



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-5W-LED-10L-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
[MANUFACT] LSI INDUSTRIES, INC.
[LUMCAT] ENM4-PT-5W-LED-10L-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	6455
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	84
Total Luminaire Watts	77
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	4645
Maximum Candela Angle	47.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	4645
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	208 (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)	360.9	N.A.	5.6
FM - Front-Medium (30-60)	2927.8	N.A.	45.4
FH - Front-High (60-80)	1884.6	N.A.	29.2
FVH - Front-Very High (80-90)	23.3	N.A.	0.4
BL - Back-Low (0-30)	205.0	N.A.	3.2
BM - Back-Medium (30-60)	767.2	N.A.	11.9
BH - Back-High (60-80)	269.0	N.A.	4.2
BVH - Back-Very High (80-90)	4.4	N.A.	0.1
UL - Uplight-Low (90-100)	3.2	N.A.	0.0
UH - Uplight-High (100-180)	9.3	N.A.	0.1
Total	6454.7	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	376	376	376	376	376	376	376	376	376	376
2.5	384	386	389	392	387	386	387	386	381	377
5.0	384	392	396	396	407	383	383	382	373	365
7.5	403	409	423	390	397	386	388	388	403	399
10.0	445	442	460	418	433	439	450	437	423	429
12.5	510	534	498	491	513	499	506	501	482	472
15.0	578	607	584	610	621	589	595	595	563	545
17.5	651	675	660	689	711	735	732	690	664	650
20.0	789	800	784	805	836	854	849	840	781	740
22.5	900	899	925	963	973	988	1013	1007	922	871
25.0	1028	1000	1055	1114	1167	1158	1167	1175	1084	981
27.5	1184	1237	1290	1272	1346	1378	1379	1345	1245	1143
30.0	1401	1370	1405	1501	1506	1600	1617	1557	1444	1298
32.5	1674	1678	1638	1650	1762	1796	1791	1799	1668	1483
35.0	1927	1895	1857	1905	1941	2036	1985	2025	1861	1713
37.5	2156	2179	2100	2097	2175	2239	2193	2238	2077	1822
40.0	2342	2365	2325	2335	2382	2421	2408	2425	2267	2032
42.5	2486	2494	2468	2474	2546	2553	2557	2589	2413	2158
45.0	2606	2609	2584	2626	2693	2722	2735	2704	2537	2264
47.5	2703	2723	2723	2745	2814	2844	2835	2816	2651	2395
50.0	2793	2827	2848	2832	2907	2940	2934	2932	2776	2553
52.5	2888	2904	2948	2915	3007	3055	3065	3058	2920	2676
55.0	2977	3018	3073	3076	3141	3265	3285	3281	3118	2848
57.5	3116	3148	3231	3255	3400	3581	3597	3549	3252	2936
60.0	3105	3131	3281	3369	3595	3868	3862	3774	3317	2973
62.5	2780	2844	3098	3324	3740	4142	4122	3967	3346	2941
65.0	2187	2261	2593	2965	3732	4413	4369	4093	3288	2851
67.5	1195	1286	1669	2276	3294	4592	4645	4239	3265	2676
70.0	256	267	446	1147	2367	4038	4251	3907	2721	1997
72.5	118	121	147	260	902	2615	2890	2708	1776	1192
75.0	73	75	83	108	222	903	1227	1304	885	540
77.5	39	39	43	55	93	189	241	465	423	254
80.0	27	27	28	32	46	70	80	132	208	143
82.5	24	24	25	28	34	40	42	59	108	114
85.0	19	19	20	23	28	34	35	42	60	93
87.5	13	13	14	16	19	23	23	28	42	52
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	376	376	376	376	376	376	376	376	376	376
2.5	375	375	376	374	372	367	370	371	369	362
5.0	363	361	353	352	354	352	342	343	338	333
7.5	378	381	372	372	354	332	314	317	306	312
10.0	402	392	384	393	343	335	316	306	297	300
12.5	444	438	426	401	358	339	326	331	329	337
15.0	493	481	461	421	376	365	372	379	373	364
17.5	572	542	517	462	410	418	427	415	397	394
20.0	662	628	597	517	471	481	472	452	440	423
22.5	793	720	680	586	552	555	526	503	465	444
25.0	886	831	768	650	669	631	590	537	498	424
27.5	1007	934	876	754	783	713	647	567	463	352
30.0	1162	1059	988	886	910	833	740	537	355	245
32.5	1272	1193	1098	1034	1043	959	757	408	230	166
35.0	1451	1321	1232	1189	1184	1084	675	272	154	122
37.5	1604	1482	1386	1369	1333	1126	489	179	116	102
40.0	1712	1601	1496	1549	1492	1029	313	130	96	87
42.5	1835	1710	1601	1695	1616	804	194	107	83	74
45.0	1972	1846	1736	1850	1666	517	138	89	71	63
47.5	2085	1968	1873	2017	1571	316	107	75	61	50
50.0	2242	2127	2037	2201	1315	208	85	63	49	38
52.5	2396	2306	2220	2398	958	146	70	51	37	27
55.0	2546	2463	2453	2560	610	104	58	38	27	18
57.5	2656	2520	2596	2549	414	73	46	27	18	10
60.0	2700	2539	2636	2261	335	59	35	18	10	4
62.5	2643	2500	2627	1773	314	53	25	10	5	2
65.0	2528	2398	2528	1166	315	69	17	5	4	2
67.5	2299	2187	2325	652	308	99	12	5	4	2
70.0	1669	1580	1664	320	237	130	13	4	4	3
72.5	939	872	925	116	102	126	10	5	3	2
75.0	409	372	386	63	43	51	8	4	1	1
77.5	179	162	160	39	21	24	6	3	0	0

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CANDELA TABULATION - (Cont.)

80.0	109	94	77	23	14	13	5	3	0	0
82.5	83	69	50	15	12	8	5	3	0	0
85.0	60	46	26	8	8	7	5	3	0	1
87.5	35	18	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	376	376
2.5	359	358
5.0	325	323
7.5	305	302
10.0	307	292
12.5	341	334
15.0	374	358
17.5	396	379
20.0	423	403
22.5	420	407
25.0	386	378

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CANDELA TABULATION - (Cont.)

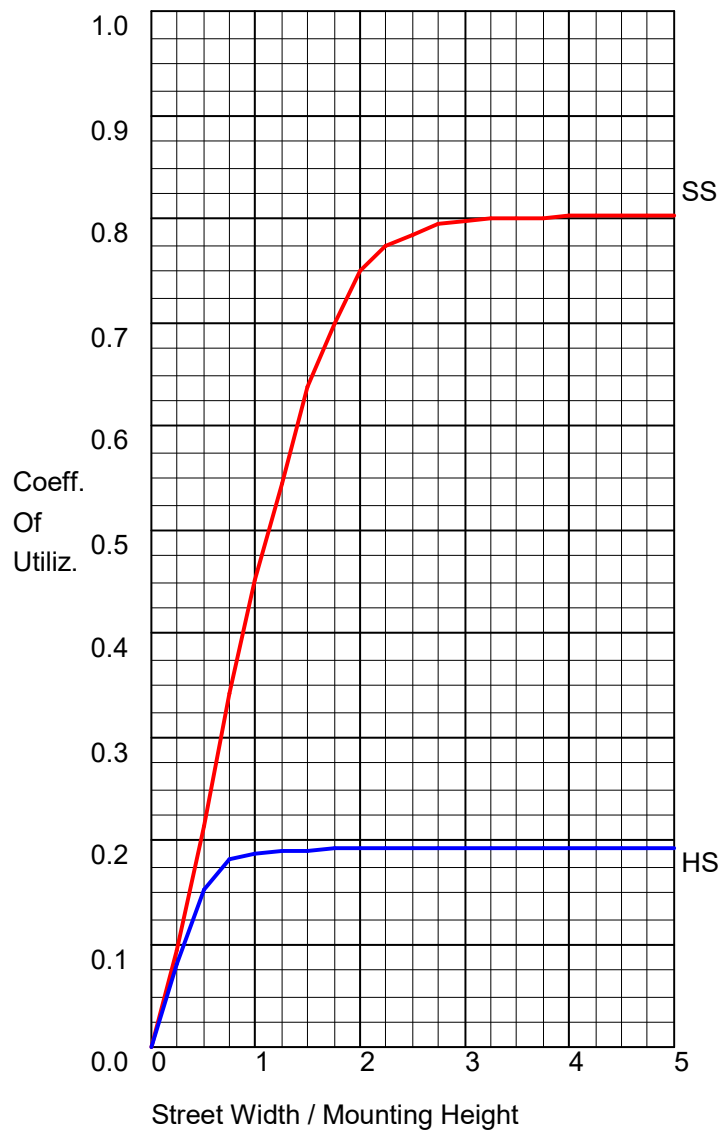
27.5	302	289
30.0	204	199
32.5	146	141
35.0	114	114
37.5	97	96
40.0	84	84
42.5	71	71
45.0	59	58
47.5	46	46
50.0	34	34
52.5	23	23
55.0	15	14
57.5	7	7
60.0	2	2
62.5	1	0
65.0	0	0
67.5	1	1
70.0	2	2
72.5	0	0
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	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

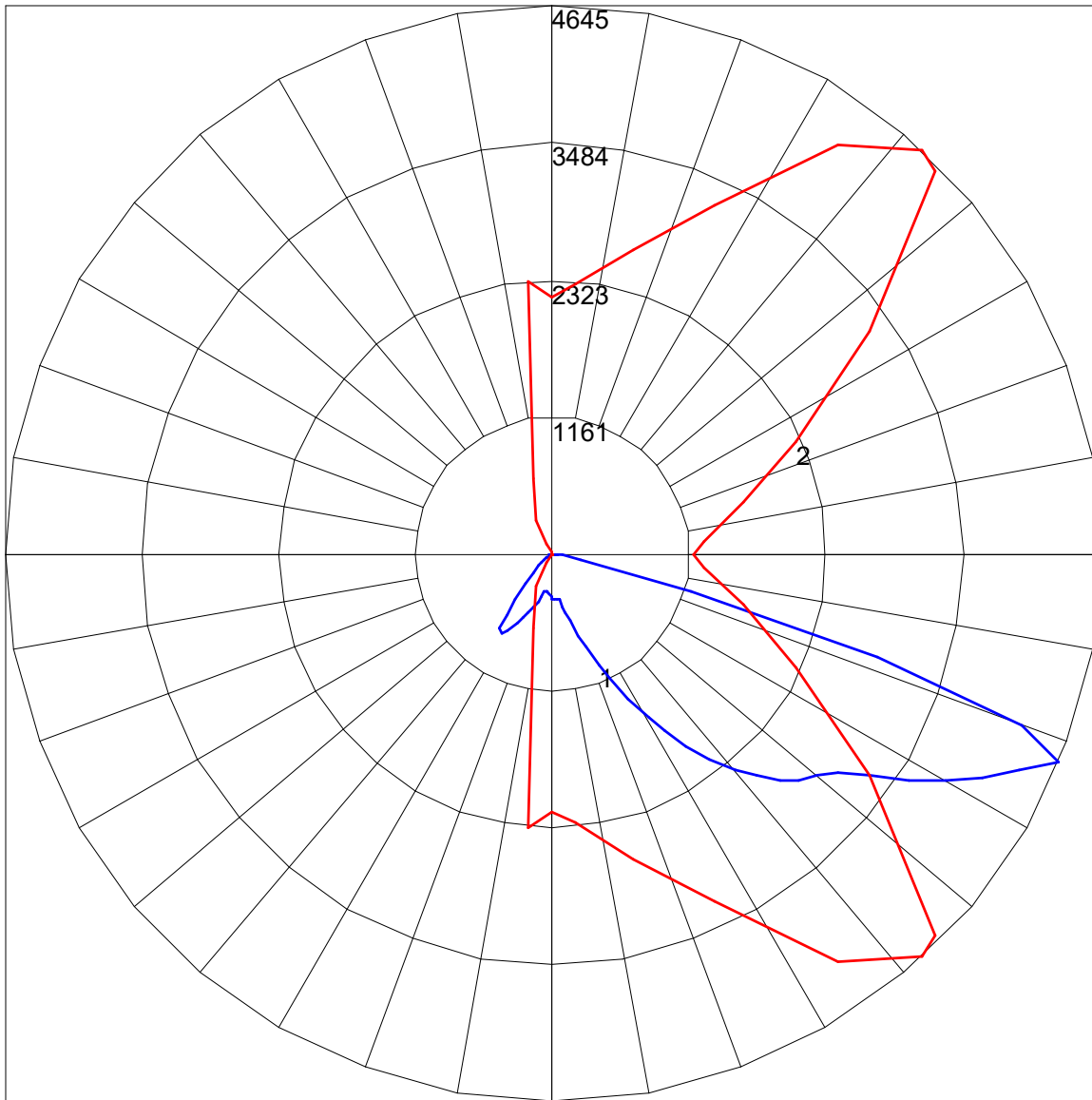
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

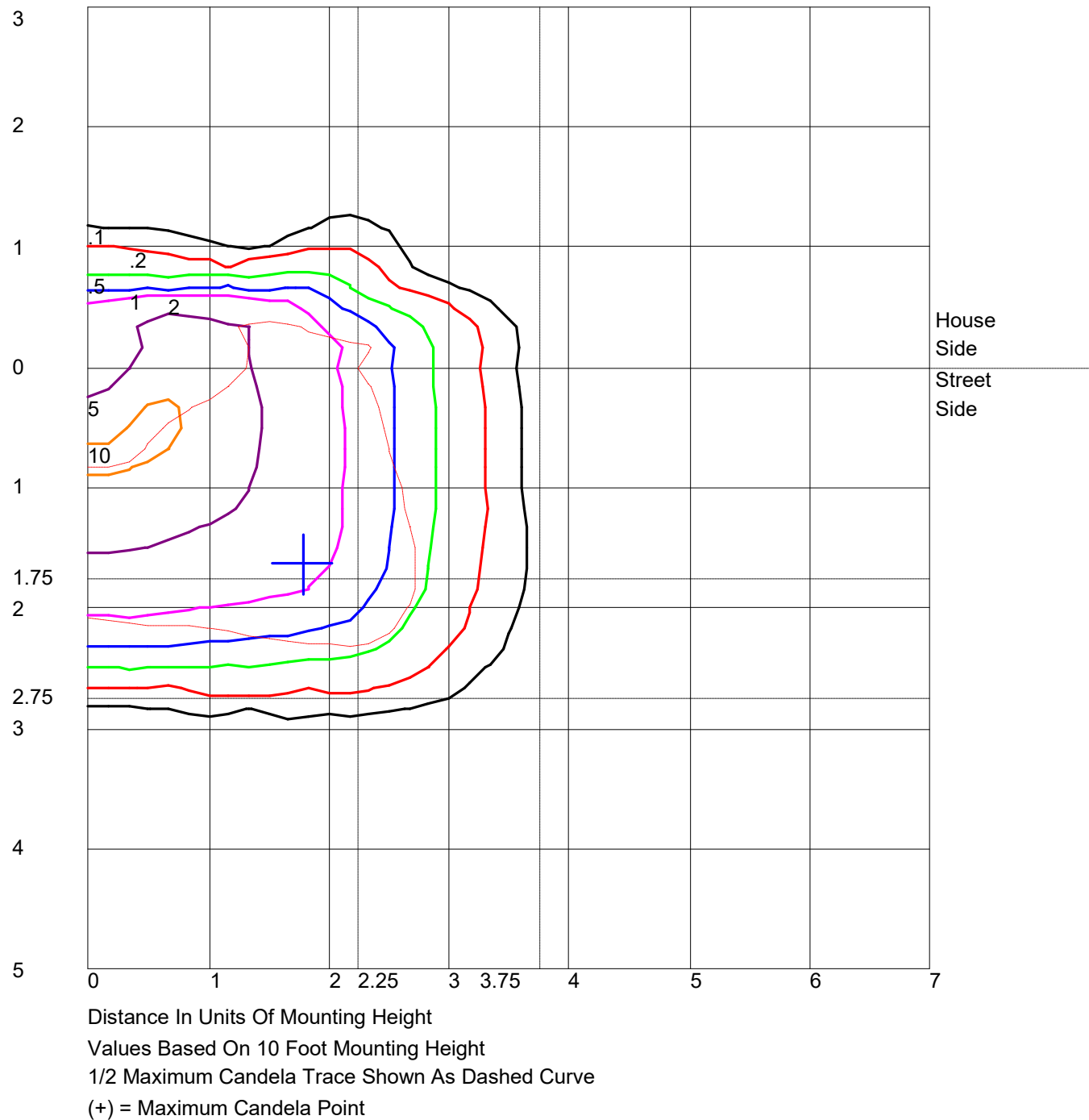
	Lumens	Percent Of Luminaire
Downward Street Side	5196.6	80.5
Downward House Side	1245.5	19.3
Downward Total	6442.1	99.8
Upward Street Side	5.0	0.1
Upward House Side	7.4	0.1
Upward Total	12.4	0.2
Total Flux	6454.5	100.0

POLAR GRAPH

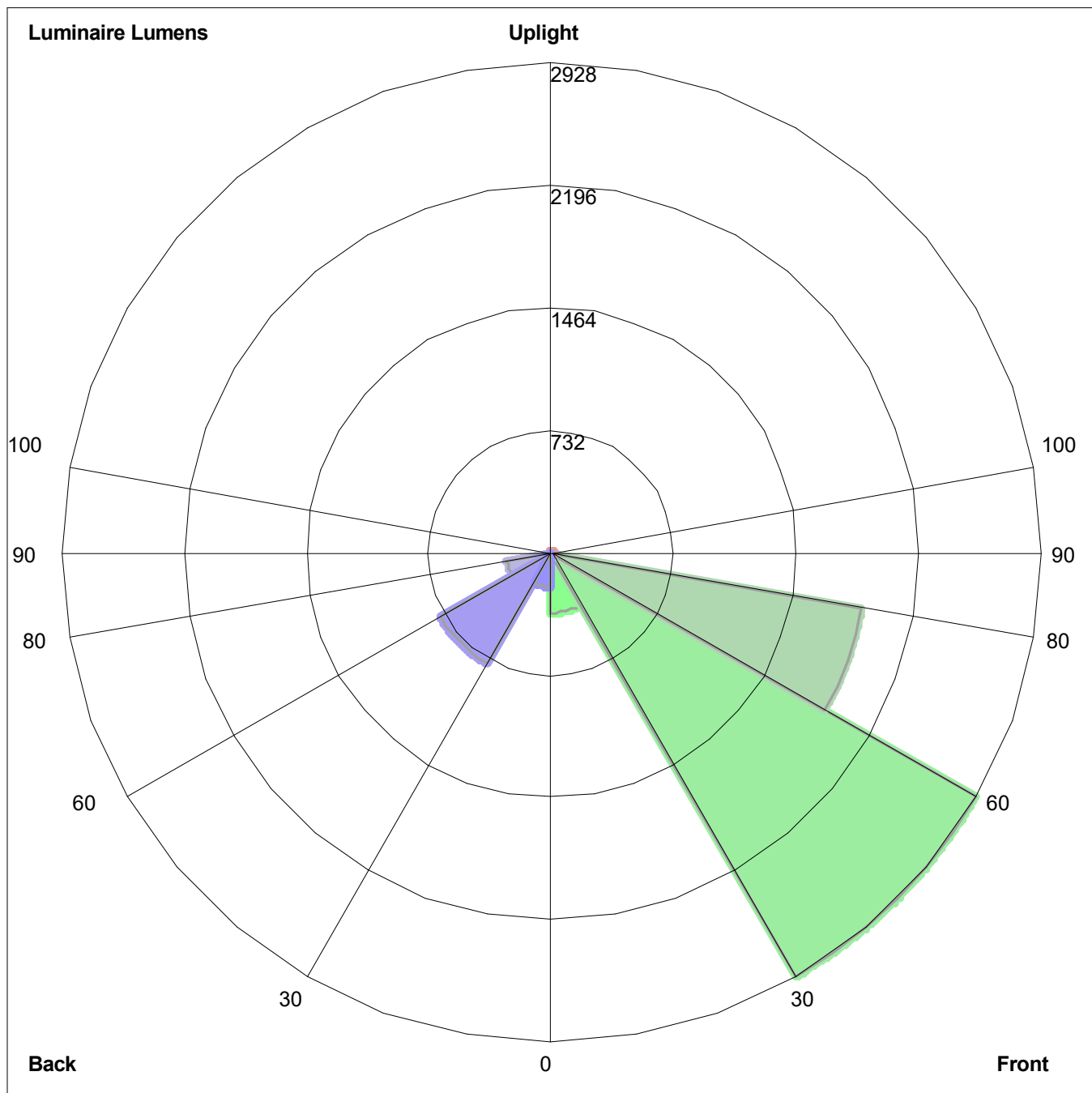


Maximum Candela = 4645 Located At Horizontal Angle = 47.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=360.9, Medium=2927.8, High=1884.6, Very High=23.3
Back: Low=205.0, Medium=767.2, High=269.0, Very High=4.4
Uplight: Low=3.2, High=9.3

BUG Rating : B1-U1-G2