



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-M-27 (25° OPTIC, 2700K)

Order Number
12250114
Test Number
12250114.64

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 25° medium optic
Mounting: Flood
Ballast/Driver: Integrated

Note: This report has been pro-rated using data from report numbers 12250114.63, 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: 0.4265 A
Power: 3.229 W
Power Factor: 0.630
Frequency: 60 Hz
Current THD: 91.3 %

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

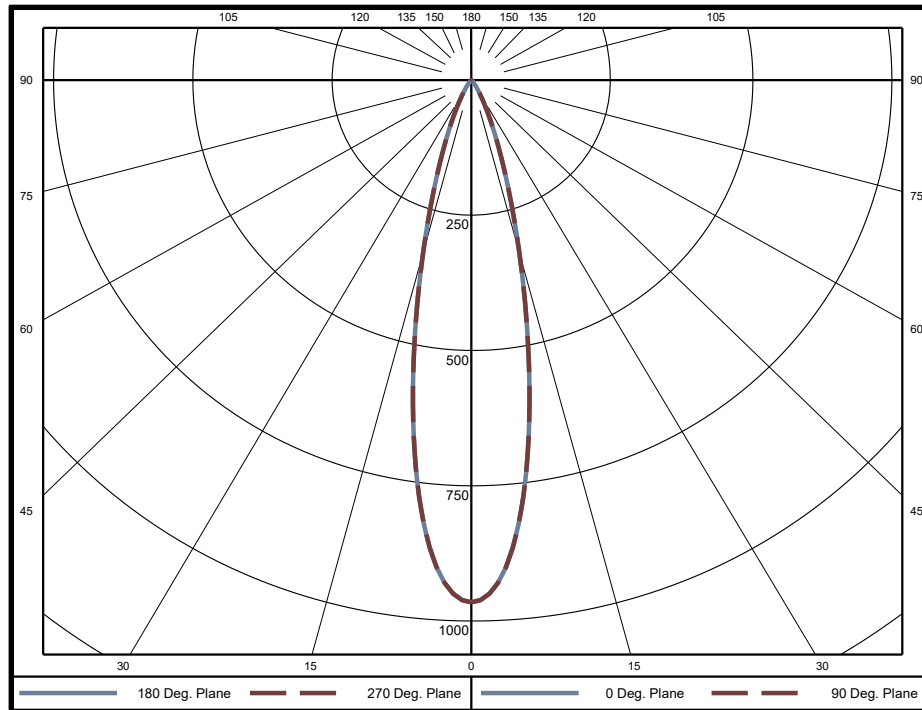
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.2 °C	12.02 VAC	0.4265 A	3.229 W	0.630	60 Hz	91.3 %

Summary of Results

Spacing Criteria
 0-180: 0.41
 90-270: 0.41

Total Lumen Output: 224.4 Lumens
Luminaire Efficacy: 69.5 lm/w
Maximum Candela: 965 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	21.91	9.8%	60-65	0.04	0.0%	120-125	0	0.0%
5-10	52.35	23.3%	65-70	0	0.0%	125-130	0	0.0%
10-15	54.86	24.4%	70-75	0	0.0%	130-135	0	0.0%
15-20	40.53	18.1%	75-80	0	0.0%	135-140	0	0.0%
20-25	25.39	11.3%	80-85	0	0.0%	140-145	0	0.0%
25-30	14.31	6.4%	85-90	0	0.0%	145-150	0	0.0%
30-35	7.32	3.3%	90-95	0	0.0%	150-155	0	0.0%
35-40	3.69	1.6%	95-100	0	0.0%	155-160	0	0.0%
40-45	1.97	0.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	1.12	0.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	0.63	0.3%	110-115	0	0.0%	170-175	0.00	0.0%
55-60	0.27	0.1%	115-120	0	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	220	98.2%
0-60	224	100.0%
0-90	224	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	965.4	965.4	965.4	965.4	965.4	965.4	965.4	965.4	965.4	965.4	965.4	965.4	965.4	965.4	965.4
	5	867.0	867.0	867.0	867.0	867.0	867.0	867.0	867.0	867.0	867.0	867.0	867.0	867.0	867.0	867.0
	10	609.0	609.0	609.0	609.0	609.0	609.0	609.0	609.0	609.0	609.0	609.0	609.0	609.0	609.0	609.0
	15	343.5	343.5	343.5	343.5	343.5	343.5	343.5	343.5	343.5	343.5	343.5	343.5	343.5	343.5	343.5
	20	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2
	25	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5
	30	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0
	35	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
	40	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
	45	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	50	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	55	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
	60	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	65	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
	70	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
	75	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
	80	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
	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)

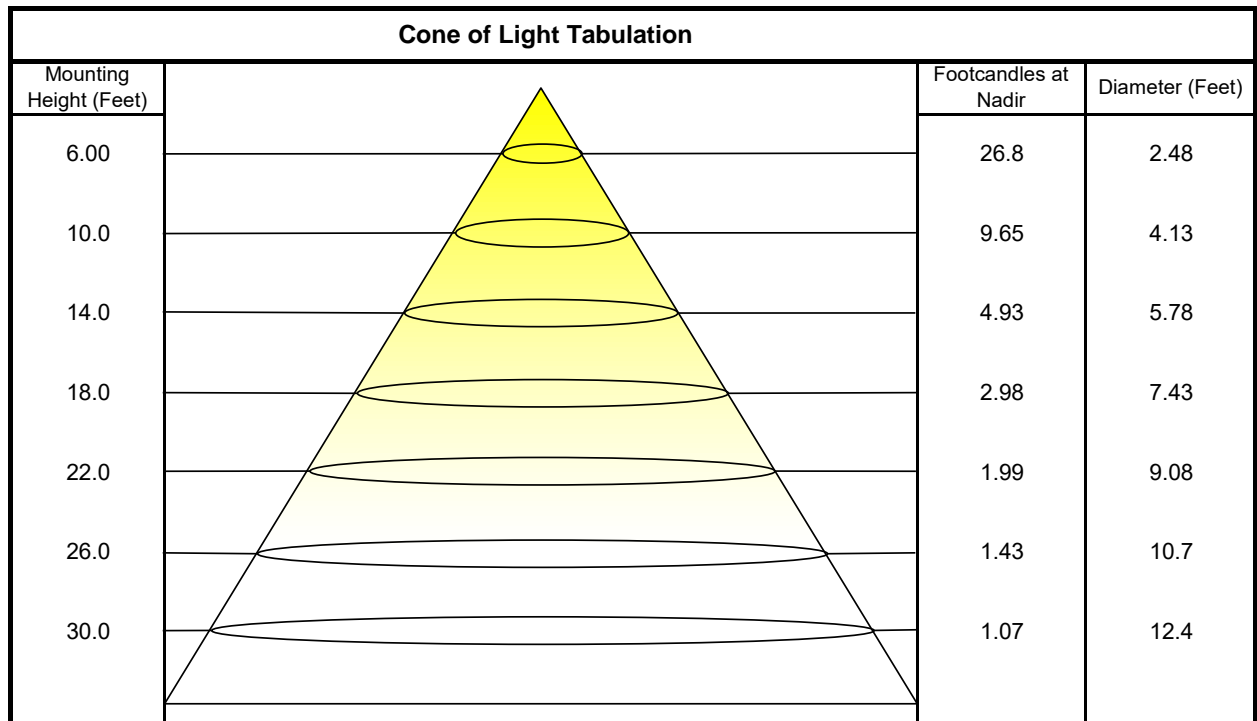
Vertical Angle (Degrees)	0	45	90
	0	1905000	1905000
	45	10490	10490
	55	3336	3336
	65	17	17
	75	0	0
	85	0	0



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	267	267	267	267	261	261	261	261	249	249	249	239	239	239	229	229	229	224
1	258	253	249	245	253	248	244	241	239	236	233	231	229	227	223	222	220	216
2	249	241	234	228	244	237	231	225	230	225	221	224	220	216	218	214	212	208
3	241	230	222	215	237	227	219	213	221	215	210	216	211	207	212	207	204	201
4	233	220	211	204	229	218	210	203	214	207	201	209	203	199	206	201	196	194
5	226	212	202	195	222	210	201	194	206	199	193	203	196	191	200	194	190	187
6	219	204	194	188	216	203	194	187	200	192	186	197	190	185	194	188	183	181
7	212	197	187	181	210	196	187	180	193	185	179	191	184	178	189	182	178	175
8	206	191	181	174	204	190	180	174	187	179	173	185	178	173	184	177	172	170
9	200	185	175	169	198	184	175	169	182	174	168	180	173	168	179	172	167	165
10	195	179	170	164	193	178	169	163	177	169	163	175	168	163	174	167	162	160

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	965.4 Candela
Central Cone Intensity:	931 Candela
Beam Flux:	100.0 Lumens
Beam Angle (0-180):	24.4 Degrees
Beam Angle (90-270):	24.4 Degrees
Field Angle (0-180):	47.9 Degrees
Field Angle (90-270):	47.9 Degrees





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	104.6	46.8%
FM	(30-60)	7.2	3.2%
FH	(60-80)	0.0	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	104.6	46.8%
BM	(30-60)	7.2	3.2%
BH	(60-80)	0.0	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		223.4	100.0%
BUG Rating	B0 U0 G0		