2777	2808	2803	2801	2652	2439
52.5	2759	2774	2816	2784	2872	2918	2928	2921	2789	2556
55.0	2844	2883	2935	2938	3000	3119	3138	3134	2978	2720
57.5	2976	3007	3086	3109	3248	3421	3436	3390	3106	2804
60.0	2966	2991	3134	3218	3434	3695	3689	3605	3168	2840
62.5	2655	2717	2959	3175	3572	3956	3937	3789	3196	2809
65.0	2089	2160	2477	2832	3565	4215	4173	3910	3141	2723
67.5	1141	1228	1594	2174	3146	4386	4437	4049	3119	2556
70.0	245	255	426	1096	2261	3857	4061	3732	2599	1908
72.5	113	116	140	248	862	2498	2761	2587	1696	1139
75.0	70	72	79	103	212	863	1172	1246	845	516
77.5	37	37	41	53	89	181	230	444	404	243
80.0	26	26	27	31	44	67	76	126	199	137
82.5	23	23	24	27	32	38	40	56	103	109
85.0	18	18	19	22	27	32	33	40	57	89
87.5	12	12	13	15	18	22	22	27	40	50
90.0	6	6	6	6	6	6	5	3	5	8
92.5	1	1	1	2	2	2	2	2	2	2
95.0	1	1	1	1	1	2	2	2	2	2
97.5	1	1	1	1	1	1	1	2	2	2
100.0	1	1	1	1	1	1	1	1	2	2
102.5	1	1	1	1	1	1	1	1	1	2
105.0	1	1	1	1	1	1	1	1	1	2
107.5	1	1	1	1	1	1	1	1	1	2
110.0	2	1	1	1	1	1	1	1	2	2
112.5	2	2	2	1	2	2	2	1	2	2
115.0	2	2	2	2	2	2	2	2	2	2
117.5	2	2	2	2	2	2	2	2	2	2
120.0	3	2	2	2	2	2	2	2	2	2
122.5	3	3	2	2	2	2	2	2	2	2
125.0	3	3	3	2	2	2	2	2	2	3
127.5	3	3	3	3	2	2	2	2	2	3
130.0	3	3	3	3	2	2	2	2	2	3

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CANDELA TABULATION - (Cont.)

132.5	3	3	3	3	2	2	2	2	2	3
135.0	3	3	3	2	2	2	2	2	2	3
137.5	1	2	1	1	2	2	1	1	2	2
140.0	0	0	0	0	1	1	1	1	1	1
142.5	0	0	0	0	1	1	1	1	1	1
145.0	0	0	0	0	1	1	1	1	1	1
147.5	0	0	0	0	1	1	1	1	1	1
150.0	0	0	0	1	1	1	1	1	1	1
152.5	0	0	0	1	1	1	1	1	1	1
155.0	0	0	0	0	1	0	1	1	1	1
157.5	0	0	0	0	0	0	1	1	1	1
160.0	0	0	0	0	0	0	0	1	1	1
162.5	0	0	0	0	0	0	0	0	1	1
165.0	0	0	0	0	0	0	0	0	0	1
167.5	0	0	0	0	0	0	0	0	0	1
170.0	0	0	0	0	0	0	0	0	0	1
172.5	0	0	0	0	1	0	0	0	0	1
175.0	0	0	0	0	1	0	0	0	0	0
177.5	0	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	359	359	359	359	359	359	359	359	359	359
2.5	358	358	359	357	355	351	353	354	352	346
5.0	347	345	337	336	338	336	327	328	323	318
7.5	361	364	355	355	338	317	300	303	292	298
10.0	384	374	367	375	328	320	302	292	284	287
12.5	424	418	407	383	342	324	311	316	314	322
15.0	471	459	440	402	359	349	355	362	356	348
17.5	546	518	494	441	392	399	408	396	379	376
20.0	632	600	570	494	450	459	451	432	420	404
22.5	757	688	650	560	527	530	502	480	444	424
25.0	846	794	734	621	639	603	564	513	476	405
27.5	962	892	837	720	748	681	618	542	442	336
30.0	1110	1012	944	846	869	796	707	513	339	234
32.5	1215	1140	1049	988	996	916	723	390	220	159
35.0	1386	1262	1177	1136	1131	1035	645	260	147	117
37.5	1532	1416	1324	1308	1273	1076	467	171	111	97
40.0	1635	1529	1429	1480	1425	983	299	124	92	83
42.5	1753	1633	1529	1619	1544	768	185	102	79	71
45.0	1884	1763	1658	1767	1591	494	132	85	68	60
47.5	1992	1880	1789	1927	1501	302	102	72	58	48
50.0	2142	2032	1946	2102	1256	199	81	60	47	36
52.5	2289	2203	2121	2291	915	139	67	49	35	26
55.0	2432	2353	2343	2445	583	99	55	36	26	17
57.5	2537	2407	2480	2435	395	70	44	26	17	10
60.0	2579	2425	2518	2160	320	56	33	17	10	4
62.5	2525	2388	2509	1694	300	51	24	10	5	2
65.0	2415	2291	2415	1114	301	66	16	5	4	2
67.5	2196	2089	2221	623	294	95	11	5	4	2
70.0	1594	1509	1589	306	226	124	12	4	4	3
72.5	897	833	884	111	97	120	10	5	3	2
75.0	391	355	369	60	41	49	8	4	1	1
77.5	171	155	153	37	20	23	6	3	0	0

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CANDELA TABULATION - (Cont.)

80.0	104	90	74	22	13	12	5	3	0	0
82.5	79	66	48	14	11	8	5	3	0	0
85.0	57	44	25	8	8	7	5	3	0	1
87.5	33	17	7	6	7	7	5	3	0	1
90.0	6	2	5	7	8	7	6	4	0	1
92.5	3	2	5	7	8	8	6	4	1	1
95.0	2	2	4	6	7	7	5	4	1	1
97.5	2	2	3	5	6	6	4	3	1	1
100.0	2	2	3	3	5	5	3	3	1	1
102.5	2	2	3	3	3	3	3	2	1	1
105.0	2	2	2	3	3	3	3	2	1	1
107.5	2	2	2	3	3	3	3	2	2	1
110.0	2	2	2	3	3	3	3	2	2	1
112.5	2	2	3	3	3	3	3	2	2	1
115.0	2	2	3	3	3	3	3	2	2	1
117.5	2	3	3	3	3	3	3	2	2	2
120.0	2	3	3	3	3	3	3	3	2	2
122.5	3	3	3	3	3	3	3	3	2	2
125.0	3	3	3	3	3	3	3	3	3	2
127.5	3	3	3	3	3	3	3	3	3	2
130.0	3	3	3	3	3	3	3	3	3	3
132.5	3	3	3	3	3	3	3	3	3	2
135.0	3	3	3	3	3	3	3	3	2	2
137.5	2	2	2	3	3	3	2	2	2	2
140.0	2	2	2	2	2	2	2	2	1	1
142.5	1	2	2	2	2	2	2	2	1	1
145.0	1	2	2	2	2	2	2	1	1	1
147.5	1	2	2	2	2	2	2	1	1	1
150.0	1	2	2	2	2	2	2	1	1	1
152.5	1	2	2	2	2	2	2	1	1	0
155.0	1	1	2	2	2	2	2	1	1	0
157.5	1	1	1	2	2	2	2	1	1	0
160.0	1	1	1	1	2	2	1	1	0	0
162.5	1	1	1	1	1	1	1	1	0	0
165.0	1	1	1	1	1	1	1	1	0	0
167.5	1	1	1	1	1	1	1	1	0	0
170.0	1	1	1	1	1	1	1	0	0	0
172.5	1	1	1	1	1	1	1	0	0	0
175.0	1	1	1	1	1	1	1	0	0	0
177.5	1	1	1	1	1	1	1	0	0	0
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	359	359
2.5	343	342
5.0	310	309
7.5	291	288
10.0	293	279
12.5	326	319
15.0	357	342
17.5	378	362
20.0	404	385
22.5	401	389
25.0	369	361

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CANDELA TABULATION - (Cont.)

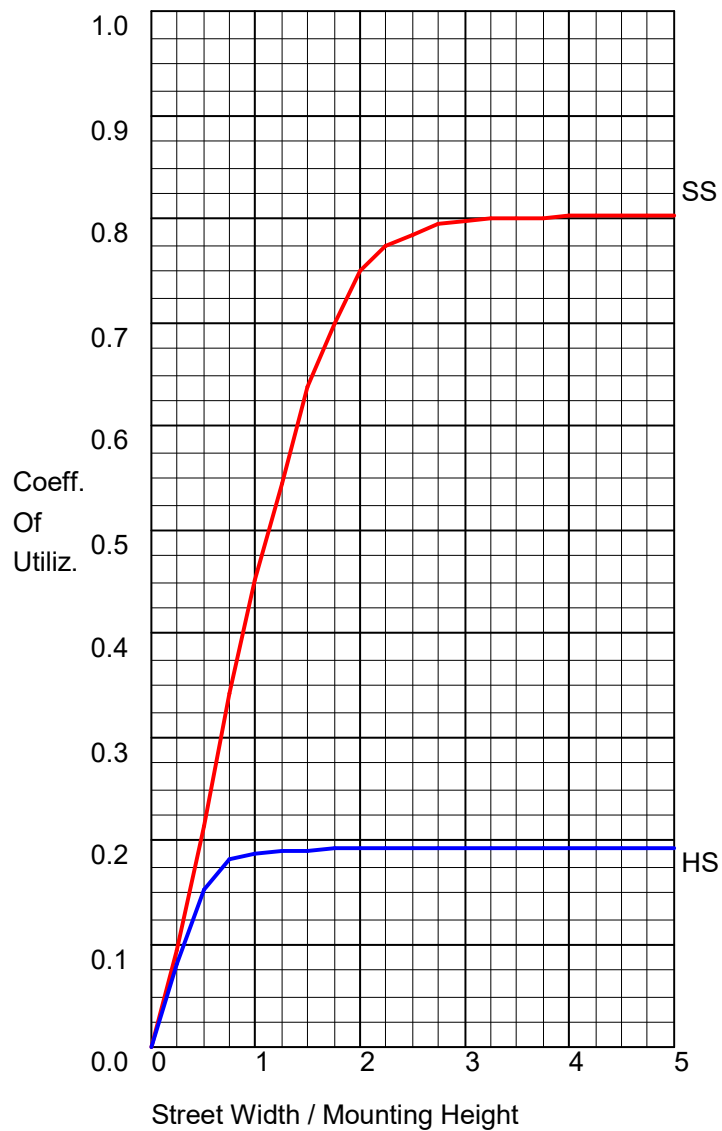
27.5	288	276
30.0	195	190
32.5	139	135
35.0	109	109
37.5	93	92
40.0	80	80
42.5	68	68
45.0	56	55
47.5	44	44
50.0	32	32
52.5	22	22
55.0	14	13
57.5	7	7
60.0	2	2
62.5	1	0
65.0	0	0
67.5	1	1
70.0	2	2
72.5	0	0
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	0	0
105.0	0	0
107.5	1	0
110.0	1	1
112.5	1	1
115.0	1	1
117.5	1	1
120.0	2	2
122.5	2	2
125.0	2	2
127.5	2	2
130.0	2	2
132.5	2	2
135.0	2	2
137.5	1	1
140.0	1	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

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CANDELA TABULATION - (Cont.)

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

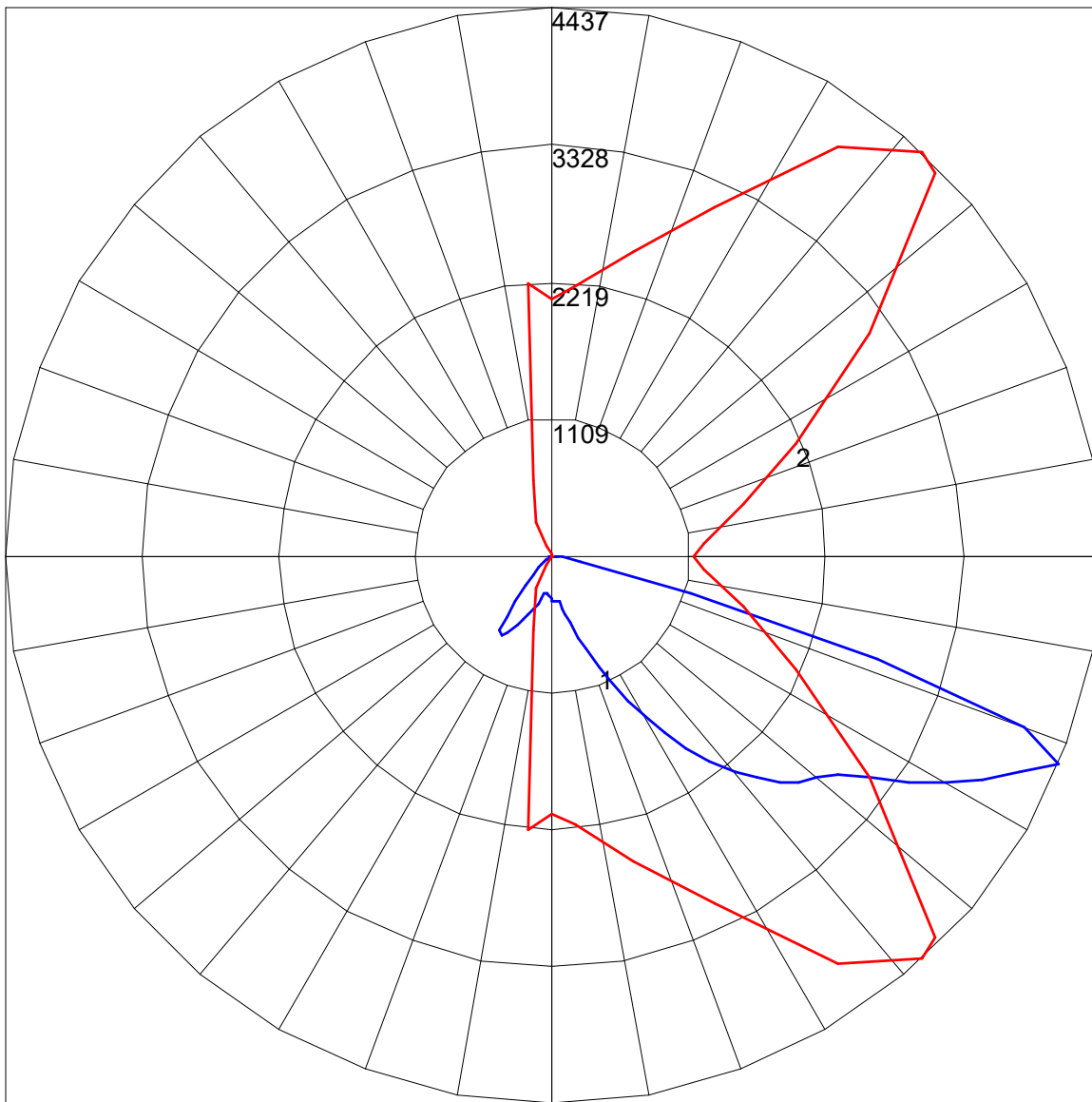
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

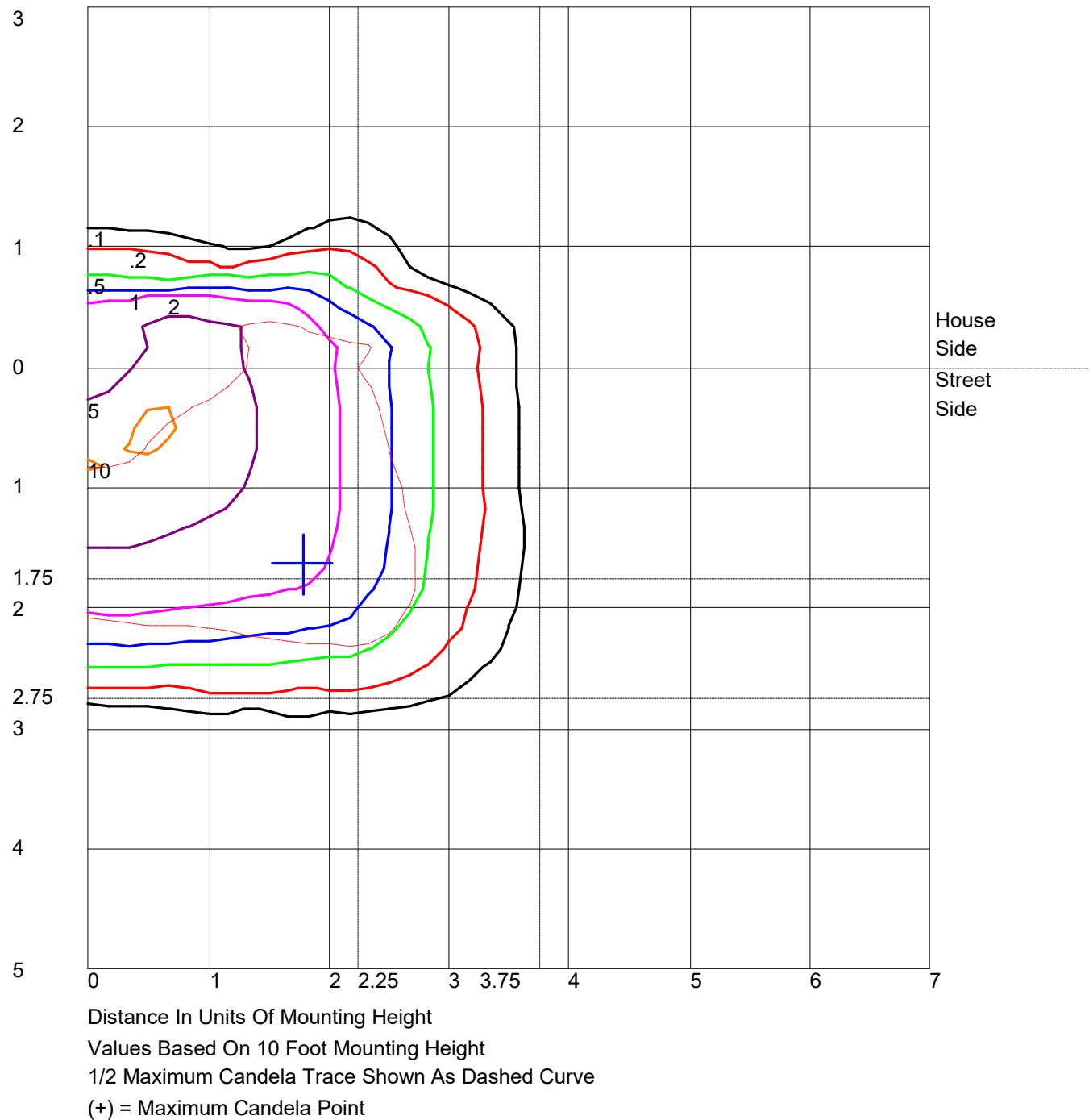
	Lumens	Percent Of Luminaire
Downward Street Side	4963.8	80.5
Downward House Side	1189.9	19.3
Downward Total	6153.7	99.8
Upward Street Side	5.0	0.1
Upward House Side	7.4	0.1
Upward Total	12.4	0.2
Total Flux	6166.1	100.0

POLAR GRAPH

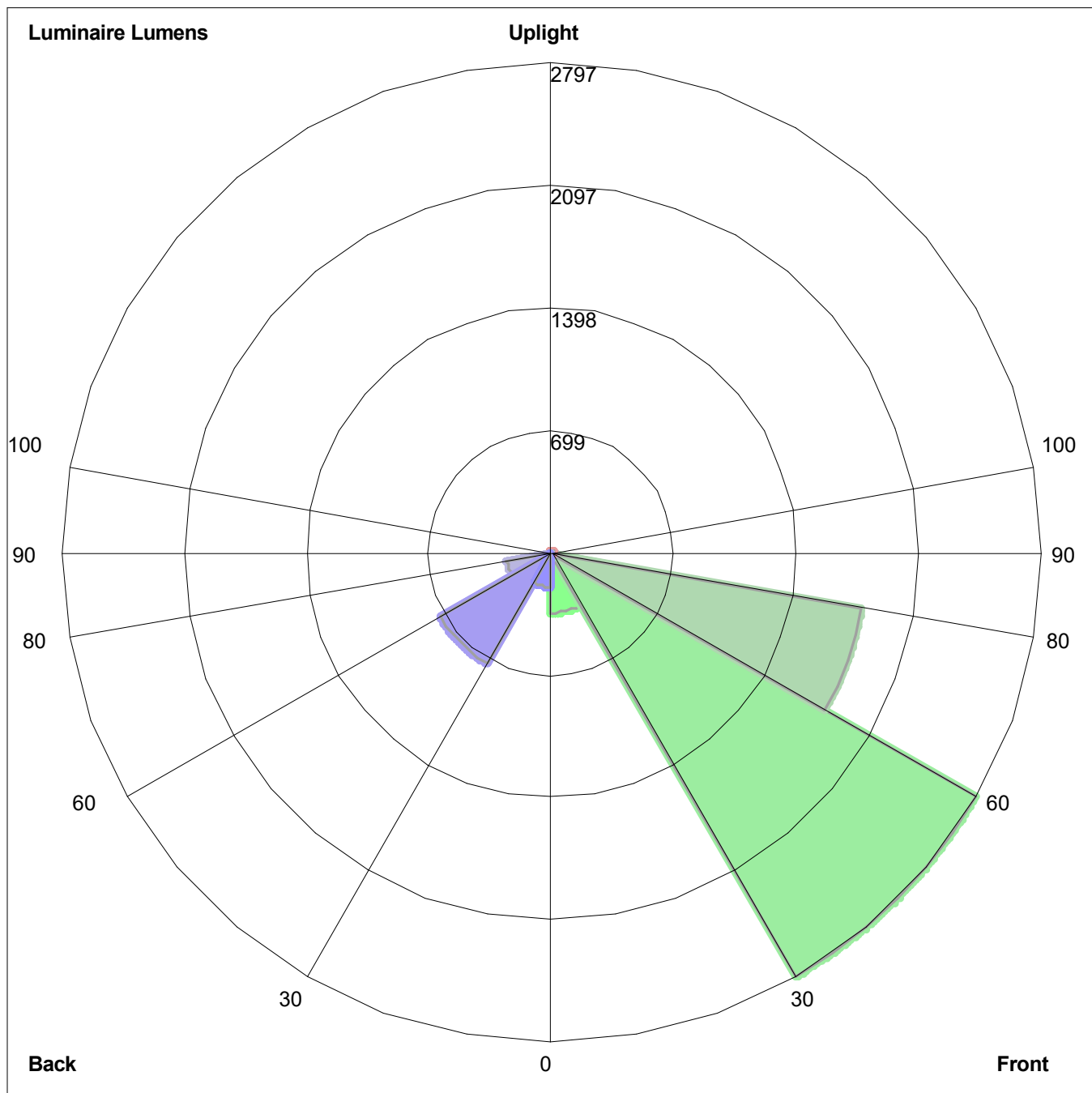


Maximum Candela = 4437 Located At Horizontal Angle = 47.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=344.8, Medium=2796.6, High=1800.2, Very High=22.3
Back: Low=195.8, Medium=732.8, High=257.0, Very High=4.2
Uplight: Low=3.2, High=9.3

BUG Rating : B1-U1-G2