



IES ROAD REPORT

PHOTOMETRIC FILENAME : HLN-FT-LED-18L-40.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-8433
[TESTLAB]LSI INDUSTRIES, INC
[ISSUEDATE]01/09/17
[TESTDATE]01/09/17
[MANUFAC]LSI INDUSTRIES, INC
[LUMCAT]HLN-FT-LED-18L-40
[OTHER]TEST PROCEDURE: IESNA LM-79-08
[_ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18397
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	154.8
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	12722
Maximum Candela Angle	50H 70V
Maximum Candela (<90 Degrees Vertical)	12722
Maximum Candela Angle (<90 Degrees Vertical)	50H 70V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	3854 (20.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1115.2	N.A.	6.1
FM - Front-Medium (30-60)	5099.8	N.A.	27.7
FH - Front-High (60-80)	7081.2	N.A.	38.5
FVH - Front-Very High (80-90)	376.1	N.A.	2.0
BL - Back-Low (0-30)	1094.5	N.A.	5.9
BM - Back-Medium (30-60)	2507.2	N.A.	13.6
BH - Back-High (60-80)	1045.5	N.A.	5.7
BVH - Back-Very High (80-90)	77.9	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	18397.4	N.A.	100.0
BUG Rating	B3-U0-G3		

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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>50</u>	<u>55</u>	<u>65</u>	<u>75</u>
0.0	2487	2487	2487	2487	2487	2487	2487	2487	2487	2487
2.5	2462	2462	2459	2462	2468	2477	2472	2477	2484	2488
5.0	2410	2407	2408	2421	2438	2459	2457	2471	2484	2495
7.5	2334	2330	2341	2364	2398	2441	2448	2475	2510	2527
10.0	2288	2283	2298	2326	2370	2428	2441	2480	2540	2575
12.5	2284	2281	2298	2327	2372	2434	2450	2497	2575	2633
15.0	2298	2294	2313	2350	2400	2466	2486	2537	2625	2703
17.5	2333	2329	2349	2383	2442	2521	2544	2596	2686	2775
20.0	2394	2391	2412	2445	2505	2586	2608	2665	2754	2845
22.5	2483	2481	2502	2533	2584	2655	2674	2725	2812	2909
25.0	2602	2605	2615	2641	2677	2727	2739	2783	2862	2954
27.5	2743	2746	2748	2769	2782	2808	2808	2839	2905	2987
30.0	2902	2905	2905	2903	2898	2895	2884	2899	2940	3004
32.5	3065	3069	3061	3050	3030	2993	2969	2966	2973	3014
35.0	3227	3232	3222	3199	3165	3115	3084	3051	3015	3023
37.5	3394	3396	3397	3367	3320	3260	3223	3166	3074	3038
40.0	3576	3581	3581	3551	3502	3452	3403	3317	3168	3070
42.5	3800	3815	3806	3777	3729	3682	3632	3519	3309	3133
45.0	4129	4111	4103	4077	4037	3991	3934	3807	3502	3232
47.5	4542	4521	4517	4496	4463	4401	4332	4192	3784	3389
50.0	5078	5053	5078	5078	5041	4946	4860	4677	4147	3642
52.5	5686	5700	5800	5812	5788	5646	5581	5308	4631	3969
55.0	6264	6296	6500	6632	6654	6542	6434	6107	5247	4425
57.5	6649	6709	7045	7472	7598	7517	7433	7072	6042	5038
60.0	6816	6905	7361	8038	8511	8576	8630	8224	7041	5781
62.5	6884	6997	7522	8392	9234	9731	9930	9529	8164	6670
65.0	7068	7196	7741	8746	9939	10984	11231	10831	9317	7156
67.5	7341	7481	8051	9313	10909	12026	12321	11785	9727	7057
70.0	6928	7144	8080	9983	11889	12687	12722	11857	8968	5712
72.5	6022	6169	7163	9735	11915	12419	12237	10562	6524	3146
75.0	4122	4255	5333	7545	10035	10593	9625	7429	3681	1403
77.5	1878	2008	3006	4647	6800	7098	6039	4515	1759	791
80.0	845	946	1480	2434	3352	3854	3313	2367	930	481
82.5	454	528	920	1407	1716	2030	1677	1172	535	286
85.0	317	360	628	962	1134	901	766	482	303	181
87.5	227	272	460	671	775	362	221	140	133	100
90.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>85</u>	<u>90</u>	<u>95</u>	<u>105</u>	<u>115</u>	<u>125</u>	<u>135</u>	<u>145</u>	<u>155</u>	<u>165</u>
0.0	2487	2487	2487	2487	2487	2487	2487	2487	2487	2487
2.5	2502	2487	2498	2512	2513	2517	2514	2510	2508	2503
5.0	2515	2506	2519	2535	2528	2521	2511	2502	2501	2497
7.5	2547	2539	2556	2557	2532	2523	2516	2508	2505	2501
10.0	2597	2587	2600	2579	2543	2530	2520	2519	2530	2531
12.5	2660	2646	2653	2612	2562	2540	2541	2548	2558	2561
15.0	2735	2715	2715	2647	2583	2560	2561	2564	2573	2573
17.5	2817	2790	2781	2681	2606	2582	2572	2567	2571	2570
20.0	2900	2867	2847	2717	2629	2593	2578	2562	2563	2560
22.5	2971	2939	2907	2746	2644	2601	2574	2553	2546	2542
25.0	3029	3000	2957	2766	2652	2604	2563	2534	2523	2522
27.5	3066	3043	2992	2773	2651	2594	2544	2510	2497	2494

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CANDELA TABULATION - (Cont.)

30.0	3081	3059	3005	2764	2636	2573	2517	2478	2463	2459
32.5	3076	3053	2997	2737	2608	2544	2483	2441	2419	2418
35.0	3056	3025	2970	2692	2566	2503	2442	2390	2368	2371
37.5	3031	2986	2928	2635	2515	2453	2390	2335	2312	2316
40.0	3009	2947	2880	2564	2452	2391	2325	2269	2254	2371
42.5	3000	2916	2826	2478	2368	2317	2241	2187	2300	2289
45.0	3021	2906	2785	2389	2275	2224	2144	2104	2285	2125
47.5	3083	2930	2765	2299	2160	2121	2037	2086	2145	1959
50.0	3211	2999	2783	2205	2036	2000	1923	2053	1977	1824
52.5	3412	3125	2843	2125	1899	1874	1806	1961	1827	1709
55.0	3733	3336	2979	2075	1765	1744	1695	1817	1673	1592
57.5	4160	3635	3173	2066	1636	1617	1602	1649	1527	1441
60.0	4649	4010	3389	2072	1525	1501	1503	1463	1350	1309
62.5	5183	4226	3471	2043	1417	1384	1382	1274	1196	1206
65.0	5288	4058	3234	1916	1287	1254	1233	1118	1045	1119
67.5	4780	3417	2551	1652	1124	1101	1106	987	901	1060
70.0	3289	2278	1543	1247	936	934	997	899	773	1019
72.5	1507	1121	829	824	726	768	883	844	659	933
75.0	728	594	470	529	508	560	709	704	487	679
77.5	443	328	282	329	335	382	489	422	302	497
80.0	259	214	190	228	248	277	270	287	225	329
82.5	171	146	132	162	189	159	190	213	149	213
85.0	112	93	85	117	104	102	120	119	80	131
87.5	58	46	45	56	50	47	67	57	35	62
90.0	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles
Angles

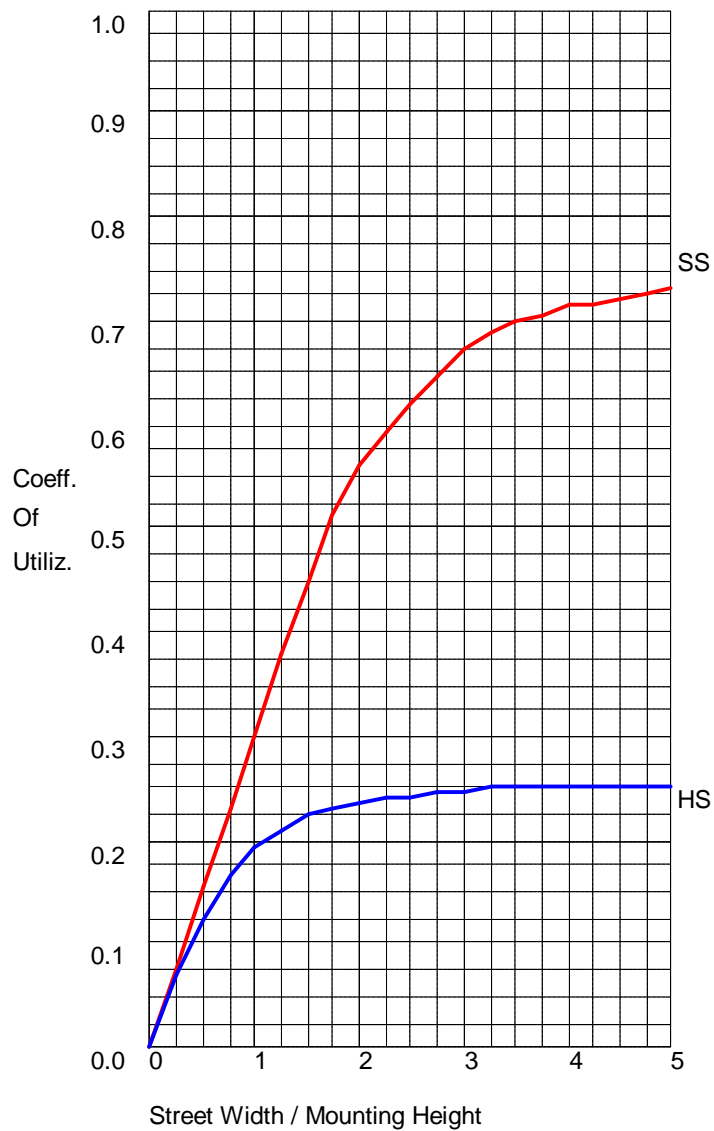
	175	180
0.0	2487	2487
2.5	2500	2496
5.0	2496	2488
7.5	2498	2492
10.0	2534	2525
12.5	2564	2557
15.0	2575	2570
17.5	2574	2569
20.0	2565	2556
22.5	2546	2539
25.0	2524	2520
27.5	2497	2492
30.0	2463	2460
32.5	2426	2422
35.0	2376	2371
37.5	2338	2339
40.0	2347	2343
42.5	2190	2181
45.0	2016	2005
47.5	1880	1862
50.0	1763	1744
52.5	1645	1631
55.0	1520	1502
57.5	1348	1330
60.0	1212	1187
62.5	1091	1059
65.0	986	947

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CANDELA TABULATION - (Cont.)

67.5	921	866
70.0	897	820
72.5	859	762
75.0	721	618
77.5	711	636
80.0	628	613
82.5	503	552
85.0	363	431
87.5	226	240
90.0	0	0

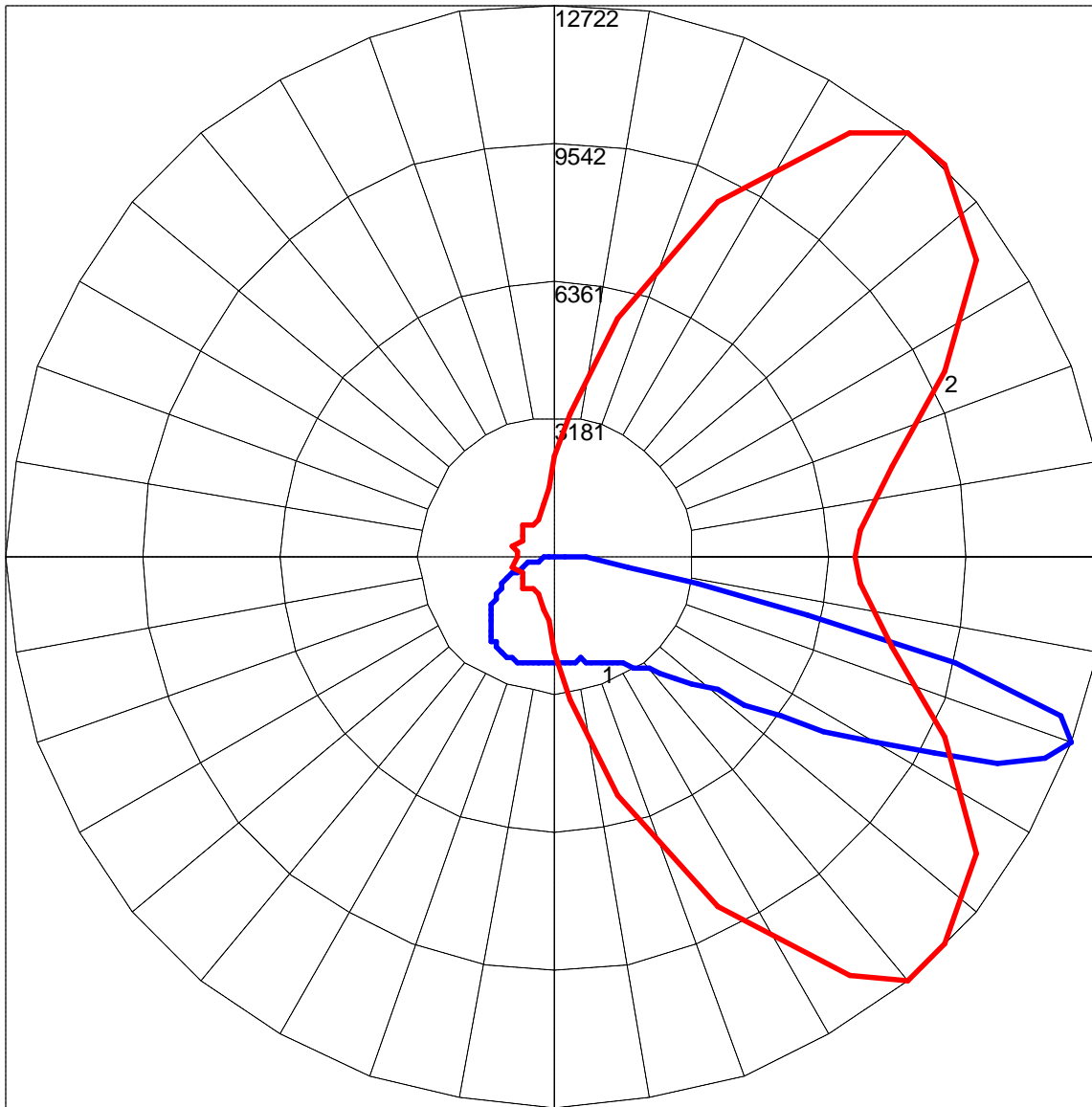
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

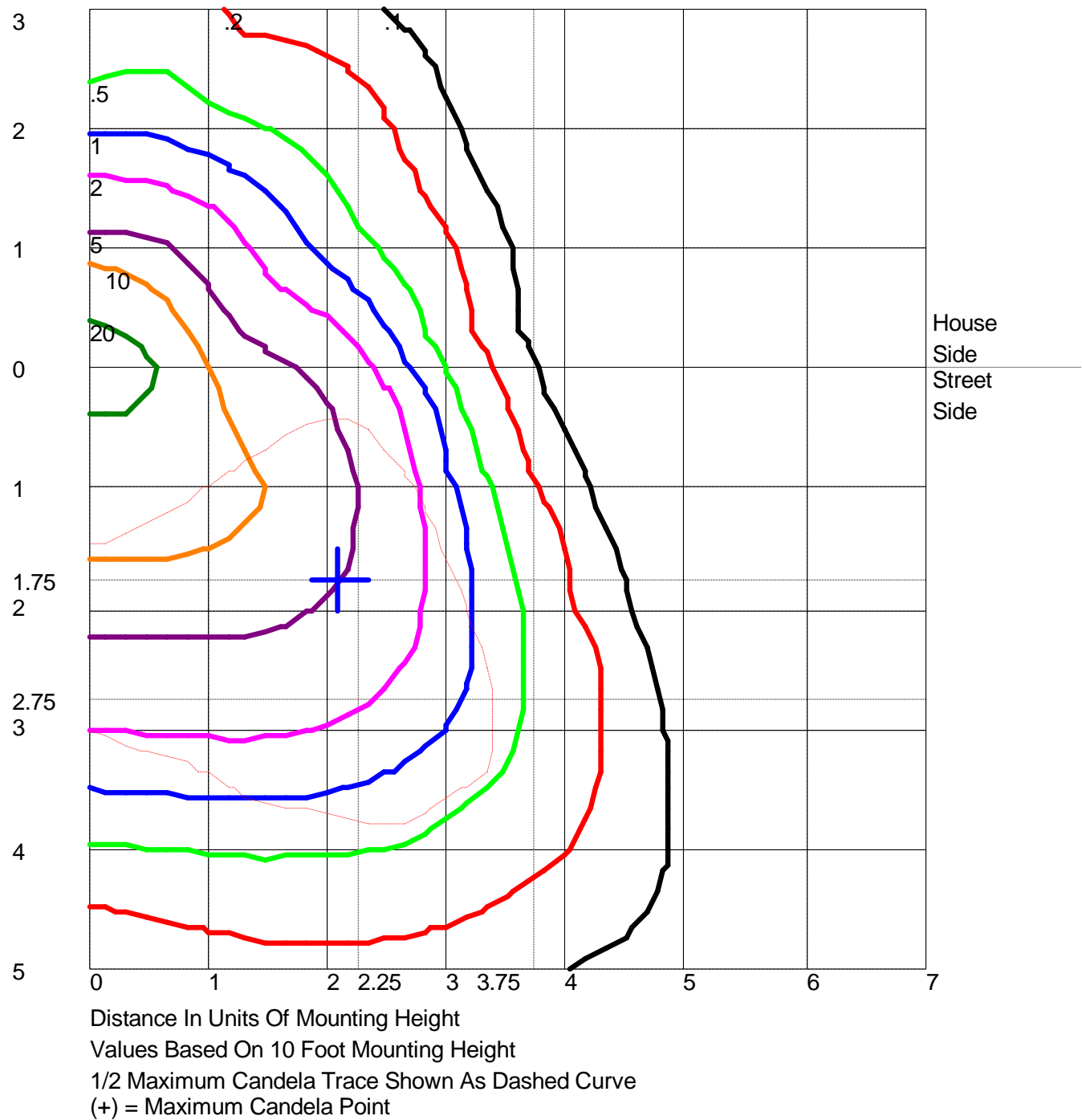
	Lumens	Percent Of Luminaire
Downward Street Side	13672.3	74.3
Downward House Side	4725.1	25.7
Downward Total	18397.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	18397.4	100.0

POLAR GRAPH

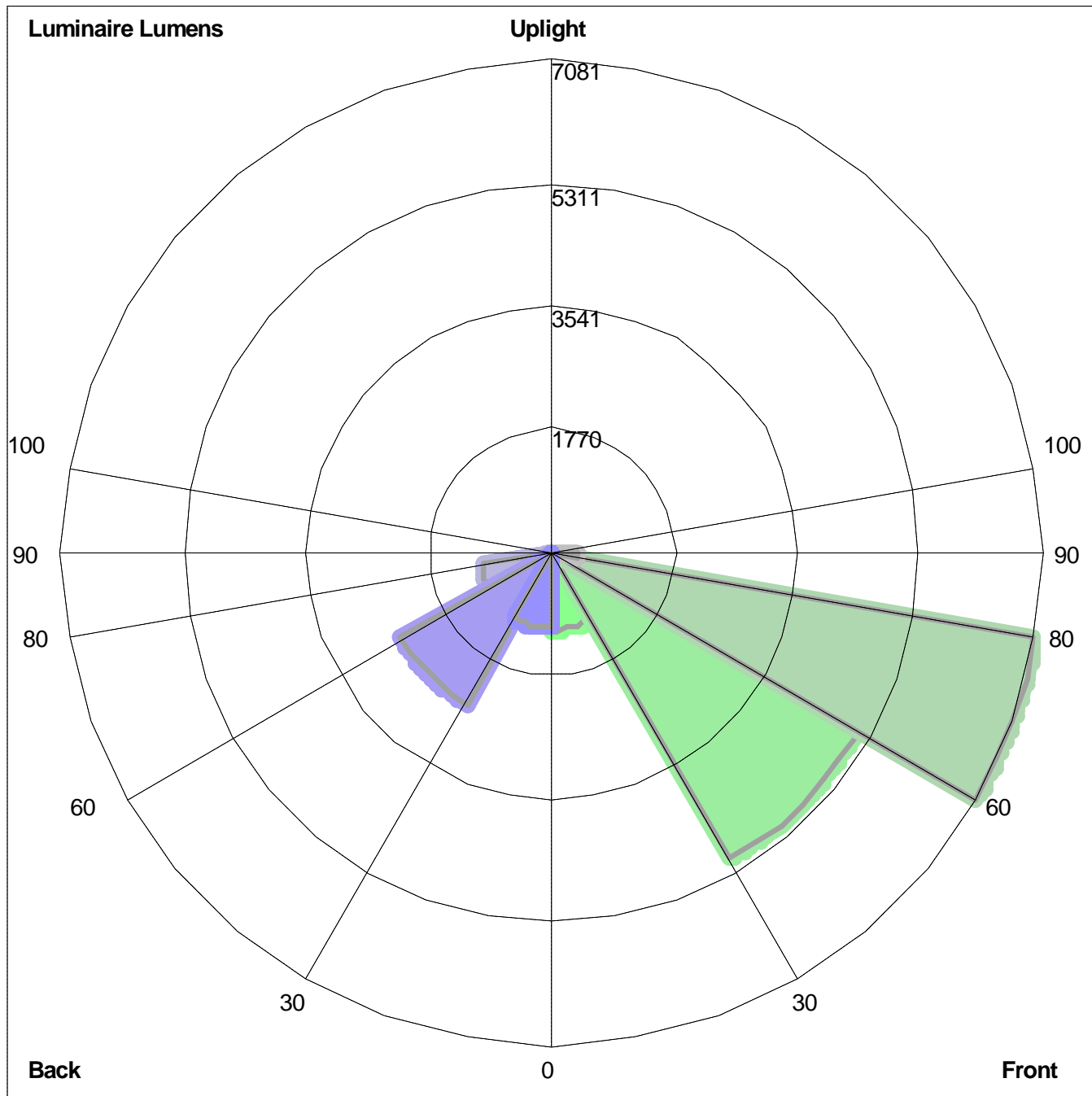


Maximum Candela = 12722 Located At Horizontal Angle = 50, Vertical Angle = 70
1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (70) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1115.2, Medium=5099.8, High=7081.2, Very High=376.1
Back: Low=1094.5, Medium=2507.2, High=1045.5, Very High=77.9
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3