



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : XGBM-3-LED-LW-NW-HSS.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]LED-5316A  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]03/30/16  
[TEST DATE]03/30/16  
[MANUFACT]LSI INDUSTRIES, INC  
[LUMCAT]XGBM-3-LED-LW-NW-HSS  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER]Tested with new Flat Black HSS Shield  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[\_SEARCH\_SOURCETYPE] LED  
[\_SEARCH\_APPLICATION] Outdoor

**CHARACTERISTICS**

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7513
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	55
Total Luminaire Watts	136.4
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	5699
Maximum Candela Angle	47.5H 55V
Maximum Candela (<90 Degrees Vertical)	5699
Maximum Candela Angle (<90 Degrees Vertical)	47.5H 55V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	951 (12.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	772.2	N.A.	10.3
FM - Front-Medium (30-60)	3709.6	N.A.	49.4
FH - Front-High (60-80)	2057.4	N.A.	27.4
FVH - Front-Very High (80-90)	67.1	N.A.	0.9
BL - Back-Low (0-30)	327.9	N.A.	4.4
BM - Back-Medium (30-60)	455.1	N.A.	6.1
BH - Back-High (60-80)	121.7	N.A.	1.6
BVH - Back-Very High (80-90)	2.2	N.A.	0.0
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	7513.2	N.A.	100.0
BUG Rating	B1-U0-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	843	843	843	843	843	843	843	843	843	843
2.5	878	879	879	882	885	893	891	899	891	891
5.0	925	923	926	936	949	965	966	984	985	999
7.5	992	992	1006	1032	1071	1102	1110	1141	1140	1167
10.0	1061	1063	1099	1163	1258	1320	1332	1361	1359	1370
12.5	1132	1139	1204	1319	1476	1581	1612	1640	1585	1566
15.0	1216	1227	1327	1485	1691	1836	1862	1898	1809	1743
17.5	1330	1344	1496	1706	1906	2040	2056	2112	2053	1843
20.0	1446	1473	1667	1974	2174	2266	2249	2219	2152	1864
22.5	1563	1610	1903	2250	2475	2459	2432	2271	2091	1839
25.0	1582	1653	2031	2503	2829	2650	2570	2276	1975	1828
27.5	1447	1529	1959	2594	2978	2766	2631	2267	1872	1758
30.0	1402	1505	1973	2587	2969	2876	2789	2294	1833	1714
32.5	1404	1538	2072	2663	2903	2918	2835	2409	1918	1769
35.0	1407	1565	2256	2878	2911	2809	2808	2683	2140	1928
37.5	1373	1550	2421	3091	2997	2750	2785	2920	2478	2103
40.0	1424	1654	2620	3130	3227	2852	2830	3038	2806	2356
42.5	1640	1954	3021	3325	3465	3256	3131	3145	3290	2561
45.0	1934	2264	3382	3644	3762	3769	3647	3376	3639	2754
47.5	2330	2562	3621	3812	4181	4363	4228	3830	3933	3040
50.0	2468	2822	3961	3909	4519	5006	4879	4372	4090	3226
52.5	2319	2746	3889	4003	4658	5412	5358	4853	4175	3377
55.0	2252	2663	3614	3750	4803	5589	5699	5215	4231	3375
57.5	1862	2255	3105	3539	4468	5677	5682	5469	4313	3345
60.0	1625	1918	2459	2961	4189	5507	5672	5423	4218	3439
62.5	1156	1448	1973	2508	3527	4849	5072	5084	4122	3405
65.0	560	772	1077	1881	3001	4288	4534	4808	4233	3487
67.5	487	607	783	1125	2249	3715	3978	4489	4294	3368
70.0	99	133	239	750	1553	3447	3835	4203	3732	2861
72.5	68	92	131	270	1165	2844	3228	3645	3136	2450
75.0	54	73	108	189	848	2226	2532	2821	2252	1687
77.5	38	47	76	136	657	1588	1764	1756	1376	925
80.0	30	35	53	88	412	908	951	929	681	460
82.5	25	30	42	62	170	353	389	365	279	195
85.0	24	29	40	48	63	99	100	110	75	56
87.5	25	30	42	49	63	65	62	47	32	27
90.0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0	0
110.0	0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0	0	0	0

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**CANDELA TABULATION - (Cont.)**

132.5	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	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	843	843	843	843	843	843	843	843	843	843
2.5	878	874	869	855	839	820	798	782	764	755
5.0	987	967	946	886	817	748	693	654	623	606
7.5	1169	1137	1097	973	853	767	708	664	621	594
10.0	1373	1332	1260	1073	940	867	793	705	593	525
12.5	1555	1503	1401	1186	1077	990	813	671	574	504
15.0	1717	1643	1510	1292	1199	995	822	681	565	485
17.5	1785	1695	1545	1348	1251	953	791	645	530	462
20.0	1765	1667	1525	1374	1136	890	703	561	494	462
22.5	1693	1597	1480	1358	1040	803	582	504	486	465
25.0	1596	1527	1443	1338	957	682	504	484	456	417
27.5	1509	1464	1415	1279	857	569	476	435	391	321
30.0	1497	1476	1440	1187	741	497	435	376	298	198
32.5	1555	1549	1492	1103	613	464	393	293	189	104
35.0	1699	1682	1589	1065	502	399	322	203	135	91
37.5	1807	1763	1673	1021	444	339	240	138	128	84
40.0	1978	1917	1789	966	424	313	169	118	106	64
42.5	2102	2045	1878	902	400	263	135	102	75	51
45.0	2243	2199	1981	812	382	202	107	70	64	46
47.5	2376	2346	2073	723	358	151	84	47	53	27
50.0	2483	2409	2092	629	306	111	71	36	23	10
52.5	2486	2411	2065	552	243	85	60	23	10	6
55.0	2354	2303	1941	475	195	63	52	12	5	3
57.5	2238	2138	1788	371	151	47	33	8	3	2
60.0	2128	2015	1670	256	102	38	16	5	2	1
62.5	2027	1986	1526	186	70	23	8	3	1	0
65.0	2001	1929	1298	129	42	13	6	3	0	0
67.5	1854	1683	1079	66	23	9	4	1	0	0
70.0	1608	1414	857	36	14	6	3	1	0	0
72.5	1291	1088	635	19	10	5	2	1	0	0
75.0	915	746	413	14	9	5	2	1	0	0
77.5	545	435	208	9	8	4	2	1	0	0

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CANDELA TABULATION - (Cont.)

80.0	279	209	81	6	6	4	2	1	0	0
82.5	112	89	19	3	3	3	2	1	0	0
85.0	24	14	3	2	2	3	2	1	0	0
87.5	11	4	2	2	2	3	2	1	0	0
90.0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0	0
110.0	0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	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. Horizontal Angles  
Angles

	<u>175.0</u>	<u>180.0</u>
0.0	843	843
2.5	750	754
5.0	597	602
7.5	576	580
10.0	496	496
12.5	466	465
15.0	448	446
17.5	433	428
20.0	450	445
22.5	455	451
25.0	389	379

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CANDELA TABULATION - (Cont.)

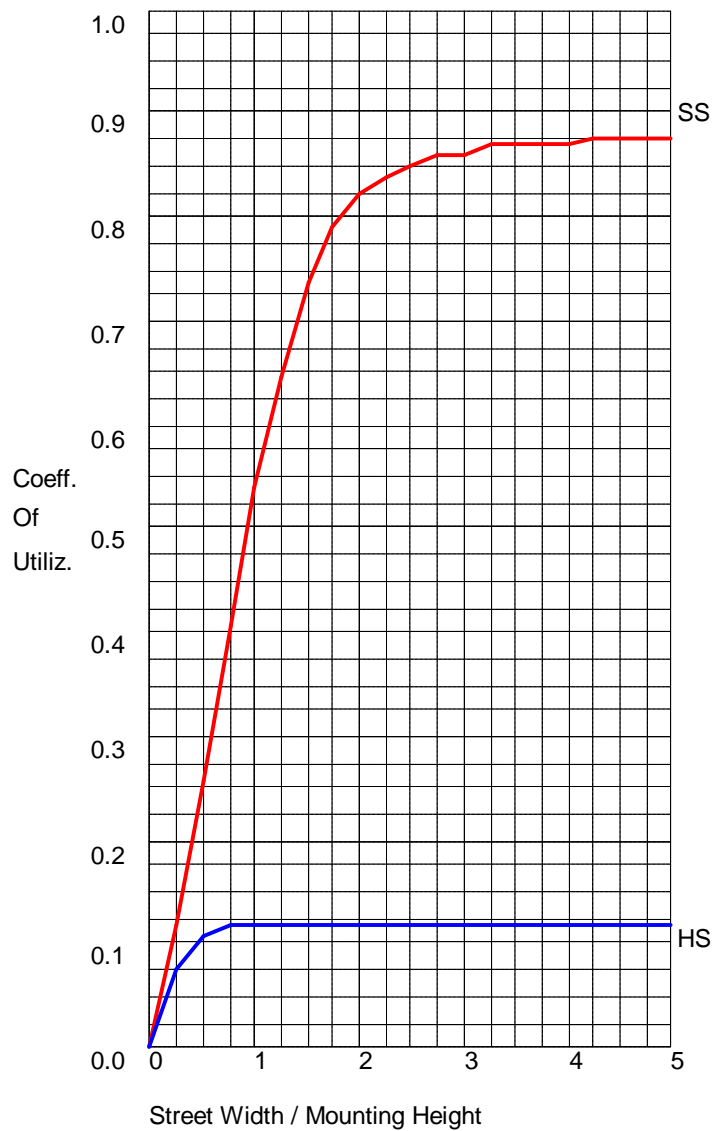
27.5	273	261
30.0	146	135
32.5	69	64
35.0	62	59
37.5	53	50
40.0	41	39
42.5	36	33
45.0	25	25
47.5	13	13
50.0	7	6
52.5	4	4
55.0	2	2
57.5	1	0
60.0	0	0
62.5	0	0
65.0	0	0
67.5	0	0
70.0	0	0
72.5	0	0
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	0	0
105.0	0	0
107.5	0	0
110.0	0	0
112.5	0	0
115.0	0	0
117.5	0	0
120.0	0	0
122.5	0	0
125.0	0	0
127.5	0	0
130.0	0	0
132.5	0	0
135.0	0	0
137.5	0	0
140.0	0	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.)**

<b>167.5</b>	0	0
<b>170.0</b>	0	0
<b>172.5</b>	0	0
<b>175.0</b>	0	0
<b>177.5</b>	0	0
<b>180.0</b>	0	0

COEFFICIENTS OF UTILIZATION

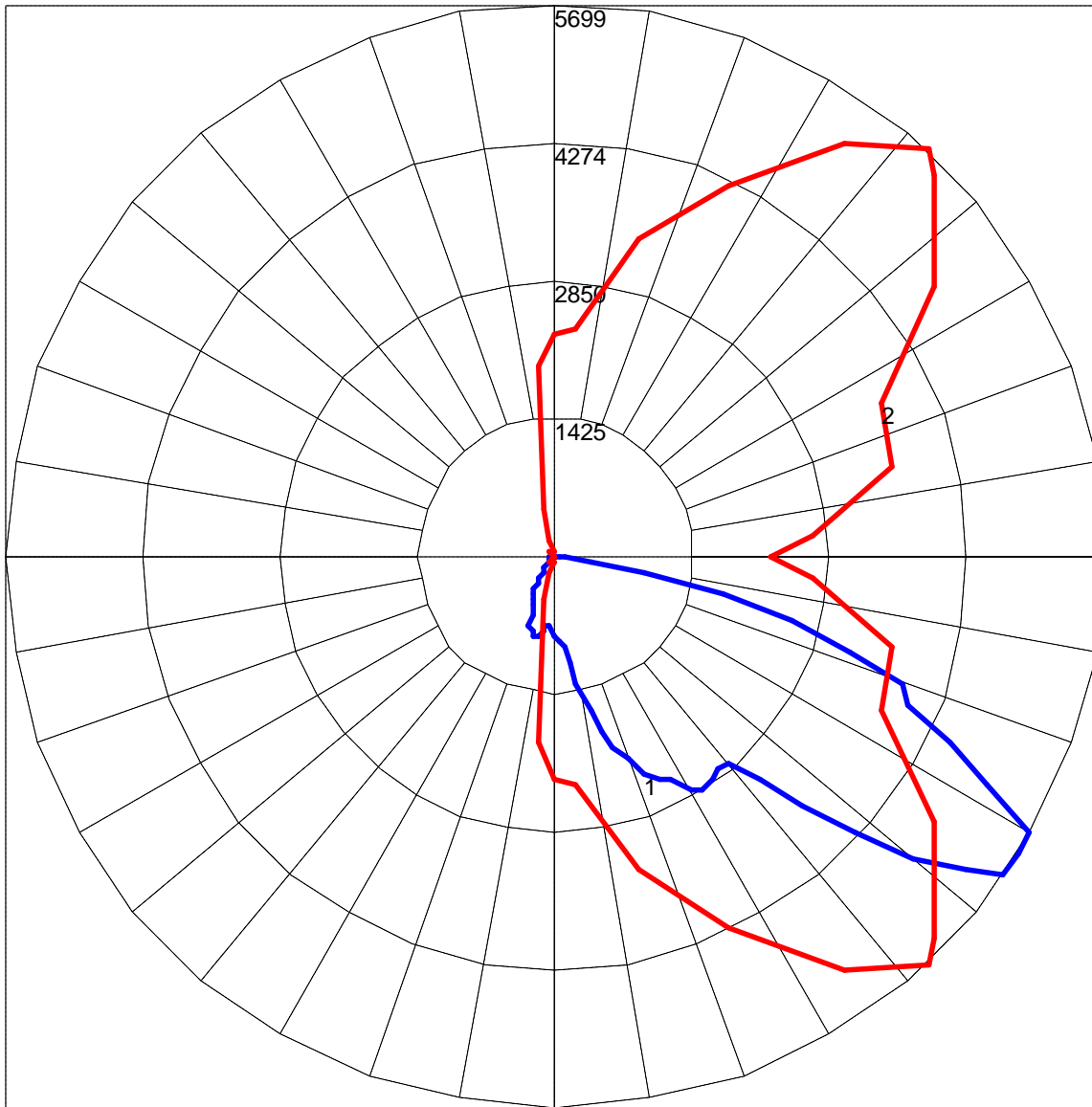


FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	6606.3	87.9
Downward House Side	906.9	12.1
Downward Total	7513.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	7513.2	100.0

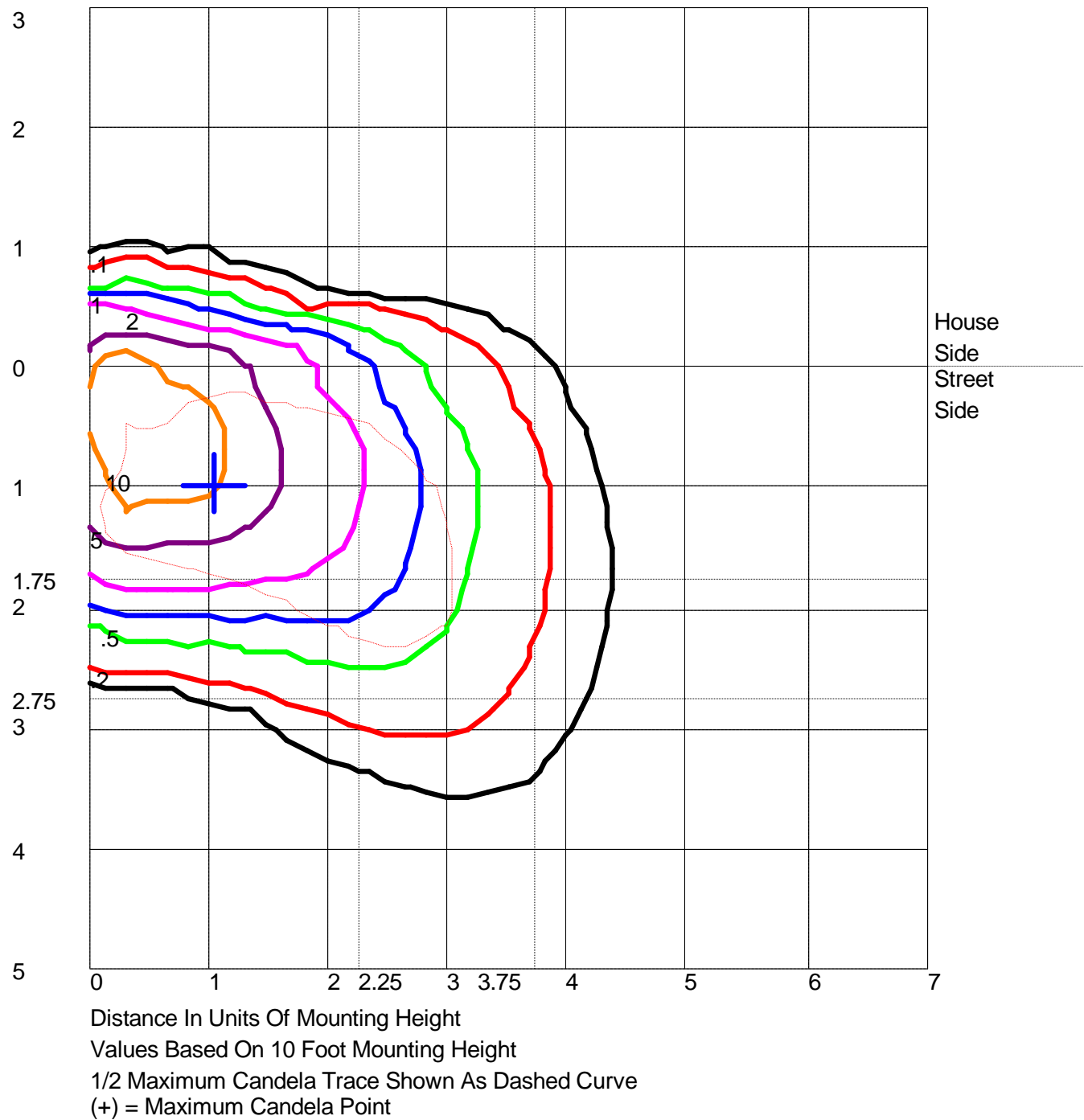


POLAR GRAPH

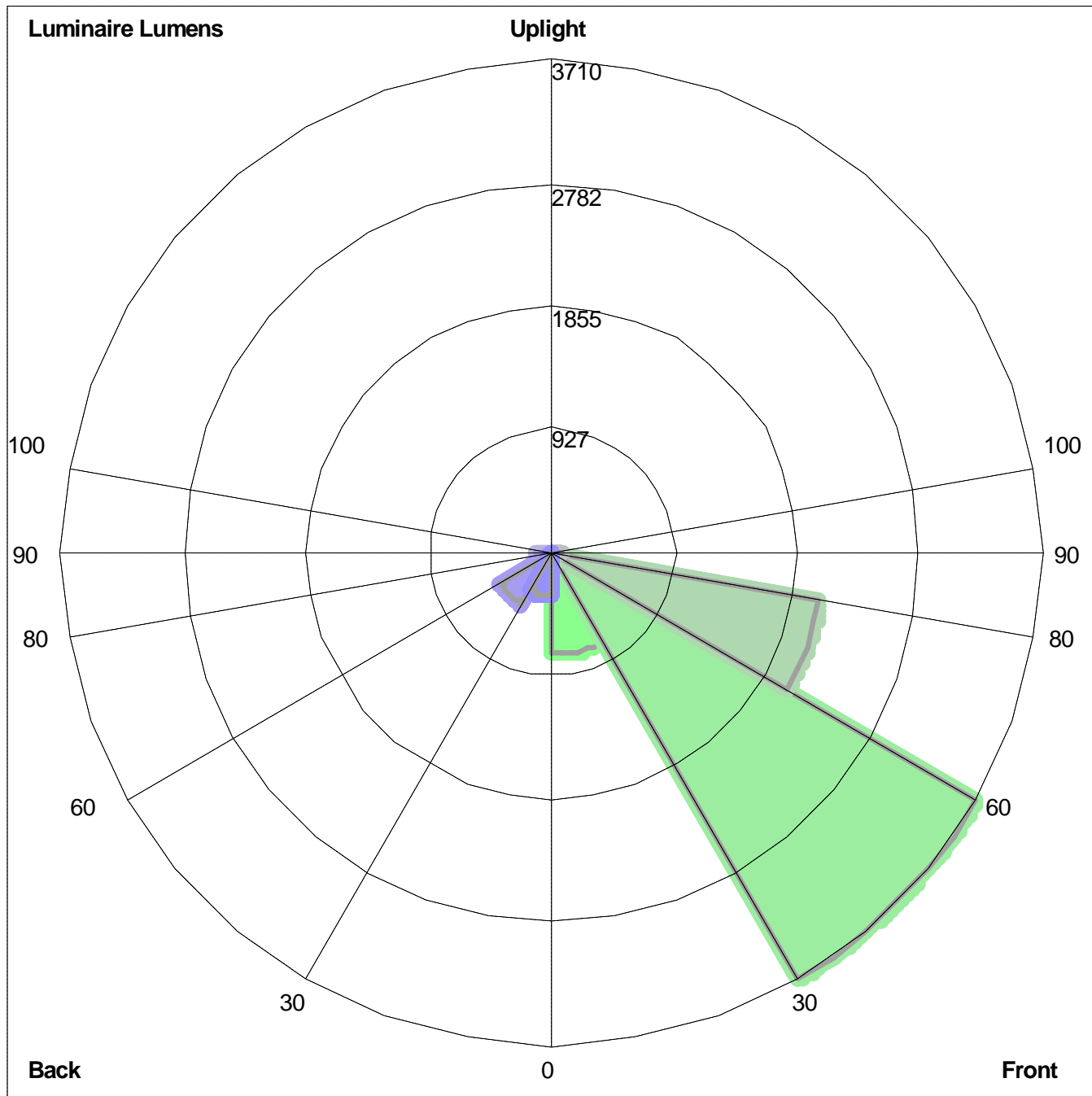


Maximum Candela = 5699 Located At Horizontal Angle = 47.5, Vertical Angle = 55  
# 1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (55) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=772.2, Medium=3709.6, High=2057.4, Very High=67.1  
Back: Low=327.9, Medium=455.1, High=121.7, Very High=2.2  
Uplight: Low=0.0, High=0.0

BUG Rating : B1-U0-G2