



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-2-LED-18L-30.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11674

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/02/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-2-LED-18L-30

[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	16634
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	148.7
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	13414
Maximum Candela Angle	82.5H 62.5V
Maximum Candela (<90 Degrees Vertical)	13414
Maximum Candela Angle (<90 Degrees Vertical)	82.5H 62.5V
Maximum Candela At 90 Degrees Vertical	19 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	751 (4.5% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-18L-30.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	951.4	N.A.	5.7
FM - Front-Medium (30-60)	6520.9	N.A.	39.2
FH - Front-High (60-80)	2898.9	N.A.	17.4
FVH - Front-Very High (80-90)	74.7	N.A.	0.4
BL - Back-Low (0-30)	728.2	N.A.	4.4
BM - Back-Medium (30-60)	3916.2	N.A.	23.5
BH - Back-High (60-80)	1424.7	N.A.	8.6
BVH - Back-Very High (80-90)	95.5	N.A.	0.6
UL - Uplight-Low (90-100)	6.0	N.A.	0.0
UH - Uplight-High (100-180)	17.9	N.A.	0.1
Total	16634.4	N.A.	100.0
BUG Rating	B3-U2-G3		

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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>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>82.5</u>
0.0	1451	1451	1451	1451	1451	1451	1451	1451	1451	1451
2.5	1476	1481	1458	1451	1453	1464	1461	1443	1417	1418
5.0	1418	1438	1431	1446	1424	1421	1416	1370	1376	1361
7.5	1435	1458	1429	1455	1393	1452	1414	1412	1461	1407
10.0	1485	1479	1481	1461	1464	1504	1520	1501	1504	1486
12.5	1650	1628	1599	1581	1563	1613	1653	1662	1617	1624
15.0	1744	1686	1726	1753	1751	1783	1796	1843	1811	1718
17.5	1828	1789	1835	1822	1925	1966	1981	2014	2023	1946
20.0	2044	2009	2037	2002	2002	2116	2203	2197	2281	2241
22.5	2119	2187	2216	2266	2255	2295	2449	2462	2565	2545
25.0	2409	2433	2436	2464	2554	2549	2675	2748	2811	2897
27.5	2915	2841	2867	2859	2826	2882	2954	3084	3153	3271
30.0	3299	3340	3356	3304	3248	3205	3308	3408	3609	3665
32.5	4213	4045	3939	3743	3713	3648	3692	3776	4042	4065
35.0	4716	4749	4499	4449	4201	4191	4157	4289	4415	4602
37.5	5528	5522	5192	4910	4796	4800	4737	4687	4954	5175
40.0	5781	5780	5704	5493	5376	5434	5295	5304	5314	5630
42.5	5829	5851	5784	5753	5890	5868	5906	5911	5562	5908
45.0	5631	5706	5676	5755	6033	6294	6471	6565	5900	6264
47.5	5204	5270	5321	5525	5933	6470	7099	7336	6453	6868
50.0	4508	4587	4706	4982	5585	6430	7673	8251	7194	7616
52.5	3691	3760	3904	4198	4933	6078	8063	9286	8132	8606
55.0	2884	2938	3094	3341	4051	5422	8168	10274	9191	9864
57.5	2168	2208	2292	2531	3131	4505	7805	11038	10204	11225
60.0	1585	1589	1660	1818	2262	3373	6947	11361	11147	12531
62.5	1195	1195	1221	1309	1581	2333	5761	10948	11751	13414
65.0	939	937	956	1006	1158	1546	4362	9721	11763	13348
67.5	733	741	761	810	920	1097	2966	7556	10606	11581
70.0	576	587	593	654	751	846	1873	5126	8118	7611
72.5	417	435	434	502	592	680	1151	3115	4870	3580
75.0	257	281	251	324	426	536	741	1914	2367	1352
77.5	219	243	189	189	235	383	518	1202	1215	676
80.0	231	240	175	144	150	217	339	751	666	425
82.5	232	230	150	107	105	146	175	408	398	261
85.0	196	192	120	73	69	92	96	128	191	134
87.5	83	84	60	37	31	34	31	34	40	39
90.0	15	14	11	6	2	1	0	1	4	5
92.5	6	6	6	4	1	0	0	0	2	2
95.0	6	6	6	4	1	0	0	0	0	1
97.5	6	6	5	3	1	0	0	0	0	1
100.0	5	5	4	3	1	0	0	0	0	0
102.5	5	5	4	3	1	0	0	0	0	1
105.0	5	5	4	3	2	0	0	0	0	0
107.5	5	5	4	3	2	1	0	0	0	1
110.0	6	6	5	4	2	1	0	0	0	1
112.5	6	6	5	5	3	1	0	0	0	1
115.0	6	6	6	5	3	2	0	0	1	1
117.5	7	7	6	6	4	2	0	0	1	2
120.0	8	8	7	6	5	3	1	1	2	2
122.5	9	8	8	7	5	3	1	1	2	2
125.0	9	9	9	7	6	4	2	1	3	4
127.5	10	10	9	8	6	5	2	2	3	5
130.0	10	10	10	8	7	5	2	2	4	5

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CANDELA TABULATION - (Cont.)

132.5	11	10	10	8	7	5	2	2	4	5
135.0	9	9	8	6	6	4	2	1	3	4
137.5	4	5	4	3	2	1	0	0	0	1
140.0	2	2	1	1	0	0	0	0	0	0
142.5	2	1	1	0	0	0	0	0	0	0
145.0	1	1	1	0	0	0	0	0	0	0
147.5	1	1	1	0	0	0	0	0	0	0
150.0	1	1	0	0	0	0	0	0	0	0
152.5	1	1	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	1	1	0	0	0	0	0	0	0	0
162.5	1	1	0	0	0	0	0	0	0	0
165.0	1	1	0	0	0	0	0	0	0	0
167.5	1	1	0	0	0	0	0	0	0	0
170.0	1	1	0	0	0	0	0	0	0	0
172.5	1	1	0	0	0	0	0	0	0	0
175.0	1	1	1	0	0	0	0	0	0	0
177.5	1	1	1	1	0	0	0	0	0	0
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	1451	1451	1451	1451	1451	1451	1451	1451	1451	1451
2.5	1415	1435	1426	1428	1451	1428	1426	1419	1445	1448
5.0	1365	1379	1387	1318	1353	1339	1353	1340	1343	1307
7.5	1385	1394	1406	1382	1371	1309	1218	1232	1247	1247
10.0	1493	1452	1405	1429	1332	1297	1223	1213	1148	1181
12.5	1574	1579	1537	1514	1406	1281	1223	1245	1207	1240
15.0	1741	1721	1677	1581	1419	1351	1285	1297	1274	1244
17.5	1913	1878	1822	1683	1488	1408	1387	1336	1329	1316
20.0	2198	2121	2045	1799	1580	1484	1410	1418	1438	1453
22.5	2502	2406	2330	2007	1725	1605	1519	1517	1567	1660
25.0	2841	2756	2638	2269	1988	1696	1594	1667	1762	1892
27.5	3255	3185	3011	2616	2226	1807	1753	1885	2084	2206
30.0	3653	3601	3401	2875	2444	2007	2004	2144	2331	2487
32.5	4176	4067	3814	3226	2645	2293	2314	2413	2651	2903
35.0	4654	4598	4346	3601	2827	2546	2648	2735	2935	3180
37.5	5210	5111	4867	4024	3119	2861	2882	3021	3113	3409
40.0	5699	5596	5348	4411	3364	3128	3139	3195	3262	3465
42.5	6012	5969	5720	4625	3548	3335	3257	3280	3222	3318
45.0	6407	6398	6056	4764	3658	3387	3248	3180	3039	3035
47.5	7015	6964	6557	4894	3742	3358	3100	2966	2777	2692
50.0	7774	7737	7106	4998	3785	3280	2911	2663	2431	2324
52.5	8731	8691	7688	5064	3787	3142	2691	2372	2119	2019
55.0	10005	9786	8247	5067	3739	2969	2454	2141	1880	1780
57.5	11426	10842	8704	4965	3617	2764	2230	1960	1677	1583
60.0	12543	11389	8714	4673	3383	2513	2031	1774	1482	1385
62.5	13276	11265	8098	4120	2995	2182	1785	1574	1260	1168
65.0	12658	10033	6735	3288	2398	1779	1495	1335	1032	929
67.5	10482	7590	4716	2274	1796	1370	1173	1070	795	693
70.0	6570	4435	2780	1494	1283	1022	917	823	615	556
72.5	2930	1960	1452	1021	939	787	724	626	484	435
75.0	1108	879	824	742	704	626	581	473	347	297
77.5	571	518	533	572	557	509	435	323	228	212

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CANDELA TABULATION - (Cont.)

80.0	383	349	342	439	449	382	281	230	197	195
82.5	230	206	201	332	329	228	195	201	249	248
85.0	117	106	109	207	158	145	152	200	285	252
87.5	37	37	36	55	60	71	77	114	157	150
90.0	4	4	6	9	15	19	19	16	6	9
92.5	2	2	4	8	14	17	17	14	6	8
95.0	1	1	4	7	11	15	15	11	5	6
97.5	1	0	3	6	9	11	10	8	4	6
100.0	0	1	2	5	6	7	6	6	3	6
102.5	1	1	2	5	6	6	5	5	3	5
105.0	0	1	2	4	5	5	4	4	4	5
107.5	1	1	2	4	4	4	4	4	4	5
110.0	1	2	3	4	5	4	4	4	4	6
112.5	1	2	3	4	5	4	4	4	4	6
115.0	1	2	3	4	5	5	4	4	5	6
117.5	2	3	3	4	5	5	5	5	5	6
120.0	2	3	4	5	6	6	6	6	6	7
122.5	3	4	5	6	6	6	6	6	6	8
125.0	4	5	6	6	6	6	6	6	7	9
127.5	5	6	6	6	6	6	6	7	8	10
130.0	5	6	6	6	6	6	6	7	9	10
132.5	5	5	6	6	6	6	6	7	9	11
135.0	4	4	5	6	6	6	6	6	8	10
137.5	1	2	2	3	3	4	4	5	6	7
140.0	0	0	0	0	1	2	2	3	4	5
142.5	0	0	0	0	1	2	2	3	4	5
145.0	0	0	0	0	1	2	2	3	4	5
147.5	0	0	0	0	1	2	2	3	4	4
150.0	0	0	0	0	1	2	2	4	4	4
152.5	0	0	0	0	1	2	2	4	4	4
155.0	0	0	0	0	1	2	3	3	4	4
157.5	0	0	0	0	1	2	3	3	4	4
160.0	0	0	0	0	1	2	2	3	4	3
162.5	0	0	0	0	0	1	2	3	3	3
165.0	0	0	0	0	0	1	2	3	3	3
167.5	0	0	0	0	0	1	2	2	3	3
170.0	0	0	0	0	0	1	2	2	3	3
172.5	0	0	0	0	0	1	1	2	2	3
175.0	0	0	0	0	0	1	1	2	2	3
177.5	0	0	0	0	0	1	1	2	2	3
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	1451	1451
2.5	1453	1445
5.0	1318	1318
7.5	1252	1285
10.0	1187	1211
12.5	1240	1285
15.0	1298	1335
17.5	1390	1393
20.0	1550	1521
22.5	1680	1745
25.0	1954	1988

IES ROAD REPORT
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CANDELA TABULATION - (Cont.)

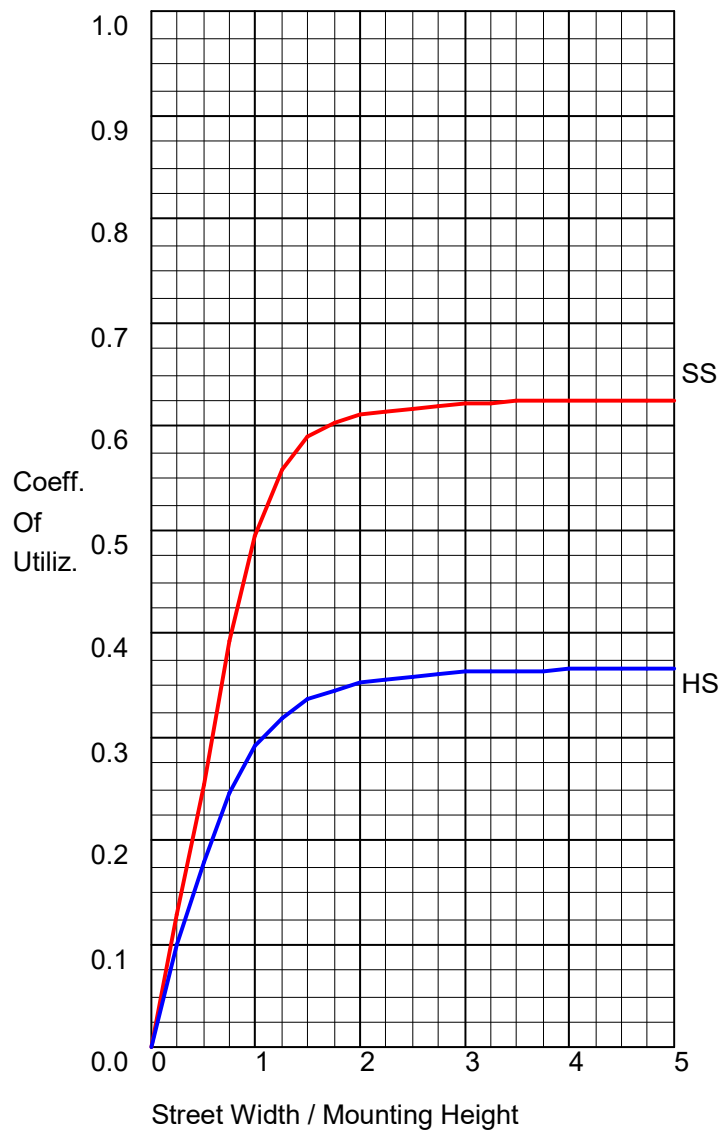
27.5	2271	2302
30.0	2575	2646
32.5	3004	3014
35.0	3319	3293
37.5	3568	3561
40.0	3543	3523
42.5	3357	3320
45.0	3057	3008
47.5	2666	2637
50.0	2292	2271
52.5	1992	1971
55.0	1748	1731
57.5	1551	1540
60.0	1340	1327
62.5	1111	1077
65.0	866	833
67.5	667	656
70.0	562	558
72.5	469	468
75.0	330	333
77.5	254	260
80.0	225	228
82.5	274	281
85.0	261	269
87.5	144	129
90.0	7	7
92.5	6	6
95.0	6	6
97.5	6	6
100.0	6	6
102.5	6	6
105.0	6	6
107.5	6	6
110.0	6	6
112.5	6	6
115.0	6	6
117.5	7	6
120.0	7	7
122.5	8	8
125.0	9	9
127.5	10	10
130.0	10	10
132.5	11	11
135.0	10	10
137.5	7	7
140.0	6	6
142.5	5	6
145.0	5	5
147.5	5	5
150.0	5	5
152.5	5	5
155.0	4	4
157.5	4	4
160.0	3	3
162.5	3	3
165.0	3	3

IES ROAD REPORT
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CANDELA TABULATION - (Cont.)

167.5	2	2
170.0	2	3
172.5	3	3
175.0	3	3
177.5	3	3
180.0	1	1

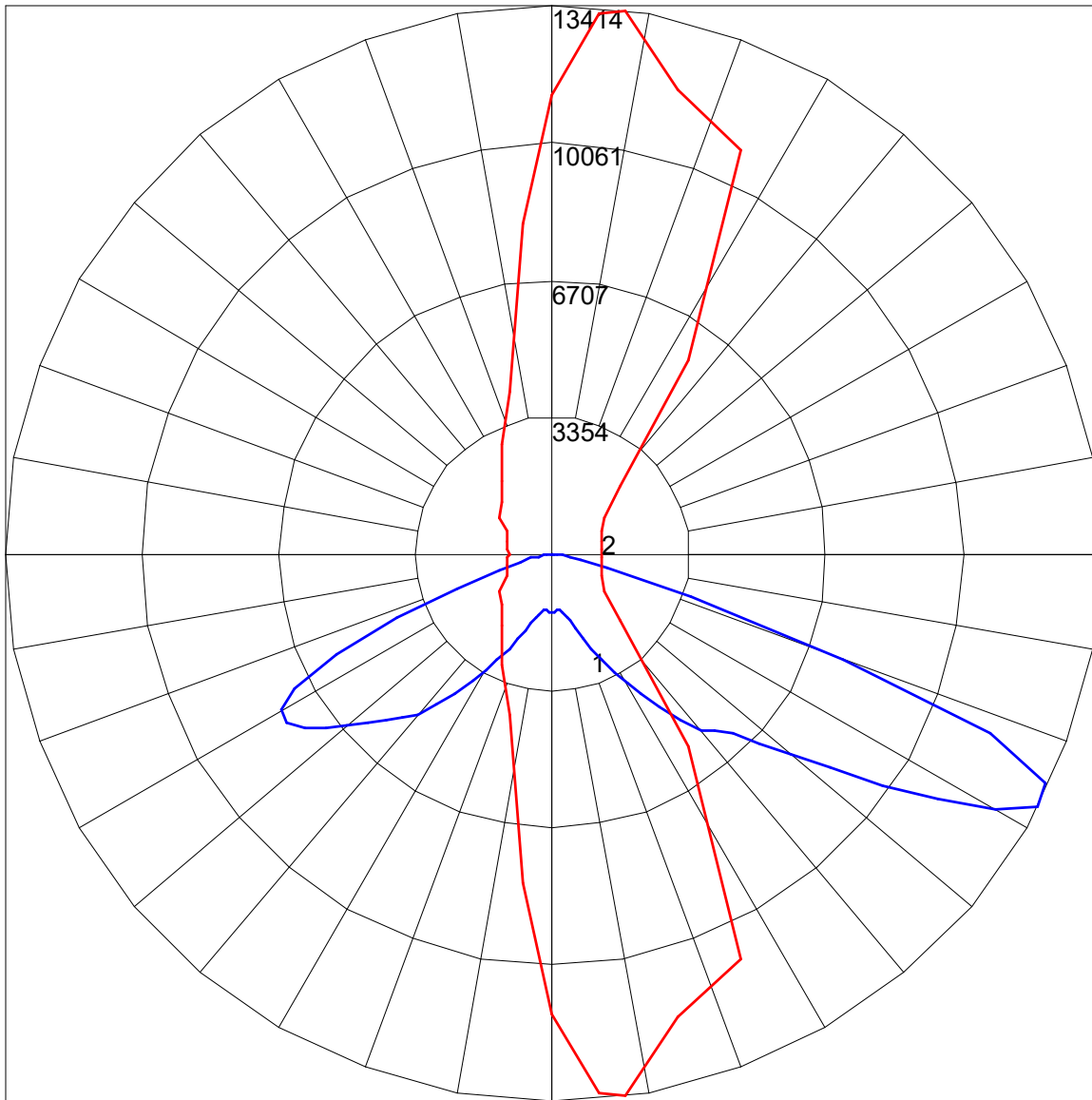
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

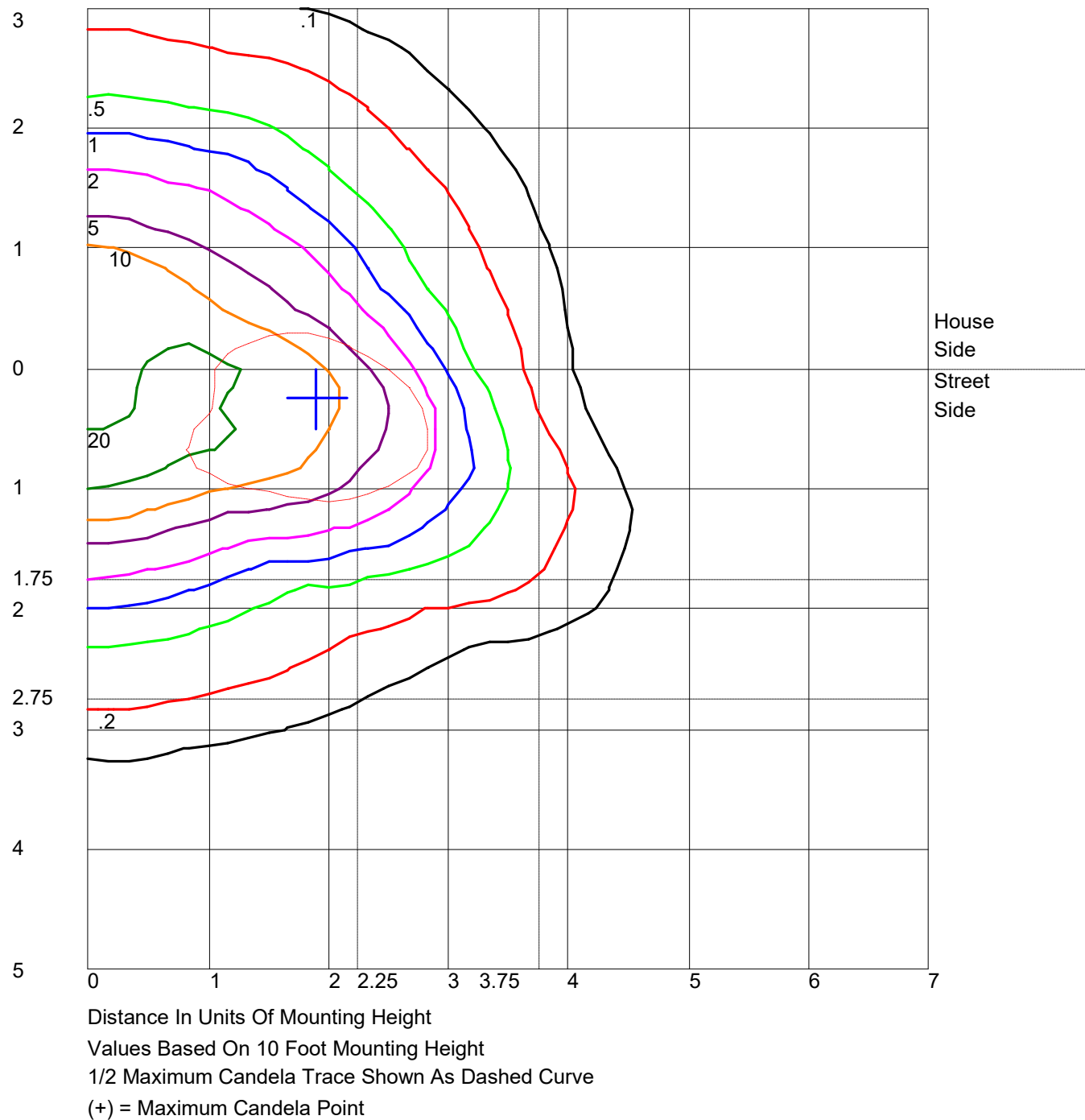
	Lumens	Percent Of Luminaire
Downward Street Side	10445.9	62.8
Downward House Side	6164.6	37.1
Downward Total	16610.5	99.9
Upward Street Side	7.4	0.0
Upward House Side	16.4	0.1
Upward Total	23.8	0.1
Total Flux	16634.3	100.0

POLAR GRAPH

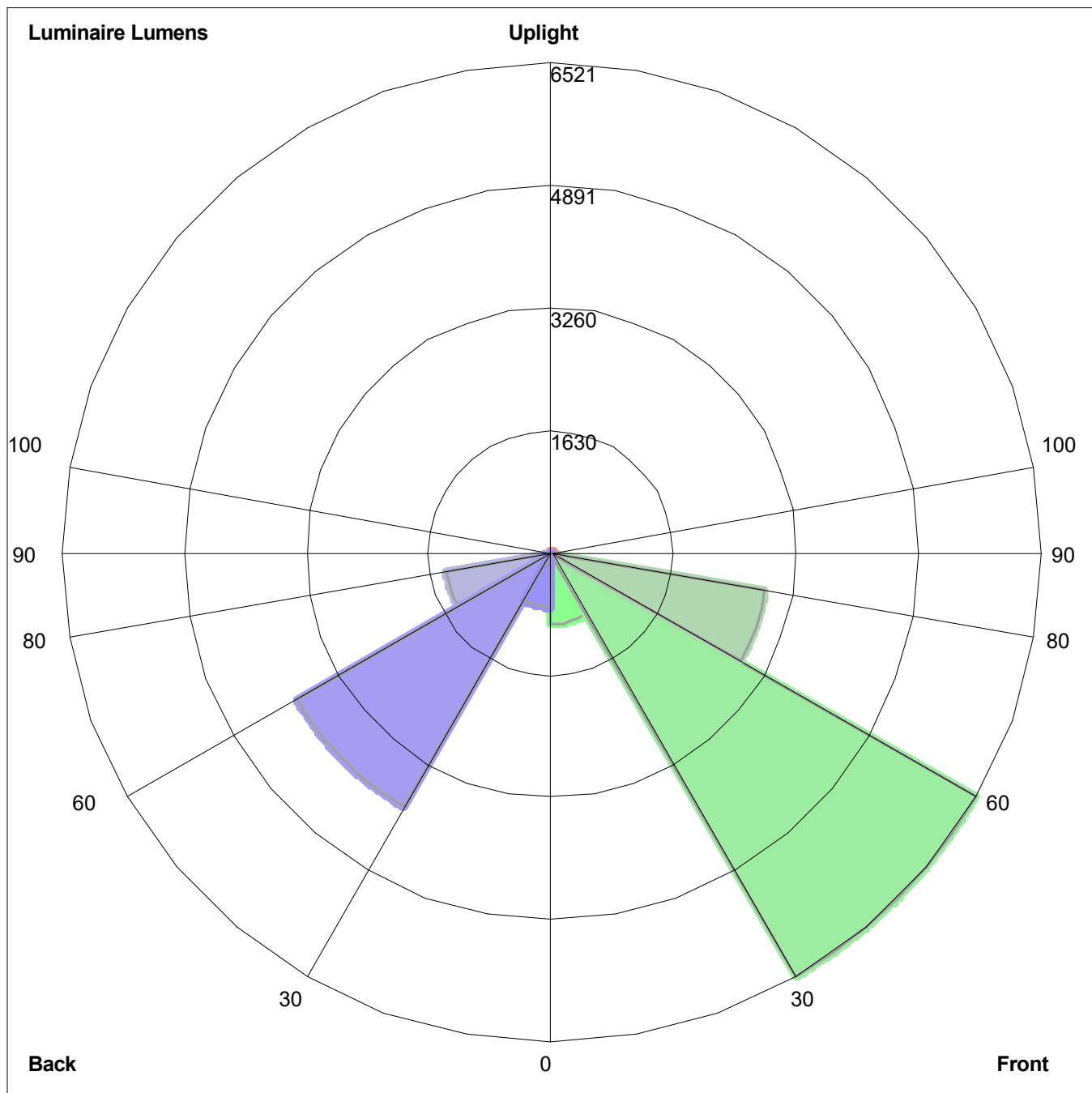


Maximum Candela = 13414 Located At Horizontal Angle = 82.5, Vertical Angle = 62.5
1 - Vertical Plane Through Horizontal Angles (82.5 - 262.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=951.4, Medium=6520.9, High=2898.9, Very High=74.7
Back: Low=728.2, Medium=3916.2, High=1424.7, Very High=95.5
Uplight: Low=6.0, High=17.9

BUG Rating : B3-U2-G3