



## IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-FT-LED-18-40.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST]LED-7758  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]11/21/16  
[TEST DATE]04/28/16  
[MANUFACTURER]LSI INDUSTRIES, INC  
[LUMCAT]XMR-FT-LED-18-40  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Outdoor  
[OTHER]SCALED FROM ORIGINAL TEST DATA

### CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18858
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	154.1
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	12284
Maximum Candela Angle	52.5H 65V
Maximum Candela (<90 Degrees Vertical)	12284
Maximum Candela Angle (<90 Degrees Vertical)	52.5H 65V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	3036 (16.1% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	862.1	N.A.	4.6
FM - Front-Medium (30-60)	6206.7	N.A.	32.9
FH - Front-High (60-80)	6449.8	N.A.	34.2
FVH - Front-Very High (80-90)	293.2	N.A.	1.6
BL - Back-Low (0-30)	1055.3	N.A.	5.6
BM - Back-Medium (30-60)	2724.9	N.A.	14.4
BH - Back-High (60-80)	1188.0	N.A.	6.3
BVH - Back-Very High (80-90)	77.8	N.A.	0.4
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	18857.8	N.A.	100.0
BUG Rating	B3-U0-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>52.5</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
2.5	2123	2123	2131	2137	2145	2156	2164	2172	2175	2188
5.0	1986	1987	1998	2014	2033	2060	2078	2096	2121	2154
7.5	1851	1863	1876	1896	1925	1963	1988	2009	2057	2122
10.0	1739	1749	1763	1787	1824	1873	1909	1933	1997	2080
12.5	1658	1662	1677	1701	1740	1792	1842	1865	1948	2045
15.0	1612	1615	1625	1647	1685	1742	1798	1821	1914	2024
17.5	1609	1611	1619	1638	1677	1736	1794	1817	1913	2027
20.0	1647	1648	1658	1686	1732	1791	1849	1871	1960	2063
22.5	1744	1746	1760	1805	1860	1929	1977	1993	2060	2133
25.0	1919	1921	1955	2003	2070	2153	2187	2192	2215	2235
27.5	2185	2187	2227	2286	2364	2461	2481	2469	2416	2357
30.0	2539	2540	2582	2642	2748	2832	2842	2812	2651	2494
32.5	2956	2957	2996	3057	3163	3236	3247	3197	2921	2633
35.0	3392	3417	3437	3506	3614	3678	3663	3605	3220	2793
37.5	3859	3842	3873	3968	4087	4116	4139	4052	3578	2986
40.0	4283	4267	4305	4439	4574	4569	4596	4509	3975	3219
42.5	4729	4735	4760	4932	5081	5046	5088	5023	4394	3520
45.0	5211	5217	5280	5476	5617	5563	5623	5565	4862	3873
47.5	5741	5745	5831	6123	6237	6158	6215	6167	5404	4333
50.0	6245	6245	6391	6836	6895	6789	6877	6854	6080	4931
52.5	6557	6567	6793	7439	7586	7473	7650	7681	6918	5629
55.0	6616	6627	6937	7777	8220	8227	8586	8689	7902	6448
57.5	6529	6524	6884	7842	8571	9093	9681	9850	8956	7183
60.0	6383	6361	6706	7672	8696	9908	10881	11063	10041	7726
62.5	6294	6250	6508	7450	8958	10720	11831	11968	10642	7776
65.0	7018	6968	6932	7437	9488	11534	12284	12271	10365	6928
67.5	7757	7771	8141	8417	10370	12088	11976	11664	8803	5335
70.0	7371	7440	8118	9510	11322	11755	10493	9825	6337	3307
72.5	6182	6314	7230	9006	11418	10276	7922	7085	3601	1607
75.0	3736	3936	5039	7143	9320	7785	5024	4156	1723	737
77.5	1417	1509	2554	4391	6205	4822	2744	2135	848	454
80.0	703	754	1331	2184	3036	2685	1391	1137	470	305
82.5	477	506	928	1337	1516	1490	691	561	308	198
85.0	343	364	686	929	1013	627	281	260	186	120
87.5	248	261	486	559	585	110	88	89	76	59
90.0	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	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
2.5	2205	2224	2217	2221	2227	2228	2248	2254	2253	2252
5.0	2193	2221	2224	2245	2273	2285	2311	2322	2326	2326
7.5	2184	2221	2235	2273	2308	2328	2357	2378	2385	2385
10.0	2173	2224	2248	2297	2339	2375	2403	2413	2423	2432
12.5	2169	2231	2265	2321	2376	2416	2436	2467	2485	2499
15.0	2170	2246	2290	2350	2416	2453	2494	2525	2547	2556
17.5	2183	2269	2323	2383	2455	2504	2553	2581	2577	2574
20.0	2210	2299	2359	2415	2497	2555	2609	2605	2594	2584
22.5	2251	2338	2392	2438	2533	2606	2641	2621	2604	2594
25.0	2302	2369	2417	2450	2563	2647	2658	2630	2612	2607
27.5	2347	2389	2426	2446	2579	2671	2664	2631	2621	2628

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**CANDELA TABULATION - (Cont.)**

<b>30.0</b>	2381	2394	2420	2428	2576	2674	2658	2628	2635	2657
<b>32.5</b>	2414	2391	2402	2401	2560	2662	2640	2617	2656	2700
<b>35.0</b>	2449	2383	2377	2363	2534	2636	2612	2597	2684	2757
<b>37.5</b>	2497	2381	2353	2324	2494	2597	2572	2567	2719	2838
<b>40.0</b>	2574	2395	2330	2279	2443	2548	2516	2525	2749	2943
<b>42.5</b>	2687	2432	2313	2223	2371	2479	2441	2463	2801	3032
<b>45.0</b>	2854	2506	2318	2170	2287	2398	2346	2388	2890	2912
<b>47.5</b>	3125	2647	2366	2133	2196	2309	2246	2312	2938	2728
<b>50.0</b>	3478	2856	2449	2105	2099	2212	2145	2270	2838	2533
<b>52.5</b>	3931	3117	2568	2086	2001	2118	2041	2186	2693	2361
<b>55.0</b>	4403	3394	2699	2061	1902	2026	1935	2070	2515	2210
<b>57.5</b>	4829	3636	2803	2032	1803	1924	1820	1924	2292	2070
<b>60.0</b>	5054	3713	2781	1979	1686	1813	1713	1774	2030	1952
<b>62.5</b>	4828	3423	2504	1864	1552	1689	1602	1613	1782	1855
<b>65.0</b>	4089	2775	1956	1669	1399	1536	1473	1473	1562	1767
<b>67.5</b>	2959	1985	1307	1385	1207	1357	1339	1369	1361	1667
<b>70.0</b>	1591	1222	870	1040	985	1133	1179	1269	1145	1526
<b>72.5</b>	715	607	600	738	756	882	985	1074	961	1334
<b>75.0</b>	414	357	394	500	550	642	770	857	787	1043
<b>77.5</b>	291	256	270	349	393	457	565	607	537	623
<b>80.0</b>	198	179	197	258	295	358	400	335	299	359
<b>82.5</b>	135	121	137	184	221	228	217	245	218	238
<b>85.0</b>	83	69	83	118	132	117	131	151	126	137
<b>87.5</b>	36	25	30	51	48	54	56	62	56	52
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0

**Vert. Horizontal Angles**  
**Angles**

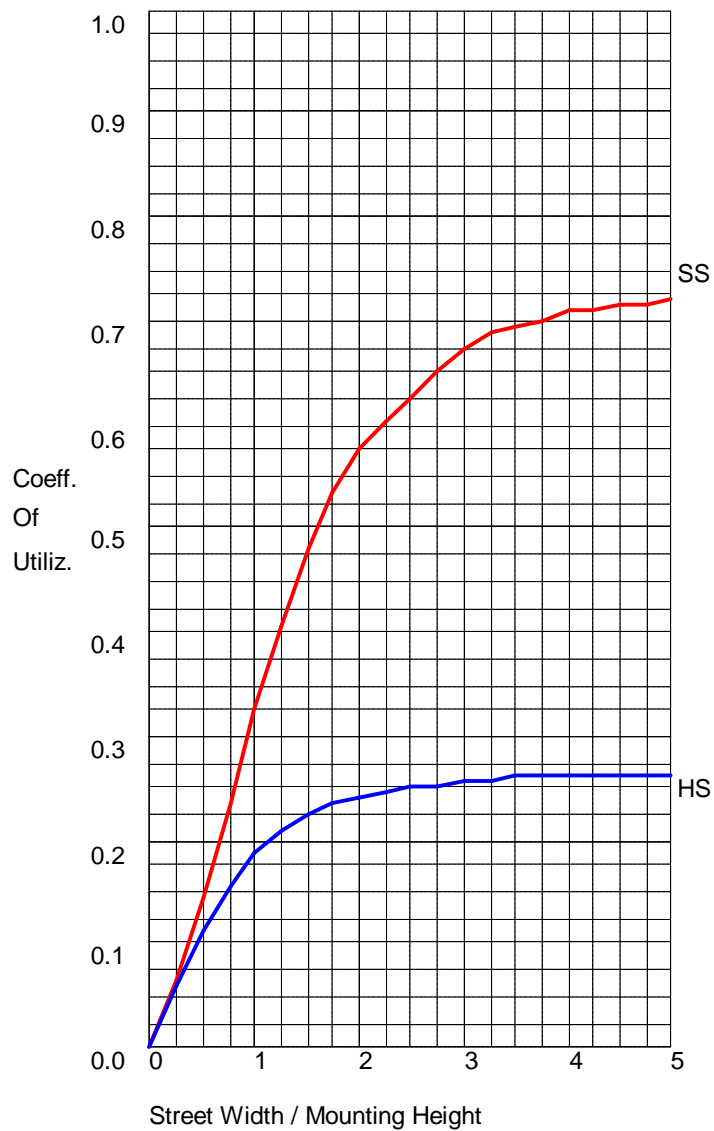
	<b><u>175.0</u></b>	<b><u>180.0</u></b>
<b>0.0</b>	2196	2196
<b>2.5</b>	2244	2239
<b>5.0</b>	2325	2316
<b>7.5</b>	2383	2379
<b>10.0</b>	2439	2435
<b>12.5</b>	2504	2502
<b>15.0</b>	2554	2550
<b>17.5</b>	2572	2567
<b>20.0</b>	2581	2577
<b>22.5</b>	2595	2592
<b>25.0</b>	2607	2601
<b>27.5</b>	2622	2615
<b>30.0</b>	2642	2632
<b>32.5</b>	2665	2649
<b>35.0</b>	2685	2661
<b>37.5</b>	2714	2676
<b>40.0</b>	2731	2655
<b>42.5</b>	2553	2474
<b>45.0</b>	2383	2324
<b>47.5</b>	2255	2211
<b>50.0</b>	2148	2110
<b>52.5</b>	2038	1997
<b>55.0</b>	1924	1878
<b>57.5</b>	1789	1738
<b>60.0</b>	1670	1611
<b>62.5</b>	1594	1522
<b>65.0</b>	1550	1473

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**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	1519	1440
<b>70.0</b>	1482	1410
<b>72.5</b>	1420	1366
<b>75.0</b>	1242	1189
<b>77.5</b>	863	847
<b>80.0</b>	565	562
<b>82.5</b>	312	321
<b>85.0</b>	166	167
<b>87.5</b>	54	48
<b>90.0</b>	0	0

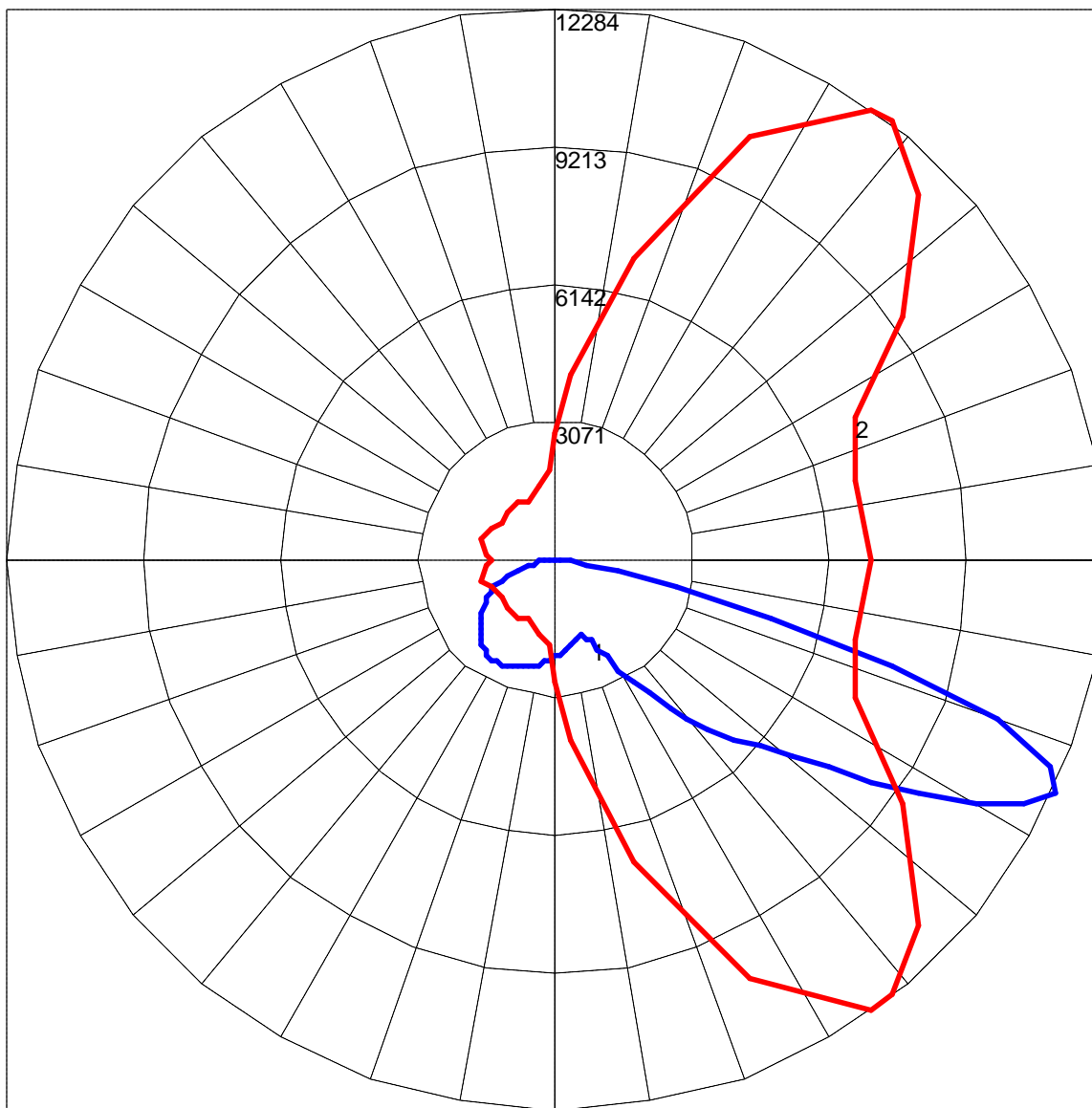
### COEFFICIENTS OF UTILIZATION



### FLUX DISTRIBUTION

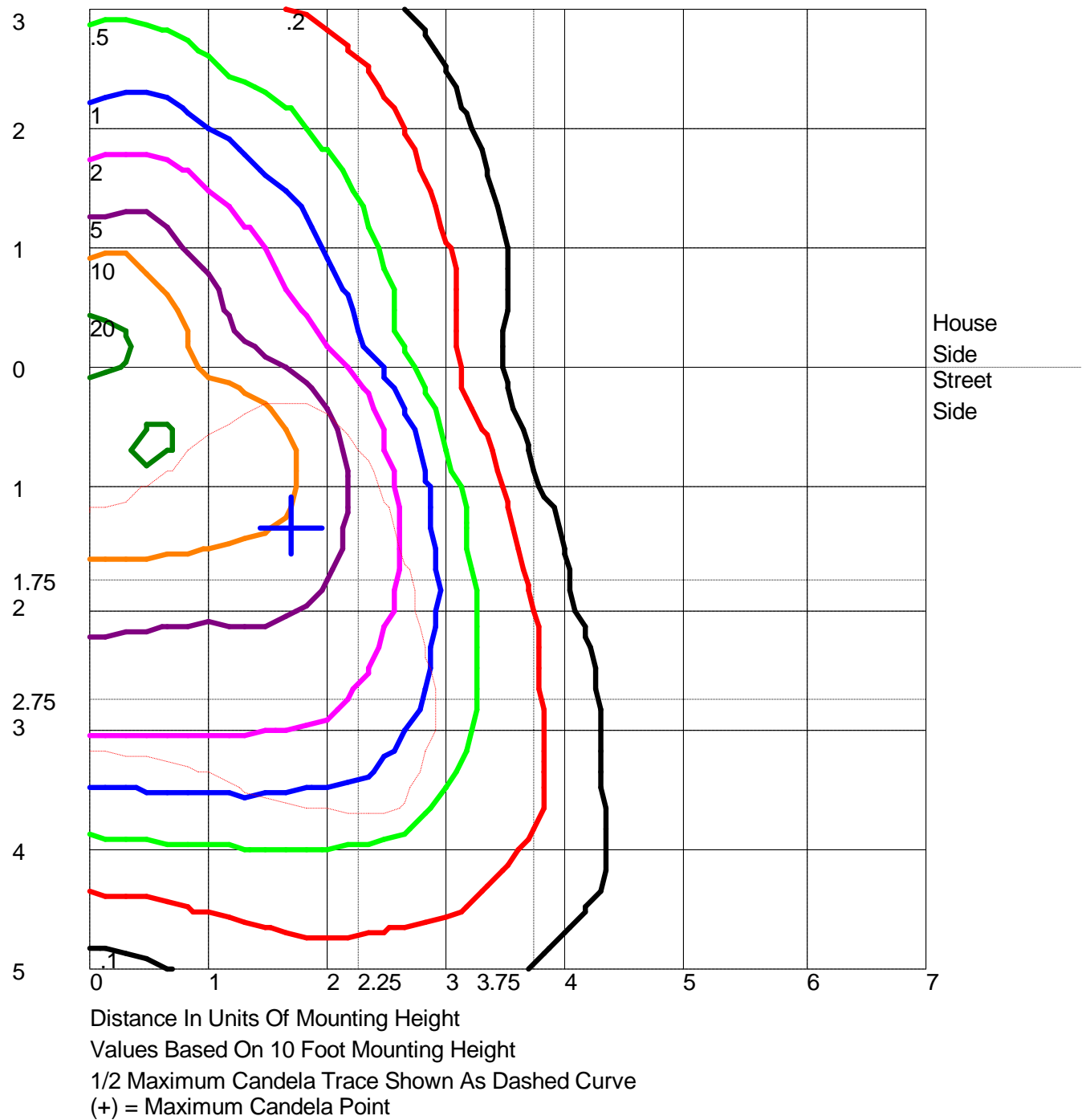
	Lumens	Percent Of Luminaire
Downward Street Side	13811.8	73.2
Downward House Side	5046.0	26.8
Downward Total	18857.8	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	18857.8	100.0

POLAR GRAPH



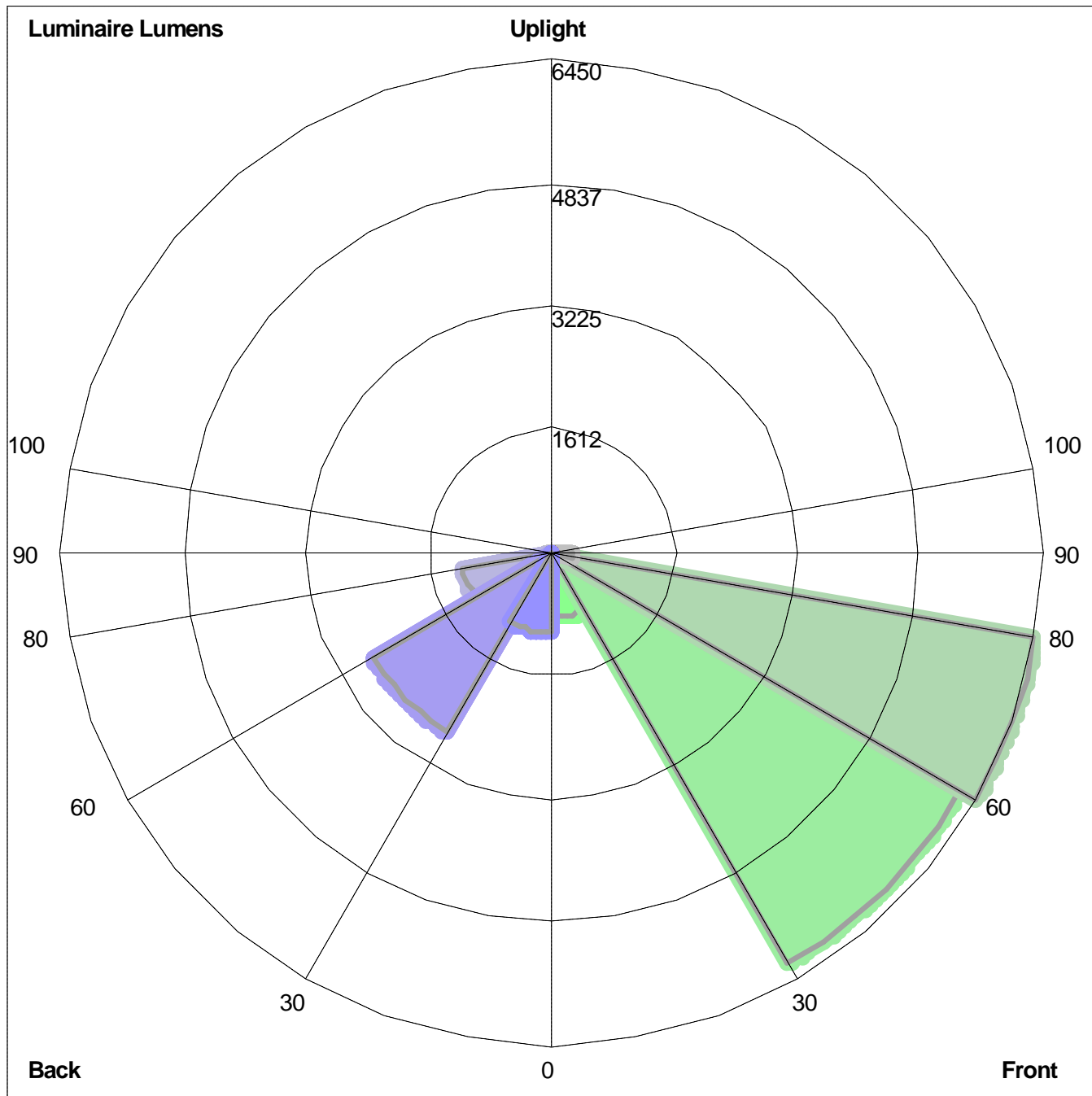
Maximum Candela = 12284 Located At Horizontal Angle = 52.5, Vertical Angle = 65  
# 1 - Vertical Plane Through Horizontal Angles (52.5 - 232.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=862.1, Medium=6206.7, High=6449.8, Very High=293.2  
Back: Low=1055.3, Medium=2724.9, High= 1188.0, Very High=77.8  
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3