



IES ROAD REPORT

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

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11762

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/27/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-FT-LED-18L-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	12620
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	85
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	8928
Maximum Candela Angle	40H 65V
Maximum Candela (<90 Degrees Vertical)	8928
Maximum Candela Angle (<90 Degrees Vertical)	40H 65V
Maximum Candela At 90 Degrees Vertical	36 (0.3% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1114 (8.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	706.0	N.A.	5.6
FM - Front-Medium (30-60)	5741.4	N.A.	45.5
FH - Front-High (60-80)	4162.7	N.A.	33.0
FVH - Front-Very High (80-90)	151.8	N.A.	1.2
BL - Back-Low (0-30)	479.9	N.A.	3.8
BM - Back-Medium (30-60)	1131.1	N.A.	9.0
BH - Back-High (60-80)	198.2	N.A.	1.6
BVH - Back-Very High (80-90)	10.2	N.A.	0.1
UL - Uplight-Low (90-100)	9.3	N.A.	0.1
UH - Uplight-High (100-180)	29.3	N.A.	0.2
Total	12619.9	N.A.	100.0
BUG Rating	B2-U2-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	35	40	45	55	65	75
0.0	1249	1249	1249	1249	1249	1249	1249	1249	1249	1249
2.5	1220	1235	1235	1238	1237	1242	1249	1257	1253	1243
5.0	1149	1145	1172	1196	1194	1183	1192	1165	1151	1149
7.5	1088	1109	1124	1108	1075	1090	1081	1147	1202	1204
10.0	1085	1092	1088	1068	1078	1100	1129	1160	1176	1204
12.5	1179	1150	1145	1102	1115	1136	1143	1172	1238	1270
15.0	1241	1214	1228	1232	1238	1220	1212	1247	1306	1348
17.5	1321	1304	1290	1320	1359	1347	1369	1350	1384	1458
20.0	1457	1461	1475	1475	1473	1500	1514	1511	1499	1591
22.5	1612	1639	1680	1736	1702	1696	1702	1714	1661	1756
25.0	1858	1866	1885	1938	2050	2020	1981	1994	1913	1912
27.5	2292	2233	2268	2245	2313	2368	2341	2298	2203	2119
30.0	2598	2631	2637	2665	2655	2703	2714	2701	2494	2341
32.5	3287	3150	3081	3062	3113	3111	3118	3106	2818	2615
35.0	3620	3651	3548	3576	3534	3578	3520	3506	3230	2861
37.5	4167	4169	4001	4033	4065	4066	3961	3958	3603	3203
40.0	4520	4526	4546	4533	4538	4530	4472	4344	4038	3500
42.5	4793	4802	4866	4915	5015	4932	4909	4834	4462	3751
45.0	5077	5115	5149	5244	5466	5381	5400	5209	4839	4050
47.5	5411	5448	5480	5594	5844	5837	5857	5663	5249	4367
50.0	5727	5760	5828	6011	6273	6350	6399	6128	5695	4652
52.5	5993	6038	6146	6403	6765	6919	6911	6667	6098	4866
55.0	6220	6267	6410	6747	7277	7421	7392	7191	6367	5015
57.5	6424	6484	6708	7103	7763	7891	7929	7568	6506	5000
60.0	6594	6656	6949	7496	8172	8357	8346	7780	6512	4819
62.5	6631	6695	7131	7869	8543	8742	8636	7775	6289	4460
65.0	6119	6181	6818	7828	8711	8928	8742	7488	5796	3877
67.5	5162	5176	5970	7159	8290	8570	8349	6942	5030	3158
70.0	3053	3054	4101	5805	7162	7523	7280	5962	4042	2230
72.5	1227	1331	1885	3238	5128	5687	5788	4580	2788	1414
75.0	924	983	1263	1767	2573	2947	3422	2919	1725	928
77.5	745	792	1041	1379	1587	1637	1655	1628	1100	663
80.0	599	645	872	1094	1114	1061	981	797	695	443
82.5	448	485	635	714	612	542	449	338	343	291
85.0	248	266	323	322	235	220	183	151	161	164
87.5	91	93	109	106	75	68	54	49	48	62
90.0	28	31	36	31	22	18	14	10	6	8
92.5	13	14	10	7	6	7	7	7	6	6
95.0	3	2	3	4	6	6	6	6	6	6
97.5	3	3	4	4	5	5	6	6	6	6
100.0	2	2	3	4	5	5	5	6	5	6
102.5	3	3	4	4	5	5	5	5	5	6
105.0	3	3	3	4	5	5	5	5	5	5
107.5	3	3	4	4	5	5	5	5	5	5
110.0	4	4	4	4	5	5	5	5	5	6
112.5	4	4	4	5	5	5	6	5	5	6
115.0	4	4	4	5	5	6	6	6	6	6
117.5	5	5	5	5	6	6	6	6	6	6
120.0	5	5	5	5	6	6	6	6	6	6
122.5	6	6	6	6	6	6	6	6	6	7
125.0	6	6	6	6	6	6	7	6	6	7
127.5	6	6	6	6	6	6	7	7	6	8
130.0	7	7	7	7	7	7	7	7	7	8

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CANDELA TABULATION - (Cont.)

132.5	7	7	7	7	7	7	7	7	7	8
135.0	6	6	6	6	6	6	7	6	6	7
137.5	4	4	4	5	5	5	6	6	6	6
140.0	1	1	2	3	4	4	4	5	5	5
142.5	1	1	2	3	4	4	4	4	4	5
145.0	1	1	2	3	4	4	4	4	4	5
147.5	1	1	2	3	4	4	4	4	4	4
150.0	1	1	2	3	4	4	4	4	4	4
152.5	1	1	2	3	4	4	4	4	4	4
155.0	1	1	2	3	4	4	4	4	4	4
157.5	1	1	2	3	4	4	4	4	4	4
160.0	1	1	2	3	4	4	4	4	4	4
162.5	1	1	2	3	4	4	4	4	4	4
165.0	1	1	2	3	4	4	4	4	4	4
167.5	1	1	2	3	4	4	4	4	4	4
170.0	1	1	2	3	4	4	4	4	4	4
172.5	1	1	2	3	4	4	4	4	4	4
175.0	1	1	2	3	4	4	4	4	4	4
177.5	1	1	2	3	3	4	4	4	4	4
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles **Horizontal Angles**

	85	90	95	105	115	125	135	145	155	165
0.0	1249	1249	1249	1249	1249	1249	1249	1249	1249	1249
2.5	1251	1259	1247	1244	1249	1250	1257	1262	1241	1217
5.0	1159	1169	1155	1184	1190	1202	1214	1222	1212	1184
7.5	1193	1216	1221	1251	1212	1149	1100	1129	1119	1159
10.0	1221	1189	1208	1223	1177	1166	1132	1129	1086	1131
12.5	1259	1285	1311	1296	1223	1146	1147	1185	1149	1148
15.0	1391	1372	1379	1315	1224	1242	1233	1154	1071	967
17.5	1452	1459	1440	1420	1299	1287	1223	1034	864	764
20.0	1625	1593	1584	1429	1349	1311	1071	858	730	688
22.5	1769	1746	1730	1580	1432	1244	925	760	702	684
25.0	1955	1927	1889	1689	1510	1145	826	734	707	710
27.5	2118	2087	2020	1843	1552	1030	809	747	760	791
30.0	2262	2265	2151	1908	1493	1013	827	782	834	873
32.5	2468	2373	2229	1941	1428	1014	854	824	902	1018
35.0	2637	2579	2349	1962	1339	1029	878	855	984	1129
37.5	2875	2736	2516	1917	1285	1032	879	881	1040	1182
40.0	3032	2821	2567	1868	1248	1026	866	873	1040	1073
42.5	3178	2892	2583	1804	1192	1006	827	814	916	812
45.0	3342	2990	2648	1725	1133	956	762	683	677	569
47.5	3494	3058	2681	1641	1068	869	650	530	465	402
50.0	3613	3074	2644	1577	980	748	528	401	325	294
52.5	3680	3081	2607	1522	850	595	391	291	235	222
55.0	3700	3057	2545	1443	687	420	268	203	170	166
57.5	3623	2958	2435	1316	513	275	189	142	123	121
60.0	3405	2772	2231	1115	357	205	144	105	87	86
62.5	3036	2439	1927	897	258	167	115	80	61	62
65.0	2556	1989	1508	658	207	136	91	61	45	44
67.5	1928	1472	987	405	166	111	71	49	34	31
70.0	1266	969	583	238	126	85	56	40	27	24
72.5	745	552	357	155	85	60	44	33	21	15
75.0	531	377	244	111	63	45	36	24	12	7
77.5	374	259	167	83	48	37	28	15	6	4

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CANDELA TABULATION - (Cont.)

80.0	228	169	118	60	38	31	22	11	4	3
82.5	153	115	83	43	31	26	19	9	3	3
85.0	102	71	47	28	25	23	16	9	3	2
87.5	46	28	21	17	18	16	13	7	2	2
90.0	9	6	11	16	18	16	12	7	3	2
92.5	7	6	12	16	19	17	14	9	4	3
95.0	7	6	11	16	18	16	14	9	4	4
97.5	6	5	9	14	15	14	12	9	5	4
100.0	6	5	7	11	12	12	10	8	5	4
102.5	6	5	6	8	10	10	9	8	6	5
105.0	6	5	6	7	9	9	9	7	6	5
107.5	6	6	6	7	8	9	8	7	6	5
110.0	6	6	6	7	8	8	8	7	6	5
112.5	6	6	6	7	8	8	8	7	6	5
115.0	6	6	7	8	9	9	9	8	7	6
117.5	6	7	7	8	9	9	9	9	7	6
120.0	6	7	8	8	9	9	9	9	8	6
122.5	7	8	8	9	9	10	10	9	9	7
125.0	8	8	9	9	9	10	10	10	9	8
127.5	8	9	9	9	9	9	10	10	9	8
130.0	9	9	9	9	9	10	10	9	9	8
132.5	9	9	9	9	9	9	9	9	9	8
135.0	8	8	9	9	9	9	9	8	7	6
137.5	6	6	6	7	7	7	6	6	5	4
140.0	5	5	5	6	6	5	5	5	4	3
142.5	5	5	5	5	5	5	5	4	3	2
145.0	5	5	5	5	5	5	4	4	3	1
147.5	5	5	5	5	5	5	4	4	2	1
150.0	5	5	5	5	5	5	4	4	2	1
152.5	5	5	5	5	5	4	4	3	2	1
155.0	4	5	5	5	5	4	4	3	2	1
157.5	4	4	5	5	4	4	4	3	1	1
160.0	4	4	4	4	4	4	3	2	1	1
162.5	4	4	4	4	4	4	3	2	1	0
165.0	4	4	4	4	4	4	3	1	1	0
167.5	4	4	4	4	4	3	2	1	1	0
170.0	4	4	4	4	4	3	2	1	1	0
172.5	4	4	4	4	4	3	2	1	1	0
175.0	4	4	4	4	3	3	2	1	1	0
177.5	4	4	4	3	3	3	2	1	1	0
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Horizontal Angles
Angles

	175	180
0.0	1249	1249
2.5	1228	1227
5.0	1170	1175
7.5	1160	1148
10.0	1168	1147
12.5	1155	1139
15.0	984	981
17.5	748	747
20.0	697	704
22.5	698	712
25.0	753	775

IES ROAD REPORT
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CANDELA TABULATION - (Cont.)

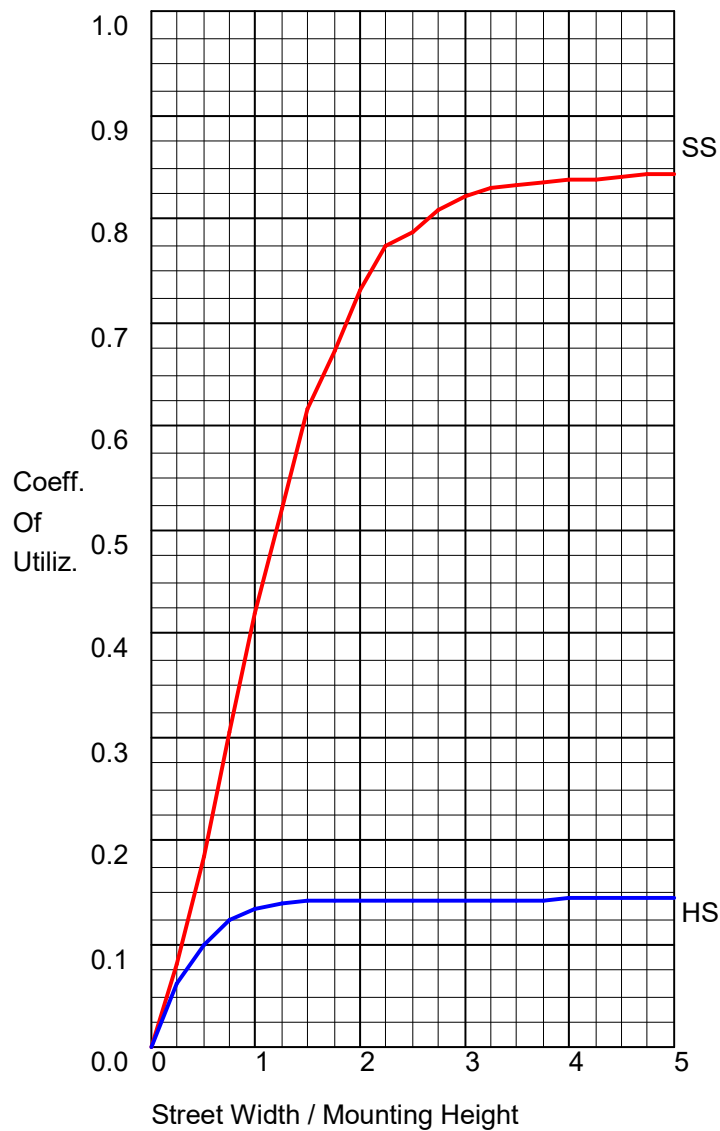
27.5	842	871
30.0	947	951
32.5	1106	1112
35.0	1177	1186
37.5	1161	1139
40.0	958	932
42.5	712	695
45.0	533	527
47.5	403	405
50.0	311	313
52.5	238	238
55.0	182	183
57.5	140	141
60.0	106	108
62.5	81	83
65.0	61	63
67.5	44	46
70.0	31	34
72.5	18	19
75.0	7	8
77.5	2	3
80.0	1	1
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	1	0
95.0	2	1
97.5	3	3
100.0	3	3
102.5	4	4
105.0	4	4
107.5	4	4
110.0	4	5
112.5	5	5
115.0	5	5
117.5	5	5
120.0	6	6
122.5	6	6
125.0	7	6
127.5	7	6
130.0	7	6
132.5	6	6
135.0	5	5
137.5	4	4
140.0	1	1
142.5	1	1
145.0	1	0
147.5	1	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

IES ROAD REPORT
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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	2	2

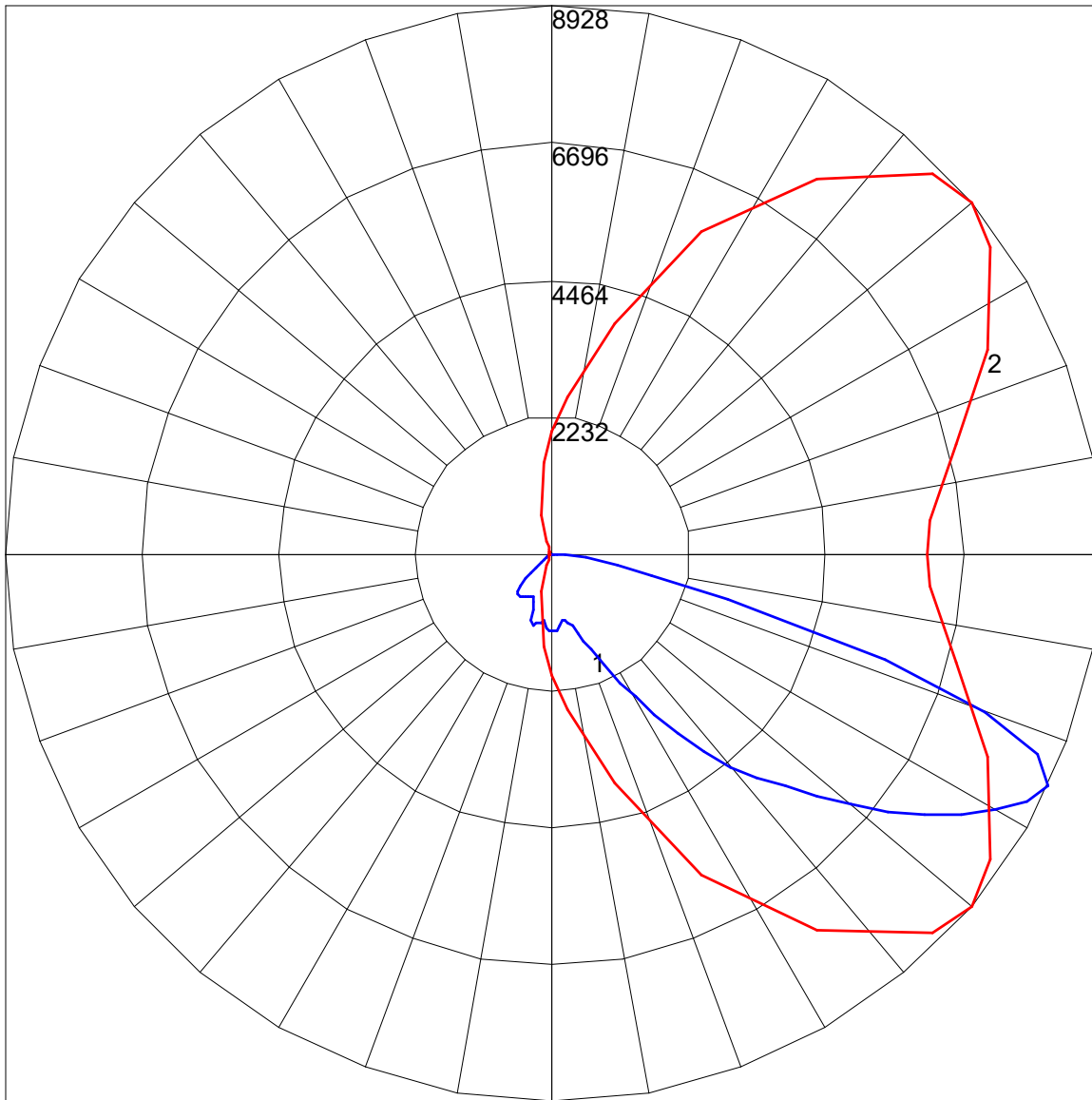
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

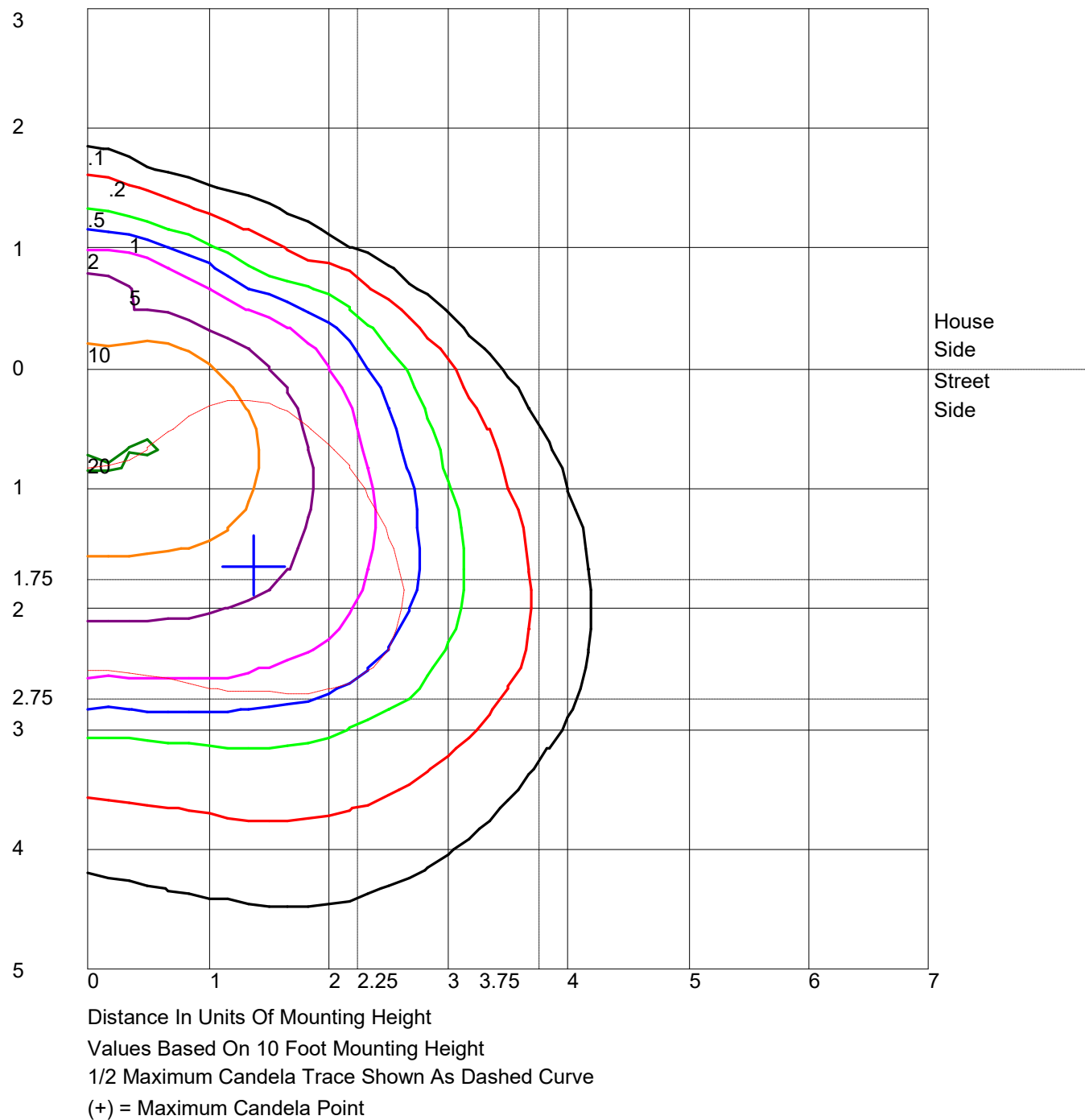
	Lumens	Percent Of Luminaire
Downward Street Side	10762.0	85.3
Downward House Side	1819.4	14.4
Downward Total	12581.4	99.7
Upward Street Side	17.0	0.1
Upward House Side	21.6	0.2
Upward Total	38.6	0.3
Total Flux	12620.0	100.0

POLAR GRAPH

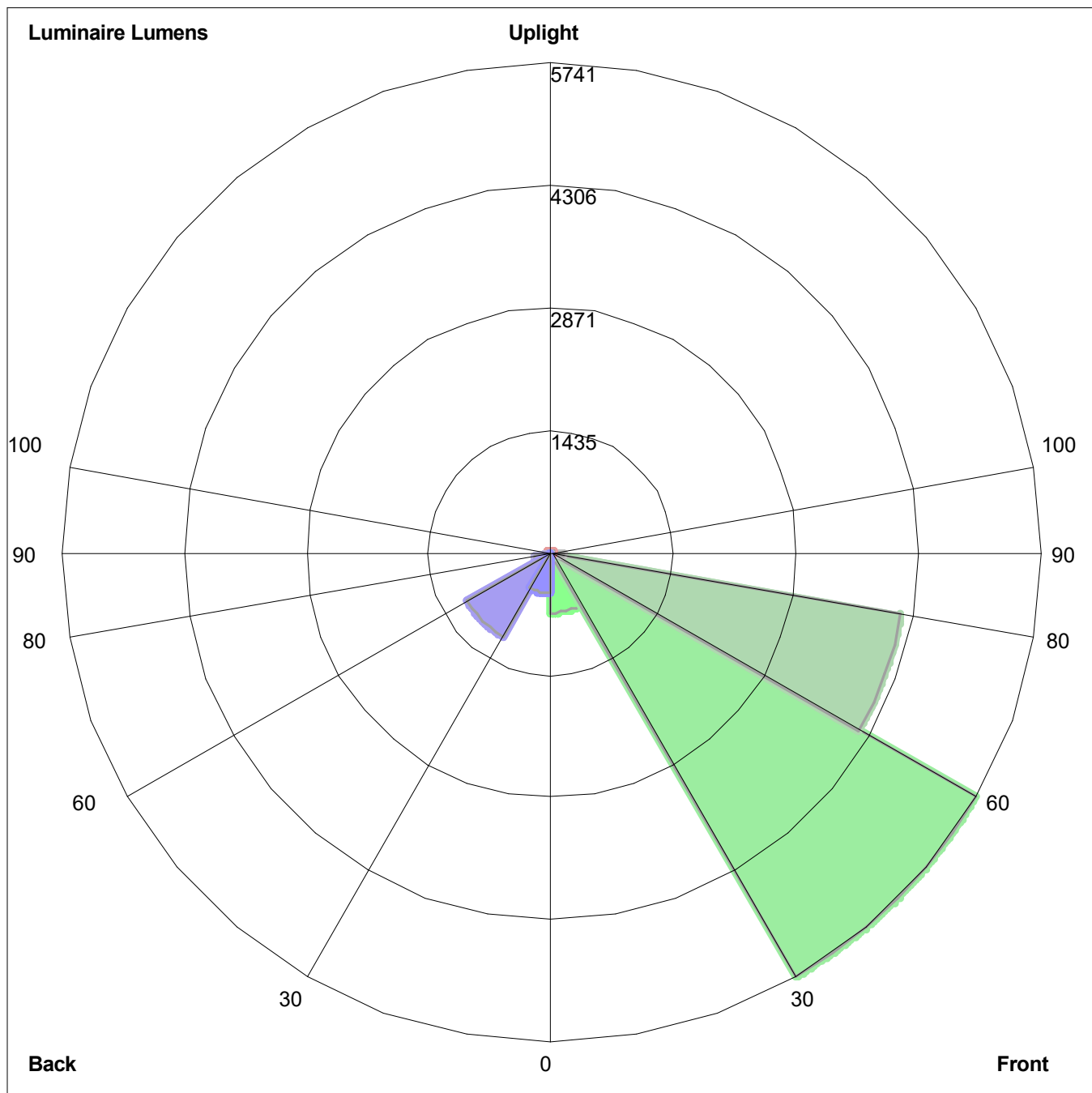


Maximum Candela = 8928 Located At Horizontal Angle = 40, Vertical Angle = 65
1 - Vertical Plane Through Horizontal Angles (40 - 220) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=706.0, Medium=5741.4, High=4162.7, Very High=151.8
Back: Low=479.9, Medium=1131.1, High=198.2, Very High=10.2
Uplight: Low=9.3, High=29.3

BUG Rating : B2-U2-G2