



## IES ROAD REPORT

PHOTOMETRIC FILENAME : HLN-2-LED-27L-40.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST]LED-8438  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUEDATE]01/10/17  
[TESTDATE]01/10/17  
[MANUFAC]LSI INDUSTRIES, INC  
[LUMCAT]HLN-2-LED-27L-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 II
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	27038
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	238.2
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	20439
Maximum Candela Angle	85H 67.5V
Maximum Candela (<90 Degrees Vertical)	20439
Maximum Candela Angle (<90 Degrees Vertical)	85H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1060 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : HLN-2-LED-27L-40.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1963.5	N.A.	7.3
FM - Front-Medium (30-60)	9976.5	N.A.	36.9
FH - Front-High (60-80)	5028.6	N.A.	18.6
FVH - Front-Very High (80-90)	92.5	N.A.	0.3
BL - Back-Low (0-30)	1593.4	N.A.	5.9
BM - Back-Medium (30-60)	5788.4	N.A.	21.4
BH - Back-High (60-80)	2510.2	N.A.	9.3
BVH - Back-Very High (80-90)	85.4	N.A.	0.3
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	27038.5	N.A.	100.0
BUG Rating	B4-U0-G4		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : HLN-2-LED-27L-40.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>85.0</b></u>
<b>0.0</b>	3917	3917	3917	3917	3917	3917	3917	3917	3917	3917
<b>2.5</b>	3968	3969	3963	3964	3961	3958	3945	3931	3927	3919
<b>5.0</b>	4059	4058	4058	4055	4048	4043	4021	4003	3987	3969
<b>7.5</b>	4143	4142	4144	4148	4148	4144	4121	4094	4075	4045
<b>10.0</b>	4182	4185	4195	4214	4234	4251	4248	4220	4197	4159
<b>12.5</b>	4157	4160	4182	4220	4276	4339	4383	4389	4363	4315
<b>15.0</b>	4100	4100	4135	4196	4283	4387	4502	4573	4565	4506
<b>17.5</b>	4073	4078	4122	4198	4298	4425	4595	4767	4797	4727
<b>20.0</b>	4135	4137	4175	4250	4353	4484	4668	4931	5050	4973
<b>22.5</b>	4264	4264	4300	4367	4457	4581	4748	5071	5317	5252
<b>25.0</b>	4465	4465	4489	4543	4616	4723	4863	5192	5613	5570
<b>27.5</b>	4758	4755	4755	4782	4823	4916	5025	5322	5890	5941
<b>30.0</b>	5159	5149	5119	5098	5096	5147	5229	5488	6157	6319
<b>32.5</b>	5736	5716	5646	5547	5461	5437	5486	5692	6411	6717
<b>35.0</b>	6542	6509	6399	6216	5975	5819	5809	5940	6651	7158
<b>37.5</b>	7620	7578	7427	7206	6730	6398	6232	6245	6900	7596
<b>40.0</b>	8727	8689	8593	8333	7773	7202	6845	6621	7149	8045
<b>42.5</b>	9460	9460	9390	9292	8918	8293	7664	7086	7405	8494
<b>45.0</b>	9636	9633	9664	9743	9752	9502	8806	7755	7679	8983
<b>47.5</b>	9438	9448	9544	9782	10085	10473	10226	8649	8018	9548
<b>50.0</b>	8974	9004	9146	9504	10063	10956	11842	9924	8470	10234
<b>52.5</b>	8254	8299	8505	8907	9719	11029	13047	11593	9051	11049
<b>55.0</b>	7234	7275	7490	7932	8956	10649	13768	13456	9903	12084
<b>57.5</b>	5805	5843	6011	6418	7559	9669	14039	15408	11057	13452
<b>60.0</b>	4045	4080	4139	4436	5534	7825	13693	16929	12628	14840
<b>62.5</b>	2474	2510	2474	2541	3392	5355	12166	17847	14741	16960
<b>65.0</b>	1511	1513	1562	1536	1871	2987	8769	17777	16458	19005
<b>67.5</b>	957	948	1002	1019	1176	1574	4631	16086	16730	20439
<b>70.0</b>	573	604	654	713	829	992	2045	12585	14579	18616
<b>72.5</b>	318	340	351	450	602	740	1190	7113	10924	11433
<b>75.0</b>	207	224	213	282	378	564	829	2923	5886	3612
<b>77.5</b>	163	181	168	206	262	373	573	1437	2349	1124
<b>80.0</b>	142	156	136	156	198	265	340	831	1060	598
<b>82.5</b>	121	126	105	108	137	198	230	442	588	337
<b>85.0</b>	88	89	75	73	80	123	158	211	322	206
<b>87.5</b>	46	48	43	42	46	67	89	101	144	115
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>87.5</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>	3917	3917	3917	3917	3917	3917	3917	3917	3917	3917
<b>2.5</b>	3914	3916	3914	3915	3918	3909	3904	3903	3902	3893
<b>5.0</b>	3961	3959	3953	3941	3926	3903	3882	3869	3858	3842
<b>7.5</b>	4037	4027	4015	3987	3955	3914	3881	3850	3824	3798
<b>10.0</b>	4149	4132	4113	4064	4007	3941	3885	3826	3759	3696
<b>12.5</b>	4300	4276	4257	4172	4086	3981	3863	3717	3577	3465
<b>15.0</b>	4486	4461	4424	4308	4184	4012	3784	3507	3311	3166
<b>17.5</b>	4701	4664	4627	4465	4286	4005	3630	3266	3046	2945
<b>20.0</b>	4941	4907	4843	4645	4383	3960	3430	3041	2892	2864
<b>22.5</b>	5231	5169	5090	4854	4479	3871	3201	2894	2869	2914
<b>25.0</b>	5544	5471	5383	5091	4571	3713	3016	2880	2944	3019
<b>27.5</b>	5897	5812	5718	5364	4649	3505	2960	2955	3061	3159

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : HLN-2-LED-27L-40.IES**

**CANDELA TABULATION - (Cont.)**

30.0	6280	6195	6102	5668	4698	3332	3017	3077	3228	3379
32.5	6693	6610	6524	6017	4672	3293	3141	3266	3497	3722
35.0	7130	7058	6975	6347	4586	3378	3338	3544	3888	4189
37.5	7592	7542	7463	6674	4489	3564	3636	3925	4357	4689
40.0	8096	8056	7978	6976	4467	3835	3983	4356	4796	5123
42.5	8573	8603	8540	7224	4555	4156	4321	4689	5094	5366
45.0	9097	9163	9098	7413	4734	4447	4559	4847	5133	5292
47.5	9695	9808	9750	7526	4928	4622	4633	4732	4802	4816
50.0	10471	10592	10426	7534	5086	4650	4475	4326	4231	4166
52.5	11361	11459	11175	7477	5166	4499	4110	3783	3559	3419
55.0	12443	12498	12033	7372	5150	4220	3660	3190	2895	2779
57.5	13684	13679	12945	7232	5090	3882	3159	2660	2404	2343
60.0	15114	15146	13805	7097	5007	3576	2686	2348	2077	2016
62.5	17157	16933	14741	6968	4918	3314	2376	2148	1765	1692
65.0	19053	18334	14940	6536	4673	2998	2134	1926	1464	1356
67.5	19826	18342	13385	5465	4053	2521	1800	1599	1059	881
70.0	17192	15085	9375	3675	2921	1800	1330	1151	674	593
72.5	9853	8221	4482	2007	1708	1179	913	699	465	411
75.0	3068	2648	1811	1098	929	744	567	434	332	295
77.5	1067	952	843	640	582	479	356	307	268	241
80.0	534	483	469	460	437	278	236	224	320	269
82.5	300	286	265	368	236	181	159	177	385	315
85.0	186	164	163	242	131	110	93	99	231	86
87.5	105	89	91	76	66	48	31	40	139	33
90.0	0	0	0	0	0	0	0	0	0	0

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

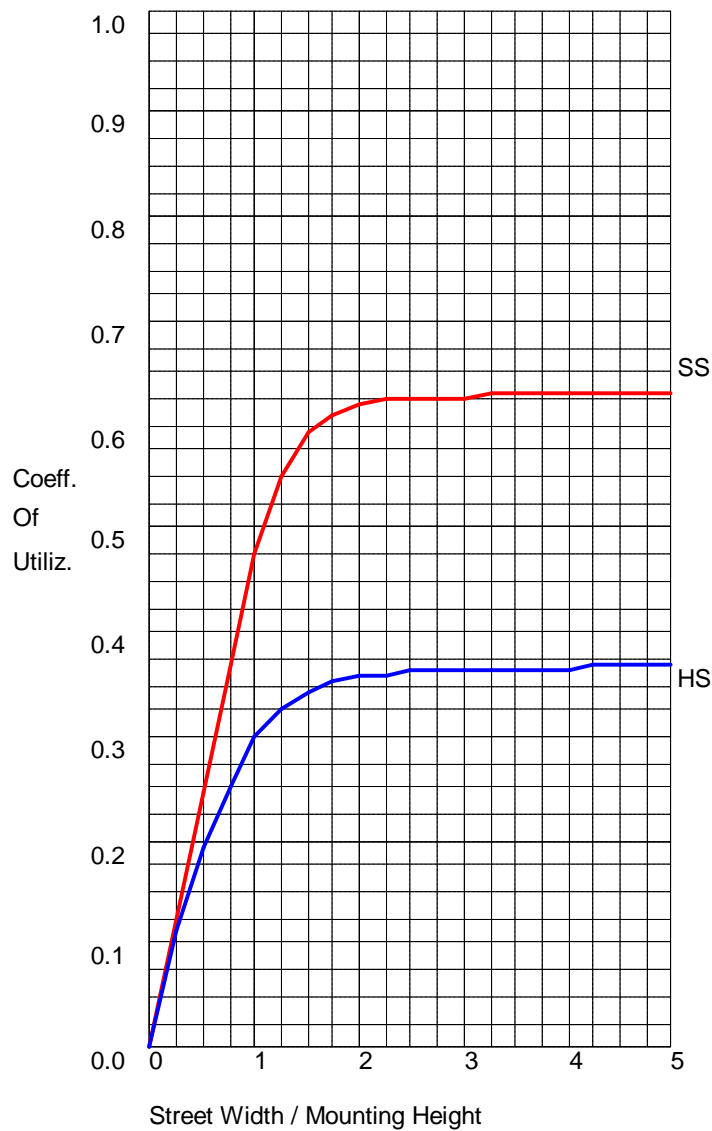
	<b>175.0</b>	<b>180.0</b>
0.0	3917	3917
2.5	3881	3891
5.0	3829	3838
7.5	3779	3787
10.0	3656	3660
12.5	3399	3400
15.0	3110	3109
17.5	2909	2912
20.0	2862	2868
22.5	2945	2947
25.0	3061	3062
27.5	3226	3247
30.0	3475	3509
32.5	3863	3908
35.0	4381	4405
37.5	4874	4894
40.0	5264	5280
42.5	5461	5470
45.0	5306	5305
47.5	4807	4799
50.0	4102	4124
52.5	3336	3354
55.0	2697	2703
57.5	2277	2245
60.0	1943	1920
62.5	1604	1575
65.0	1231	1192

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : HLN-2-LED-27L-40.IES**

**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	806	768
<b>70.0</b>	576	549
<b>72.5</b>	410	409
<b>75.0</b>	301	311
<b>77.5</b>	254	256
<b>80.0</b>	314	320
<b>82.5</b>	304	296
<b>85.0</b>	55	51
<b>87.5</b>	19	19
<b>90.0</b>	0	0

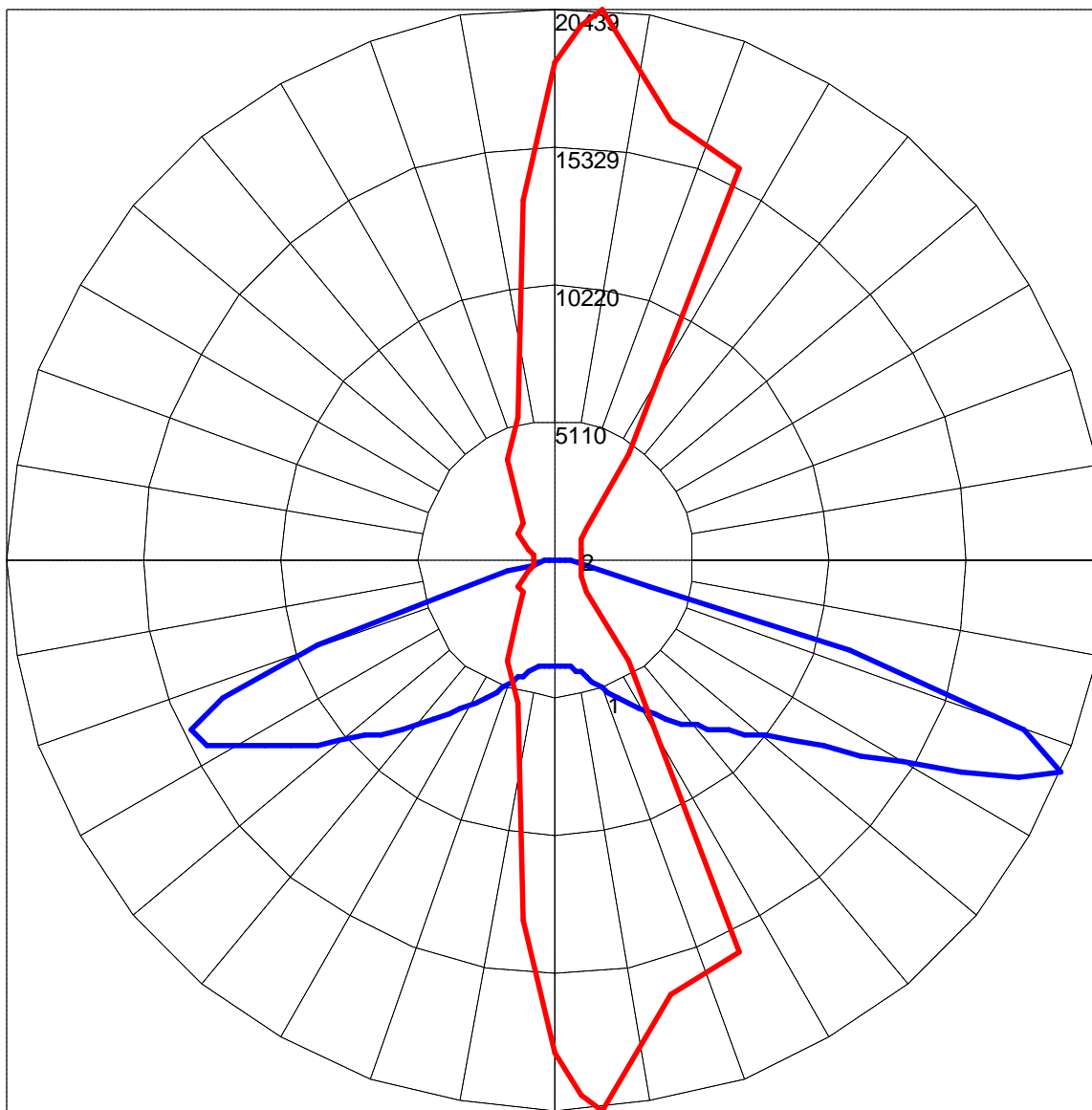
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

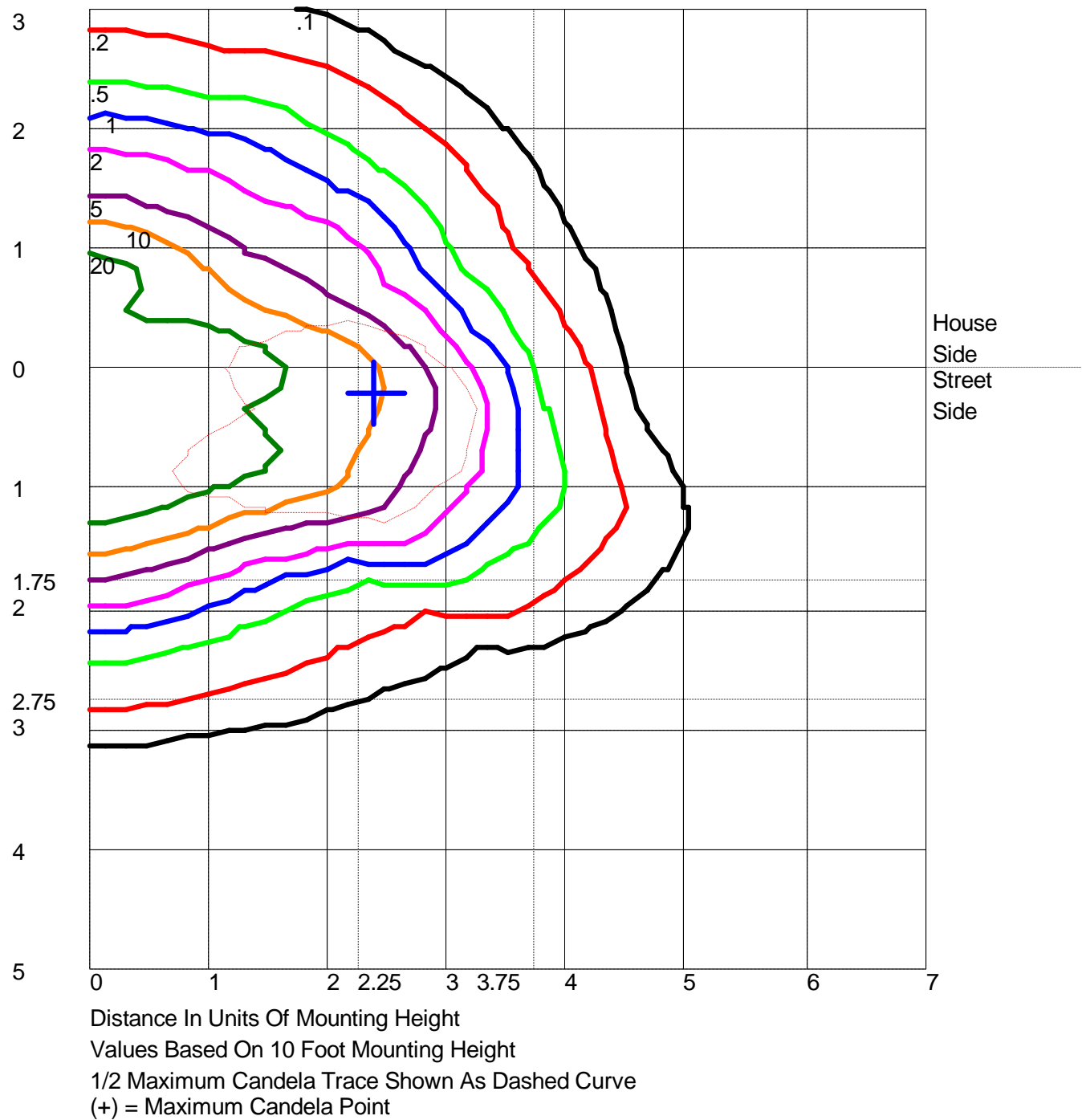
	Lumens	Percent Of Luminaire
Downward Street Side	17061.0	63.1
Downward House Side	9977.4	36.9
Downward Total	27038.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	27038.4	100.0

POLAR GRAPH



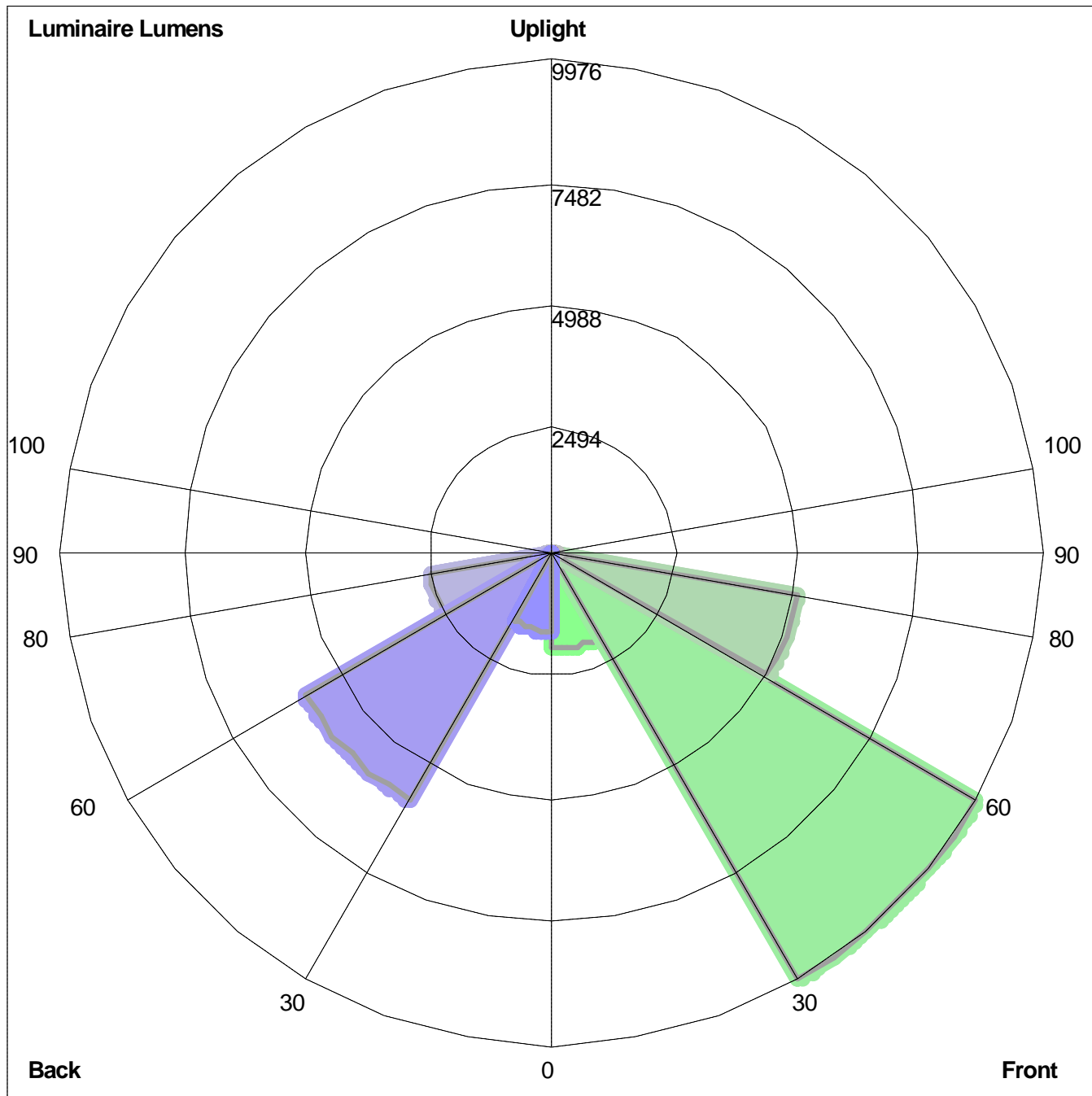
Maximum Candela = 20439 Located At Horizontal Angle = 85, Vertical Angle = 67.5  
# 1 - Vertical Plane Through Horizontal Angles (85 - 265) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=1963.5, Medium=9976.5, High=5028.6, Very High=92.5  
Back: Low=1593.4, Medium=5788.4, High=2510.2, Very High=85.4  
Uplight: Low=0.0, High=0.0

BUG Rating : B4-U0-G4