



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300

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-W-27 (40° OPTIC, 2700K)

Order Number
12250114
Test Number
12250114.67

Report Date

2018-05-08

Prepared By

Sean Gregory, Project Handler

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 40° wide optic
Mounting: Flood
Ballast/Driver: Integrated

Note: This report has been pro-rated using data from report numbers 12250114.66, 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: 24.3 °C
Voltage: 12.02 VAC
Current: 0.4243 A
Power: 3.207 W
Power Factor: 0.629
Frequency: 60 Hz
Current THD: 91.8 %

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
24.3 °C	12.02 VAC	0.4243 A	3.207 W	0.629	60 Hz	91.8 %

Summary of Results

Spacing Criteria

0-180: 0.61

90-270: 0.61

Total Lumen Output:

228.5 Lumens

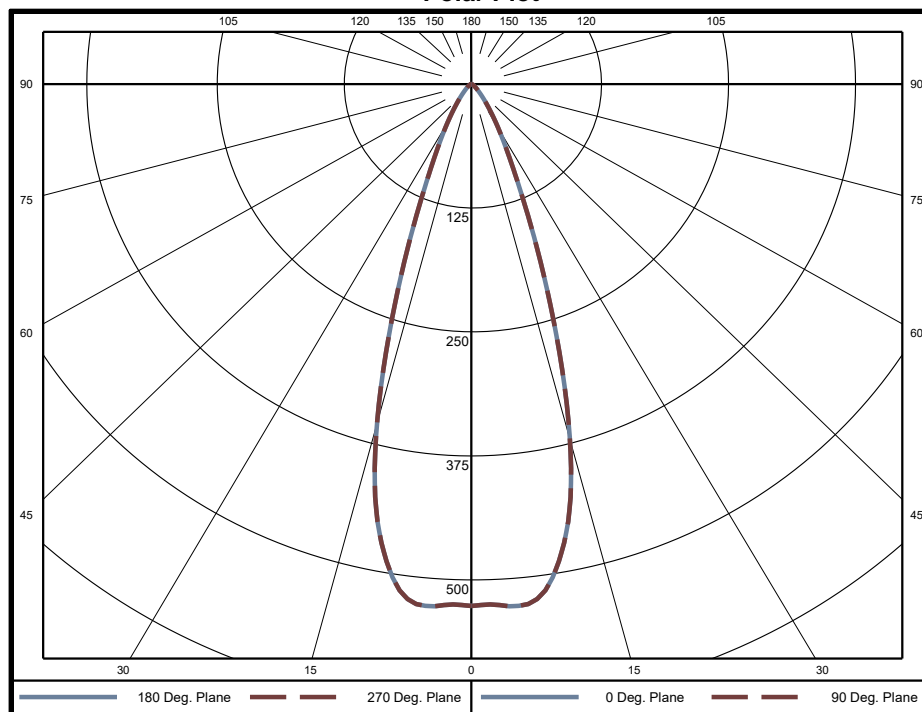
Luminaire Efficacy:

71.2 lm/w

Maximum Candela:

528 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	12.60	5.5%	60-65	0.99	0.4%	120-125	0	0.0%
5-10	36.74	16.1%	65-70	0.68	0.3%	125-130	0	0.0%
10-15	51.22	22.4%	70-75	0.41	0.2%	130-135	0	0.0%
15-20	46.34	20.3%	75-80	0.17	0.1%	135-140	0	0.0%
20-25	30.37	13.3%	80-85	0.03	0.0%	140-145	0	0.0%
25-30	18.72	8.2%	85-90	0	0.0%	145-150	0	0.0%
30-35	11.96	5.2%	90-95	0	0.0%	150-155	0	0.0%
35-40	7.42	3.2%	95-100	0	0.0%	155-160	0	0.0%
40-45	4.56	2.0%	100-105	0	0.0%	160-165	0	0.0%
45-50	2.95	1.3%	105-110	0	0.0%	165-170	0	0.0%
50-55	1.99	0.9%	110-115	0	0.0%	170-175	0	0.0%
55-60	1.39	0.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	215	94.3%
0-60	226	99.0%
0-90	229	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	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2
	5	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1
	10	488.6	488.6	488.6	488.6	488.6	488.6	488.6	488.6	488.6	488.6	488.6	488.6	488.6	488.6	488.6
	15	368.3	368.3	368.3	368.3	368.3	368.3	368.3	368.3	368.3	368.3	368.3	368.3	368.3	368.3	368.3
	20	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0
	25	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3
	30	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
	35	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
	40	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
	45	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
	50	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	55	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	60	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	65	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	70	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	75	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	80	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

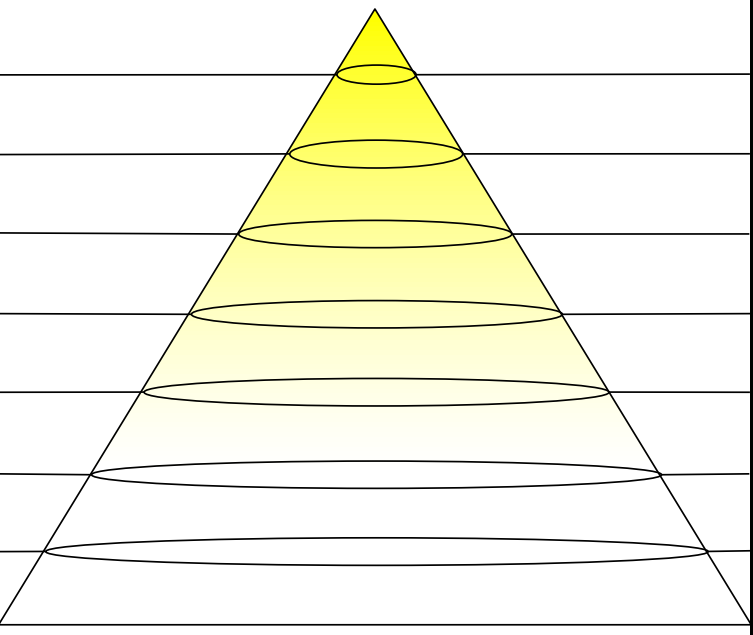
Vertical Angle (Degrees)	0	45	90
	0	1039000	1039000
	45	25860	25860
	55	12590	12590
	65	7701	7701
	75	4061	4061
	85	8	8



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	229
1	261	255	250	246	256	251	246	242	241	238	235	233	230	228	225	223	221	217
2	250	241	233	226	246	237	230	223	230	224	219	223	218	214	217	213	210	206
3	240	228	218	210	236	225	216	208	219	211	205	213	207	202	208	203	199	196
4	231	216	205	197	227	214	204	196	209	200	194	204	197	191	200	194	189	186
5	222	206	194	186	218	204	193	185	200	191	184	196	188	182	193	186	181	178
6	213	196	185	176	210	194	184	176	191	182	175	188	180	174	185	178	173	170
7	205	188	176	168	203	186	175	168	184	174	167	181	172	166	179	171	165	162
8	198	180	168	161	196	179	168	160	176	167	160	174	165	159	172	164	158	156
9	191	173	161	154	189	172	161	154	170	160	153	168	159	153	166	158	152	150
10	185	166	155	148	183	165	155	148	164	154	147	162	153	147	160	152	147	144

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	526.2 Candela
Central Cone Intensity:	526 Candela
Beam Flux:	131.4 Lumens
Beam Angle (0-180):	36.2 Degrees
Beam Angle (90-270):	36.2 Degrees
Field Angle (0-180):	60.6 Degrees
Field Angle (90-270):	60.6 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		14.6	3.67
10.0		5.26	6.11
14.0		2.68	8.56
18.0		1.62	11.0
22.0		1.09	13.5
26.0		0.778	15.9
30.0		0.585	18.3



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	98.0	42.9%
FM	(30-60)	15.2	6.6%
FH	(60-80)	1.1	0.5%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	98.0	42.9%
BM	(30-60)	15.2	6.6%
BH	(60-80)	1.1	0.5%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		228.6	100.0%
BUG Rating	B0 U0 G0		