



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 Avenue West
Carlsbad
CA, 92010
United States

Catalog Number

HPL7-5-30

Order Number

11745044

Test Number

11745044.20

Test Date

2017-05-15

Prepared By

Javier Caban, Technician

Approved By

Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Conical 7" copper shade with clear glass lens, cylindrical copper stem and brass base
Lamp: 64 white LEDs
Mounting: Path/Area
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 7.00 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Semicutoff
BUG Rating: B0 U1 G0

Test Conditions

Test Temperature: 24.6 °C
Voltage: 12.01 VAC
Current: 0.6002 A
Power: 4.439 W
Power Factor: 0.615
Frequency: 60 Hz
Current THD: 72.4 %

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
24.6 °C	12.01 VAC	0.6002 A	4.439 W	0.615	60 Hz	72.4 %

Summary of Results

Spacing Criteria

0-180: 1.04

90-270: 1.04

Total Lumen Output:

206.9 Lumens

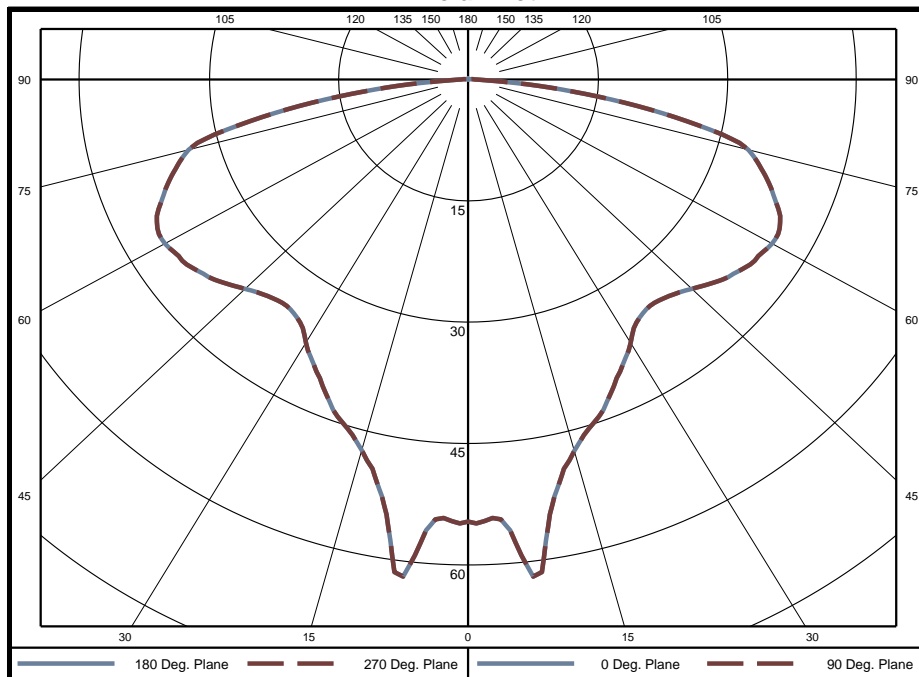
Luminaire Efficacy:

46.6 lm/w

Maximum Candela:

62 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.31	0.6%	60-65	19.67	9.5%	120-125	0.03	0.0%
5-10	4.22	2.0%	65-70	19.47	9.4%	125-130	0.02	0.0%
10-15	5.96	2.9%	70-75	18.49	8.9%	130-135	0.02	0.0%
15-20	7.53	3.6%	75-80	15.17	7.3%	135-140	0.02	0.0%
20-25	8.92	4.3%	80-85	7.53	3.6%	140-145	0.02	0.0%
25-30	9.91	4.8%	85-90	1.42	0.7%	145-150	0.02	0.0%
30-35	10.65	5.1%	90-95	0.33	0.2%	150-155	0.02	0.0%
35-40	11.72	5.7%	95-100	0.14	0.1%	155-160	0.02	0.0%
40-45	13.28	6.4%	100-105	0.08	0.0%	160-165	0.01	0.0%
45-50	15.17	7.3%	105-110	0.05	0.0%	165-170	0.01	0.0%
50-55	17.04	8.2%	110-115	0.04	0.0%	170-175	0.01	0.0%
55-60	18.59	9.0%	115-120	0.03	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	60	29.1%
0-60	124	60.1%
0-90	206	99.6%
90-180	1	0.4%



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	54.63	54.63	54.63	54.63	54.63	54.63	54.63	54.63	54.63	54.63	54.63	54.63	54.63	54.63	54.63
	5	55.91	55.91	55.91	55.91	55.91	55.91	55.91	55.91	55.91	55.91	55.91	55.91	55.91	55.91	55.91
	10	54.56	54.56	54.56	54.56	54.56	54.56	54.56	54.56	54.56	54.56	54.56	54.56	54.56	54.56	54.56
	15	47.52	47.52	47.52	47.52	47.52	47.52	47.52	47.52	47.52	47.52	47.52	47.52	47.52	47.52	47.52
	20	44.32	44.32	44.32	44.32	44.32	44.32	44.32	44.32	44.32	44.32	44.32	44.32	44.32	44.32	44.32
	25	40.72	40.72	40.72	40.72	40.72	40.72	40.72	40.72	40.72	40.72	40.72	40.72	40.72	40.72	40.72
	30	37.63	37.63	37.63	37.63	37.63	37.63	37.63	37.63	37.63	37.63	37.63	37.63	37.63	37.63	37.63
	35	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28
	40	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29
	45	36.60	36.60	36.60	36.60	36.60	36.60	36.60	36.60	36.60	36.60	36.60	36.60	36.60	36.60	36.60
	50	38.47	38.47	38.47	38.47	38.47	38.47	38.47	38.47	38.47	38.47	38.47	38.47	38.47	38.47	38.47
	55	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88	39.88
	60	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62	40.62
	65	39.89	39.89	39.89	39.89	39.89	39.89	39.89	39.89	39.89	39.89	39.89	39.89	39.89	39.89	39.89
	70	37.01	37.01	37.01	37.01	37.01	37.01	37.01	37.01	37.01	37.01	37.01	37.01	37.01	37.01	37.01
	75	33.62	33.62	33.62	33.62	33.62	33.62	33.62	33.62	33.62	33.62	33.62	33.62	33.62	33.62	33.62
	80	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42
	85	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89
	90	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
	95	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
	100	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
	105	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
	110	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
	115	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	120	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	125	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	130	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	135	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	140	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	145	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	150	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	155	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	160	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	165	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	170	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	175	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	180	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	2200	2200
	45	2085	2085
	55	2800	2800
	65	3801	3801
	75	5232	5232
	85	3183	3183



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	246	246	246	246	240	240	240	240	229	229	229	219	219	219	210	210	210	206
1	218	205	193	183	212	200	189	180	191	182	174	182	175	168	174	168	163	158
2	193	172	154	139	187	167	151	137	160	146	134	152	141	130	146	136	127	122
3	173	146	126	110	167	143	124	109	136	120	106	130	116	104	124	112	102	97
4	156	127	106	89	151	124	104	89	118	101	87	113	98	86	108	95	84	79
5	143	112	91	75	138	109	89	74	105	87	73	100	84	72	96	82	71	66
6	131	100	79	64	127	98	78	63	94	76	63	90	74	62	86	72	61	56
7	121	90	70	55	117	88	69	55	85	67	55	81	66	54	78	64	54	49
8	112	82	62	49	109	80	62	49	77	60	48	74	59	48	72	58	47	43
9	105	75	56	44	102	73	56	44	71	55	43	68	53	43	66	52	43	38
10	98	69	51	39	95	68	51	39	65	50	39	63	49	39	61	48	38	35

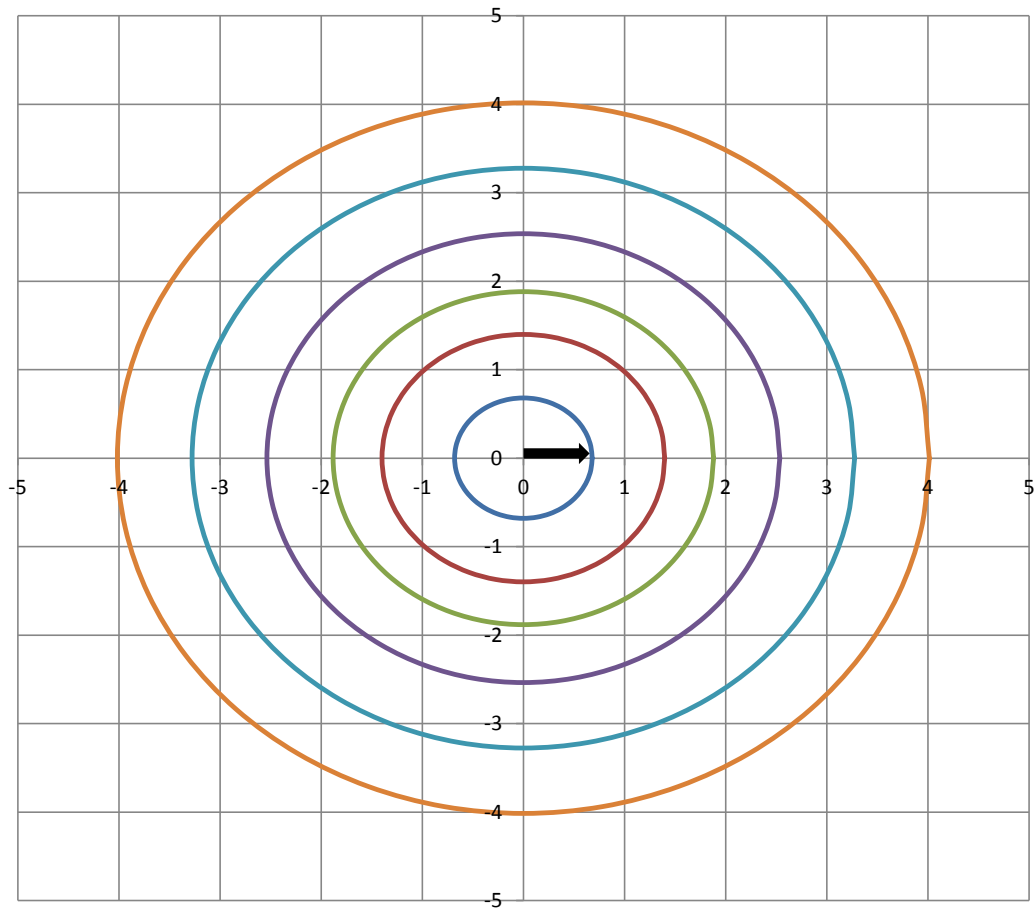
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	54.63 Candela
Central Cone Intensity:	55 Candela
Beam Flux:	191.7 Lumens
Beam Angle (0-180):	156.0 Degrees
Beam Angle (90-270):	156.0 Degrees
Field Angle (0-180):	171.0 Degrees
Field Angle (90-270):	171.0 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		3.41	4.17
6.00		1.52	6.26
8.00		0.854	8.34
10.0		0.546	10.4
12.0		0.379	12.5
14.0		0.279	14.6
16.0		0.213	16.7



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)	18.9	9.1%
FM	(30-60)	43.2	20.9%
FH	(60-80)	36.3	17.5%
FVH	(80-90)	4.6	2.2%
BL	(0-30)	18.9	9.1%
BM	(30-60)	43.2	20.9%
BH	(60-80)	36.3	17.5%
BVH	(80-90)	4.6	2.2%
UL	(90-100)	0.5	0.2%
UH	(100-180)	0.4	0.2%
Total		206.9	100.0%
BUG Rating	B0 U1 G0		