



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-5W-LED-18L-50-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-50-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	11876
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	8546
Maximum Candela Angle	47.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	8546
Maximum Candela Angle (<90 Degrees Vertical)	47.5H 67.5V
Maximum Candela At 90 Degrees Vertical	16 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	383 (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)	664.0	N.A.	5.6
FM - Front-Medium (30-60)	5386.8	N.A.	45.4
FH - Front-High (60-80)	3467.5	N.A.	29.2
FVH - Front-Very High (80-90)	42.9	N.A.	0.4
BL - Back-Low (0-30)	377.2	N.A.	3.2
BM - Back-Medium (30-60)	1411.5	N.A.	11.9
BH - Back-High (60-80)	495.1	N.A.	4.2
BVH - Back-Very High (80-90)	8.2	N.A.	0.1
UL - Uplight-Low (90-100)	5.9	N.A.	0.1
UH - Uplight-High (100-180)	17.1	N.A.	0.1
Total	11876.2	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	692	692	692	692	692	692	692	692	692	692
2.5	707	710	716	719	714	712	712	710	700	694
5.0	708	721	729	728	750	705	705	704	686	671
7.5	742	754	779	718	731	712	714	714	742	734
10.0	819	812	846	767	797	807	828	803	778	789
12.5	938	981	916	905	943	918	931	922	887	869
15.0	1063	1116	1074	1122	1143	1086	1095	1094	1035	1003
17.5	1198	1242	1213	1267	1309	1353	1346	1270	1221	1196
20.0	1452	1473	1444	1480	1539	1571	1562	1545	1437	1363
22.5	1656	1654	1702	1772	1788	1818	1865	1852	1697	1603
25.0	1892	1839	1941	2049	2148	2130	2147	2162	1993	1804
27.5	2178	2277	2373	2341	2477	2533	2537	2476	2290	2104
30.0	2577	2521	2585	2763	2772	2943	2975	2863	2657	2389
32.5	3081	3087	3015	3035	3241	3306	3297	3309	3068	2730
35.0	3547	3487	3417	3505	3571	3747	3653	3725	3424	3150
37.5	3967	4008	3864	3858	4003	4120	4036	4117	3821	3351
40.0	4310	4352	4278	4295	4382	4456	4430	4462	4170	3738
42.5	4574	4589	4540	4553	4685	4698	4705	4763	4441	3971
45.0	4795	4801	4754	4831	4955	5008	5031	4975	4667	4166
47.5	4974	5010	5010	5051	5179	5232	5216	5182	4878	4407
50.0	5138	5200	5239	5211	5350	5409	5400	5395	5109	4697
52.5	5315	5344	5424	5362	5532	5621	5640	5627	5373	4923
55.0	5478	5554	5653	5660	5780	6007	6045	6036	5736	5240
57.5	5733	5791	5945	5988	6255	6590	6620	6531	5983	5400
60.0	5713	5761	6036	6198	6615	7118	7105	6943	6102	5470
62.5	5113	5233	5699	6115	6881	7619	7584	7299	6157	5411
65.0	4024	4160	4772	5455	6867	8120	8037	7531	6050	5245
67.5	2197	2365	3070	4188	6061	8450	8546	7800	6008	4924
70.0	472	490	820	2112	4355	7429	7821	7188	5006	3676
72.5	218	223	269	477	1660	4813	5318	4983	3266	2193
75.0	136	138	153	198	408	1664	2257	2401	1628	994
77.5	70	72	79	103	172	350	444	854	778	467
80.0	50	50	52	60	84	129	147	243	383	265
82.5	44	45	47	51	61	73	77	108	199	210
85.0	35	35	37	42	51	61	64	76	110	171
87.5	24	24	26	28	35	42	43	52	77	97
90.0	12	12	12	12	12	12	9	6	9	16
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	6	6	5	4	4	4	4	4	4	5
127.5	6	6	6	5	4	4	4	4	4	5
130.0	6	6	6	5	4	4	4	4	4	5

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CANDELA TABULATION - (Cont.)

132.5	6	6	6	5	4	4	4	4	4	5
135.0	6	6	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	692	692	692	692	692	692	692	692	692	692
2.5	690	689	691	689	684	676	679	680	677	667
5.0	668	664	650	647	651	648	630	632	623	612
7.5	695	701	685	684	650	610	579	584	562	574
10.0	739	719	707	721	632	616	582	562	546	554
12.5	818	806	785	738	659	625	599	609	604	621
15.0	907	885	847	774	691	671	685	696	686	671
17.5	1052	999	953	849	756	767	785	762	730	724
20.0	1216	1155	1098	953	867	885	869	831	809	778
22.5	1457	1325	1251	1078	1015	1020	966	925	854	816
25.0	1630	1531	1414	1197	1230	1162	1087	987	917	780
27.5	1854	1717	1612	1387	1442	1312	1190	1045	852	648
30.0	2137	1948	1818	1630	1674	1534	1361	988	652	450
32.5	2341	2195	2019	1902	1919	1764	1392	751	424	306
35.0	2671	2431	2267	2189	2178	1993	1242	501	284	226
37.5	2951	2728	2551	2520	2452	2073	900	330	215	187
40.0	3149	2944	2753	2851	2744	1893	576	240	178	160
42.5	3376	3146	2945	3119	2974	1480	357	196	153	136
45.0	3629	3397	3193	3405	3065	952	255	163	131	115
47.5	3837	3622	3446	3712	2890	582	197	138	111	92
50.0	4127	3914	3748	4048	2419	383	156	116	90	70
52.5	4408	4244	4086	4413	1762	269	129	93	68	49
55.0	4684	4532	4514	4710	1123	189	106	70	49	34
57.5	4886	4637	4777	4691	760	135	84	49	32	19
60.0	4968	4670	4850	4160	616	108	63	32	19	7
62.5	4863	4599	4832	3264	577	98	46	19	10	4
65.0	4651	4413	4652	2146	580	128	31	10	8	3
67.5	4229	4024	4278	1200	566	183	22	9	7	4
70.0	3070	2906	3061	589	436	238	22	8	8	5
72.5	1727	1605	1703	213	187	230	19	9	6	3
75.0	753	684	712	116	80	94	17	8	2	1
77.5	330	298	294	71	39	45	12	6	1	1

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CANDELA TABULATION - (Cont.)

80.0	201	174	143	43	26	24	9	6	0	1
82.5	153	128	92	27	21	16	9	6	0	1
85.0	109	84	49	17	15	14	9	6	0	1
87.5	63	34	14	12	14	13	9	6	0	1
90.0	12	4	9	13	15	14	12	7	1	1
92.5	5	4	9	13	16	15	12	8	1	2
95.0	4	3	7	12	14	14	10	7	1	2
97.5	4	3	6	9	12	12	8	6	1	2
100.0	4	4	5	6	9	9	6	5	2	1
102.5	3	4	5	6	6	6	6	4	2	1
105.0	3	4	4	5	6	6	5	4	2	1
107.5	3	4	4	5	6	6	5	4	3	2
110.0	4	4	4	5	6	6	5	4	3	2
112.5	4	4	5	5	6	6	5	4	3	2
115.0	4	4	5	6	6	6	5	4	3	2
117.5	4	5	5	6	6	6	5	4	4	3
120.0	4	5	5	6	6	6	6	5	4	3
122.5	5	5	6	6	6	6	6	5	4	4
125.0	5	6	6	6	6	6	6	6	5	4
127.5	6	6	6	6	6	6	6	6	5	4
130.0	6	6	6	6	6	6	6	6	5	5
132.5	6	6	6	6	6	6	6	5	5	4
135.0	5	6	6	6	6	6	6	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	692	692
2.5	661	659
5.0	597	596
7.5	560	554
10.0	564	538
12.5	628	615
15.0	688	659
17.5	728	697
20.0	778	742
22.5	773	750
25.0	712	695

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CANDELA TABULATION - (Cont.)

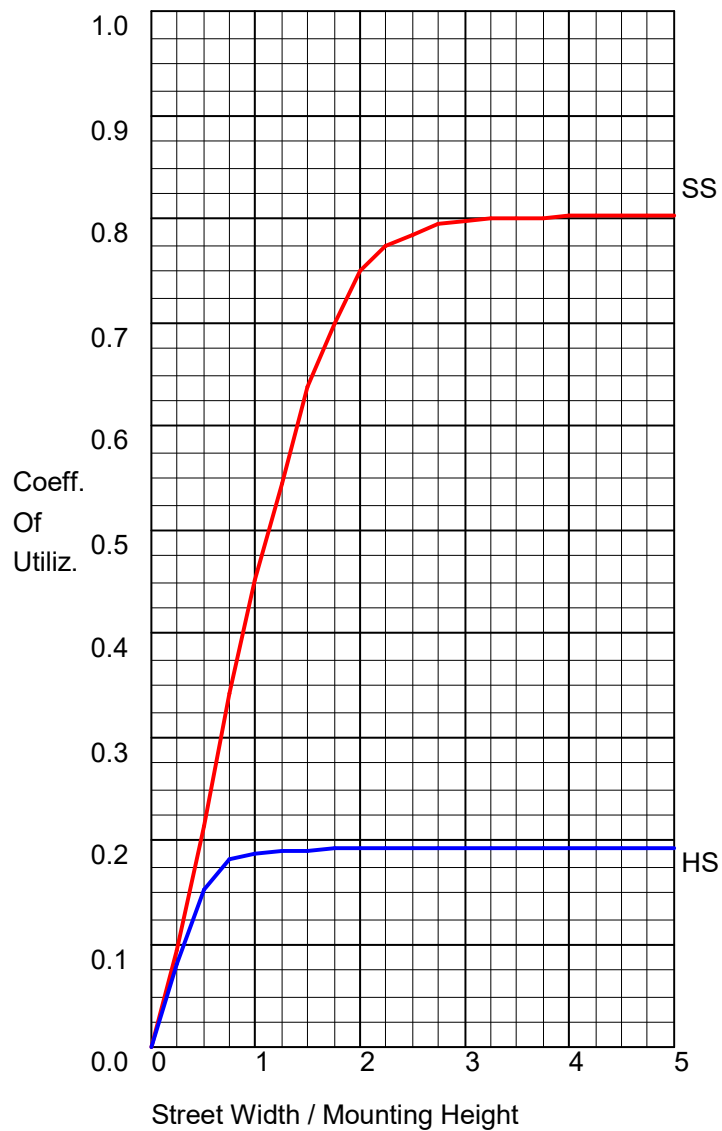
27.5	556	531
30.0	376	365
32.5	268	261
35.0	210	210
37.5	179	177
40.0	154	154
42.5	131	131
45.0	108	106
47.5	84	84
50.0	63	62
52.5	43	42
55.0	27	26
57.5	13	13
60.0	4	4
62.5	1	1
65.0	1	0
67.5	2	1
70.0	3	3
72.5	0	0
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	1	0
97.5	1	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

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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	1	1

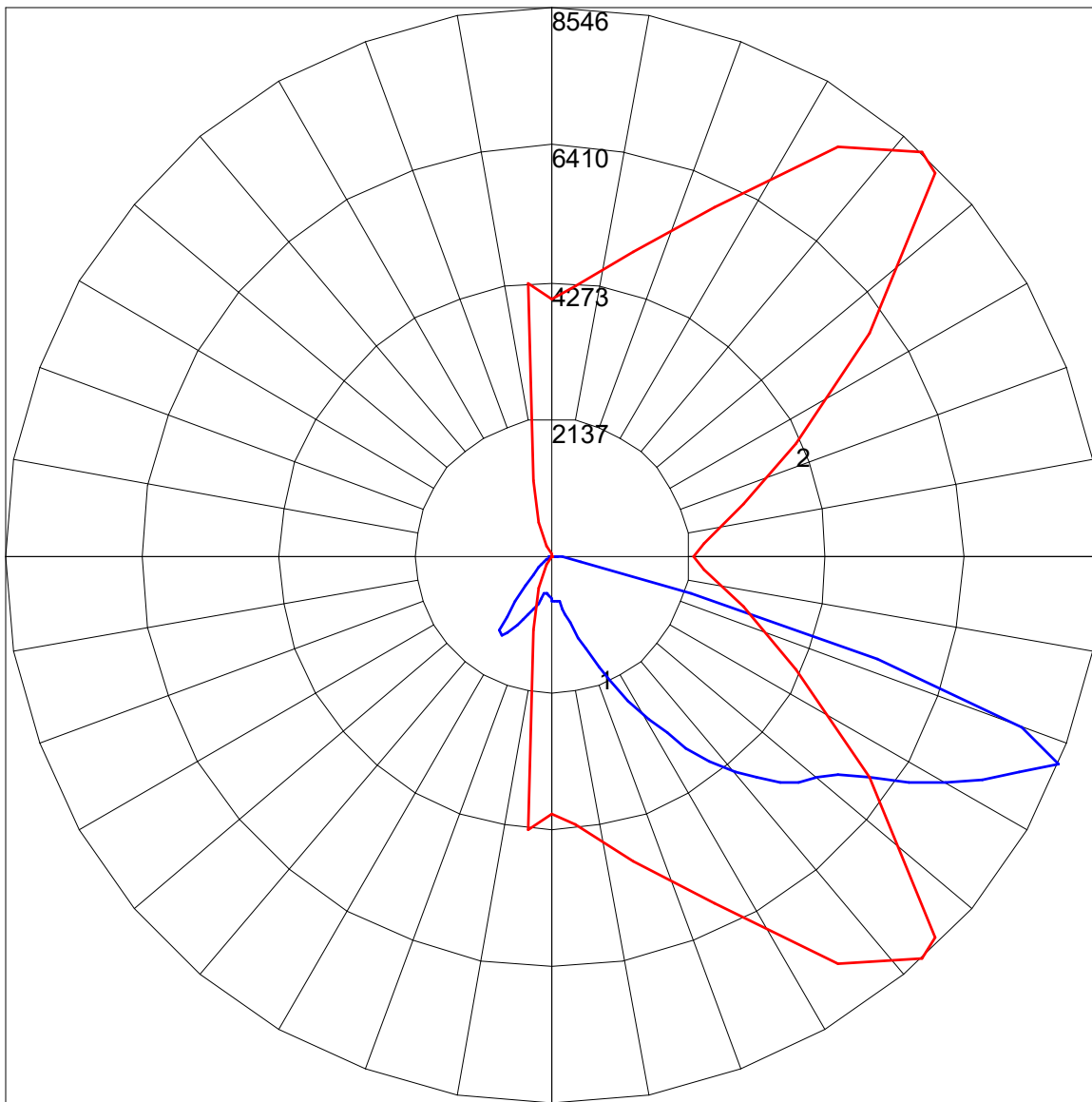
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

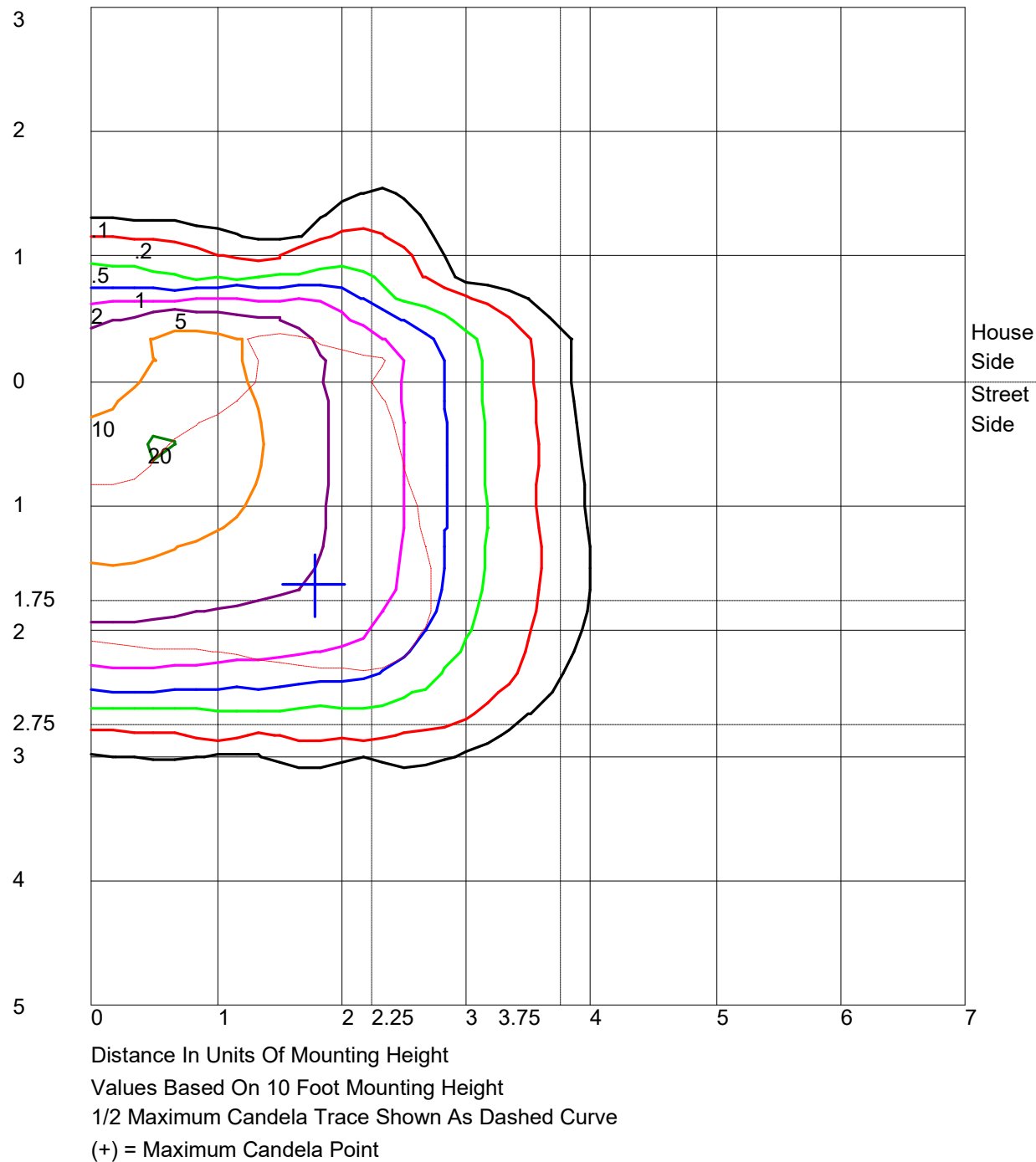
	Lumens	Percent Of Luminaire
Downward Street Side	9561.2	80.5
Downward House Side	2292.0	19.3
Downward Total	11853.2	99.8
Upward Street Side	9.2	0.1
Upward House Side	13.9	0.1
Upward Total	23.1	0.2
Total Flux	11876.3	100.0

POLAR GRAPH

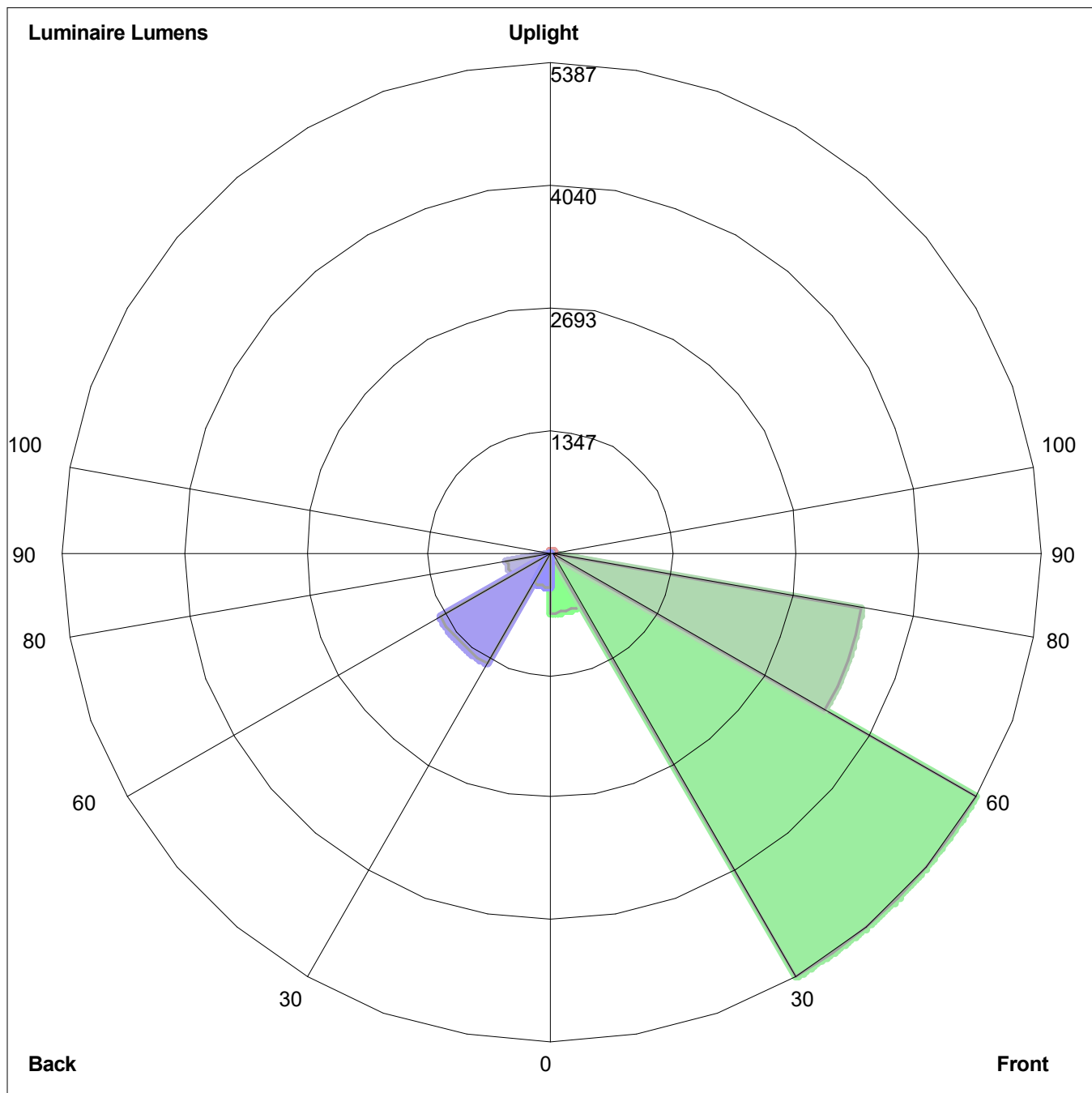


Maximum Candela = 8546 Located At Horizontal Angle = 47.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=664.0, Medium=5386.8, High=3467.5, Very High=42.9
Back: Low=377.2, Medium=1411.5, High=495.1, Very High=8.2
Uplight: Low=5.9, High=17.1

BUG Rating : B2-U2-G2