



## IES ROAD REPORT

PHOTOMETRIC FILENAME : HLN-5W-LED-18L-40.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST]LED-8432  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]01/09/17  
[TEST DATE]01/09/17  
[MANUFACTURER]LSI INDUSTRIES, INC  
[LUMEN CATEGORY]HLN-5W-LED-18L-40  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[\_ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED  
[\_SEARCH\_SOURCE TYPE] LED  
[\_SEARCH\_APPLICATION] Outdoor

### CHARACTERISTICS

IES Classification	Type VS
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	17984
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	154.8
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	9107
Maximum Candela Angle	45H 70V
Maximum Candela (<90 Degrees Vertical)	9107
Maximum Candela Angle (<90 Degrees Vertical)	45H 70V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1043 (5.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : HLN-5W-LED-18L-40.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	841.3	N.A.	4.7
FM - Front-Medium (30-60)	3678.4	N.A.	20.5
FH - Front-High (60-80)	4386.1	N.A.	24.4
FVH - Front-Very High (80-90)	86.2	N.A.	0.5
BL - Back-Low (0-30)	841.3	N.A.	4.7
BM - Back-Medium (30-60)	3678.4	N.A.	20.5
BH - Back-High (60-80)	4386.1	N.A.	24.4
BVH - Back-Very High (80-90)	86.2	N.A.	0.5
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	17984.0	N.A.	100.0
BUG Rating	B4-U0-G2		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : HLN-5W-LED-18L-40.IES**

**CANDELA TABULATION**

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>5</u>	<u>15</u>	<u>25</u>	<u>35</u>	<u>45</u>	<u>55</u>	<u>65</u>	<u>75</u>	<u>85</u>
0.0	1710	1710	1710	1710	1710	1710	1710	1710	1710	1710
2.5	1718	1714	1713	1716	1716	1715	1713	1714	1712	1708
5.0	1725	1721	1722	1723	1722	1721	1720	1720	1717	1715
7.5	1736	1731	1734	1735	1735	1733	1731	1731	1726	1725
10.0	1757	1752	1755	1755	1754	1752	1750	1749	1748	1745
12.5	1793	1788	1789	1790	1788	1784	1780	1775	1776	1774
15.0	1833	1831	1832	1834	1835	1832	1828	1826	1818	1815
17.5	1882	1883	1885	1890	1895	1899	1894	1886	1873	1869
20.0	1945	1946	1950	1960	1971	1980	1974	1959	1939	1930
22.5	2013	2015	2030	2046	2065	2077	2067	2043	2014	1999
25.0	2080	2084	2109	2141	2179	2190	2171	2136	2095	2074
27.5	2149	2157	2193	2245	2298	2316	2288	2234	2180	2151
30.0	2223	2232	2281	2356	2422	2448	2409	2334	2265	2226
32.5	2302	2314	2376	2467	2549	2582	2530	2436	2352	2305
35.0	2389	2403	2474	2587	2679	2714	2651	2544	2449	2399
37.5	2485	2502	2582	2704	2812	2853	2775	2659	2557	2501
40.0	2596	2617	2702	2828	2944	2989	2908	2784	2675	2609
42.5	2733	2745	2826	2959	3081	3129	3050	2920	2798	2723
45.0	2869	2880	2961	3095	3220	3271	3196	3060	2926	2840
47.5	3016	3034	3107	3240	3365	3427	3348	3204	3053	2965
50.0	3180	3199	3264	3395	3523	3596	3505	3356	3203	3099
52.5	3355	3378	3447	3569	3700	3775	3675	3515	3366	3268
55.0	3565	3586	3652	3769	3906	3984	3866	3712	3576	3469
57.5	3811	3833	3903	4024	4163	4239	4109	3961	3808	3691
60.0	4083	4106	4192	4346	4509	4609	4434	4253	4105	3958
62.5	4380	4425	4548	4740	4961	5092	4882	4654	4489	4306
65.0	5063	5065	5198	5379	5675	5818	5571	5315	5146	4918
67.5	5280	5354	5743	6314	7016	7261	6911	6374	5933	5627
70.0	4553	4610	5209	6256	8036	9107	8275	6707	5616	4991
72.5	2946	2965	3707	4934	6999	8717	7304	5173	4023	3499
75.0	882	890	1290	2598	4759	6566	5087	2840	1574	1115
77.5	300	298	394	735	1688	3180	2073	937	534	406
80.0	161	155	180	290	593	1043	763	417	276	242
82.5	109	104	114	159	268	416	319	219	166	168
85.0	73	72	76	100	151	207	169	134	107	116
87.5	45	46	50	63	88	109	94	79	65	66
90.0	0	0	0	0	0	0	0	0	0	0

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

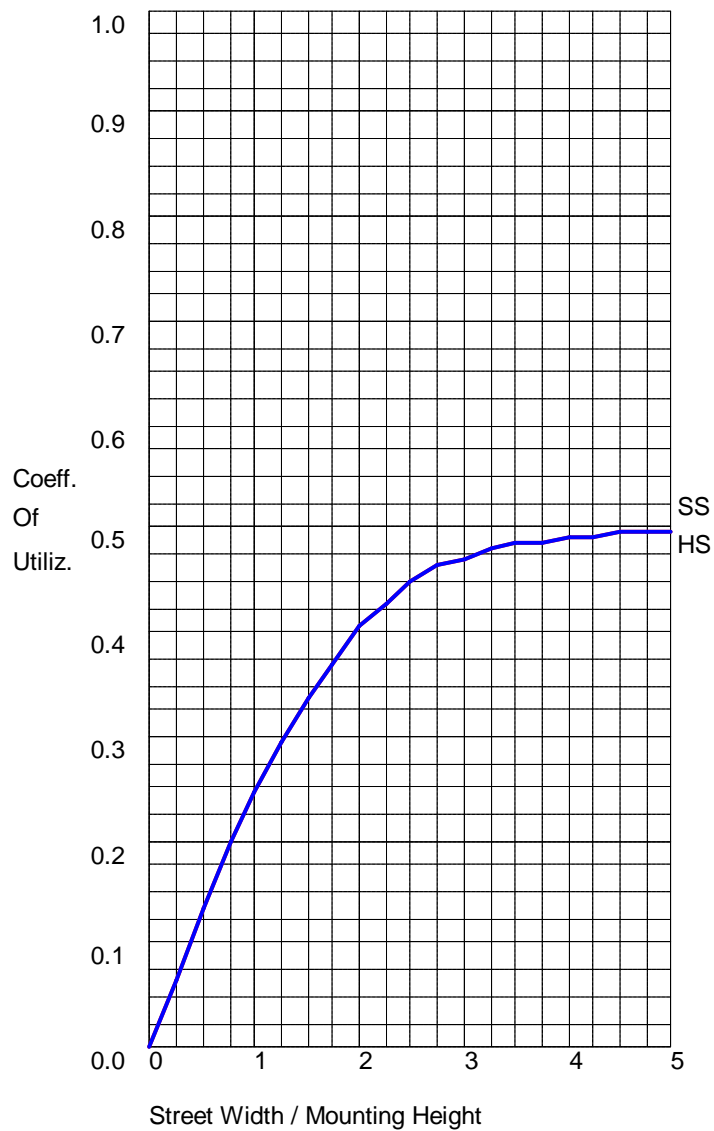
	<u>90</u>
0.0	1710
2.5	1711
5.0	1718
7.5	1729
10.0	1749
12.5	1777
15.0	1818
17.5	1871
20.0	1933
22.5	2001
25.0	2073
27.5	2158

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : HLN-5W-LED-18L-40.IES**

**CANDELA TABULATION - (Cont.)**

<b>30.0</b>	2233
<b>32.5</b>	2313
<b>35.0</b>	2402
<b>37.5</b>	2502
<b>40.0</b>	2607
<b>42.5</b>	2718
<b>45.0</b>	2834
<b>47.5</b>	2956
<b>50.0</b>	3088
<b>52.5</b>	3243
<b>55.0</b>	3448
<b>57.5</b>	3672
<b>60.0</b>	3929
<b>62.5</b>	4279
<b>65.0</b>	4889
<b>67.5</b>	5587
<b>70.0</b>	4919
<b>72.5</b>	3495
<b>75.0</b>	1014
<b>77.5</b>	399
<b>80.0</b>	243
<b>82.5</b>	170
<b>85.0</b>	112
<b>87.5</b>	64
<b>90.0</b>	0

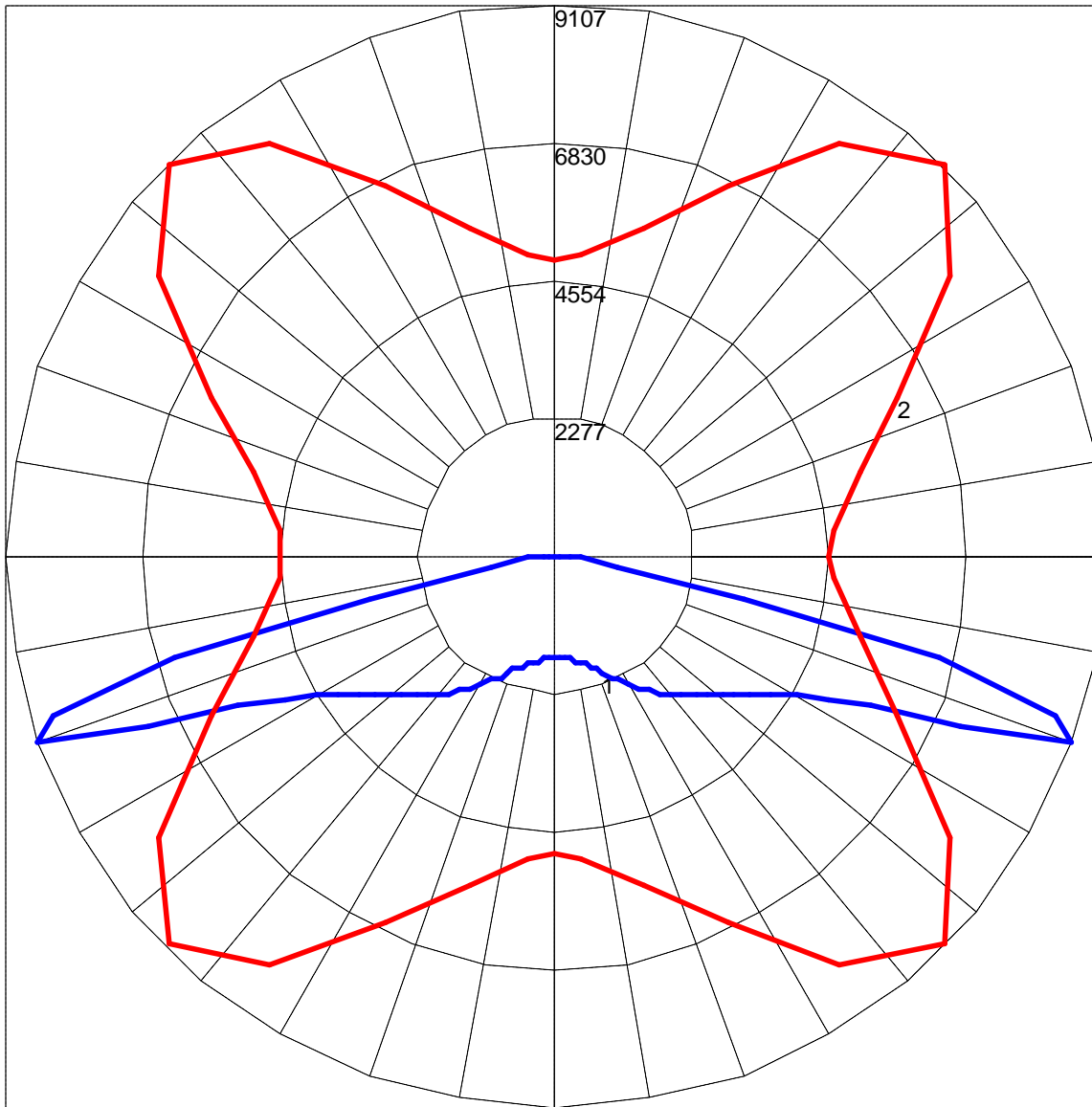
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

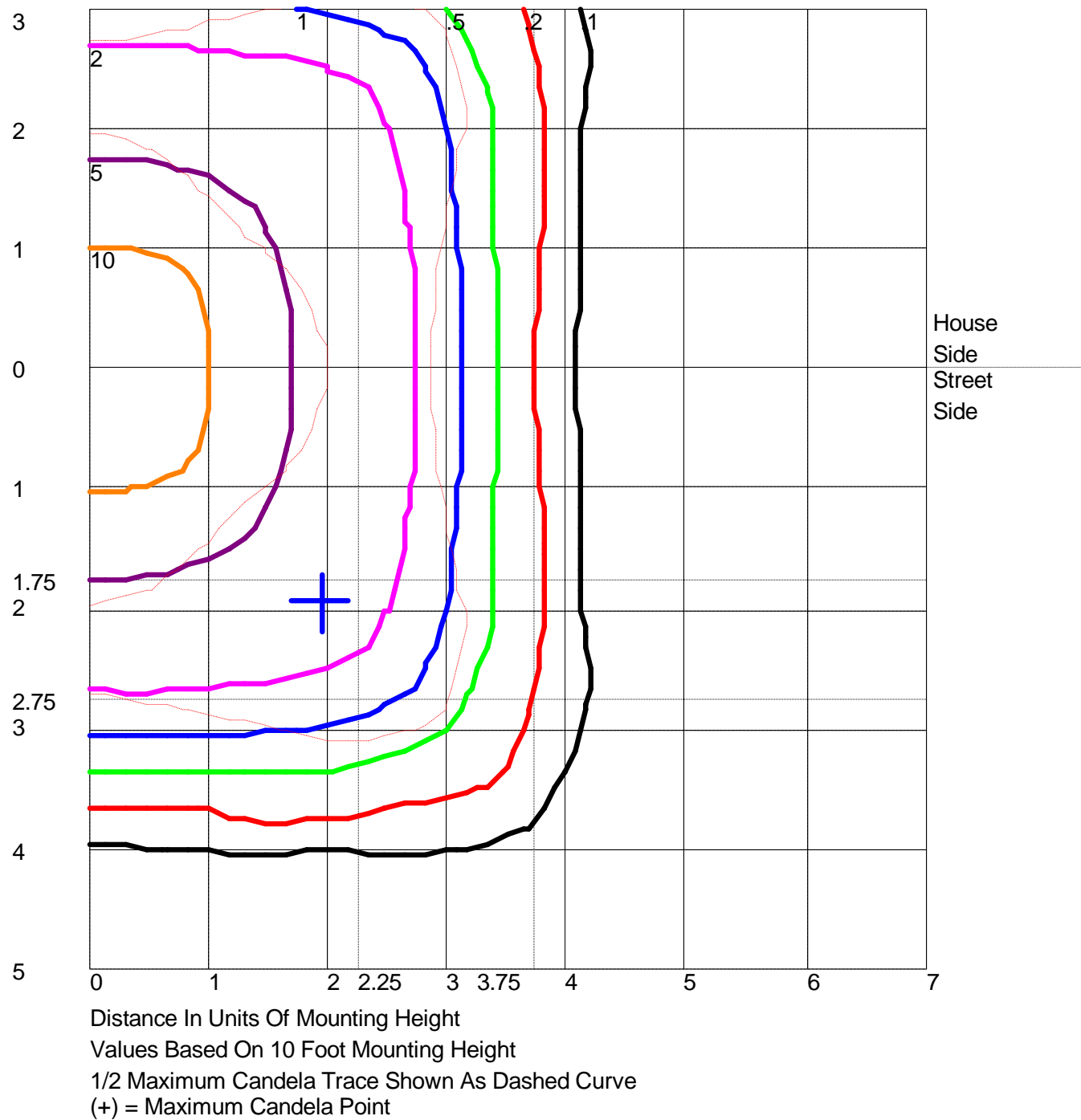
	Lumens	Percent Of Luminaire
Downward Street Side	8992.0	50.0
Downward House Side	8992.0	50.0
Downward Total	17984.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	17984.0	100.0

POLAR GRAPH

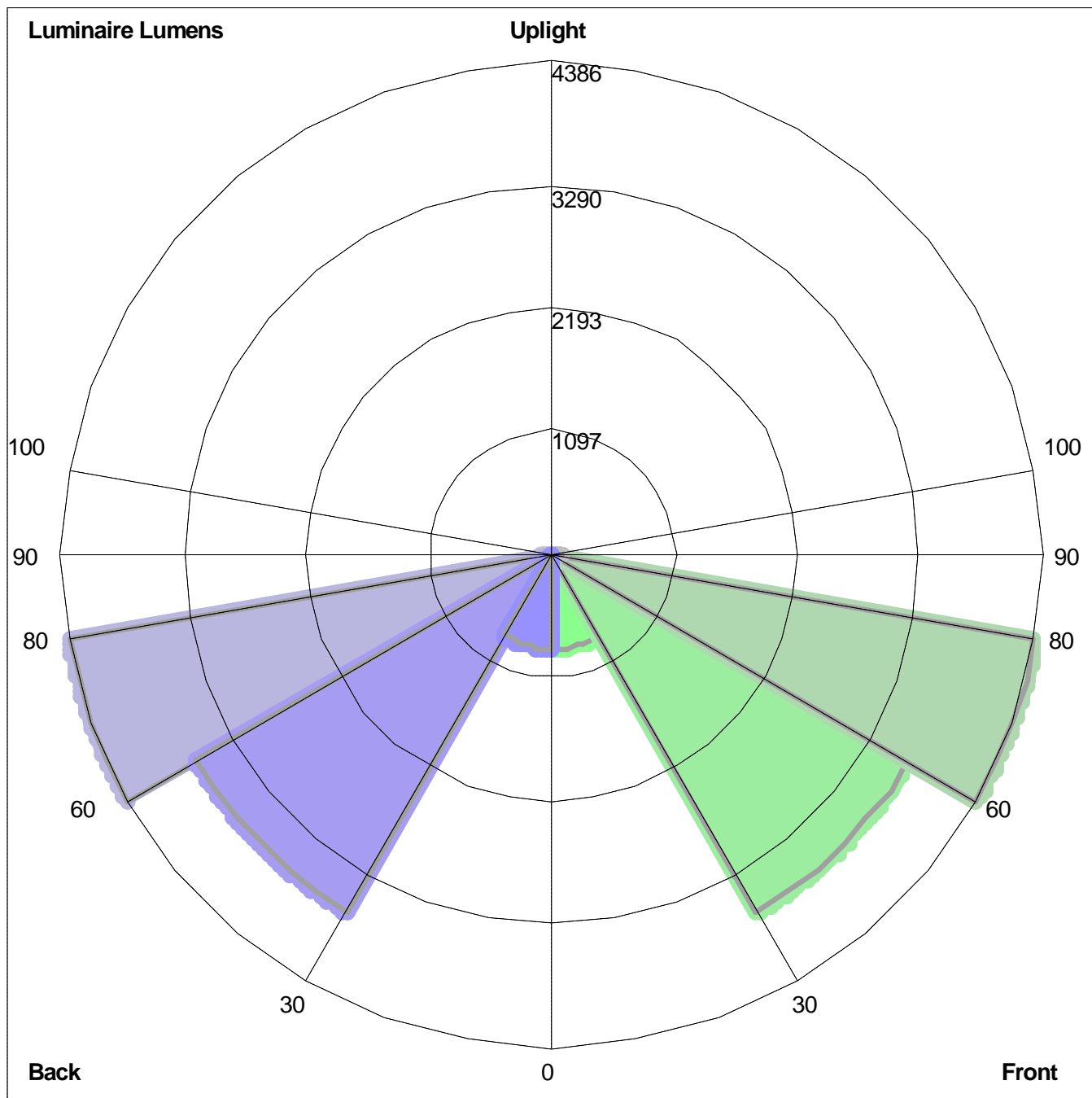


Maximum Candela = 9107 Located At Horizontal Angle = 45, Vertical Angle = 70  
# 1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (70) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=841.3, Medium=3678.4, High=4386.1, Very High=86.2  
Back: Low=841.3, Medium=3678.4, High=4386.1, Very High=86.2  
Uplight: Low=0.0, High=0.0

BUG Rating : B4-U0-G2