



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-5W-LED-10L-30-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-30-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	5632
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	73
Total Luminaire Watts	77
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	4052
Maximum Candela Angle	47.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	4052
Maximum Candela Angle (<90 Degrees Vertical)	47.5H 67.5V
Maximum Candela At 90 Degrees Vertical	7 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	182 (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)	314.8	N.A.	5.6
FM - Front-Medium (30-60)	2553.8	N.A.	45.3
FH - Front-High (60-80)	1643.9	N.A.	29.2
FVH - Front-Very High (80-90)	20.3	N.A.	0.4
BL - Back-Low (0-30)	178.8	N.A.	3.2
BM - Back-Medium (30-60)	669.3	N.A.	11.9
BH - Back-High (60-80)	234.8	N.A.	4.2
BVH - Back-Very High (80-90)	3.9	N.A.	0.1
UL - Uplight-Low (90-100)	2.9	N.A.	0.1
UH - Uplight-High (100-180)	9.3	N.A.	0.2
Total	5631.8	N.A.	100.0
BUG Rating	B1-U1-G1		

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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	328	328	328	328	328	328	328	328	328	328
2.5	335	337	340	342	338	337	338	337	332	329
5.0	335	342	345	345	355	334	334	333	325	319
7.5	352	357	369	341	346	337	339	339	352	348
10.0	388	385	401	364	378	383	393	381	369	374
12.5	445	466	435	428	447	436	441	437	420	412
15.0	504	530	510	532	542	514	519	519	491	476
17.5	568	589	575	601	620	641	638	602	579	567
20.0	689	698	684	702	730	745	741	732	681	646
22.5	785	784	807	840	848	862	884	878	805	760
25.0	897	872	921	972	1018	1010	1018	1025	945	856
27.5	1033	1079	1125	1110	1174	1202	1203	1173	1086	997
30.0	1222	1195	1226	1310	1314	1395	1411	1358	1259	1132
32.5	1460	1464	1429	1439	1537	1567	1562	1569	1455	1294
35.0	1681	1653	1620	1662	1693	1776	1731	1766	1624	1494
37.5	1880	1900	1832	1829	1898	1953	1913	1952	1812	1589
40.0	2043	2063	2028	2036	2078	2112	2100	2115	1977	1773
42.5	2169	2175	2152	2158	2221	2227	2230	2258	2105	1882
45.0	2273	2276	2254	2290	2349	2374	2385	2359	2213	1975
47.5	2358	2375	2375	2394	2455	2481	2473	2457	2312	2089
50.0	2436	2466	2484	2470	2536	2564	2560	2558	2422	2227
52.5	2520	2533	2572	2542	2623	2665	2674	2667	2547	2334
55.0	2597	2633	2680	2683	2740	2848	2866	2862	2720	2484
57.5	2718	2746	2818	2839	2966	3124	3138	3096	2836	2561
60.0	2709	2731	2862	2939	3136	3374	3369	3292	2893	2593
62.5	2425	2481	2702	2899	3262	3613	3595	3460	2919	2565
65.0	1908	1973	2262	2586	3256	3849	3811	3571	2868	2487
67.5	1042	1121	1456	1985	2873	4005	4052	3698	2848	2334
70.0	224	233	389	1001	2065	3522	3709	3408	2373	1742
72.5	103	106	128	226	787	2281	2521	2362	1549	1040
75.0	64	66	72	94	194	788	1070	1138	772	471
77.5	34	34	37	48	81	165	210	405	369	222
80.0	24	24	25	28	40	61	69	115	182	125
82.5	21	21	22	25	29	35	37	51	94	100
85.0	16	16	17	20	25	29	30	37	52	81
87.5	11	11	12	14	16	20	20	25	37	46
90.0	5	5	5	5	5	5	5	3	5	7
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	328	328	328	328	328	328	328	328	328	328
2.5	327	327	328	326	324	321	322	323	321	316
5.0	317	315	308	307	309	307	299	300	295	290
7.5	330	332	324	324	309	289	274	277	267	272
10.0	351	342	335	342	300	292	276	267	259	262
12.5	387	382	372	350	312	296	284	289	287	294
15.0	430	419	402	367	328	319	324	331	325	318
17.5	499	473	451	403	358	364	373	362	346	343
20.0	577	548	521	451	411	419	412	395	384	369
22.5	691	628	594	511	481	484	458	438	405	387
25.0	773	725	670	567	584	551	515	468	435	370
27.5	878	815	764	658	683	622	564	495	404	307
30.0	1014	924	862	773	794	727	646	468	310	214
32.5	1110	1041	958	902	910	836	660	356	201	145
35.0	1266	1152	1075	1037	1033	945	589	237	134	107
37.5	1399	1293	1209	1194	1163	983	426	156	101	89
40.0	1493	1396	1305	1352	1301	898	273	113	84	76
42.5	1601	1491	1396	1478	1410	701	169	93	72	65
45.0	1720	1610	1514	1614	1453	451	121	78	62	55
47.5	1819	1717	1634	1760	1371	276	93	66	53	44
50.0	1956	1856	1777	1920	1147	182	74	55	43	33
52.5	2090	2012	1937	2092	836	127	61	45	32	24
55.0	2221	2149	2140	2233	532	90	50	33	24	16
57.5	2317	2198	2265	2224	361	64	40	24	16	9
60.0	2355	2215	2299	1973	292	51	30	16	9	4
62.5	2306	2181	2291	1547	274	47	22	9	5	2
65.0	2205	2092	2205	1017	275	60	15	5	4	2
67.5	2005	1908	2028	569	268	87	10	5	4	2
70.0	1456	1378	1451	279	206	113	11	4	4	3
72.5	819	761	807	101	89	110	9	5	3	2
75.0	357	324	337	55	37	45	7	4	1	1
77.5	156	142	140	34	18	21	5	3	0	0

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CANDELA TABULATION - (Cont.)

80.0	95	82	68	20	12	11	5	3	0	0
82.5	72	60	44	13	10	7	5	3	0	0
85.0	52	40	23	7	7	6	5	3	0	1
87.5	30	16	6	5	6	6	5	3	0	1
90.0	5	2	5	6	7	6	5	4	0	1
92.5	3	2	5	6	7	7	5	4	1	1
95.0	2	2	4	5	6	6	5	4	1	1
97.5	2	2	3	5	5	5	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	328	328
2.5	313	312
5.0	283	282
7.5	266	263
10.0	268	255
12.5	298	291
15.0	326	312
17.5	345	331
20.0	369	352
22.5	366	355
25.0	337	330

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CANDELA TABULATION - (Cont.)

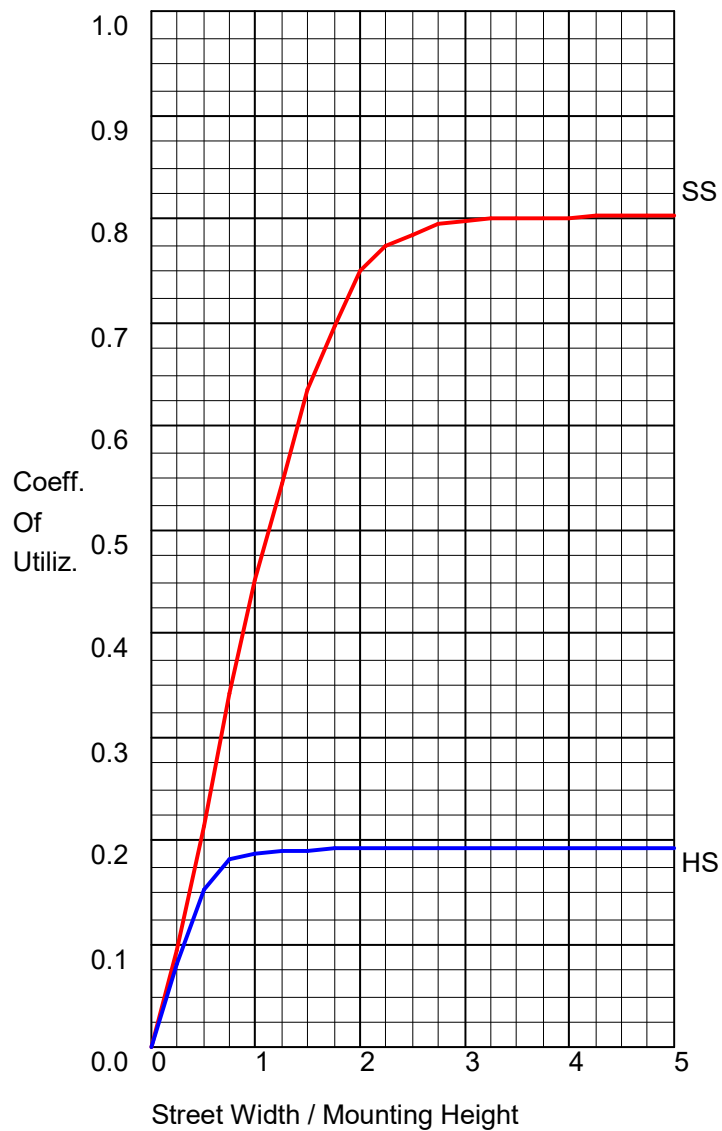
27.5	263	252
30.0	178	174
32.5	127	123
35.0	100	100
37.5	85	84
40.0	73	73
42.5	62	62
45.0	51	50
47.5	40	40
50.0	29	29
52.5	20	20
55.0	13	12
57.5	6	6
60.0	2	2
62.5	1	0
65.0	0	0
67.5	1	1
70.0	2	2
72.5	0	0
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	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

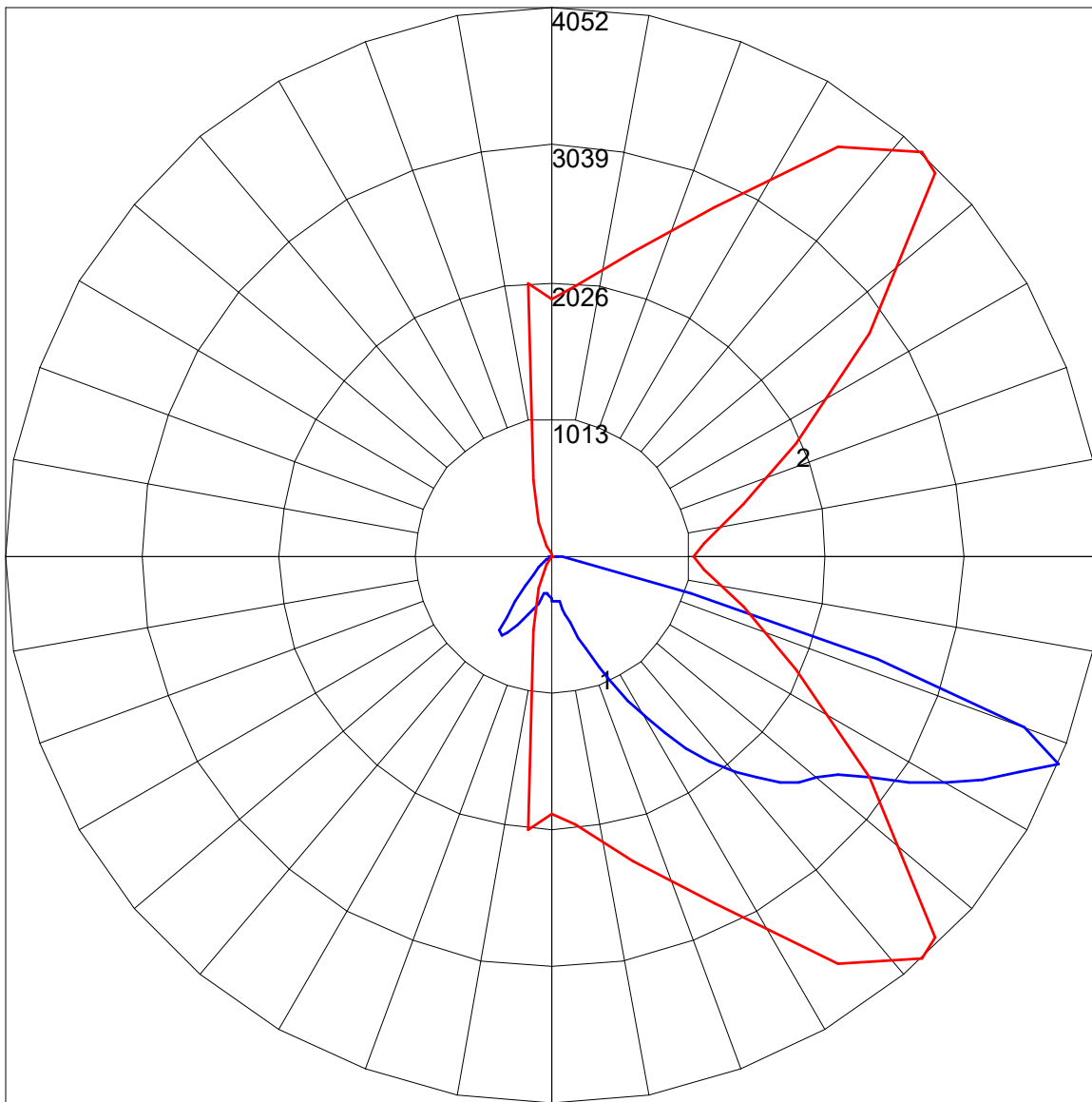
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

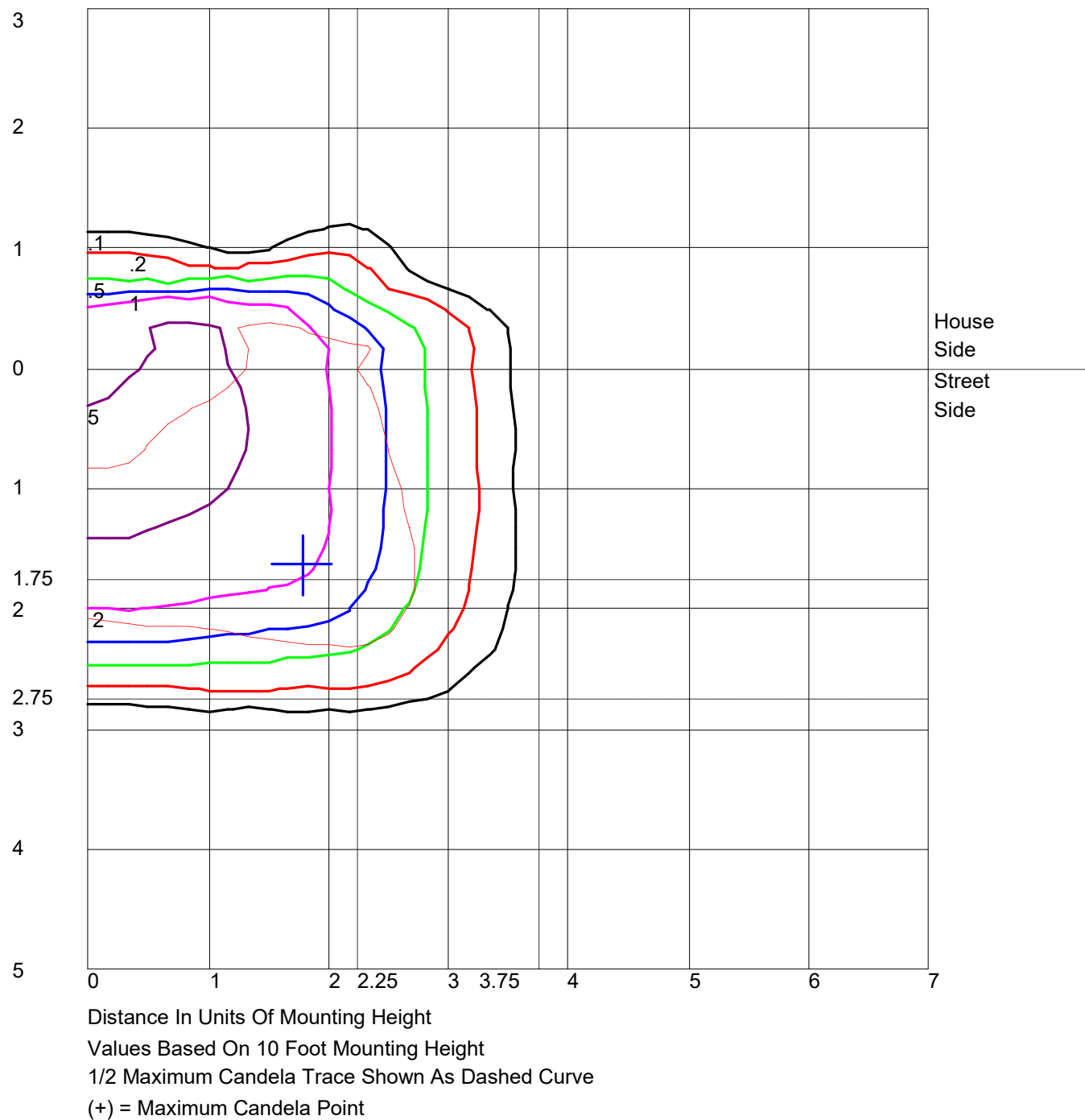
	Lumens	Percent Of Luminaire
Downward Street Side	4532.9	80.5
Downward House Side	1086.7	19.3
Downward Total	5619.6	99.8
Upward Street Side	5.0	0.1
Upward House Side	7.3	0.1
Upward Total	12.3	0.2
Total Flux	5631.9	100.0

POLAR GRAPH

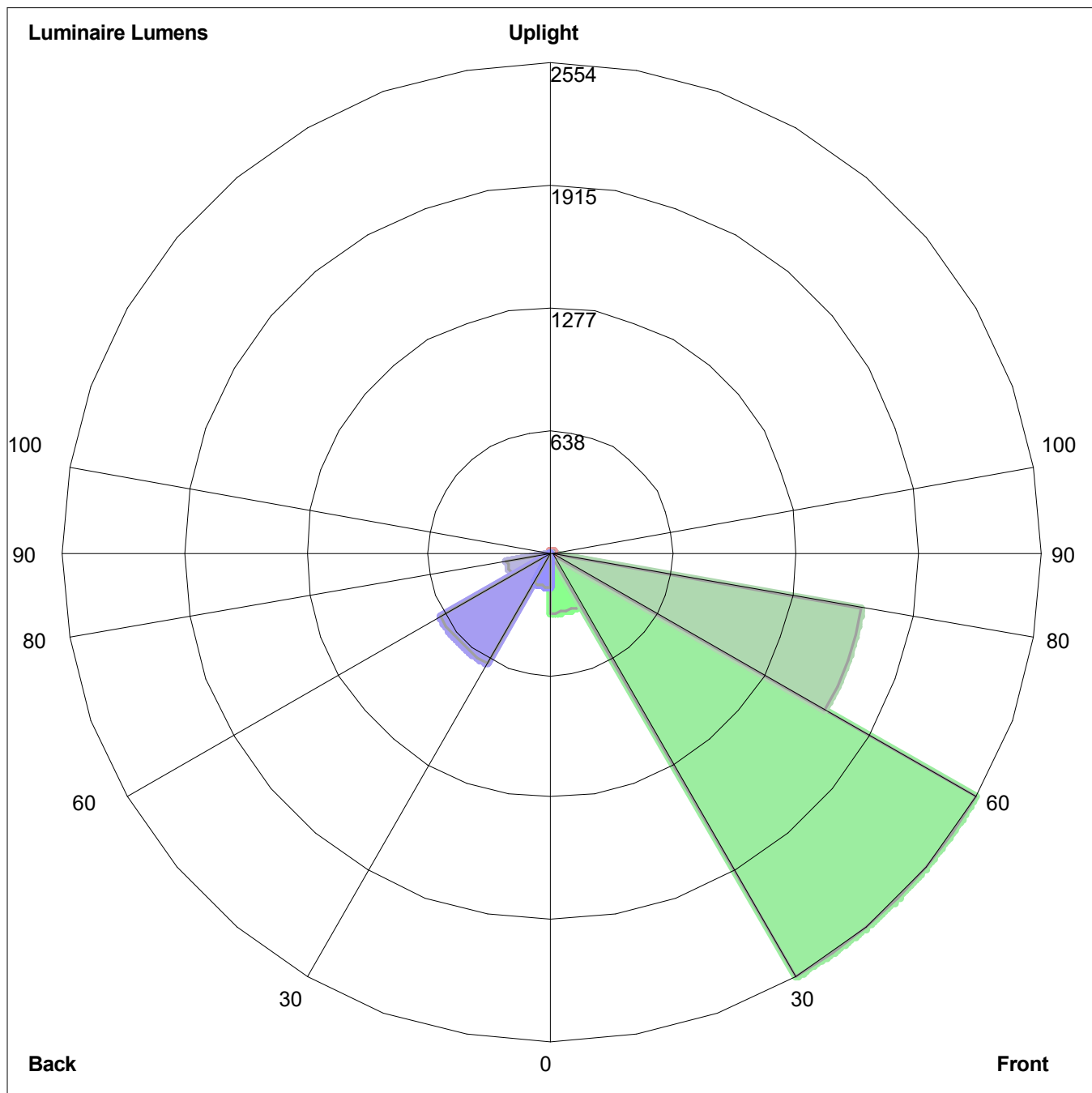


Maximum Candela = 4052 Located At Horizontal Angle = 47.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=314.8, Medium=2553.8, High=1643.9, Very High=20.3
Back: Low=178.8, Medium=669.3, High=234.8, Very High=3.9
Uplight: Low=2.9, High=9.3

BUG Rating : B1-U1-G1