



## IES ROAD REPORT

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

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST]LED-8461  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUEDATE]01/17/17  
[TESTDATE]01/16/17  
[MANUFAC]LSI INDUSTRIES, INC  
[LUMCAT]HLN-FT-LED-27L-50  
[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	27325
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	237
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	16000
Maximum Candela Angle	47.5H 70V
Maximum Candela (<90 Degrees Vertical)	16000
Maximum Candela Angle (<90 Degrees Vertical)	47.5H 70V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	7567 (27.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1721.9	N.A.	6.3
FM - Front-Medium (30-60)	7883.9	N.A.	28.9
FH - Front-High (60-80)	9764.8	N.A.	35.7
FVH - Front-Very High (80-90)	690.0	N.A.	2.5
BL - Back-Low (0-30)	1727.8	N.A.	6.3
BM - Back-Medium (30-60)	3922.3	N.A.	14.4
BH - Back-High (60-80)	1504.2	N.A.	5.5
BVH - Back-Very High (80-90)	110.0	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	27324.9	N.A.	100.0
BUG Rating	B3-U0-G4		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : HLN-FT-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>47.5</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	3921	3921	3921	3921	3921	3921	3921	3921	3921	3921
2.5	3931	3923	3918	3933	3931	3944	3935	3949	3948	3955
5.0	3915	3904	3903	3923	3929	3950	3943	3963	3970	3985
7.5	3832	3818	3825	3864	3906	3957	3957	4000	4018	4041
10.0	3733	3721	3735	3787	3847	3928	3940	4011	4074	4108
12.5	3660	3656	3678	3739	3808	3900	3915	4011	4113	4188
15.0	3627	3622	3648	3717	3796	3899	3916	4017	4145	4265
17.5	3640	3630	3660	3724	3808	3915	3936	4035	4175	4326
20.0	3702	3692	3726	3783	3849	3952	3973	4067	4207	4375
22.5	3798	3785	3825	3884	3940	4010	4032	4116	4247	4416
25.0	3937	3922	3959	4015	4060	4115	4123	4179	4288	4450
27.5	4137	4114	4146	4187	4225	4251	4250	4266	4336	4477
30.0	4391	4365	4399	4409	4418	4426	4418	4383	4398	4503
32.5	4681	4670	4687	4693	4660	4643	4629	4541	4477	4528
35.0	4984	4981	5014	5003	4953	4913	4891	4747	4583	4555
37.5	5318	5338	5354	5339	5291	5232	5207	5033	4736	4597
40.0	5689	5720	5737	5750	5683	5609	5577	5395	4945	4687
42.5	6161	6158	6175	6205	6151	6048	6014	5809	5251	4819
45.0	6652	6644	6688	6739	6710	6578	6540	6322	5625	5020
47.5	7214	7208	7274	7374	7373	7224	7254	6945	6101	5312
50.0	7882	7874	7987	8133	8159	8052	8039	7688	6670	5678
52.5	8539	8547	8757	9039	9129	9009	8953	8551	7362	6163
55.0	9094	9130	9436	9966	10232	10071	9994	9563	8195	6828
57.5	9504	9574	10068	10796	11283	11242	11161	10743	9217	7538
60.0	9674	9743	10369	11455	12305	12456	12404	12126	10329	8294
62.5	9711	9778	10512	11832	13092	13697	13670	13515	11387	8959
65.0	9492	9586	10395	12034	13678	14607	14640	14468	12334	9398
67.5	9199	9313	10139	11952	14057	15375	15531	15195	12683	9083
70.0	8933	9066	9920	11900	14123	15703	16000	14992	11865	7749
72.5	8523	8675	9503	11892	14607	15898	15891	14024	9600	5234
75.0	6956	7222	8369	10720	14332	14823	14496	11457	6036	2615
77.5	4065	4309	5779	8219	11610	12115	11530	7504	2935	1271
80.0	1792	1875	2973	4848	6618	7567	7078	3932	1451	810
82.5	828	894	1803	2682	3180	3727	3476	1888	905	511
85.0	534	587	1171	1701	1959	1956	1648	882	551	312
87.5	346	389	739	1102	1393	649	573	352	265	182
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	3921	3921	3921	3921	3921	3921	3921	3921	3921	3921
2.5	3949	3940	3945	3942	3942	3934	3927	3914	3903	3898
5.0	3984	3975	3976	3958	3951	3943	3935	3924	3909	3901
7.5	4043	4033	4028	4001	3990	3976	3953	3933	3918	3912
10.0	4118	4106	4099	4055	4034	4000	3978	3969	3967	3973
12.5	4201	4193	4178	4111	4070	4033	4025	4026	4028	4032
15.0	4291	4280	4261	4173	4107	4077	4073	4068	4063	4062
17.5	4386	4370	4350	4224	4136	4112	4100	4086	4074	4065
20.0	4476	4457	4434	4272	4161	4132	4109	4085	4067	4053
22.5	4551	4544	4511	4308	4181	4140	4105	4065	4044	4029
25.0	4607	4612	4571	4328	4184	4132	4079	4033	4005	3996
27.5	4645	4663	4621	4339	4174	4111	4039	3986	3959	3959

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

**CANDELA TABULATION - (Cont.)**

30.0	4663	4693	4653	4326	4145	4074	3985	3927	3905	3911
32.5	4658	4692	4657	4292	4098	4013	3917	3855	3840	3864
35.0	4637	4669	4641	4230	4026	3935	3833	3769	3771	3823
37.5	4616	4635	4608	4144	3927	3833	3726	3665	3691	3840
40.0	4616	4609	4569	4049	3813	3716	3600	3543	3655	3969
42.5	4622	4577	4519	3929	3657	3572	3447	3406	3772	3838
45.0	4680	4576	4480	3806	3483	3412	3274	3286	3778	3525
47.5	4781	4587	4440	3667	3293	3228	3075	3224	3619	3177
50.0	4944	4650	4430	3522	3083	3027	2873	3163	3348	2895
52.5	5229	4822	4488	3400	2859	2820	2675	3020	3023	2672
55.0	5602	5026	4554	3269	2628	2611	2478	2830	2700	2442
57.5	6003	5273	4650	3151	2399	2409	2306	2609	2405	2189
60.0	6397	5479	4679	3026	2183	2214	2136	2335	2121	1998
62.5	6669	5504	4525	2899	1964	2017	1953	2056	1877	1843
65.0	6632	5143	3967	2686	1762	1824	1757	1835	1648	1713
67.5	5965	4346	3000	2280	1531	1605	1573	1631	1434	1610
70.0	4521	3107	1967	1700	1272	1356	1400	1410	1223	1513
72.5	2519	1645	1211	1146	980	1087	1208	1199	1017	1366
75.0	1067	750	653	747	706	808	958	960	792	1073
77.5	647	467	390	484	501	581	718	641	490	701
80.0	432	322	279	341	381	424	459	398	323	476
82.5	280	214	196	258	276	258	284	276	208	319
85.0	172	128	129	178	161	145	190	152	106	197
87.5	97	65	71	94	78	80	84	74	54	88
90.0	0	0	0	0	0	0	0	0	0	0

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

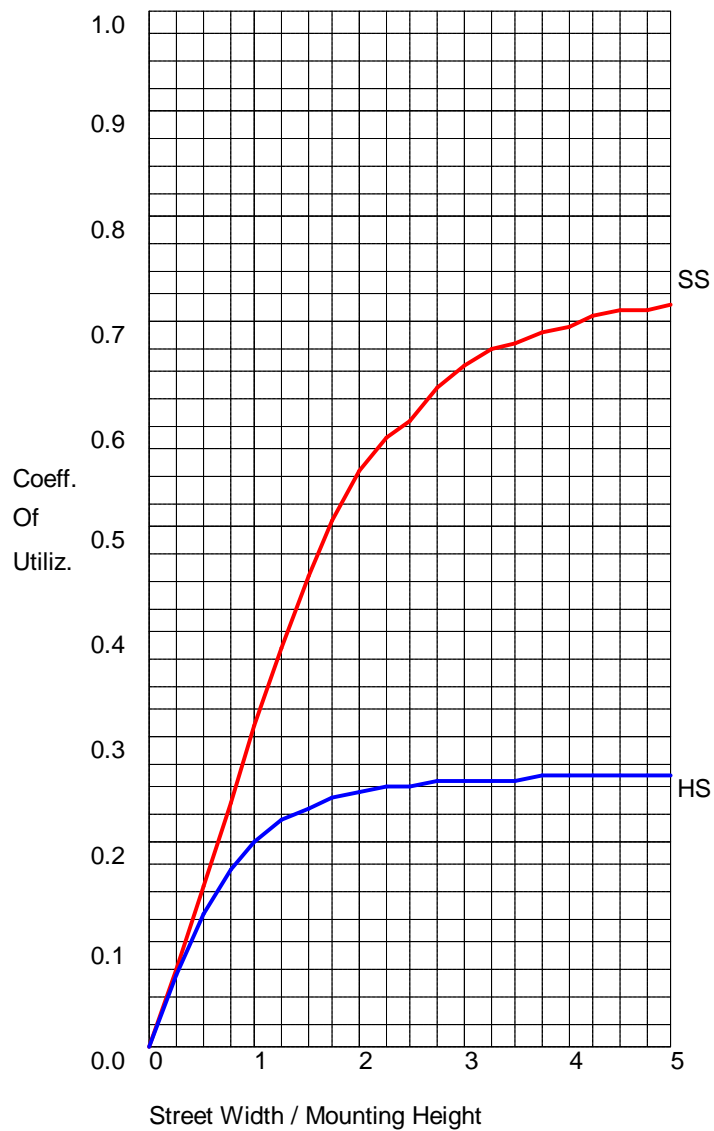
	<b><u>175.0</u></b>	<b><u>180.0</u></b>
0.0	3921	3921
2.5	3895	3879
5.0	3898	3884
7.5	3910	3899
10.0	3973	3964
12.5	4035	4021
15.0	4063	4050
17.5	4064	4051
20.0	4050	4039
22.5	4025	4014
25.0	3994	3982
27.5	3964	3953
30.0	3929	3922
32.5	3894	3898
35.0	3876	3881
37.5	4025	4036
40.0	3898	3851
42.5	3532	3478
45.0	3205	3179
47.5	2972	2954
50.0	2755	2738
52.5	2541	2523
55.0	2310	2289
57.5	2039	2018
60.0	1855	1829
62.5	1699	1658
65.0	1569	1523

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

**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	1470	1419
<b>70.0</b>	1410	1356
<b>72.5</b>	1337	1296
<b>75.0</b>	1123	1060
<b>77.5</b>	932	932
<b>80.0</b>	805	830
<b>82.5</b>	640	663
<b>85.0</b>	444	515
<b>87.5</b>	237	322
<b>90.0</b>	0	0

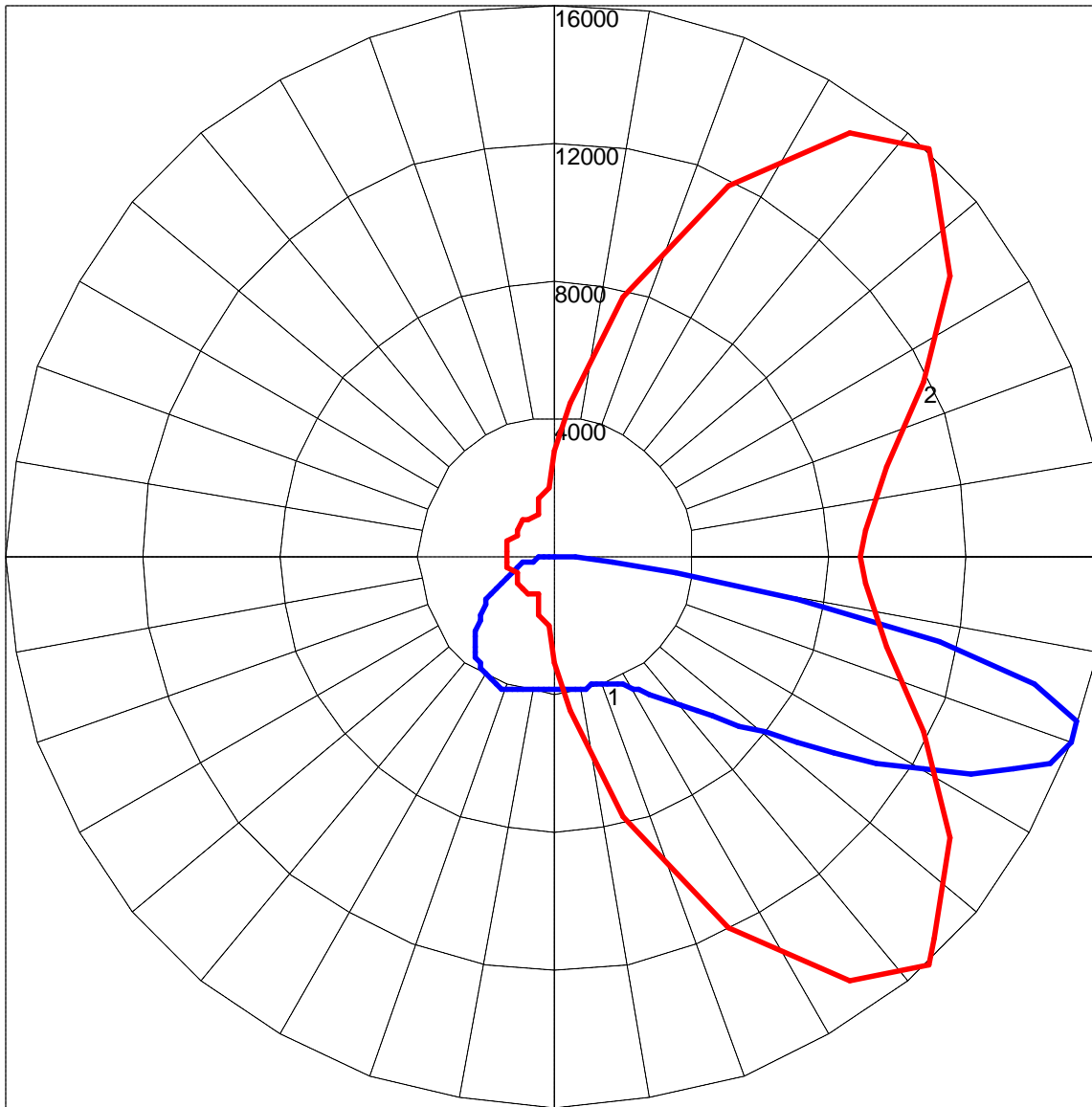
### COEFFICIENTS OF UTILIZATION



### FLUX DISTRIBUTION

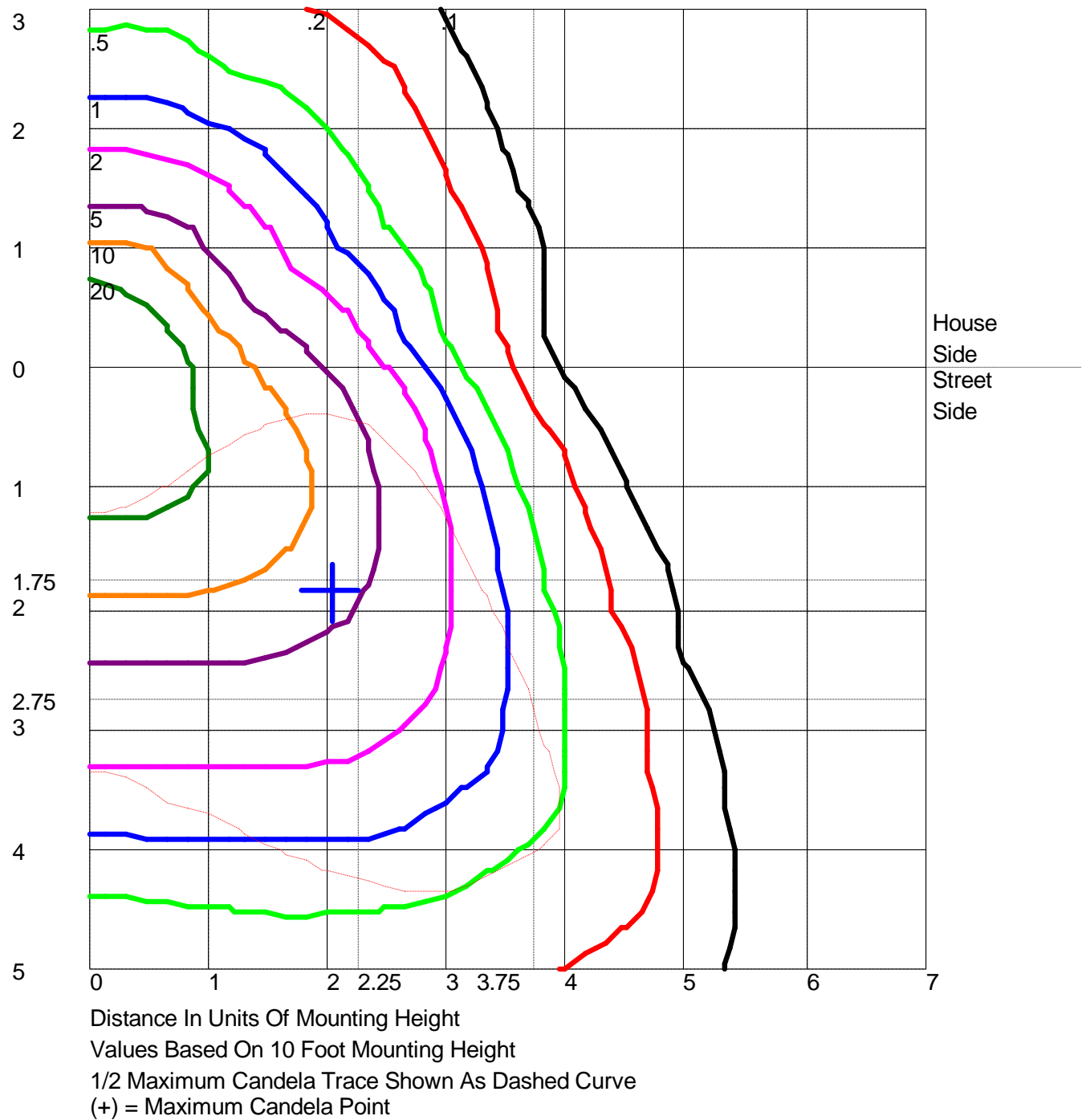
	Lumens	Percent Of Luminaire
Downward Street Side	20060.7	73.4
Downward House Side	7264.3	26.6
Downward Total	27325.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	27325.0	100.0

POLAR GRAPH



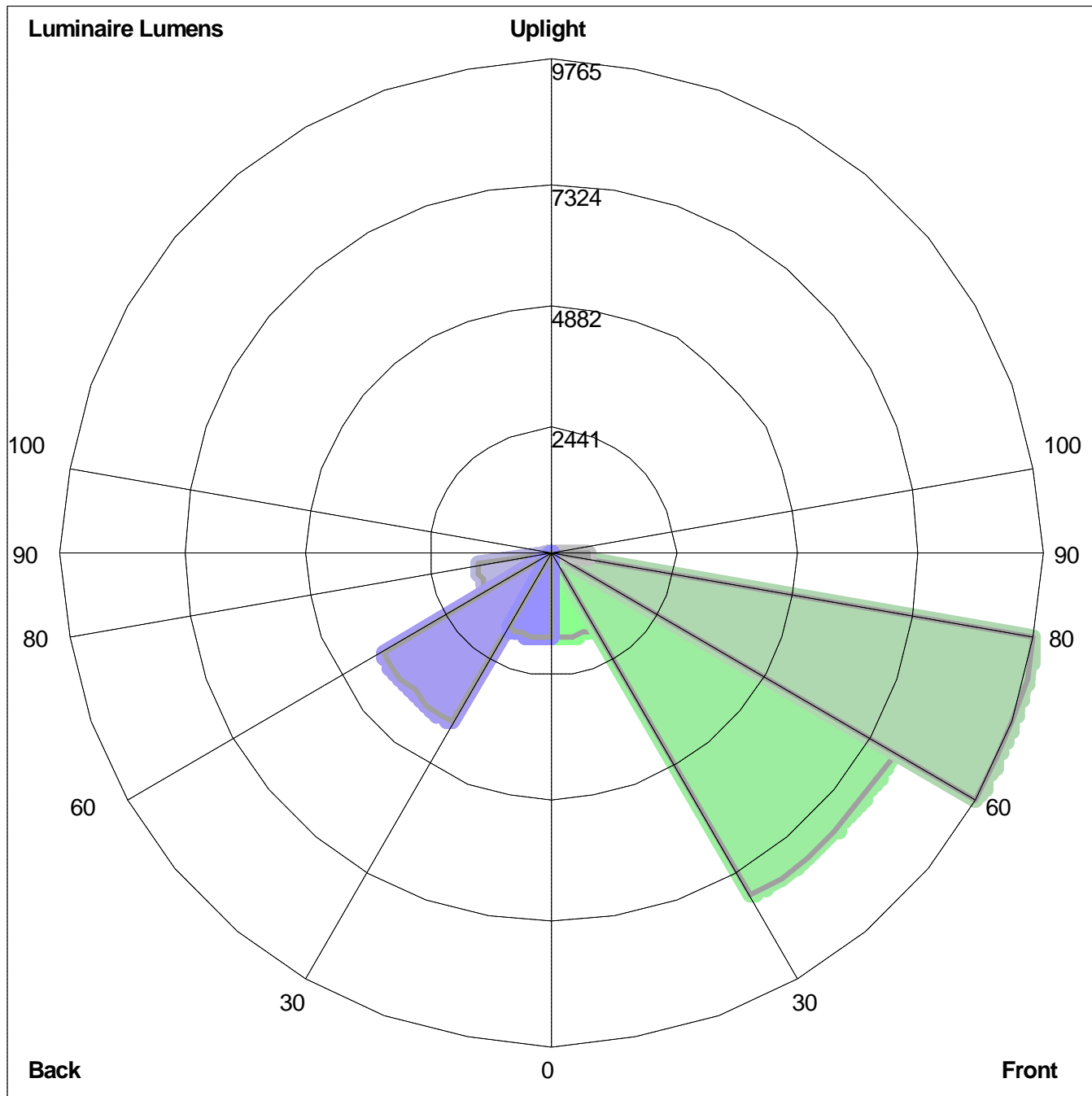
Maximum Candela = 16000 Located At Horizontal Angle = 47.5, Vertical Angle = 70  
# 1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (70) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=1721.9, Medium=7883.9, High=9764.8, Very High=690.0  
Back: Low=1727.8, Medium=3922.3, High=1504.2, Very High=110.0  
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G4