



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IES LM-79-2008, ANSI C82.77-2002, IES LM-35-2002 (Withdrawn)

Prepared For **Auroralight Inc**

2742 Loker Ave W
#100
Carlsbad, CA 92010-6619
United States

Catalog Number **LDM350-360-30 (360° OPENING, 3000K)**

Order Number

11263738

Test Number

1256649A

Revision of Test Number 1256649 on:

2021-06-29

Test Date

2018-03-08

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 copper housing, brass domed top with four (4) 90° openings and clear acrylic lens
Lamp: One (1) Cree XHP 3000K LED
Mounting: Recessed In-Grade/Wall

Luminaire



Luminaire Characteristics

Luminous Diameter: 3.50 in.
Luminous Height: 0.410 in.

Summary of Results

Total Luminaire Output:	37.97 Lumens
Luminaire Efficacy:	9.88 lm/w
Maximum Candela:	21 Candela

Test Conditions

Test Temperature:	24.1 °C
Voltage:	11.89 VAC
Current:	0.3318 A
Power:	3.843 W
Power Factor:	0.974
Frequency:	60 Hz
Current THD:	13.6 %

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
24.1 °C	11.89 VAC	0.3318 A	3.843 W	0.974	60 Hz	13.6 %

Summary of Results

Spacing Criteria

0-180: 1.60
90-270: 1.67

Total Lumen Output:

58.99 Lumens

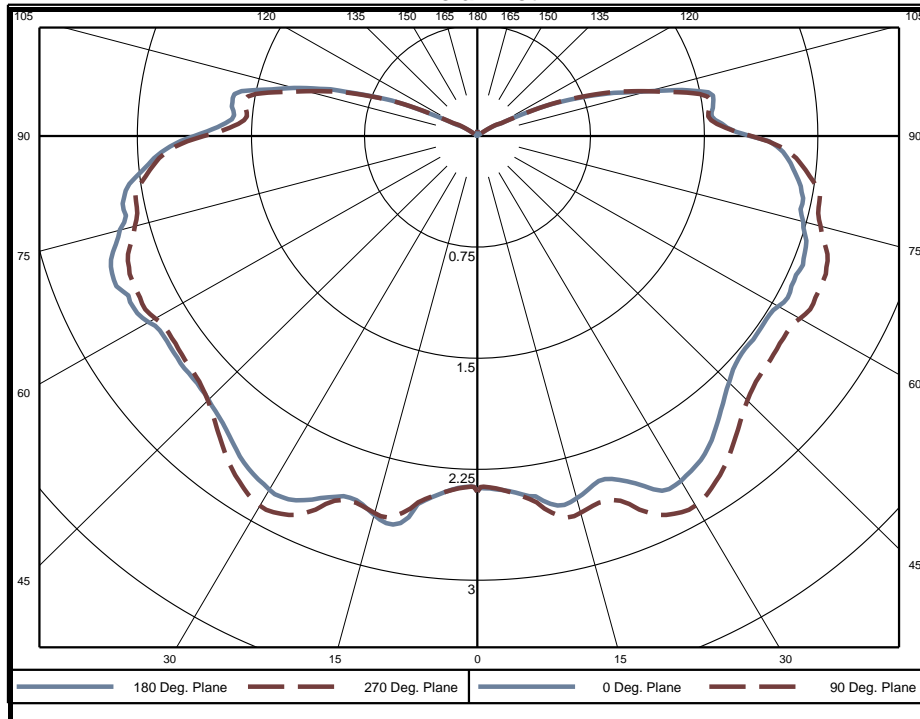
Luminaire Efficacy:

15.4 lm/w

Maximum Candela:

21 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.058	0.1%	60-65	2.341	4.0%	120-125	0.127	0.2%
5-10	0.180	0.3%	65-70	2.842	4.8%	125-130	0.051	0.1%
10-15	0.319	0.5%	70-75	3.030	5.1%	130-135	0.022	0.0%
15-20	0.446	0.8%	75-80	4.025	6.8%	135-140	0.019	0.0%
20-25	0.637	1.1%	80-85	6.704	11.4%	140-145	0.016	0.0%
25-30	0.841	1.4%	85-90	7.390	12.5%	145-150	0.013	0.0%
30-35	1.000	1.7%	90-95	7.731	13.1%	150-155	0.011	0.0%
35-40	1.134	1.9%	95-100	6.979	11.8%	155-160	0.009	0.0%
40-45	1.272	2.2%	100-105	4.179	7.1%	160-165	0.007	0.0%
45-50	1.468	2.5%	105-110	1.479	2.5%	165-170	0.005	0.0%
50-55	1.665	2.8%	110-115	0.823	1.4%	170-175	0.003	0.0%
55-60	1.885	3.2%	115-120	0.277	0.5%	175-180	0.001	0.0%

Zone	Lumens	% of Luminaire
0-40	5	7.8%
0-60	11	18.5%
0-90	37	63.1%
90-180	22	36.9%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal 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	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
	5	2.41	2.45	2.44	2.45	2.41	2.44	2.43	2.44	2.41	2.44	2.43	2.44	2.41	2.45	2.44
	10	2.50	2.63	2.70	2.67	2.55	2.60	2.63	2.63	2.61	2.63	2.63	2.60	2.55	2.67	2.70
	15	2.53	2.66	2.69	2.73	2.63	2.73	2.73	2.73	2.65	2.73	2.73	2.63	2.73	2.69	2.66
	20	2.47	2.86	2.92	2.87	2.61	2.89	2.95	2.82	2.59	2.82	2.95	2.89	2.61	2.87	2.92
	25	2.61	3.38	3.52	3.34	2.82	3.31	3.49	3.18	2.71	3.18	3.49	3.31	2.82	3.34	3.52
	30	2.69	3.55	3.74	3.56	2.88	3.53	3.70	3.32	2.76	3.32	3.70	3.53	2.88	3.56	3.74
	35	2.62	3.60	3.79	3.64	2.79	3.61	3.77	3.39	2.69	3.39	3.77	3.61	2.79	3.64	3.79
	40	2.48	3.60	3.79	3.66	2.65	3.67	3.80	3.40	2.59	3.40	3.80	3.67	2.65	3.66	3.79
	45	2.35	3.75	4.10	3.98	2.52	3.83	3.97	3.55	2.52	3.55	3.97	3.83	2.52	3.98	4.10
	50	2.28	4.03	4.66	4.47	2.46	4.05	4.18	3.78	2.49	3.78	4.18	4.05	2.46	4.47	4.66
	55	2.28	4.16	4.87	4.63	2.44	4.22	4.36	3.97	2.48	3.97	4.36	4.22	2.44	4.63	4.87
	60	2.30	4.92	5.57	5.41	2.46	5.11	5.23	4.83	2.51	4.83	5.23	5.11	2.46	5.41	5.57
	65	2.31	5.79	6.27	6.45	2.49	6.10	6.13	5.86	2.55	5.86	6.13	6.10	2.49	6.45	6.27
	70	2.30	6.78	7.15	7.24	2.46	7.13	6.87	6.84	2.58	6.84	6.87	7.13	2.46	7.24	7.15
	75	2.23	6.33	6.74	7.06	2.35	6.76	6.79	6.85	2.45	6.85	6.79	6.76	2.35	7.06	6.74
	80	2.18	14.39	12.32	12.41	2.30	14.92	14.36	15.17	2.37	15.17	14.36	14.92	2.30	12.41	12.32
	85	2.08	15.94	15.10	16.08	2.15	16.96	17.17	16.73	2.19	16.73	17.17	16.96	2.15	16.08	15.10
	90	1.81	17.59	17.85	18.70	1.82	20.75	20.17	20.40	1.87	20.40	20.17	20.75	1.82	18.70	17.85
	95	1.55	14.99	15.82	16.12	1.53	16.85	16.83	16.98	1.62	16.98	16.83	16.85	1.53	16.12	15.82
	100	1.58	14.62	17.19	16.54	1.54	16.81	17.55	18.34	1.63	18.34	17.55	16.81	1.54	16.54	17.19
	105	1.17	3.64	3.76	3.75	1.17	4.16	4.32	4.28	1.26	4.28	4.32	4.16	1.17	3.75	3.76
	110	0.80	2.60	2.68	2.75	0.82	2.96	3.05	2.98	0.83	2.98	3.05	2.96	0.82	2.75	2.68
	115	0.45	1.04	1.20	1.16	0.45	1.19	1.29	1.13	0.42	1.13	1.29	1.19	0.45	1.16	1.20
	120	0.16	0.36	0.45	0.41	0.17	0.36	0.40	0.32	0.14	0.32	0.40	0.36	0.17	0.41	0.45
	125	0.08	0.23	0.26	0.27	0.08	0.24	0.24	0.20	0.06	0.20	0.24	0.24	0.08	0.27	0.26
	130	0.01	0.07	0.07	0.08	0.01	0.08	0.07	0.07	0.01	0.07	0.07	0.08	0.01	0.08	0.07
	135	0.01	0.06	0.06	0.07	0.01	0.07	0.07	0.06	0.01	0.06	0.07	0.07	0.01	0.07	0.06
	140	0.01	0.06	0.06	0.06	0.01	0.06	0.06	0.06	0.01	0.06	0.06	0.06	0.01	0.06	0.06
	145	0.01	0.06	0.06	0.06	0.01	0.06	0.06	0.06	0.00	0.06	0.06	0.06	0.01	0.06	0.06
	150	0.01	0.05	0.06	0.06	0.01	0.06	0.06	0.05	0.01	0.05	0.06	0.06	0.01	0.06	0.06
	155	0.01	0.05	0.05	0.06	0.01	0.06	0.05	0.05	0.01	0.05	0.05	0.06	0.01	0.06	0.05
	160	0.01	0.05	0.05	0.06	0.01	0.06	0.05	0.05	0.01	0.05	0.05	0.06	0.01	0.06	0.05
	165	0.01	0.05	0.05	0.06	0.01	0.06	0.05	0.05	0.00	0.05	0.05	0.06	0.01	0.06	0.05
	170	0.01	0.05	0.05	0.06	0.01	0.05	0.05	0.05	0.01	0.05	0.05	0.05	0.01	0.06	0.05
	175	0.01	0.05	0.05	0.06	0.01	0.06	0.05	0.05	0.01	0.05	0.05	0.06	0.01	0.06	0.05
	180	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)			
	0	45	90	
	0	387	387	387
	45	1296	2258	1390
	55	728	1554	779
	65	663	1799	713
	75	580	1753	611
	85	514	3733	530



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	65	65	65	65	61	61	61	61	53	53	53	47	47	47	40	40	40	37
1	53	48	43	39	49	45	40	37	38	34	31	32	29	26	26	24	22	19
2	47	40	34	29	43	37	31	27	31	27	23	26	22	19	21	18	15	13
3	42	34	28	22	39	31	25	21	26	21	18	22	18	15	17	14	12	9
4	38	29	23	18	35	27	21	17	23	18	14	19	15	12	15	12	9	7
5	35	26	20	15	32	24	18	14	20	15	12	17	13	10	13	10	8	6
6	32	23	17	13	29	21	16	12	18	13	10	15	11	8	12	9	6	5
7	29	21	15	11	27	19	14	10	16	12	9	13	10	7	11	8	6	4
8	27	19	13	9	25	17	12	9	15	10	7	12	9	6	10	7	5	3
9	25	17	12	8	23	16	11	8	13	9	7	11	8	5	9	6	4	3
10	24	16	11	7	22	14	10	7	12	8	6	10	7	5	9	6	4	3

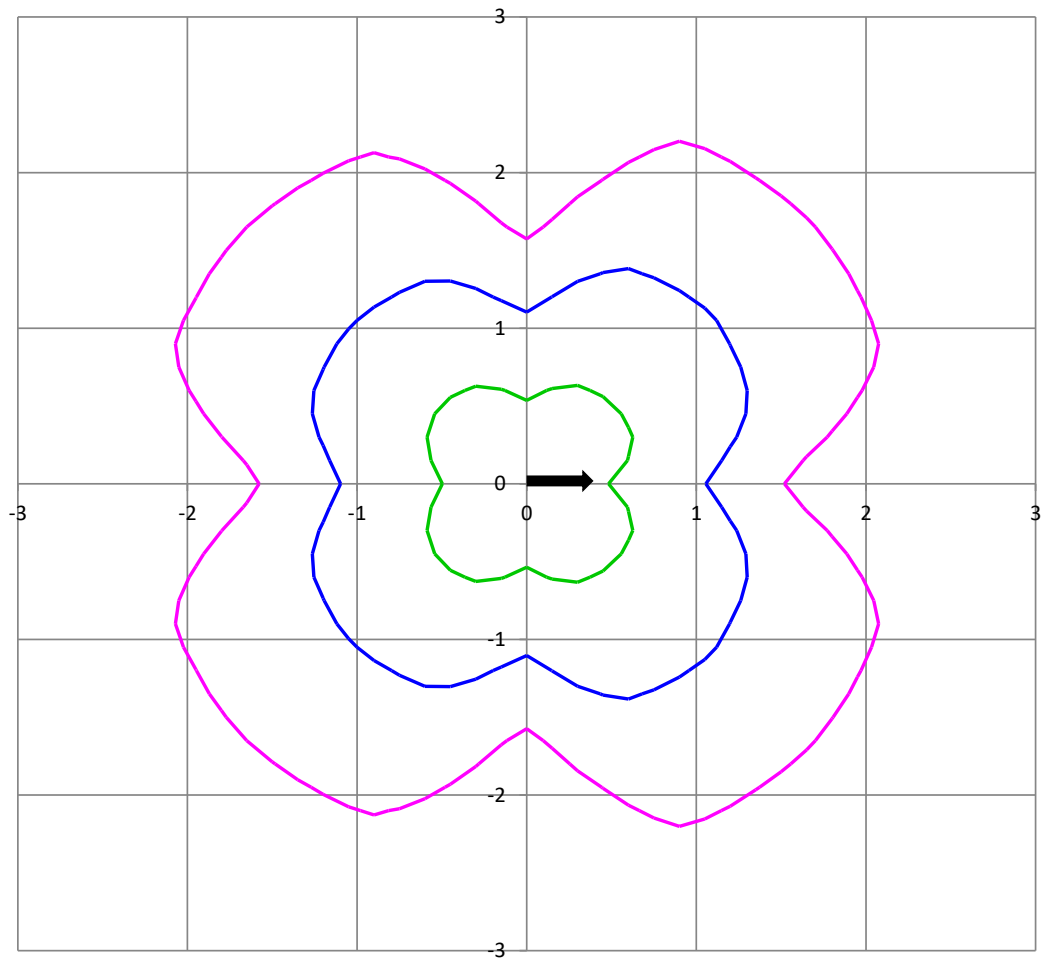
Beam and Field Information	
CIE Type:	Semi-Direct
Center Beam Intensity:	2.40 Candela
Central Cone Intensity:	2 Candela
Beam Flux:	58.2 Lumens
Beam Angle (0-180):	210.4 Degrees
Beam Angle (90-270):	209.2 Degrees
Field Angle (0-180):	235.3 Degrees
Field Angle (90-270):	235.7 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		0.150	8.24
6.00		0.0667	12.4
8.00		0.0375	16.5
10.0		0.0240	20.6
12.0		0.0167	24.7
14.0		0.0123	28.9
16.0		0.00938	33.0

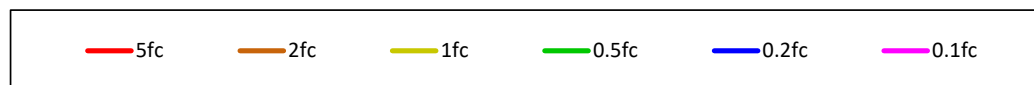


ISOFootcandle Plot

Mounting Height - 2 Feet

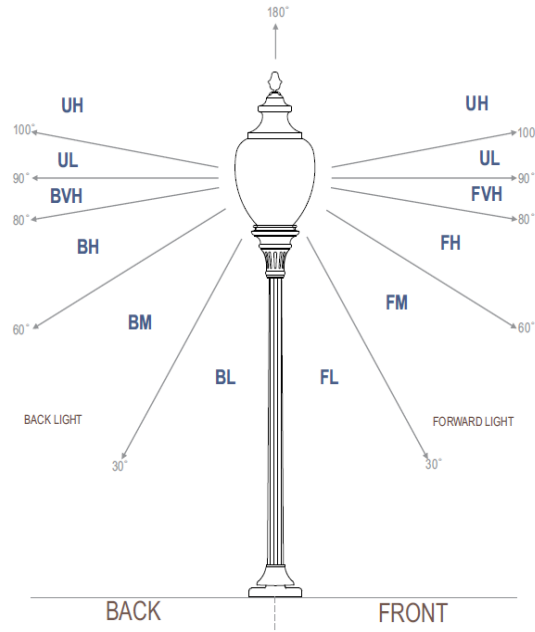


Grid Lines in Units of Mounting Height





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	#N/A	#N/A
FM	(30-60)	#N/A	#N/A
FH	(60-80)	#N/A	#N/A
FVH	(80-90)	#N/A	#N/A
BL	(0-30)	#N/A	#N/A
BM	(30-60)	#N/A	#N/A
BH	(60-80)	#N/A	#N/A
BVH	(80-90)	#N/A	#N/A
UL	(90-100)	#N/A	#N/A
UH	(100-180)	#N/A	#N/A
Total		#N/A	#N/A
BUG Rating	#N/A		



Attachment A

Amended Report Documentation

[illegible]