



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-WF-30 (60° OPTIC, 3000K)

Order Number
12250114
Test Number
12250114.69

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 60° wide flood 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:	B0 U0 G0

Test Conditions

Test Temperature:	24.2 °C
Voltage:	12.02 VAC
Current:	0.4242 A
Power:	3.198 W
Power Factor:	0.627
Frequency:	60 Hz
Current THD:	92.0 %

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	0.4242 A	3.198 W	0.627	60 Hz	92.0 %

Summary of Results

Spacing Criteria

0-180: 0.90

90-270: 0.90

Total Lumen Output:

252.3 Lumens

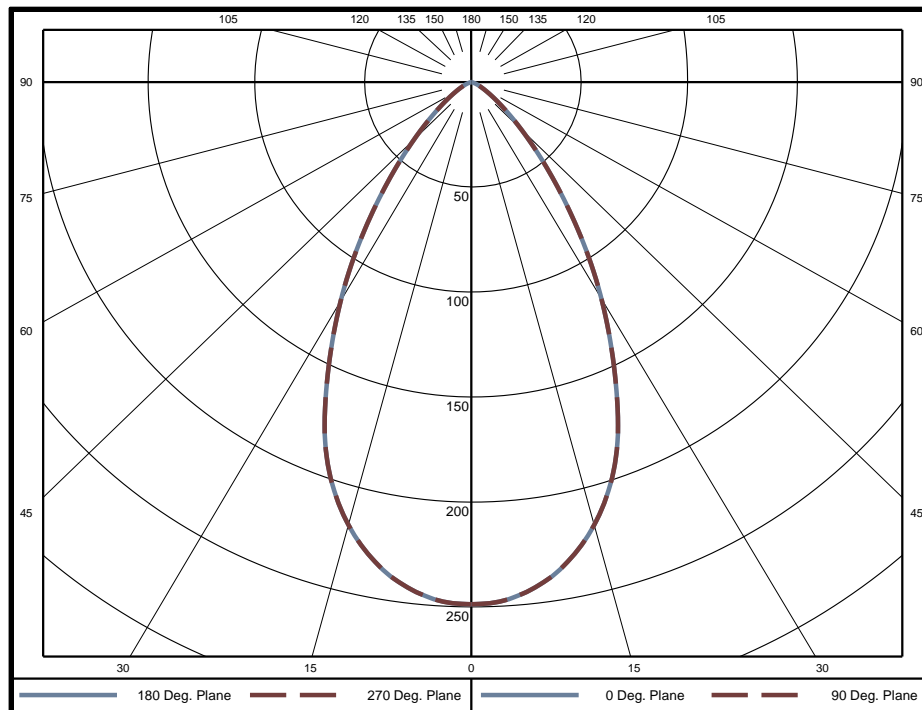
Luminaire Efficacy:

78.9 lm/w

Maximum Candela:

249 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	5.91	2.3%	60-65	2.41	1.0%	120-125	0	0.0%
5-10	17.22	6.8%	65-70	1.34	0.5%	125-130	0	0.0%
10-15	26.95	10.7%	70-75	0.59	0.2%	130-135	0	0.0%
15-20	34.02	13.5%	75-80	0.14	0.1%	135-140	0	0.0%
20-25	36.91	14.6%	80-85	0.00	0.0%	140-145	0	0.0%
25-30	35.07	13.9%	85-90	0	0.0%	145-150	0	0.0%
30-35	30.28	12.0%	90-95	0	0.0%	150-155	0	0.0%
35-40	23.39	9.3%	95-100	0	0.0%	155-160	0	0.0%
40-45	16.49	6.5%	100-105	0	0.0%	160-165	0	0.0%
45-50	10.81	4.3%	105-110	0	0.0%	165-170	0	0.0%
50-55	6.73	2.7%	110-115	0	0.0%	170-175	0	0.0%
55-60	4.07	1.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	210	83.1%
0-60	248	98.2%
0-90	252	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	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7
	5	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6
	10	235.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8
	15	218.6	218.6	218.6	218.6	218.6	218.6	218.6	218.6	218.6	218.6	218.6	218.6	218.6	218.6	218.6
	20	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8
	25	157.8	157.8	157.8	157.8	157.8	157.8	157.8	157.8	157.8	157.8	157.8	157.8	157.8	157.8	157.8
	30	120.9	120.9	120.9	120.9	120.9	120.9	120.9	120.9	120.9	120.9	120.9	120.9	120.9	120.9	120.9
	35	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
	40	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2
	45	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
	50	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
	55	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
	60	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	65	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	70	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	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	0.0	0.0	0.0	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)

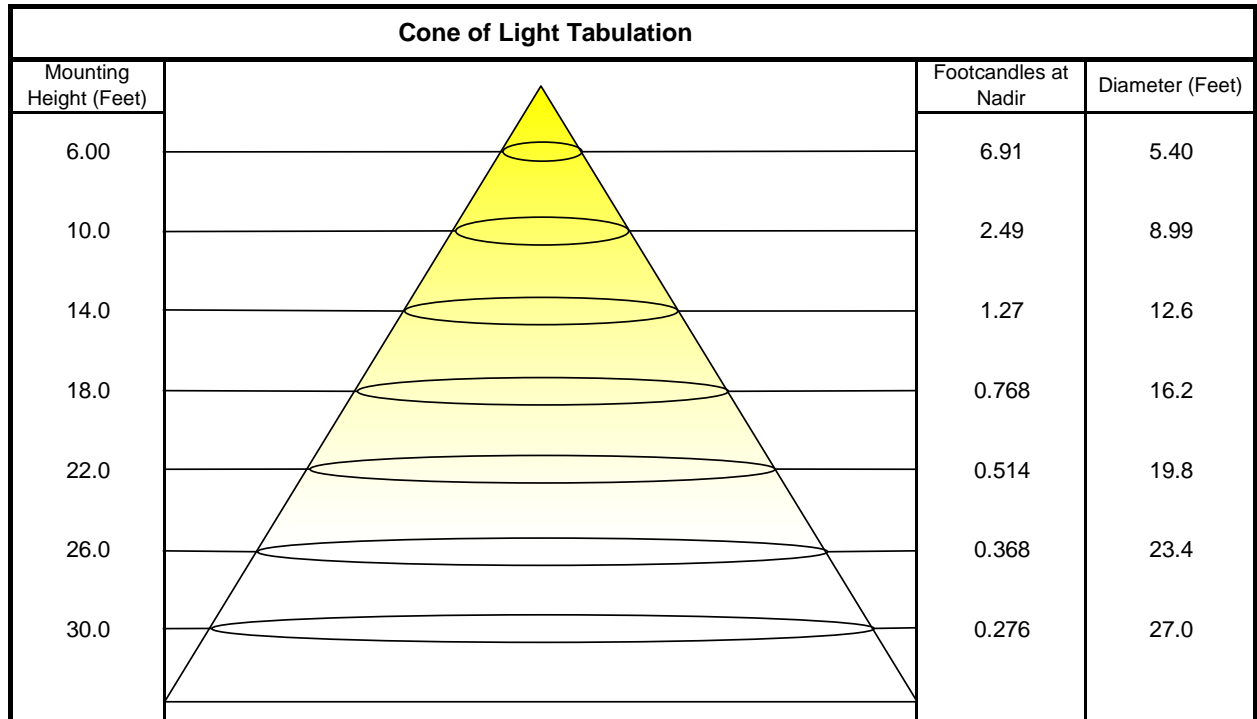
Vertical Angle (Degrees)	0	45	90
	0	490900	490900
	45	96250	96250
	55	39710	39710
	65	16970	16970
	75	4348	4348
	85	0	0



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	300	300	300	300	293	293	293	293	280	280	280	268	268	268	257	257	257	252
1	285	278	271	265	279	272	266	260	262	257	252	252	248	245	244	241	238	233
2	269	256	245	235	264	252	241	233	243	235	228	236	229	223	229	223	218	214
3	254	236	223	212	249	233	220	210	226	215	207	220	211	203	214	207	200	196
4	240	219	204	192	235	216	202	191	210	198	189	205	195	186	200	192	184	180
5	226	203	187	175	222	201	186	175	196	183	173	192	180	171	188	178	170	166
6	214	189	173	161	210	187	172	161	183	170	160	180	168	158	176	166	157	153
7	202	177	160	149	199	175	160	149	172	158	148	169	156	147	166	155	146	142
8	192	166	149	138	188	164	149	138	161	147	137	159	146	137	156	145	136	132
9	182	156	140	129	179	154	139	129	152	138	128	150	137	128	147	136	127	124
10	173	147	131	120	170	145	130	120	143	129	120	141	129	120	139	128	119	116

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	248.7 Candela
Central Cone Intensity:	248 Candela
Beam Flux:	153.1 Lumens
Beam Angle (0-180):	59.0 Degrees
Beam Angle (90-270):	59.0 Degrees
Field Angle (0-180):	96.2 Degrees
Field Angle (90-270):	96.2 Degrees





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	78.1	30.9%
FM	(30-60)	46.0	18.2%
FH	(60-80)	2.2	0.9%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	78.1	30.9%
BM	(30-60)	46.0	18.2%
BH	(60-80)	2.2	0.9%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		252.5	100.0%
BUG Rating	B0 U0 G0		