



UL Verification Services Inc.  
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## Photometric Test Report

Relevant Standards  
IES LM-79-2008, ANSI C82.77-2002

**Prepared For**  
**Auroralight Inc**

2742 Loker Ave W  
#100  
Carlsbad, CA 92010-6619  
United States

**Catalog Number**  
**LSL10-N-27 (15° OPTIC, 2700K)**

Order Number  
12250114  
Test Number  
12250114.61

Report Date

2018-05-08

Prepared By

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Approved By

Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Cylindrical metal housing with adjustable knuckle  
**Lamp:** One (1) Cree XP-L 2700K LED with 15° narrow optic  
**Mounting:** Flood  
**Ballast/Driver:** Integrated  
**Note:** This report has been pro-rated using data from report numbers 12250114.60, 12250114.01, 12250114.02, 12250114.03, 12250114.04, 12250114.05, and 12250114.06 to account for differences in color temperature.

#### Luminaire



#### Luminaire Characteristics

Luminous Diameter: 1.00 in.

#### Summary of Results

Roadway Classification: Type V, Very Short  
Cutoff Classification: Full Cutoff  
BUG Rating: B0 U0 G0

#### Test Conditions

Test Temperature: 24.2 °C  
Voltage: 12.02 VAC  
Current: 0.4246 A  
Power: 3.202 W  
Power Factor: 0.627  
Frequency: 60 Hz  
Current THD: 91.9 %

Tested in 30 planes left side, 30 planes right side, left and right averaged  
Vertical test increments are 2.5 degrees  
Test distance exceeds five times the greatest luminous opening of luminaire

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.2 °C	12.02 VAC	0.4246 A	3.202 W	0.627	60 Hz	91.9 %

### Summary of Results

#### Spacing Criteria

0-180: 0.26

90-270: 0.26

Total Lumen Output:

228.5 Lumens

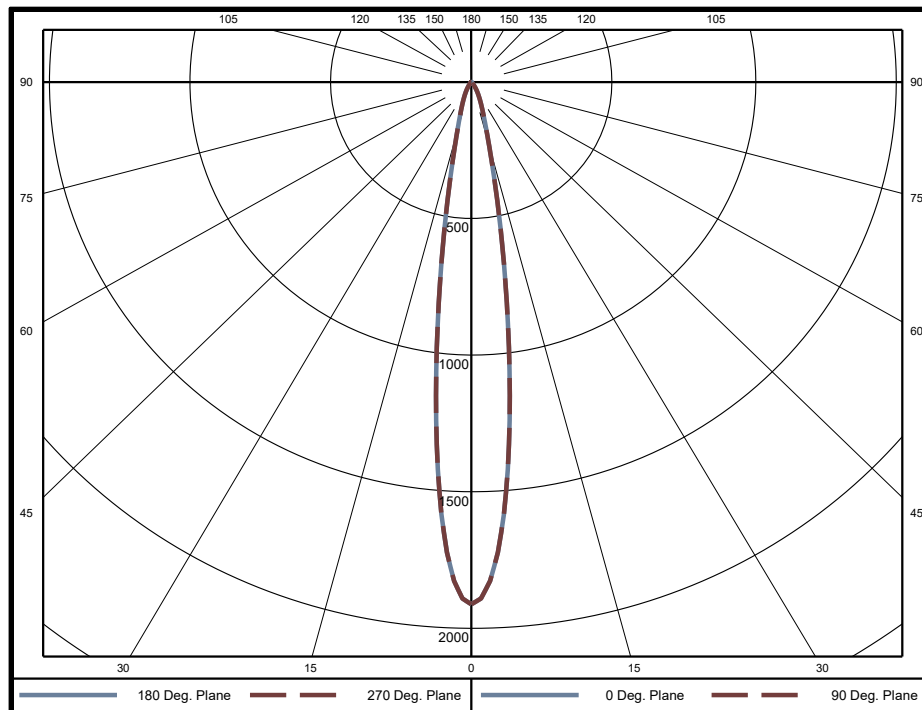
Luminaire Efficacy:

71.4 lm/w

Maximum Candela:

1912 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	39.68	17.4%	60-65	0.56	0.2%	120-125	0	0.0%
5-10	67.76	29.7%	65-70	0.32	0.1%	125-130	0	0.0%
10-15	43.42	19.0%	70-75	0.12	0.1%	130-135	0	0.0%
15-20	25.72	11.3%	75-80	0.02	0.0%	135-140	0	0.0%
20-25	18.03	7.9%	80-85	0	0.0%	140-145	0	0.0%
25-30	12.85	5.6%	85-90	0	0.0%	145-150	0	0.0%
30-35	8.44	3.7%	90-95	0	0.0%	150-155	0	0.0%
35-40	4.95	2.2%	95-100	0	0.0%	155-160	0	0.0%
40-45	2.84	1.2%	100-105	0	0.0%	160-165	0	0.0%
45-50	1.75	0.8%	105-110	0	0.0%	165-170	0	0.0%
50-55	1.17	0.5%	110-115	0	0.0%	170-175	0	0.0%
55-60	0.82	0.4%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	221	96.7%
0-60	227	99.5%
0-90	228	100.0%
90-180	0	0.0%



**Candela Tabulation**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	1912	1912	1912	1912	1912	1912	1912	1912	1912	1912	1912	1912	1912	1912	1912
	5	1423	1423	1423	1423	1423	1423	1423	1423	1423	1423	1423	1423	1423	1423	1423
	10	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604
	15	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224
	20	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
	25	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
	30	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
	35	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
	40	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	45	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	50	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	55	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	65	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

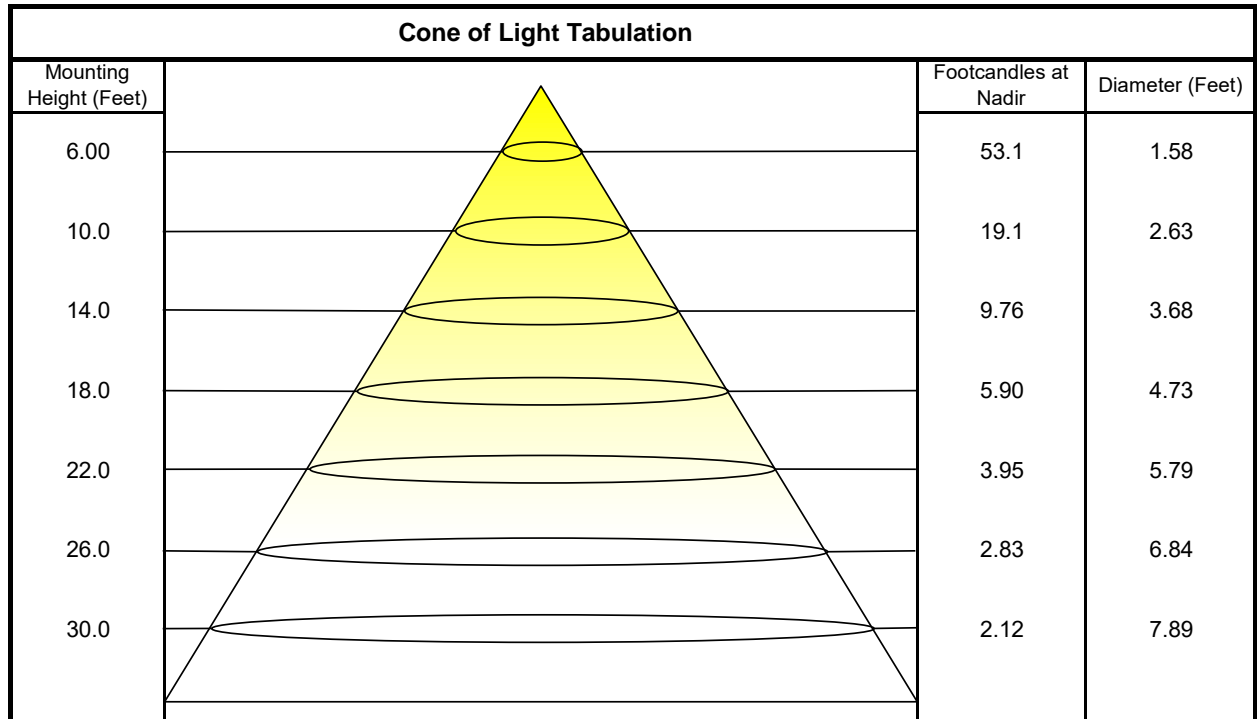
Vertical Angle (Degrees)	0	45	90
	0	3774000	3774000
	45	15650	15650
	55	7463	7463
	65	4158	4158
	75	757	757
	85	0	0



### Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	272	272	272	272	266	266	266	266	254	254	254	243	243	243	233	233	233	228
1	263	258	254	250	258	253	250	246	244	241	239	236	234	232	228	227	225	221
2	254	246	240	234	250	243	236	231	235	231	226	229	225	222	223	220	217	214
3	247	236	228	222	242	233	226	220	227	221	216	222	217	213	217	213	210	207
4	239	227	218	212	236	225	217	210	220	213	208	216	210	206	212	207	203	201
5	232	219	210	203	229	217	209	202	214	206	201	210	204	199	207	202	198	195
6	226	212	203	196	223	211	202	196	208	200	195	205	198	193	202	197	192	190
7	220	206	197	190	218	205	196	190	202	195	189	200	193	188	198	192	187	185
8	215	200	191	185	213	199	191	185	197	189	184	195	188	183	193	187	183	180
9	210	195	186	180	208	194	186	180	192	185	179	191	184	179	189	183	178	176
10	205	190	182	176	203	190	181	176	188	181	175	187	180	175	185	179	175	173

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1912 Candela
Central Cone Intensity:	1733 Candela
Beam Flux:	77.1 Lumens
Beam Angle (0-180):	15.3 Degrees
Beam Angle (90-270):	15.3 Degrees
Field Angle (0-180):	31.9 Degrees
Field Angle (90-270):	31.9 Degrees





**IES "BUG" Rating**  
(Back Light, Uplight, Glare)  
Per IES TM-15-11



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	103.8	45.4%
FM	(30-60)	10.0	4.4%
FH	(60-80)	0.5	0.2%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	103.8	45.4%
BM	(30-60)	10.0	4.4%
BH	(60-80)	0.5	0.2%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		228.7	100.0%
<b>BUG Rating</b>	<b>B0 U0 G0</b>		