



IES ROAD REPORT

PHOTOMETRIC FILENAME : HLN-3-LED-27L-50.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-8463
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]01/17/17
[TEST DATE]01/16/17
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMEN CATEGORY]HLN-3-LED-27L-50
[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 III
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	27572
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	236.6
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	24027
Maximum Candela Angle	57.5H 70V
Maximum Candela (<90 Degrees Vertical)	24027
Maximum Candela Angle (<90 Degrees Vertical)	57.5H 70V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	2443 (8.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT
PHOTOMETRIC FILENAME : HLN-3-LED-27L-50.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1230.4	N.A.	4.5
FM - Front-Medium (30-60)	10128.4	N.A.	36.7
FH - Front-High (60-80)	9602.8	N.A.	34.8
FVH - Front-Very High (80-90)	307.4	N.A.	1.1
BL - Back-Low (0-30)	1284.0	N.A.	4.7
BM - Back-Medium (30-60)	3491.9	N.A.	12.7
BH - Back-High (60-80)	1403.3	N.A.	5.1
BVH - Back-Very High (80-90)	124.2	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	27572.4	N.A.	100.0
BUG Rating	B3-U0-G4		

IES ROAD REPORT
PHOTOMETRIC FILENAME : HLN-3-LED-27L-50.IES

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>55.0</u>	<u>57.5</u>	<u>65.0</u>	<u>75.0</u>
0.0	2505	2505	2505	2505	2505	2505	2505	2505	2505	2505
2.5	2457	2446	2449	2459	2466	2467	2476	2468	2491	2499
5.0	2367	2353	2362	2384	2401	2414	2434	2429	2461	2483
7.5	2239	2227	2245	2277	2312	2349	2393	2396	2440	2474
10.0	2133	2125	2145	2185	2232	2285	2348	2359	2426	2478
12.5	2072	2065	2087	2129	2189	2255	2331	2346	2423	2501
15.0	2084	2081	2100	2142	2211	2286	2371	2388	2465	2550
17.5	2209	2210	2225	2262	2327	2399	2485	2504	2587	2646
20.0	2501	2474	2482	2509	2567	2613	2686	2703	2773	2802
22.5	2838	2826	2826	2879	2912	2930	2989	2995	3024	3003
25.0	3233	3218	3213	3293	3345	3341	3353	3348	3339	3249
27.5	3666	3655	3672	3773	3846	3868	3801	3801	3704	3536
30.0	4165	4161	4210	4312	4404	4431	4307	4287	4113	3847
32.5	4666	4673	4778	4890	5007	5045	4867	4827	4556	4176
35.0	5165	5181	5324	5489	5649	5700	5472	5408	5026	4517
37.5	5708	5734	5912	6113	6326	6438	6109	6017	5510	4848
40.0	6323	6394	6578	6824	7069	7192	6805	6647	5999	5174
42.5	7050	7138	7355	7689	7921	8025	7496	7288	6491	5473
45.0	7933	8041	8296	8674	9013	8969	8224	7955	7040	5776
47.5	8974	9115	9408	9939	10192	10032	9027	8684	7570	6116
50.0	10513	10647	10830	11394	11595	11217	9945	9493	8171	6557
52.5	12463	12661	12808	13230	13206	12565	10919	10441	8890	7120
55.0	14012	14214	14541	15452	15180	13999	12065	11573	9782	7965
57.5	15487	15703	16466	17220	17688	16305	13468	13001	11015	9239
60.0	15525	15689	16707	18226	19463	18695	15547	14996	12815	10855
62.5	12853	12970	14169	17138	20038	20652	18798	17895	14820	12757
65.0	7273	7135	9007	13046	18320	22023	21614	20846	17706	14247
67.5	3244	3182	4108	6996	13750	20875	23968	23552	20314	14927
70.0	1643	1722	2037	3212	7683	17169	23982	24027	21308	13447
72.5	1029	1062	1316	1959	3965	10977	19504	19650	17429	8279
75.0	700	727	945	1460	2669	5789	12240	12298	9436	3213
77.5	511	528	681	1157	2070	3195	5308	5149	3649	1379
80.0	375	381	517	944	1682	2136	2443	2393	1838	795
82.5	260	272	400	694	1310	1414	1313	1329	1137	502
85.0	197	206	300	543	867	894	702	715	603	328
87.5	162	165	213	413	572	430	369	347	307	220
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	2505	2505	2505	2505	2505	2505	2505	2505	2505	2505
2.5	2513	2519	2527	2536	2544	2545	2555	2566	2561	2560
5.0	2512	2526	2546	2573	2596	2613	2640	2655	2659	2666
7.5	2516	2539	2567	2611	2651	2681	2737	2784	2811	2828
10.0	2530	2558	2593	2652	2703	2778	2861	2913	2940	2952
12.5	2559	2588	2627	2692	2772	2878	2960	3012	3038	3055
15.0	2611	2632	2671	2734	2844	2961	3042	3098	3128	3141
17.5	2696	2706	2731	2779	2900	3024	3111	3168	3195	3204
20.0	2813	2806	2808	2828	2944	3083	3171	3221	3241	3247
22.5	2957	2925	2894	2874	2975	3132	3215	3263	3277	3279
25.0	3119	3051	2991	2902	2989	3166	3245	3291	3307	3308
27.5	3307	3200	3084	2917	2991	3185	3262	3311	3340	3350

IES ROAD REPORT
PHOTOMETRIC FILENAME : HLN-3-LED-27L-50.IES

CANDELA TABULATION - (Cont.)

30.0	3503	3327	3169	2918	2977	3187	3262	3329	3403	3439
32.5	3693	3447	3236	2895	2944	3174	3248	3373	3527	3640
35.0	3879	3556	3278	2851	2892	3139	3234	3429	3677	3886
37.5	4057	3647	3300	2789	2820	3093	3207	3417	3805	4124
40.0	4225	3728	3305	2702	2729	3027	3112	3363	4002	4271
42.5	4395	3806	3296	2608	2624	2918	2984	3317	4273	3932
45.0	4580	3899	3295	2514	2485	2786	2858	3278	4495	3541
47.5	4798	4026	3325	2426	2342	2642	2744	3242	4445	3290
50.0	5081	4234	3415	2368	2209	2510	2632	3204	4247	3140
52.5	5471	4540	3593	2355	2090	2381	2522	3025	3954	3015
55.0	6091	5010	3858	2376	1980	2253	2398	2774	3600	2890
57.5	6827	5565	4135	2406	1875	2118	2260	2507	3192	2710
60.0	7849	6246	4207	2369	1764	1960	2119	2212	2713	2590
62.5	9323	6710	3766	2154	1623	1758	1929	1935	2228	2448
65.0	10764	6821	2940	1772	1397	1529	1654	1687	1777	2285
67.5	10823	6120	2117	1343	1152	1243	1352	1440	1436	2065
70.0	8025	4328	1348	958	922	976	1065	1221	1201	1750
72.5	3695	1936	690	682	731	787	863	1041	1007	1372
75.0	1289	788	442	510	591	655	715	822	782	984
77.5	668	471	328	410	498	549	585	564	486	649
80.0	414	312	265	336	415	371	369	425	365	463
82.5	271	214	210	290	314	261	272	319	221	336
85.0	179	144	179	261	196	192	203	163	132	215
87.5	117	88	155	181	137	123	105	113	89	119
90.0	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles

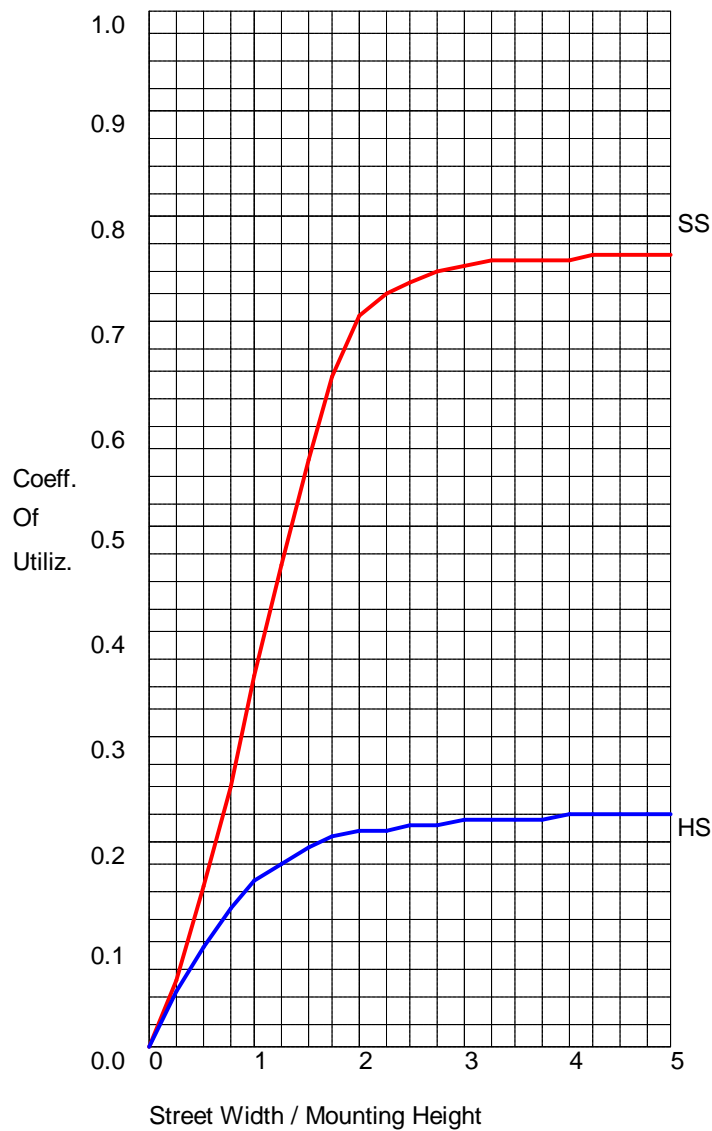
	175.0	180.0
0.0	2505	2505
2.5	2547	2542
5.0	2655	2653
7.5	2822	2817
10.0	2953	2940
12.5	3056	3044
15.0	3141	3137
17.5	3201	3192
20.0	3239	3228
22.5	3269	3258
25.0	3297	3282
27.5	3343	3326
30.0	3440	3424
32.5	3686	3674
35.0	3970	3950
37.5	4039	3973
40.0	3738	3626
42.5	3190	3112
45.0	2876	2789
47.5	2698	2611
50.0	2565	2478
52.5	2431	2334
55.0	2287	2175
57.5	2104	1966
60.0	1988	1826
62.5	1889	1710
65.0	1861	1658

IES ROAD REPORT
PHOTOMETRIC FILENAME : HLN-3-LED-27L-50.IES

CANDELA TABULATION - (Cont.)

67.5	1907	1710
70.0	1941	1840
72.5	1694	1755
75.0	1450	1696
77.5	1219	1463
80.0	940	1091
82.5	660	707
85.0	456	481
87.5	301	373
90.0	0	0

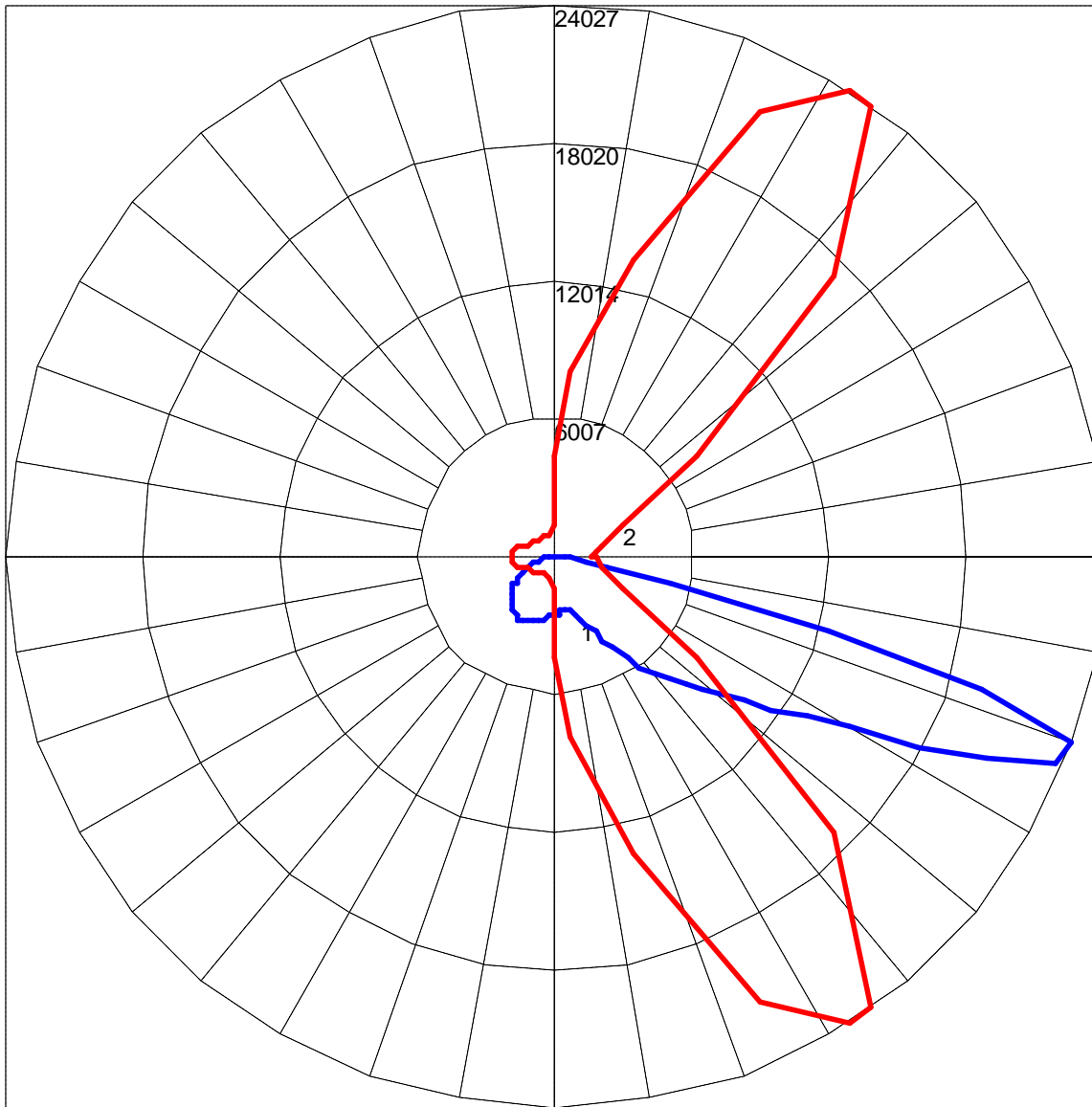
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

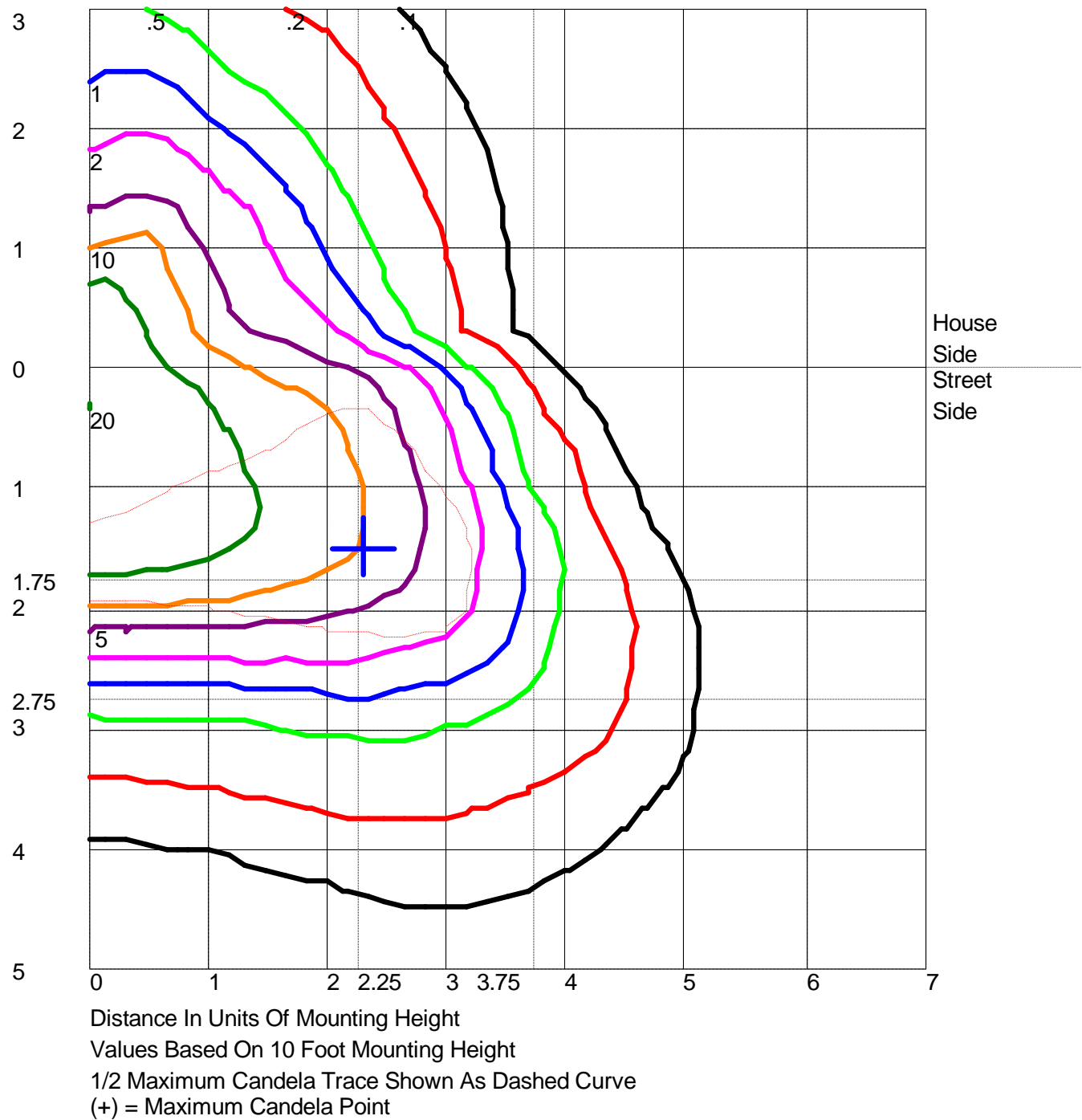
	Lumens	Percent Of Luminaire
Downward Street Side	21269.0	77.1
Downward House Side	6303.3	22.9
Downward Total	27572.3	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	27572.3	100.0

POLAR GRAPH

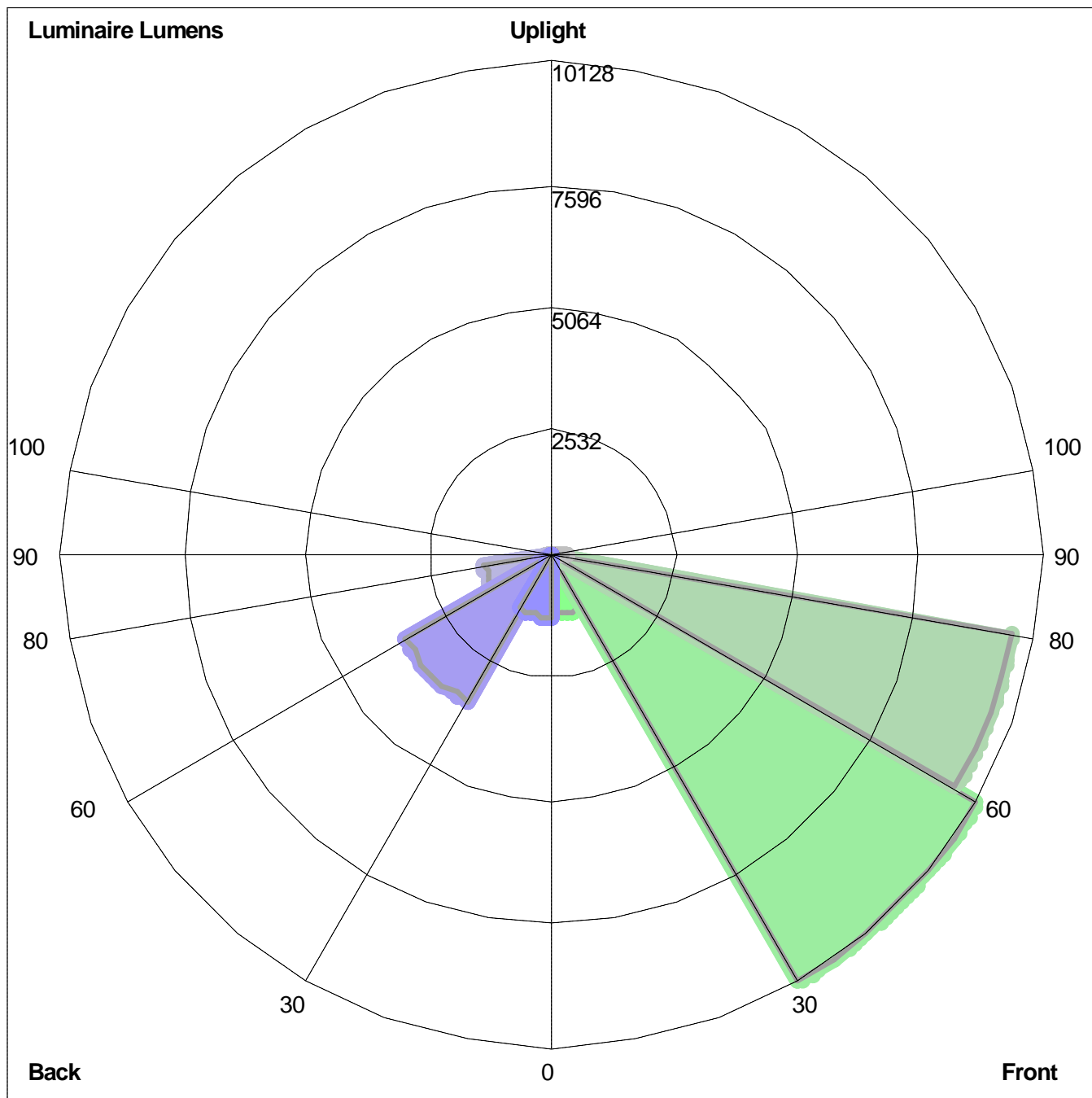


Maximum Candela = 24027 Located At Horizontal Angle = 57.5, Vertical Angle = 70
1 - Vertical Plane Through Horizontal Angles (57.5 - 237.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (70) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1230.4, Medium=10128.4, High=9602.8, Very High=307.4
Back: Low= 1284.0, Medium=3491.9, High=1403.3, Very High=124.2
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G4