



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-30 (40° OPTIC, 3000K)

Order Number
12250114
Test Number
12250114.66

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.
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Luminaire Description: Cylindrical metal housing with adjustable knuckle
Lamp: One (1) Cree XP-L 3000K LED with 40° wide 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:	24.3 °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:

266.7 Lumens

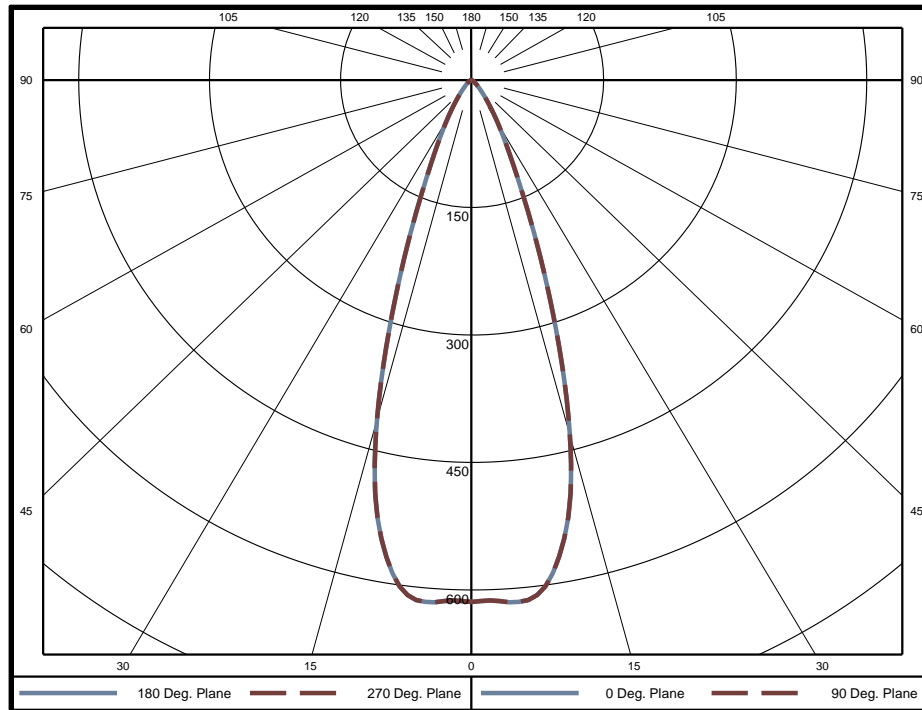
Luminaire Efficacy:

83.2 lm/w

Maximum Candela:

616 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	14.70	5.5%	60-65	1.15	0.4%	120-125	0	0.0%
5-10	42.87	16.1%	65-70	0.79	0.3%	125-130	0	0.0%
10-15	59.77	22.4%	70-75	0.48	0.2%	130-135	0	0.0%
15-20	54.08	20.3%	75-80	0.20	0.1%	135-140	0	0.0%
20-25	35.45	13.3%	80-85	0.03	0.0%	140-145	0	0.0%
25-30	21.84	8.2%	85-90	0	0.0%	145-150	0	0.0%
30-35	13.96	5.2%	90-95	0	0.0%	150-155	0	0.0%
35-40	8.66	3.2%	95-100	0	0.0%	155-160	0	0.0%
40-45	5.33	2.0%	100-105	0	0.0%	160-165	0	0.0%
45-50	3.44	1.3%	105-110	0	0.0%	165-170	0	0.0%
50-55	2.32	0.9%	110-115	0	0.0%	170-175	0	0.0%
55-60	1.62	0.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	251	94.2%
0-60	264	99.0%
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	614.1	614.1	614.1	614.1	614.1	614.1	614.1	614.1	614.1	614.1	614.1	614.1	614.1	614.1	614.1
	5	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3
	10	570.1	570.1	570.1	570.1	570.1	570.1	570.1	570.1	570.1	570.1	570.1	570.1	570.1	570.1	570.1
	15	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8
	20	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3
	25	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0
	30	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4
	35	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
	40	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
	45	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
	50	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
	55	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	60	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	65	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	70	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
	75	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	80	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	0.2
	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	1212000	1212000
	45	30180	30180
	55	14700	14700
	65	8987	8987
	75	4739	4739
	85	9	9



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	305	298	292	287	298	292	287	282	282	278	274	272	269	266	263	260	258	253
2	292	281	272	264	287	276	268	261	268	261	255	260	255	250	253	248	245	240
3	280	266	254	245	275	262	252	243	255	247	239	249	242	236	243	237	232	228
4	269	252	240	230	265	249	238	229	244	234	226	239	230	223	234	227	221	217
5	259	240	227	217	255	238	225	216	233	222	214	229	220	212	225	217	211	207
6	249	229	216	206	245	227	214	205	223	212	204	220	210	203	216	208	201	198
7	240	219	206	196	236	217	205	196	214	203	195	211	201	194	208	200	193	190
8	231	210	197	187	228	208	196	187	206	194	186	203	193	186	201	192	185	182
9	223	202	188	180	220	200	188	179	198	187	179	196	186	178	194	185	178	175
10	215	194	181	172	213	193	181	172	191	180	172	189	179	171	187	178	171	168

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	614.1 Candela
Central Cone Intensity:	614 Candela
Beam Flux:	153.4 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		17.1	3.67
10.0		6.14	6.11
14.0		3.13	8.56
18.0		1.90	11.0
22.0		1.27	13.5
26.0		0.908	15.9
30.0		0.682	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)	114.3	42.9%
FM	(30-60)	17.7	6.6%
FH	(60-80)	1.3	0.5%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	114.3	42.9%
BM	(30-60)	17.7	6.6%
BH	(60-80)	1.3	0.5%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		266.7	100.0%
BUG Rating	B1 U0 G0		