



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-N-30 (15° OPTIC, 3000K)

Order Number
12250114
Test Number
12250114.60

Test Date

2018-05-03

Prepared By

Cordaryl Cousar, Technician

Approved By

Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



Luminaire Description: Cylindrical metal housing with adjustable knuckle
Lamp: One (1) Cree XP-L 3000K LED with 15° narrow optic
Mounting: Flood
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 1.00 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Full Cutoff
BUG Rating: B1 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:

266.6 Lumens

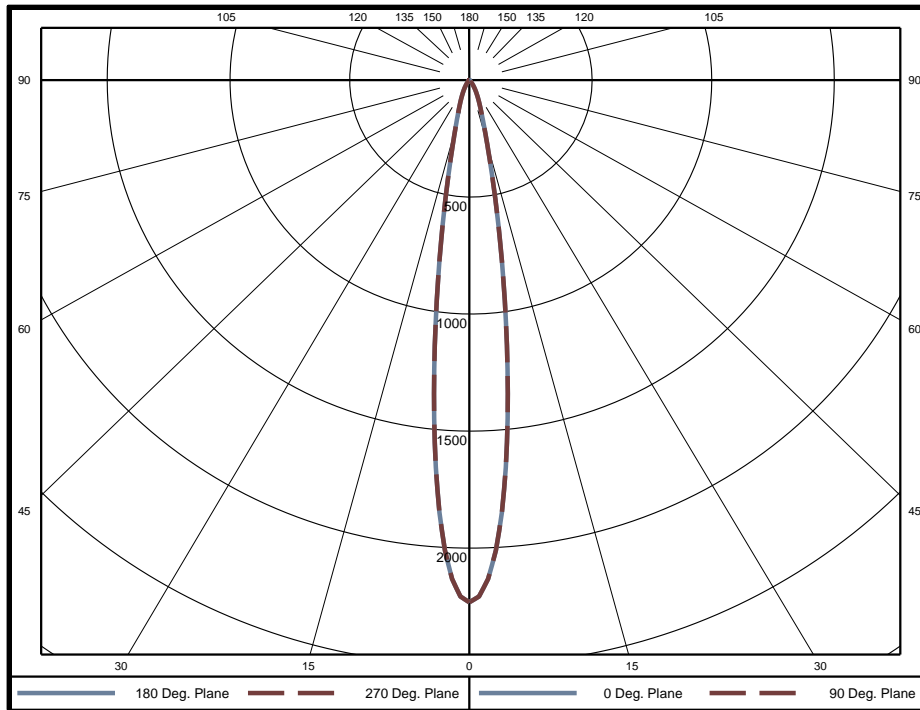
Luminaire Efficacy:

83.3 lm/w

Maximum Candela:

2231 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	46.31	17.4%	60-65	0.65	0.2%	120-125	0	0.0%
5-10	79.08	29.7%	65-70	0.38	0.1%	125-130	0	0.0%
10-15	50.67	19.0%	70-75	0.14	0.1%	130-135	0	0.0%
15-20	30.02	11.3%	75-80	0.02	0.0%	135-140	0	0.0%
20-25	21.04	7.9%	80-85	0	0.0%	140-145	0	0.0%
25-30	15.00	5.6%	85-90	0	0.0%	145-150	0	0.0%
30-35	9.85	3.7%	90-95	0	0.0%	150-155	0	0.0%
35-40	5.78	2.2%	95-100	0	0.0%	155-160	0	0.0%
40-45	3.32	1.2%	100-105	0	0.0%	160-165	0	0.0%
45-50	2.04	0.8%	105-110	0	0.0%	165-170	0	0.0%
50-55	1.37	0.5%	110-115	0	0.0%	170-175	0	0.0%
55-60	0.96	0.4%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	258	96.7%
0-60	265	99.6%
0-90	267	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	2231	2231	2231	2231	2231	2231	2231	2231	2231	2231	2231	2231	2231	2231	2231
	5	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661
	10	704	704	704	704	704	704	704	704	704	704	704	704	704	704	704
	15	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261
	20	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131
	25	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77
	30	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
	35	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	40	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	45	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	50	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	55	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	60	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	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/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	4404000	4404000
	45	18270	18270
	55	8709	8709
	65	4852	4852
	75	884	884
	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	317	317	317	317	310	310	310	310	296	296	296	284	284	284	272	272	272	267
1	307	301	296	292	301	296	291	287	285	282	278	275	273	270	266	264	262	258
2	297	287	280	273	291	283	276	270	275	269	264	267	263	259	260	257	253	250
3	288	275	266	259	283	272	263	256	265	258	253	259	254	249	254	249	245	242
4	279	265	255	247	275	262	253	246	257	249	243	252	245	240	248	242	237	234
5	271	256	245	237	268	254	244	236	249	241	234	245	238	232	242	236	231	228
6	264	248	237	229	261	246	236	228	242	234	227	239	231	226	236	229	224	221
7	257	240	230	222	254	239	229	222	236	227	221	233	225	219	231	224	218	216
8	251	234	223	216	248	233	222	215	230	221	215	228	220	214	226	218	213	211
9	245	228	217	210	243	227	217	210	225	216	209	223	215	209	221	214	208	206
10	239	222	212	205	237	221	212	205	220	211	205	218	210	204	216	209	204	201

Beam and Field Information

CIE Type:	Direct
Center Beam Intensity:	2231 Candela
Central Cone Intensity:	2022 Candela
Beam Flux:	90.0 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

Cone of Light Tabulation

Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
6.00		62.0	1.58
10.0		22.3	2.63
14.0		11.4	3.68
18.0		6.89	4.73
22.0		4.61	5.79
26.0		3.30	6.84
30.0		2.48	7.89



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	121.2	45.4%
FM	(30-60)	11.7	4.4%
FH	(60-80)	0.6	0.2%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	121.2	45.4%
BM	(30-60)	11.7	4.4%
BH	(60-80)	0.6	0.2%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		266.9	100.0%
BUG Rating	B1 U0 G0		