



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
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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
HSL11-6-N-45 (6W, 15° OPTIC, 4500K)

Order Number

12250114

Test Number

12250114.46

Report Date

2018-05-07

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, clear glass lens and internal LED module

Lamp: One (1) Cree XHP 4500K LED with 15°, narrow optic

Mounting: Flood

Ballast/Driver: Integrated

Note: This report has been pro-rated using data from report numbers 12250114.45, 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: 1.50 in.

Luminous Height: 1.000 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Full Cutoff
BUG Rating: B1 U0 G0

Test Conditions

Test Temperature: 24.4 °C
Voltage: 12.02 VAC
Current: 0.5352 A
Power: 6.370 W
Power Factor: 0.990
Frequency: 60 Hz
Current THD: 7.19 %

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
24.4 °C	12.02 VAC	0.5352 A	6.370 W	0.990	60 Hz	7.19 %

Summary of Results

Spacing Criteria

0-180: 0.29

90-270: 0.29

Total Lumen Output:

324.6 Lumens

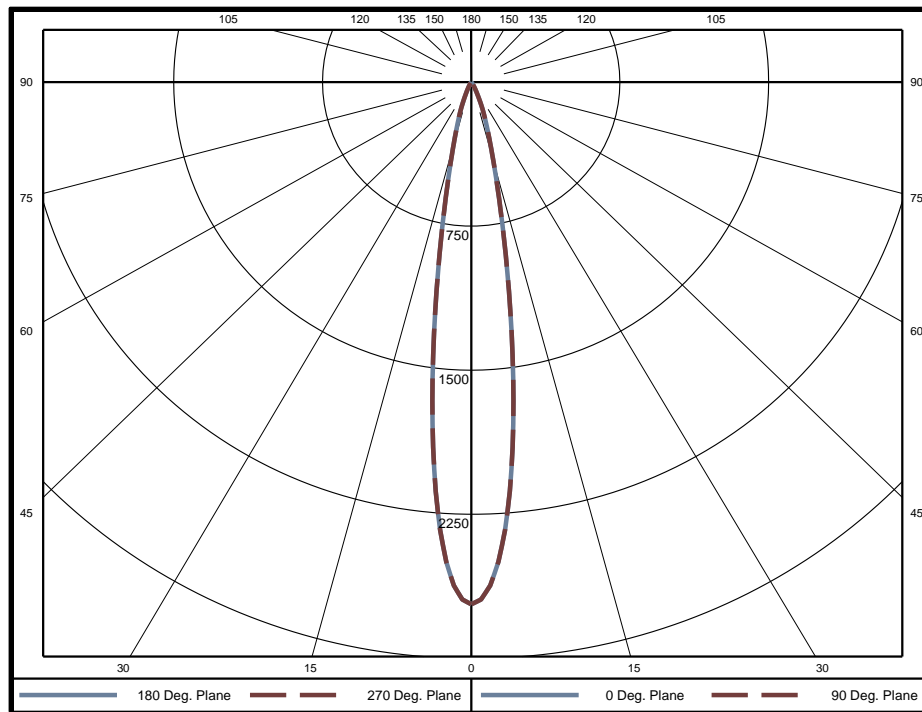
Luminaire Efficacy:

51.0 lm/w

Maximum Candela:

2718 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	57.9	17.8%	60-65	0	0.0%	120-125	0	0.0%
5-10	107.0	33.0%	65-70	0	0.0%	125-130	0	0.0%
10-15	74.4	22.9%	70-75	0	0.0%	130-135	0	0.0%
15-20	43.7	13.5%	75-80	0	0.0%	135-140	0	0.0%
20-25	24.3	7.5%	80-85	0	0.0%	140-145	0	0.0%
25-30	10.7	3.3%	85-90	0	0.0%	145-150	0	0.0%
30-35	4.3	1.3%	90-95	0	0.0%	150-155	0	0.0%
35-40	1.7	0.5%	95-100	0	0.0%	155-160	0	0.0%
40-45	0.7	0.2%	100-105	0	0.0%	160-165	0	0.0%
45-50	0	0.0%	105-110	0	0.0%	165-170	0	0.0%
50-55	0	0.0%	110-115	0	0.0%	170-175	0	0.0%
55-60	0	0.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	324	99.8%
0-60	325	100.0%
0-90	325	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	2718	2718	2718	2718	2718	2718	2718	2718	2718	2718	2718	2718	2718	2718	2718
	5	2137	2137	2137	2137	2137	2137	2137	2137	2137	2137	2137	2137	2137	2137	2137
	10	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001
	15	392	392	392	392	392	392	392	392	392	392	392	392	392	392	392
	20	179	179	179	179	179	179	179	179	179	179	179	179	179	179	179
	25	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
	30	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	35	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	40	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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)

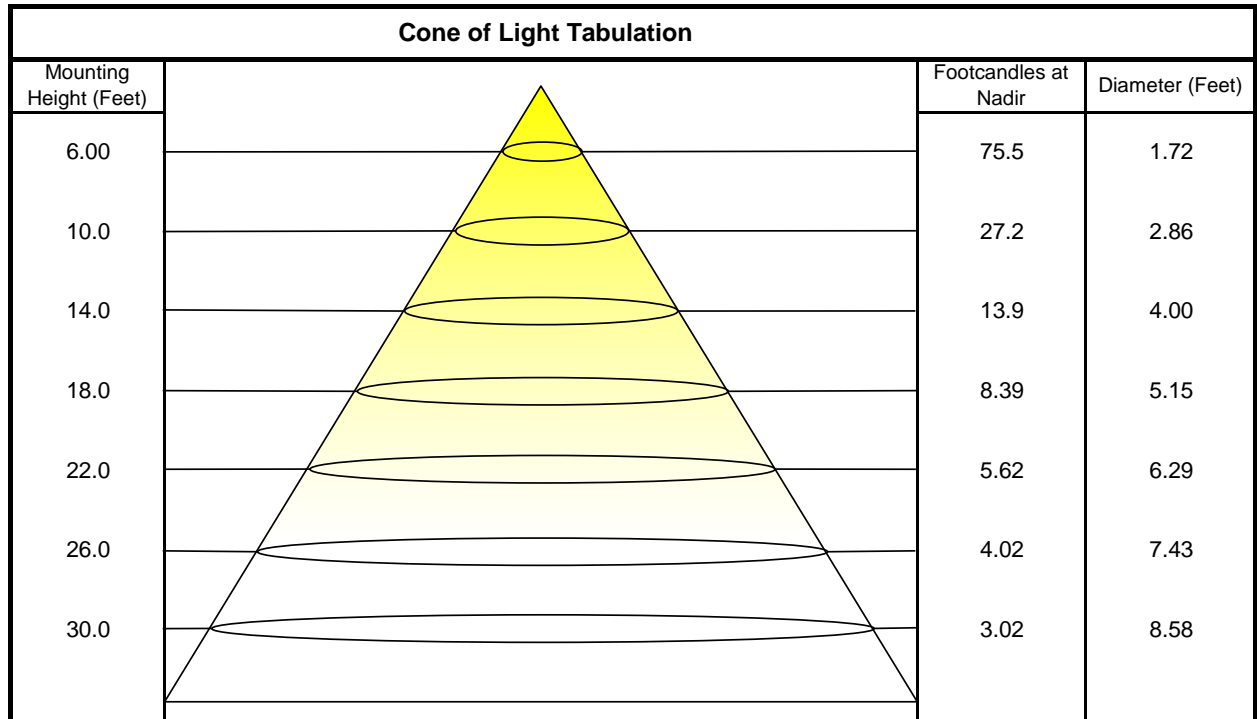
Vertical Angle (Degrees)	0	45	90
	0	2384000	2384000
	45	0	0
	55	0	0
	65	0	0
	75	0	0
	85	0	0



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	386	386	386	386	377	377	377	377	361	361	361	345	345	345	331	331	331	325
1	375	369	363	358	367	362	357	353	349	345	342	337	334	332	326	324	322	317
2	364	354	345	338	358	349	341	334	339	333	327	330	325	320	321	317	314	309
3	355	341	331	323	349	337	328	320	329	322	316	322	316	311	316	311	306	302
4	346	331	319	311	341	327	317	309	321	313	306	315	308	302	310	304	299	296
5	338	321	309	301	333	318	308	300	313	304	297	309	301	295	304	298	292	289
6	330	313	301	292	326	310	299	292	306	297	290	302	294	288	299	292	286	283
7	323	305	293	285	320	303	292	284	300	290	283	296	288	282	293	286	280	278
8	316	298	286	278	313	296	285	278	293	284	277	291	282	276	288	281	275	272
9	310	291	280	272	307	290	279	272	288	278	271	285	277	271	283	275	270	267
10	304	285	274	267	301	284	274	267	282	273	266	280	272	265	278	271	265	262

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	2718 Candela
Central Cone Intensity:	2508 Candela
Beam Flux:	131.0 Lumens
Beam Angle (0-180):	16.6 Degrees
Beam Angle (90-270):	16.6 Degrees
Field Angle (0-180):	34.5 Degrees
Field Angle (90-270):	34.5 Degrees





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	159.2	49.0%
FM	(30-60)	3.1	1.0%
FH	(60-80)	0.0	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	159.2	49.0%
BM	(30-60)	3.1	1.0%
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		324.6	100.0%
BUG Rating	B1 U0 G0		