



## IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-SAX-2-LED-18L-30-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] LED-11792  
[TESTLAB] LSI INDUSTRIES, INC.  
[ISSUE DATE] 06/10/2020  
[TEST DATE] 05/01/20  
[MANUFACTURER] LSI INDUSTRIES, INC.  
[LUMCAT] ENM4-SAX-2-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 II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	14057
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	94
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	12806
Maximum Candela Angle	75H 65V
Maximum Candela (<90 Degrees Vertical)	12806
Maximum Candela Angle (<90 Degrees Vertical)	75H 65V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	783 (5.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-SAX-2-LED-18L-30-IL.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1369.0	N.A.	9.7
FM - Front-Medium (30-60)	6671.2	N.A.	47.5
FH - Front-High (60-80)	3308.0	N.A.	23.5
FVH - Front-Very High (80-90)	57.2	N.A.	0.4
BL - Back-Low (0-30)	901.0	N.A.	6.4
BM - Back-Medium (30-60)	1342.8	N.A.	9.6
BH - Back-High (60-80)	403.2	N.A.	2.9
BVH - Back-Very High (80-90)	4.7	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	14057.1	N.A.	100.0
BUG Rating	B2-U0-G2		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-SAX-2-LED-18L-30-IL.IES**

**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>55.0</b></u>	<u><b>65.0</b></u>	<u><b>75.0</b></u>	<u><b>77.5</b></u>
<b>0.0</b>	2588	2588	2588	2588	2588	2588	2588	2588	2588	2588
<b>2.5</b>	2637	2636	2647	2642	2635	2631	2625	2606	2609	2582
<b>5.0</b>	2712	2690	2695	2701	2696	2687	2684	2662	2646	2618
<b>7.5</b>	2751	2744	2754	2754	2760	2751	2750	2724	2714	2680
<b>10.0</b>	2792	2787	2806	2812	2818	2828	2826	2808	2781	2761
<b>12.5</b>	2858	2849	2860	2868	2899	2906	2909	2904	2879	2860
<b>15.0</b>	2898	2891	2915	2940	2977	2999	3011	3004	2983	2977
<b>17.5</b>	2938	2951	2980	3007	3054	3108	3137	3135	3127	3117
<b>20.0</b>	3012	3034	3054	3103	3150	3220	3254	3293	3289	3258
<b>22.5</b>	3133	3144	3181	3224	3285	3336	3411	3468	3455	3437
<b>25.0</b>	3285	3296	3329	3367	3417	3486	3578	3648	3660	3645
<b>27.5</b>	3447	3457	3484	3551	3616	3679	3739	3852	3877	3860
<b>30.0</b>	3666	3679	3719	3758	3844	3907	3980	4073	4100	4102
<b>32.5</b>	3922	3932	3963	4036	4100	4182	4227	4302	4358	4374
<b>35.0</b>	4189	4186	4247	4331	4436	4496	4512	4555	4617	4641
<b>37.5</b>	4471	4475	4526	4636	4764	4851	4832	4851	4912	4960
<b>40.0</b>	4757	4767	4828	4967	5141	5247	5237	5205	5260	5315
<b>42.5</b>	4988	5023	5109	5300	5539	5694	5665	5592	5621	5780
<b>45.0</b>	5159	5189	5330	5550	5872	6146	6163	6036	6091	6196
<b>47.5</b>	5222	5205	5382	5706	6125	6591	6777	6593	6618	6717
<b>50.0</b>	5041	5018	5223	5637	6300	6982	7399	7331	7312	7398
<b>52.5</b>	4598	4609	4822	5279	6134	7269	8109	8168	8153	8250
<b>55.0</b>	3923	3925	4171	4683	5663	7258	8780	9055	9085	9207
<b>57.5</b>	3043	3065	3334	3817	4829	6859	9244	10046	10215	10344
<b>60.0</b>	2058	2081	2327	2808	3788	5991	9339	11098	11414	11512
<b>62.5</b>	1132	1170	1358	1733	2552	4748	8953	11671	12323	12454
<b>65.0</b>	607	613	719	954	1515	3417	7888	11370	12806	12693
<b>67.5</b>	371	381	415	570	900	2152	6071	9963	12014	11747
<b>70.0</b>	241	241	262	351	579	1229	4092	7590	9203	8735
<b>72.5</b>	160	165	174	228	393	785	2396	4821	5441	4914
<b>75.0</b>	98	100	104	136	253	574	1169	2877	2687	2214
<b>77.5</b>	53	55	57	72	145	398	614	1579	1367	1084
<b>80.0</b>	46	46	44	47	69	223	362	667	783	635
<b>82.5</b>	48	48	46	47	54	91	169	240	455	397
<b>85.0</b>	37	38	36	37	46	70	80	112	202	189
<b>87.5</b>	25	24	22	23	27	42	50	72	72	70
<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>	2588	2588	2588	2588	2588	2588	2588	2588	2588	2588
<b>2.5</b>	2609	2595	2597	2584	2572	2571	2560	2555	2557	2564
<b>5.0</b>	2644	2625	2607	2578	2566	2546	2532	2519	2497	2493
<b>7.5</b>	2687	2658	2659	2599	2571	2524	2496	2473	2455	2442
<b>10.0</b>	2756	2735	2696	2623	2578	2520	2479	2436	2403	2382
<b>12.5</b>	2848	2807	2776	2666	2594	2520	2437	2380	2354	2327
<b>15.0</b>	2951	2907	2850	2725	2621	2492	2401	2350	2311	2296
<b>17.5</b>	3075	3011	2965	2775	2626	2482	2371	2303	2243	2174
<b>20.0</b>	3231	3157	3077	2857	2643	2462	2333	2197	1940	1714
<b>22.5</b>	3395	3319	3220	2941	2654	2451	2239	1806	1429	1146
<b>25.0</b>	3580	3475	3349	3021	2678	2395	1879	1328	881	616
<b>27.5</b>	3795	3685	3534	3104	2684	2231	1441	804	525	426

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-SAX-2-LED-18L-30-IL.IES**

**CANDELA TABULATION - (Cont.)**

30.0	4033	3895	3703	3167	2697	1882	973	514	404	366
32.5	4288	4135	3905	3246	2618	1479	606	410	357	332
35.0	4561	4387	4093	3314	2403	1027	455	363	328	305
37.5	4873	4658	4334	3390	2075	655	389	329	299	272
40.0	5200	4973	4550	3437	1663	478	348	299	265	231
42.5	5604	5315	4828	3418	1155	406	314	268	220	181
45.0	6026	5673	5109	3305	713	361	281	223	168	131
47.5	6527	6120	5384	3026	514	325	244	174	120	91
50.0	7166	6622	5727	2589	422	282	198	126	83	63
52.5	7905	7249	6079	1998	363	239	149	84	56	41
55.0	8788	7900	6383	1320	323	195	106	56	35	27
57.5	9747	8561	6595	852	294	153	72	35	21	16
60.0	10629	8934	6602	650	274	115	46	20	9	5
62.5	11225	8985	6161	520	253	86	26	8	5	4
65.0	11101	8449	5162	417	215	62	13	5	3	2
67.5	9493	6773	3649	317	151	39	5	3	2	1
70.0	6366	4235	2008	227	97	22	4	2	2	1
72.5	2942	2062	937	163	55	8	2	2	1	1
75.0	1132	905	443	102	30	5	2	1	1	0
77.5	583	521	250	59	14	4	1	1	1	0
80.0	373	325	156	26	5	1	0	1	1	0
82.5	245	174	89	9	4	1	1	1	1	1
85.0	138	87	36	3	1	1	1	1	1	1
87.5	48	23	2	0	0	0	1	1	1	1
90.0	0	0	0	0	0	0	0	0	0	0

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

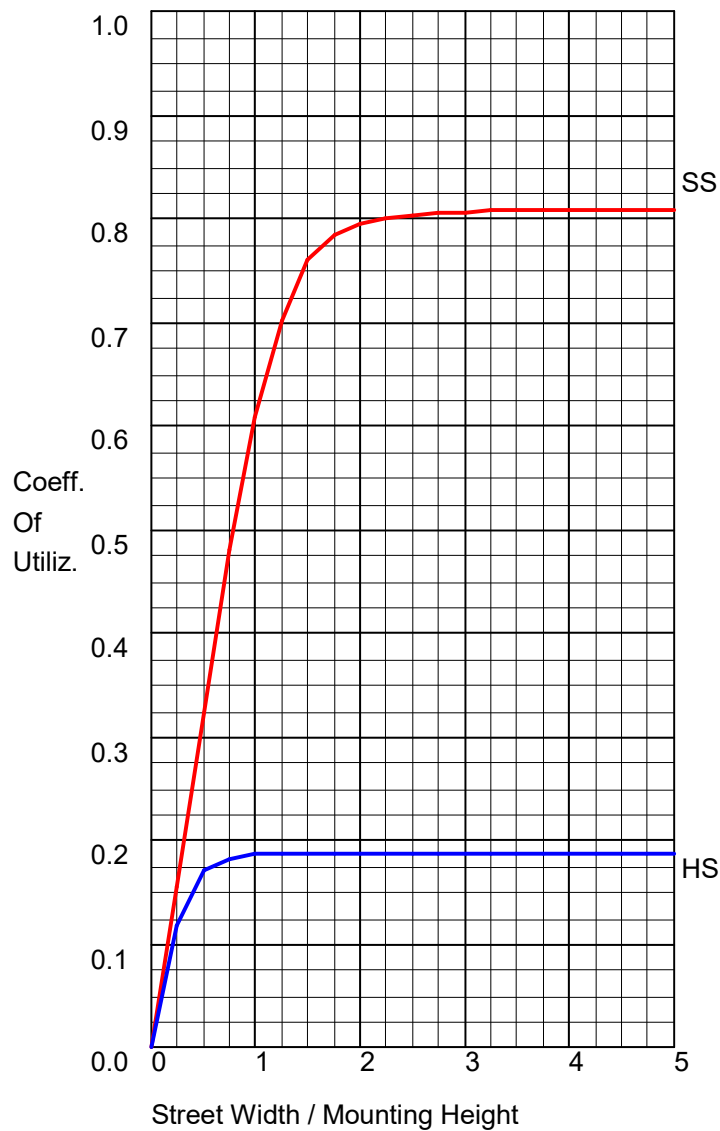
	<u>175.0</u>	<u>180.0</u>
0.0	2588	2588
2.5	2545	2544
5.0	2496	2486
7.5	2432	2419
10.0	2367	2359
12.5	2319	2319
15.0	2271	2262
17.5	2094	2072
20.0	1574	1557
22.5	976	958
25.0	538	531
27.5	399	393
30.0	350	348
32.5	319	315
35.0	290	289
37.5	256	254
40.0	216	213
42.5	164	159
45.0	117	113
47.5	80	79
50.0	54	53
52.5	36	35
55.0	23	22
57.5	11	10
60.0	4	4
62.5	1	0
65.0	0	0

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-SAX-2-LED-18L-30-IL.IES**

**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

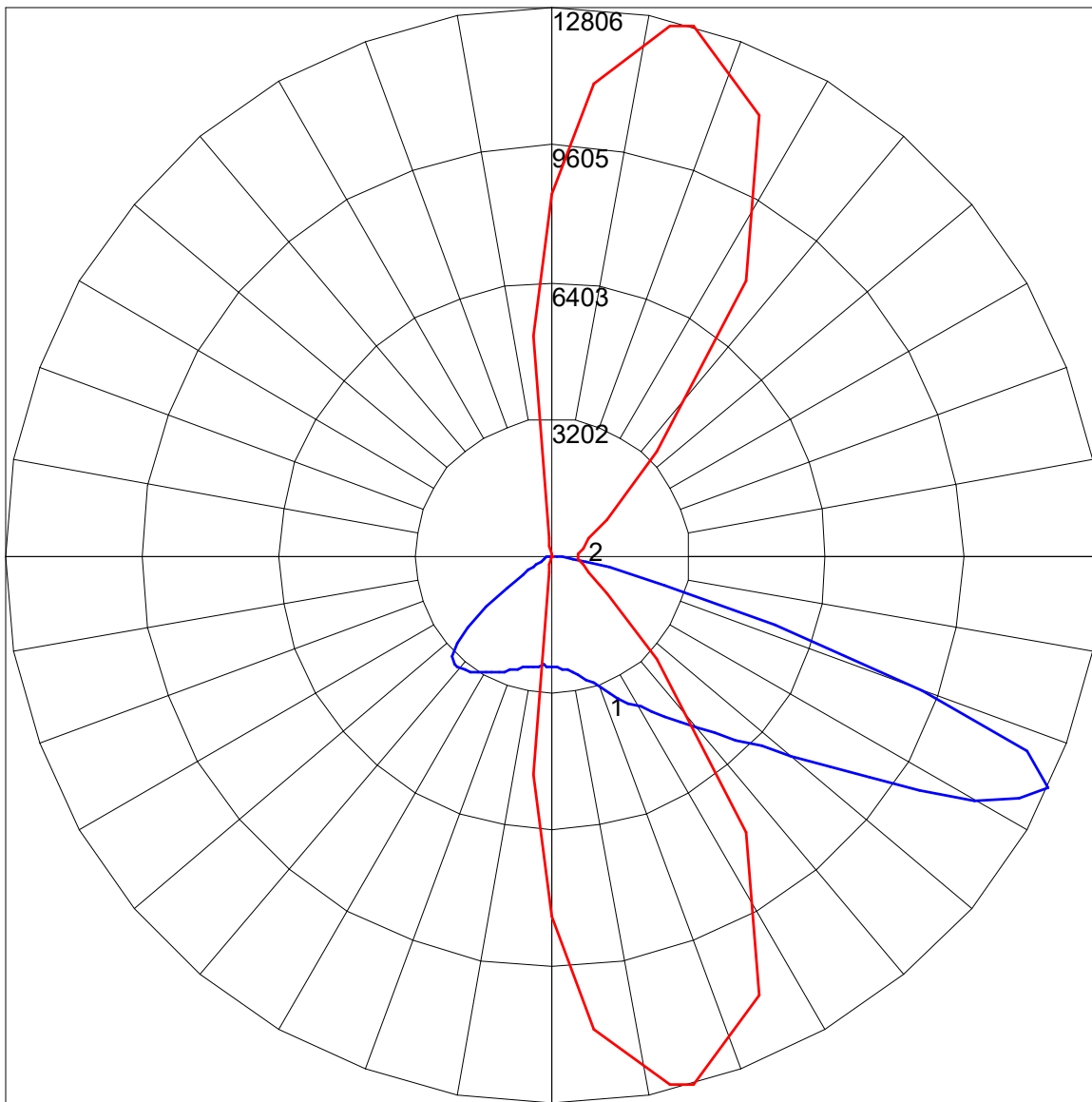
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

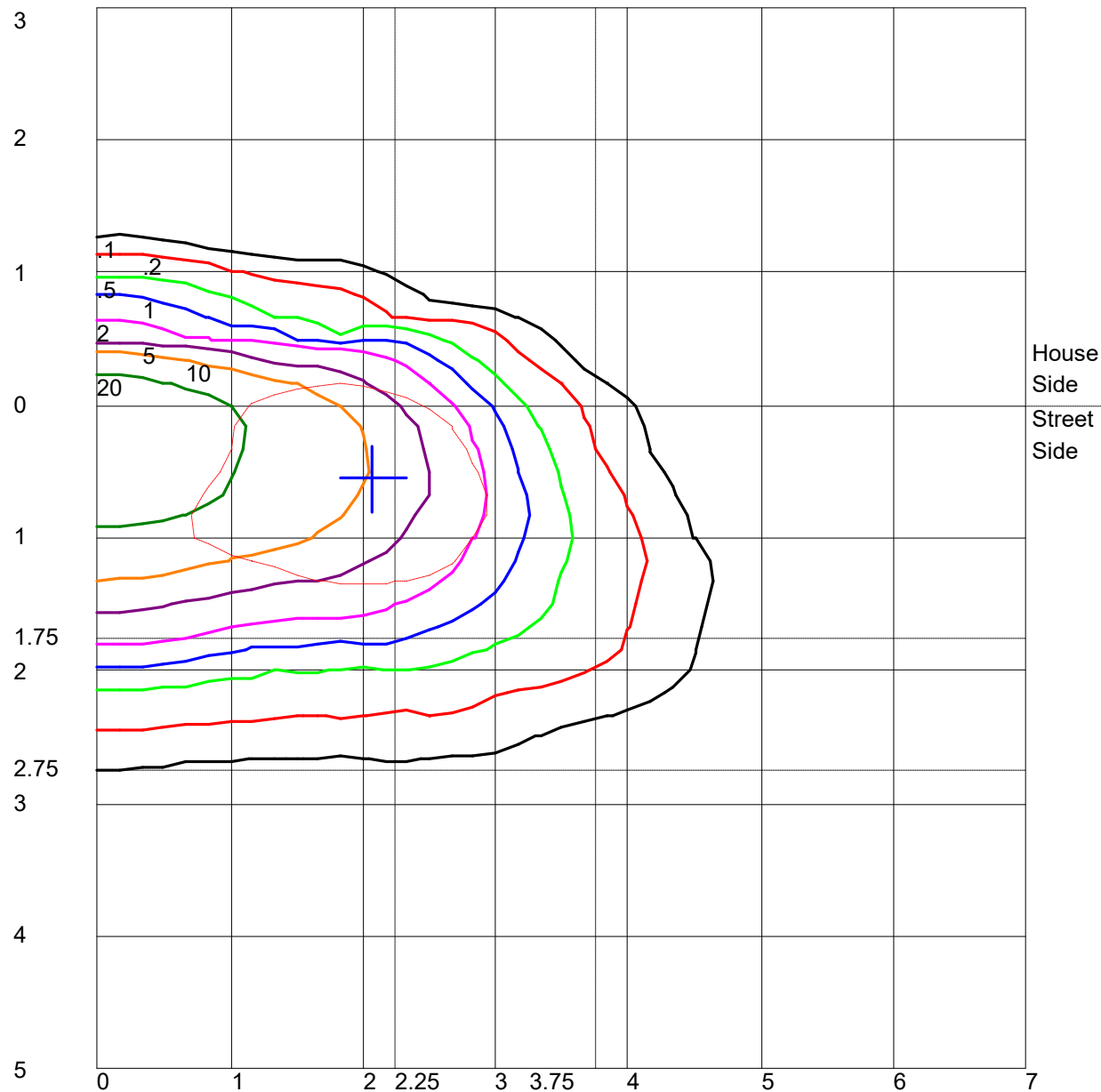
	Lumens	Percent Of Luminaire
Downward Street Side	11405.3	81.1
Downward House Side	2651.8	18.9
Downward Total	14057.1	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	14057.1	100.0

POLAR GRAPH



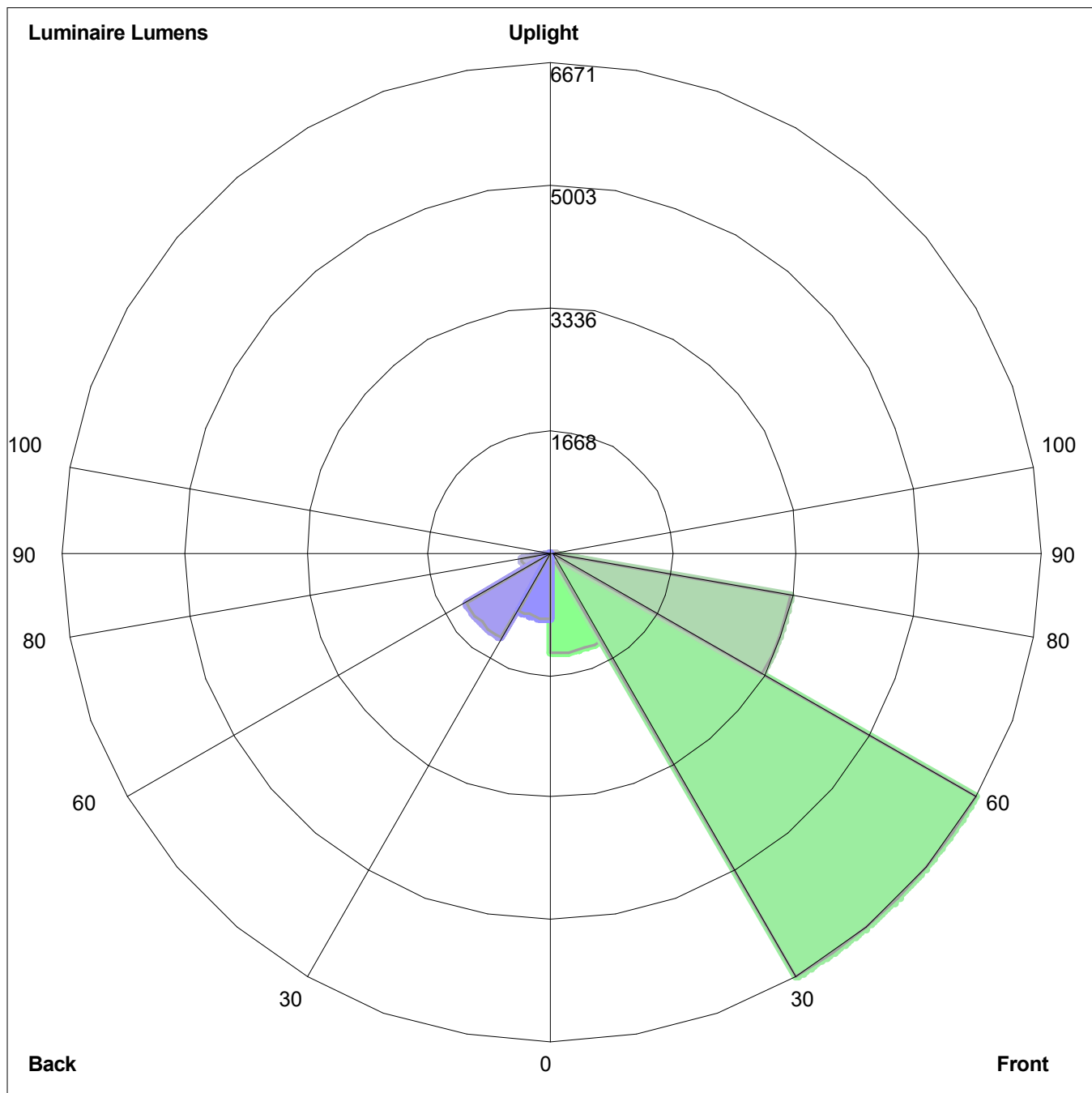
Maximum Candela = 12806 Located At Horizontal Angle = 75, Vertical Angle = 65  
# 1 - Vertical Plane Through Horizontal Angles (75 - 255) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low= 1369.0, Medium=6671.2, High= 3308.0, Very High=57.2  
Back: Low=901.0, Medium=1342.8, High=403.2, Very High=4.7  
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2