



## IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-SAX-5W-LED-25L-30-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11786

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/30/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-SAX-5W-LED-25L-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	15429
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	68
Total Luminaire Watts	227.9
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	11044
Maximum Candela Angle	45H 67.5V
Maximum Candela (<90 Degrees Vertical)	11044
Maximum Candela Angle (<90 Degrees Vertical)	45H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	502 (3.3% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	966.9	N.A.	6.3
FM - Front-Medium (30-60)	5810.3	N.A.	37.7
FH - Front-High (60-80)	4834.3	N.A.	31.3
FVH - Front-Very High (80-90)	52.3	N.A.	0.3
BL - Back-Low (0-30)	956.1	N.A.	6.2
BM - Back-Medium (30-60)	2126.8	N.A.	13.8
BH - Back-High (60-80)	678.1	N.A.	4.4
BVH - Back-Very High (80-90)	4.3	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	15429.1	N.A.	100.0
BUG Rating	B2-U0-G2		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>0.0</b></u>	<u><b>5.0</b></u>	<u><b>15.0</b></u>	<u><b>25.0</b></u>	<u><b>35.0</b></u>	<u><b>45.0</b></u>	<u><b>47.5</b></u>	<u><b>55.0</b></u>	<u><b>65.0</b></u>	<u><b>75.0</b></u>
<b>0.0</b>	1642	1642	1642	1642	1642	1642	1642	1642	1642	1642
<b>2.5</b>	1648	1625	1626	1623	1627	1633	1610	1627	1634	1627
<b>5.0</b>	1628	1601	1608	1609	1617	1620	1598	1625	1635	1643
<b>7.5</b>	1643	1621	1622	1625	1636	1640	1617	1644	1656	1674
<b>10.0</b>	1696	1667	1674	1680	1684	1693	1669	1697	1702	1715
<b>12.5</b>	1777	1756	1761	1768	1776	1781	1756	1780	1778	1789
<b>15.0</b>	1889	1873	1879	1896	1895	1904	1886	1896	1886	1893
<b>17.5</b>	2020	2002	2018	2050	2057	2064	2064	2050	2025	2012
<b>20.0</b>	2168	2161	2179	2231	2261	2266	2260	2233	2189	2157
<b>22.5</b>	2319	2320	2364	2431	2481	2506	2486	2454	2376	2325
<b>25.0</b>	2483	2481	2549	2669	2737	2765	2750	2707	2594	2495
<b>27.5</b>	2657	2662	2760	2913	3041	3055	3056	2971	2822	2684
<b>30.0</b>	2835	2852	2984	3185	3347	3368	3369	3261	3061	2897
<b>32.5</b>	3019	3058	3202	3448	3651	3681	3663	3564	3321	3139
<b>35.0</b>	3215	3246	3419	3706	3938	4020	3989	3863	3601	3372
<b>37.5</b>	3408	3460	3637	3960	4236	4346	4356	4175	3915	3633
<b>40.0</b>	3639	3687	3881	4229	4556	4672	4698	4508	4199	3920
<b>42.5</b>	3896	3944	4160	4516	4871	4992	5026	4850	4520	4211
<b>45.0</b>	4172	4225	4451	4802	5176	5327	5359	5176	4835	4540
<b>47.5</b>	4498	4545	4762	5108	5525	5647	5713	5518	5191	4877
<b>50.0</b>	4799	4860	5103	5422	5872	6034	6095	5881	5517	5207
<b>52.5</b>	5120	5216	5434	5788	6231	6421	6463	6242	5887	5610
<b>55.0</b>	5485	5592	5807	6153	6645	6850	6882	6638	6340	6039
<b>57.5</b>	5867	5957	6195	6568	7163	7436	7490	7186	6795	6473
<b>60.0</b>	6168	6261	6610	7097	7868	8269	8391	7823	7196	6741
<b>62.5</b>	6343	6404	6789	7500	8723	9298	9358	8507	7535	6892
<b>65.0</b>	5922	6009	6590	7559	9224	10319	10212	8992	7726	7032
<b>67.5</b>	4369	4397	5383	6907	9128	11044	10975	9630	7910	6819
<b>70.0</b>	1258	1284	2283	4745	7939	10975	10987	9461	6849	5227
<b>72.5</b>	361	366	500	1065	4532	8977	8982	7479	4785	3235
<b>75.0</b>	162	166	189	339	973	4129	4787	4360	2464	1444
<b>77.5</b>	78	78	89	124	291	844	964	1547	1069	624
<b>80.0</b>	59	59	60	73	115	201	228	380	502	299
<b>82.5</b>	56	56	58	66	80	98	101	135	230	240
<b>85.0</b>	45	45	48	56	69	81	83	97	129	198
<b>87.5</b>	30	30	33	38	44	56	59	70	101	124
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>85.0</b></u>	<u><b>90.0</b></u>	<u><b>95.0</b></u>	<u><b>105.0</b></u>	<u><b>115.0</b></u>	<u><b>125.0</b></u>	<u><b>135.0</b></u>	<u><b>145.0</b></u>	<u><b>155.0</b></u>	<u><b>165.0</b></u>
<b>0.0</b>	1642	1642	1642	1642	1642	1642	1642	1642	1642	1642
<b>2.5</b>	1637	1643	1649	1642	1655	1660	1663	1669	1680	1681
<b>5.0</b>	1654	1663	1679	1684	1696	1712	1722	1732	1736	1749
<b>7.5</b>	1690	1709	1723	1741	1760	1782	1794	1804	1812	1817
<b>10.0</b>	1744	1768	1784	1813	1841	1868	1879	1887	1897	1893
<b>12.5</b>	1818	1844	1866	1911	1950	1976	1980	1992	1981	1979
<b>15.0</b>	1912	1943	1972	2015	2071	2099	2101	2107	2086	2072
<b>17.5</b>	2024	2057	2088	2157	2213	2243	2257	2247	2205	2163
<b>20.0</b>	2164	2182	2222	2299	2368	2419	2430	2393	2325	2252
<b>22.5</b>	2312	2333	2383	2474	2561	2621	2622	2575	2455	2315
<b>25.0</b>	2472	2507	2546	2644	2760	2826	2819	2724	2459	2165
<b>27.5</b>	2646	2674	2710	2843	2968	3047	3023	2737	2182	1736

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**CANDELA TABULATION - (Cont.)**

30.0	2838	2866	2908	3041	3207	3301	3150	2468	1680	1196
32.5	3055	3082	3127	3274	3466	3544	3035	1950	1139	727
35.0	3278	3293	3349	3502	3720	3699	2614	1372	698	443
37.5	3523	3526	3598	3768	3974	3639	2021	865	425	298
40.0	3791	3799	3857	4037	4230	3277	1395	513	288	233
42.5	4060	4075	4124	4335	4453	2635	873	323	220	190
45.0	4351	4375	4445	4649	4475	1920	501	235	180	162
47.5	4665	4698	4774	4987	4219	1251	310	181	153	131
50.0	5028	5044	5127	5341	3643	744	216	149	122	101
52.5	5441	5491	5525	5702	2805	431	160	119	91	71
55.0	5858	5887	5948	5987	1942	258	129	91	62	44
57.5	6197	6249	6322	5998	1303	167	99	62	36	20
60.0	6399	6422	6503	5470	938	126	72	37	16	5
62.5	6459	6475	6531	4348	784	113	48	17	4	1
65.0	6534	6553	6567	2936	743	165	28	5	2	0
67.5	6158	6138	6176	1726	703	254	14	4	1	0
70.0	4384	4317	4389	817	545	326	15	4	3	1
72.5	2530	2323	2362	287	260	283	11	4	2	0
75.0	1015	956	942	124	96	119	5	1	0	0
77.5	446	406	358	62	34	45	1	0	0	0
80.0	237	206	151	28	12	13	0	0	0	0
82.5	171	143	86	7	4	4	0	0	0	0
85.0	116	87	36	2	0	1	0	0	0	0
87.5	65	26	2	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0

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

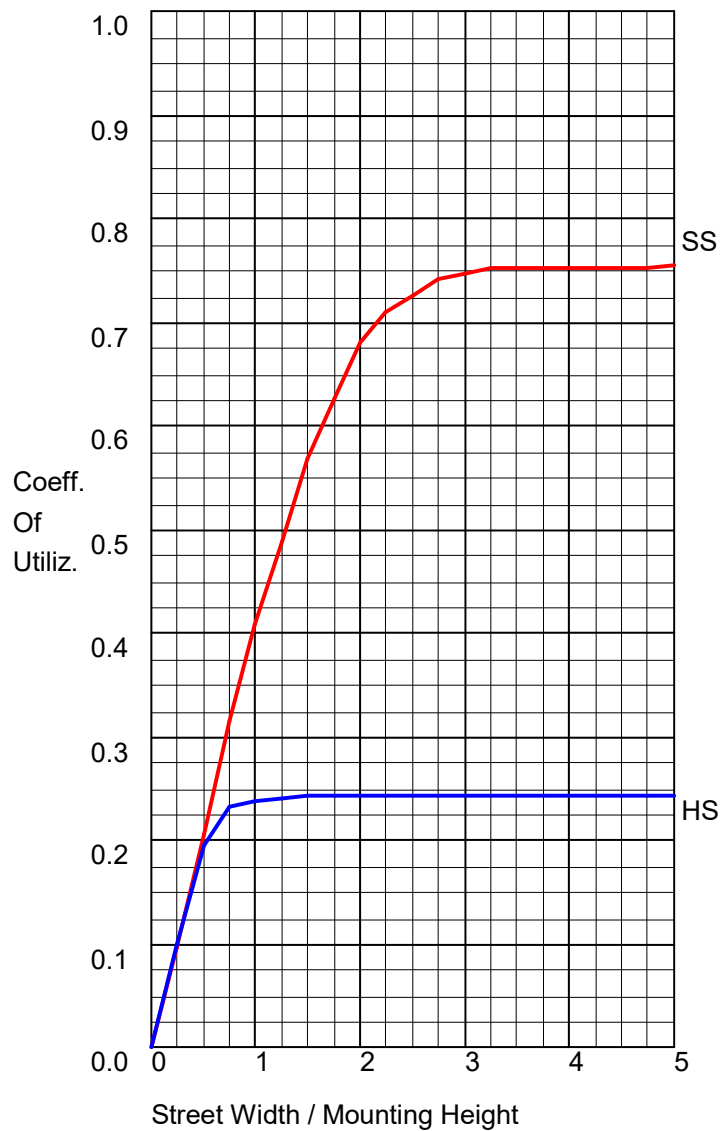
	<u>175.0</u>	<u>180.0</u>
0.0	1642	1642
2.5	1682	1679
5.0	1750	1743
7.5	1815	1816
10.0	1887	1903
12.5	1967	1974
15.0	2059	2052
17.5	2143	2142
20.0	2211	2216
22.5	2210	2201
25.0	1979	1954
27.5	1490	1460
30.0	970	942
32.5	589	573
35.0	362	361
37.5	264	263
40.0	212	208
42.5	179	178
45.0	152	148
47.5	122	120
50.0	91	90
52.5	61	60
55.0	35	34
57.5	14	13
60.0	2	2
62.5	0	0
65.0	0	0

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**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	0	0
<b>70.0</b>	0	0
<b>72.5</b>	0	0
<b>75.0</b>	0	0
<b>77.5</b>	0	0
<b>80.0</b>	0	0
<b>82.5</b>	0	0
<b>85.0</b>	0	0
<b>87.5</b>	0	0
<b>90.0</b>	0	0

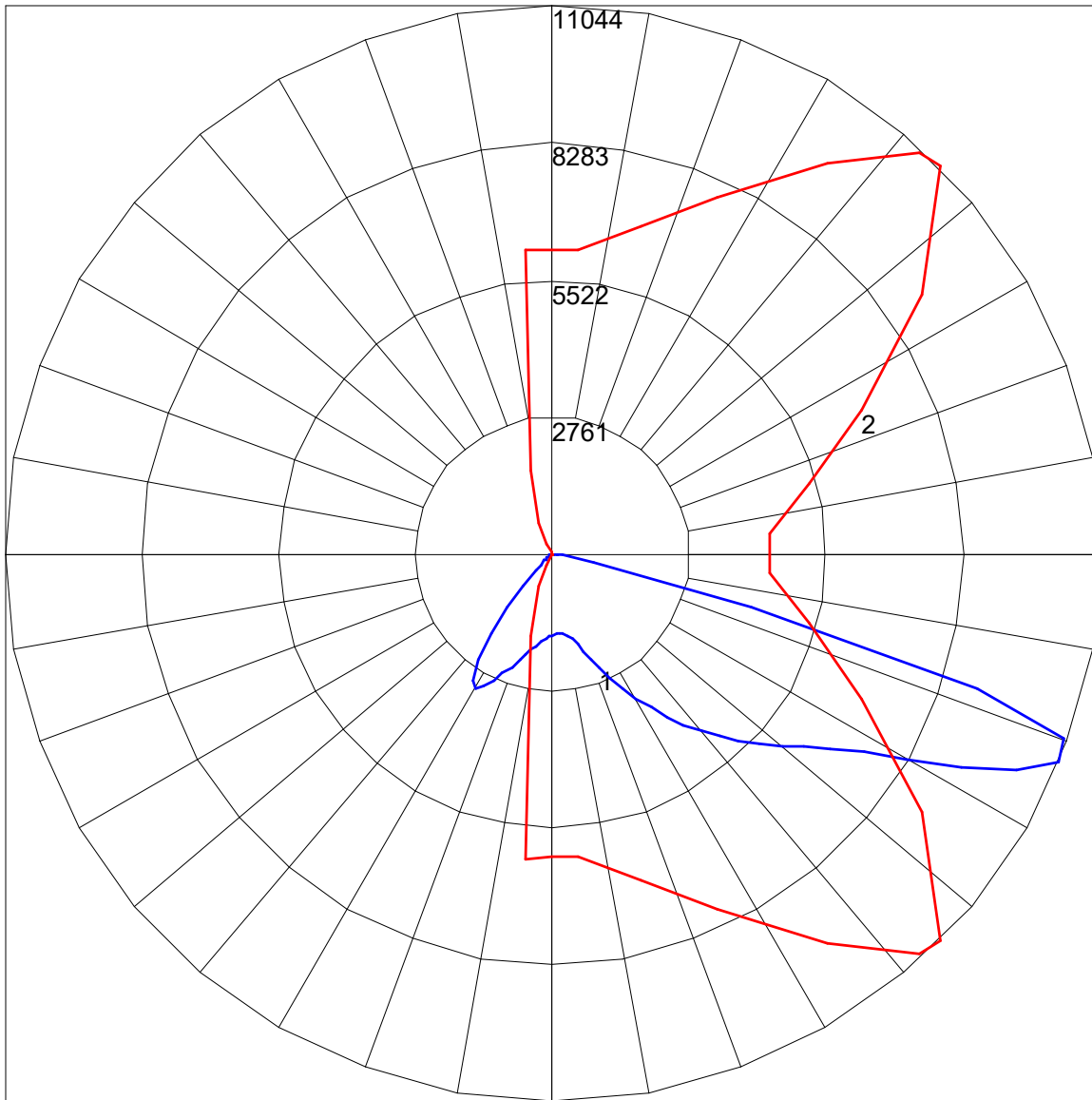
### COEFFICIENTS OF UTILIZATION



### FLUX DISTRIBUTION

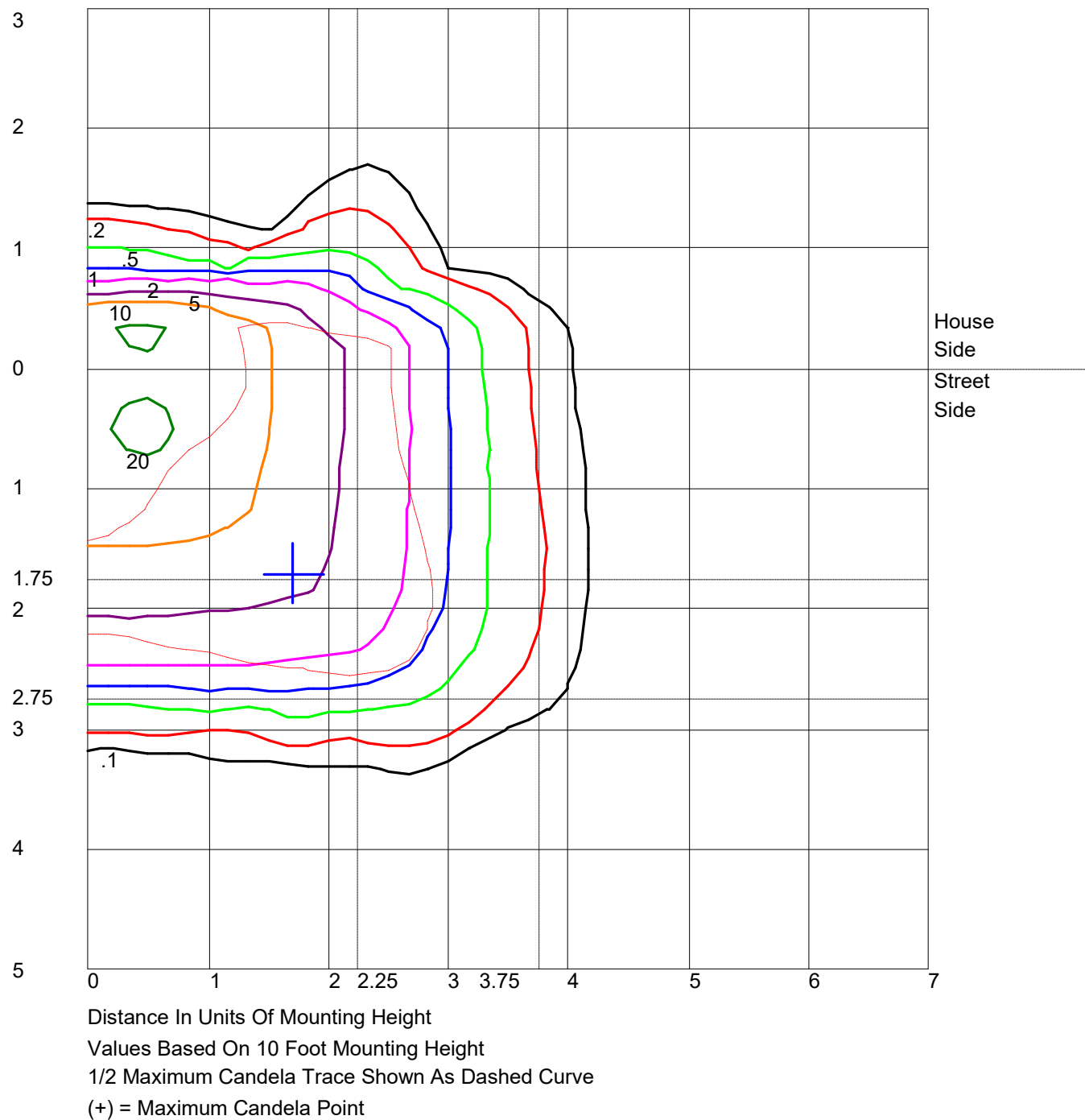
	Lumens	Percent Of Luminaire
Downward Street Side	11663.7	75.6
Downward House Side	3765.4	24.4
Downward Total	15429.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	15429.2	100.0

POLAR GRAPH



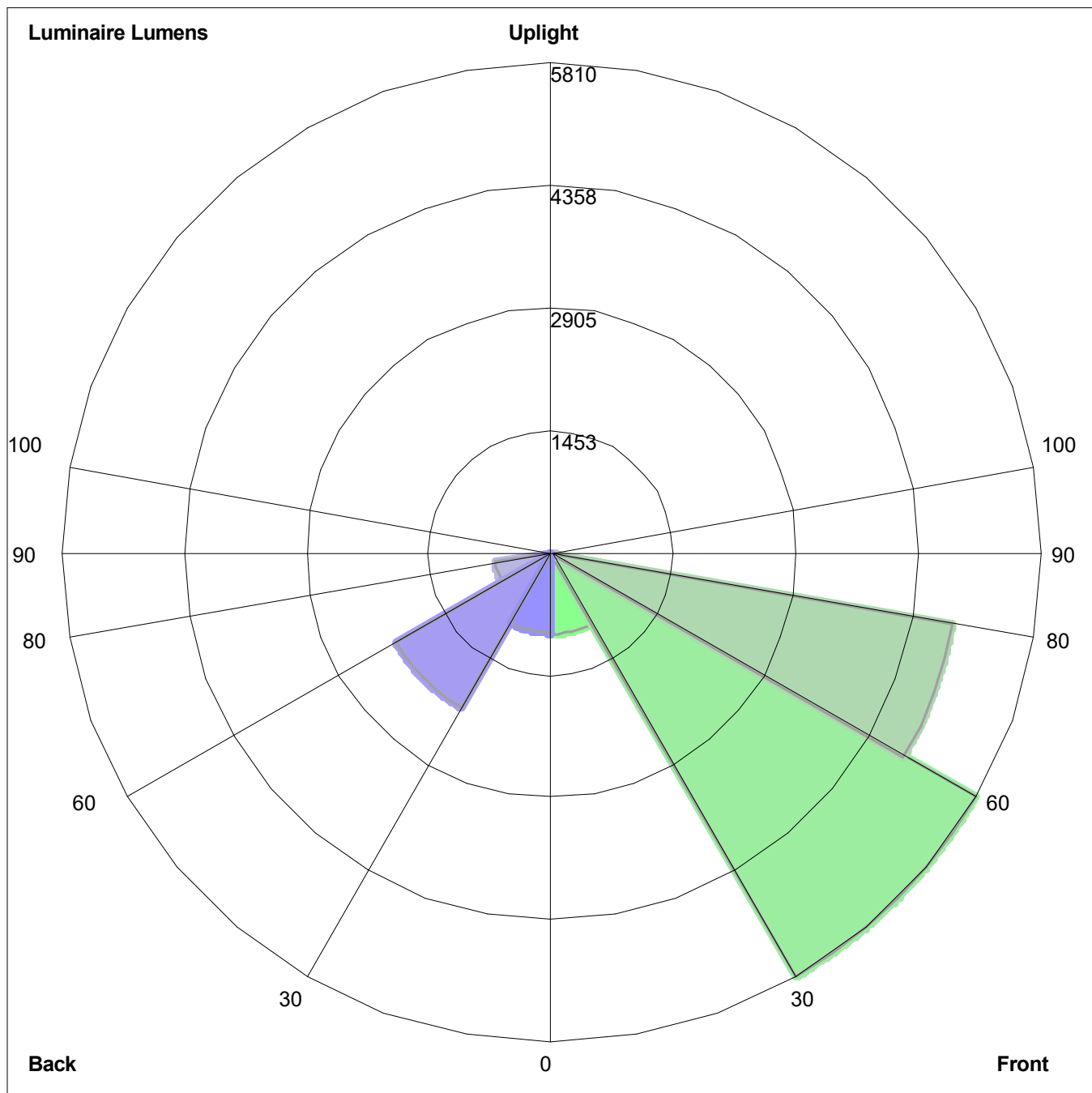
Maximum Candela = 11044 Located At Horizontal Angle = 45, Vertical Angle = 67.5  
# 1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=966.9, Medium=5810.3, High=4834.3, Very High=52.3  
Back: Low=956.1, Medium=2126.8, High=678.1, Very High=4.3  
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2