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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-40 (25° OPTIC, 4000K)

Order Number
12250114
Test Number
12250114.65

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 4000K 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: Cutoff
BUG Rating: B1 U1 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:

293.3 Lumens

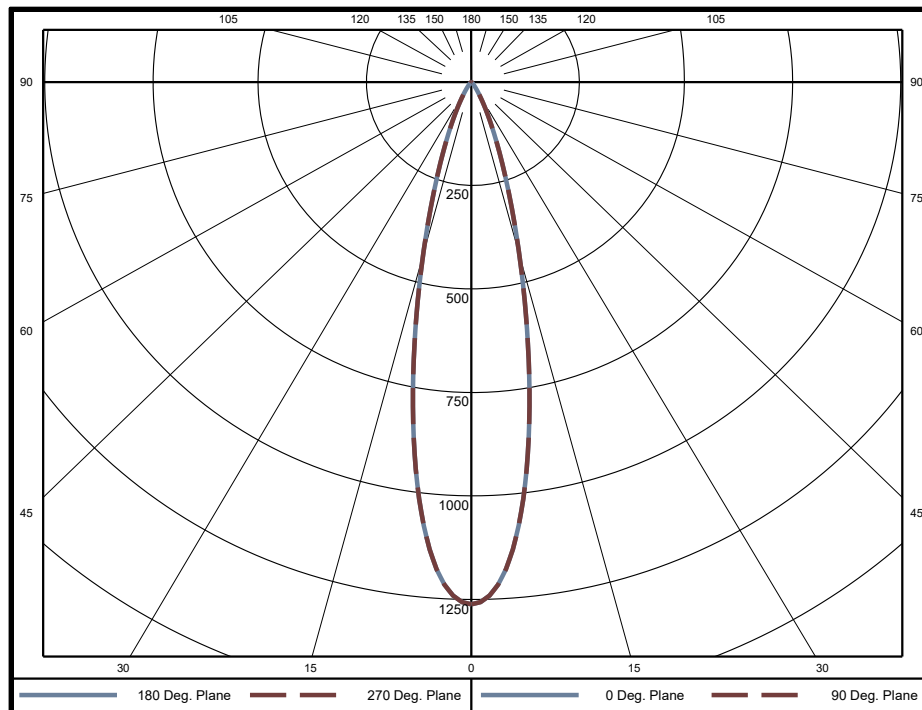
Luminaire Efficacy:

90.8 lm/w

Maximum Candela:

1262 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	28.64	9.8%	60-65	0.06	0.0%	120-125	0	0.0%
5-10	68.43	23.3%	65-70	0	0.0%	125-130	0	0.0%
10-15	71.70	24.4%	70-75	0	0.0%	130-135	0	0.0%
15-20	52.97	18.1%	75-80	0	0.0%	135-140	0	0.0%
20-25	33.19	11.3%	80-85	0	0.0%	140-145	0	0.0%
25-30	18.70	6.4%	85-90	0	0.0%	145-150	0	0.0%
30-35	9.57	3.3%	90-95	0	0.0%	150-155	0	0.0%
35-40	4.82	1.6%	95-100	0	0.0%	155-160	0	0.0%
40-45	2.58	0.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	1.47	0.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	0.82	0.3%	110-115	0	0.0%	170-175	0.00	0.0%
55-60	0.36	0.1%	115-120	0	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	288	98.2%
0-60	293	100.0%
0-90	293	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	1262	1262	1262	1262	1262	1262	1262	1262	1262	1262	1262	1262	1262	1262	1262
	5	1133	1133	1133	1133	1133	1133	1133	1133	1133	1133	1133	1133	1133	1133	1133
	10	796	796	796	796	796	796	796	796	796	796	796	796	796	796	796
	15	449	449	449	449	449	449	449	449	449	449	449	449	449	449	449
	20	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
	25	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108
	30	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	50	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	55	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	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
	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/m²)
Horizontal Angle (Degrees)

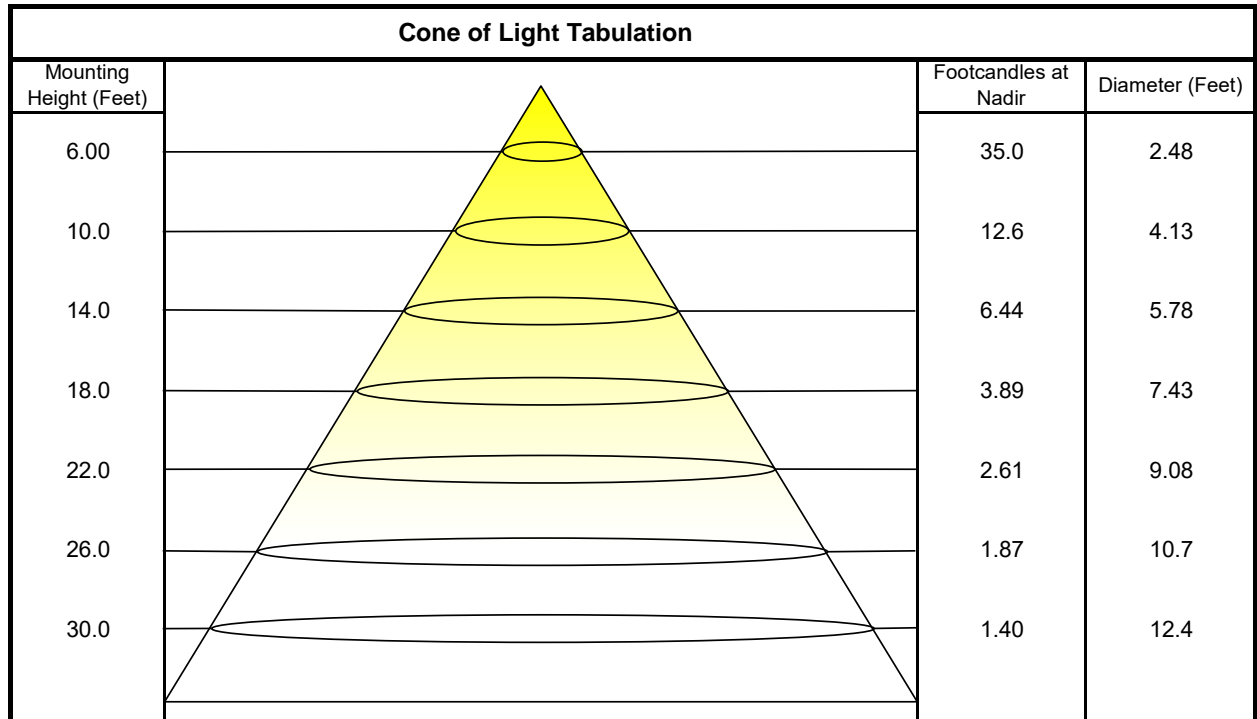
Vertical Angle (Degrees)	0	45	90
	0	2490000	2490000
	45	13720	13720
	55	4360	4360
	65	23	23
	75	0	0
	85	0	0



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	349	349	349	349	341	341	341	341	326	326	326	312	312	312	299	299	299	293
1	337	331	325	320	330	324	319	315	313	309	305	302	299	296	292	290	288	283
2	325	315	306	298	319	310	302	295	301	294	288	292	287	282	284	280	277	272
3	315	301	290	281	309	297	287	279	289	281	274	283	276	270	277	271	266	262
4	304	288	276	267	300	285	274	266	279	270	263	274	266	260	269	262	257	253
5	295	277	264	255	291	274	263	254	270	260	252	265	257	250	261	254	248	245
6	286	267	254	245	282	265	253	244	261	251	243	257	248	241	254	246	240	237
7	277	258	245	236	274	256	244	236	253	242	234	250	240	233	247	238	232	229
8	269	249	237	228	266	248	236	228	245	234	227	242	233	226	240	231	225	222
9	262	241	229	221	259	240	228	220	238	227	220	236	226	219	234	225	218	216
10	254	234	222	214	252	233	222	214	231	221	213	229	220	213	227	219	212	209

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1262 Candela
Central Cone Intensity:	1216 Candela
Beam Flux:	130.7 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)	137.0	46.5%
FM	(30-60)	10.2	3.5%
FH	(60-80)	0.1	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	137.0	46.5%
BM	(30-60)	10.2	3.5%
BH	(60-80)	0.1	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		294.5	100.0%
BUG Rating	B1 U1 G0		