



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
LWL2-4-W-30 (4W, 40° OPTIC, 3000K)

Order Number

13551695

Test Number

13551695.21A

Revision of Test Number 13551695.21 on:

2021-05-12

Test Date

2021-02-11

Prepared By

Jesse Litchfield, Technician

Approved By

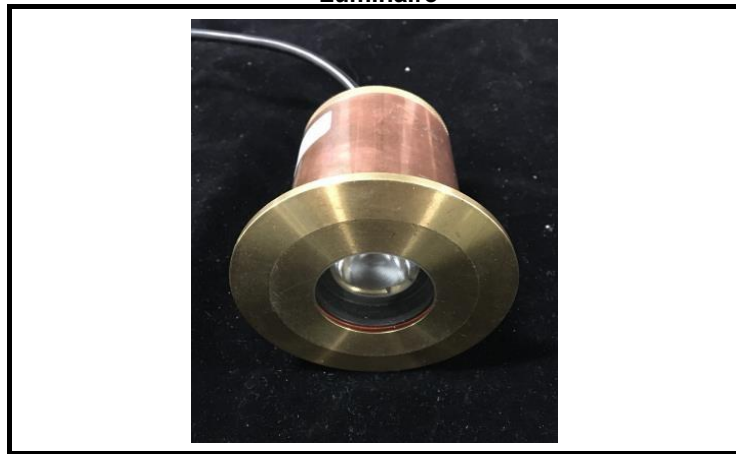
Alexa Lambert, Project Handler

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Luminaire Description: Cylindrical brass housing with circular brass faceplate and clear lens
Lamp: One (1) XHP35 3000K Cree LED
Mounting: In-Grade
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 1.25 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Noncutoff
BUG Rating: B0 U3 G0

Test Conditions

Test Temperature: 24.8 °C
Voltage: 12.04 VAC
Current: 0.3736 A
Power: 4.483 W
Power Factor: 0.996
Frequency: 60 Hz
Current THD: 4.58 %

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
24.8 °C	12.04 VAC	0.3736 A	4.483 W	0.996	60 Hz	4.58 %

Summary of Results

Spacing Criteria

0-180: #N/A

90-270: #N/A

Total Lumen Output:

300.0 Lumens

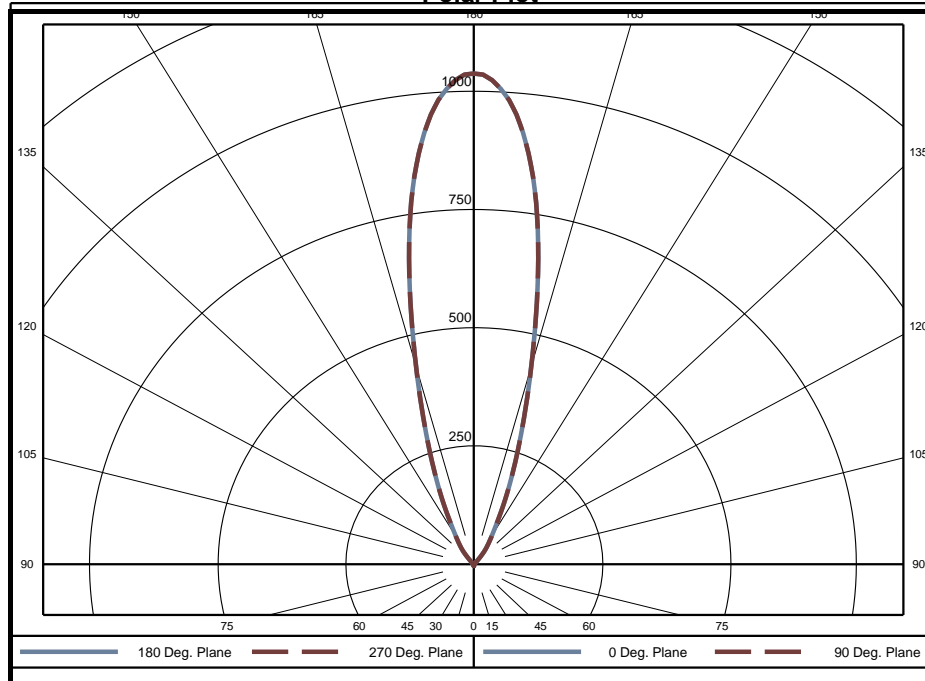
Luminaire Efficacy:

66.9 lm/w

Maximum Candela:

1037 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0	0.0%	60-65	0	0.0%	120-125	0.80	0.3%
5-10	0	0.0%	65-70	0	0.0%	125-130	1.13	0.4%
10-15	0	0.0%	70-75	0	0.0%	130-135	1.65	0.6%
15-20	0	0.0%	75-80	0	0.0%	135-140	3.08	1.0%
20-25	0	0.0%	80-85	0	0.0%	140-145	9.49	3.2%
25-30	0	0.0%	85-90	0	0.0%	145-150	16.33	5.4%
30-35	0	0.0%	90-95	0.03	0.0%	150-155	24.42	8.1%
35-40	0	0.0%	95-100	0.07	0.0%	155-160	38.20	12.7%
40-45	0	0.0%	100-105	0.11	0.0%	160-165	53.72	17.9%
45-50	0	0.0%	105-110	0.16	0.1%	165-170	66.55	22.2%
50-55	0	0.0%	110-115	0.26	0.1%	170-175	59.66	19.9%
55-60	0	0.0%	115-120	0.50	0.2%	175-180	23.80	7.9%

Zone	Lumens	% of Luminaire
0-40	0	0.0%
0-60	0	0.0%
0-90	0	0.0%
90-180	300	100.0%



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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	125	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	130	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	135	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	140	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	145	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
	150	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
	155	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
	160	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244
	165	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432
	170	718	718	718	718	718	718	718	718	718	718	718	718	718	718	718
	175	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954
	180	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037

Average Luminance (cd/m²)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
	0	0	0
	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	286	286	286	286	244	244	244	244	167	167	167	96	96	96	31	31	31	0
1	260	248	237	227	221	212	203	196	145	140	135	83	81	79	27	26	25	0
2	236	216	199	185	201	185	172	160	127	119	112	73	69	65	23	22	21	0
3	215	189	169	154	183	162	146	133	111	102	93	64	59	55	21	19	18	0
4	196	167	145	129	167	143	126	112	98	88	79	57	51	47	18	17	15	0
5	179	148	125	109	152	127	109	95	87	76	67	51	45	40	16	15	13	0
6	164	131	109	93	140	113	95	81	78	66	57	45	39	34	15	13	11	0
7	151	118	96	81	129	101	83	70	70	58	50	41	34	30	13	11	10	0
8	140	106	85	70	119	91	73	61	63	52	43	37	30	26	12	10	9	0
9	129	96	75	61	110	82	65	53	57	46	38	33	27	23	11	9	8	0
10	120	87	67	54	102	75	58	47	52	41	33	30	24	20	10	8	7	0

Beam and Field Information

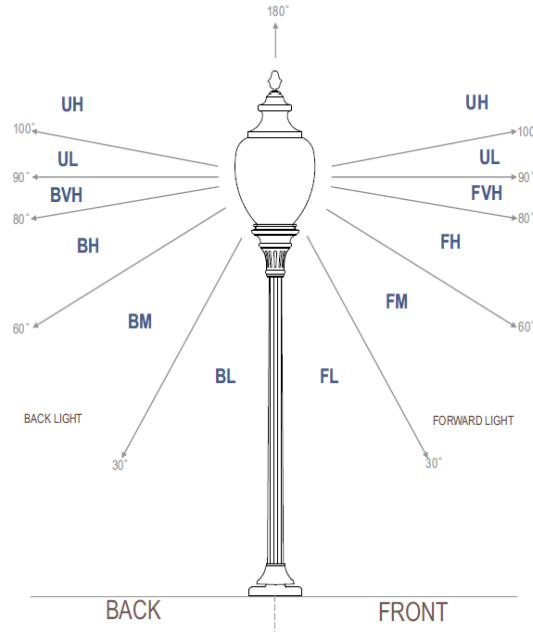
CIE Type:	Indirect
Center Beam Intensity:	1037 Candela
Central Cone Intensity:	1008 Candela
Beam Flux:	128.9 Lumens
Beam Angle (0-180):	26.7 Degrees
Beam Angle (90-270):	26.7 Degrees
Field Angle (0-180):	53.6 Degrees
Field Angle (90-270):	53.6 Degrees

Cone of Light Tabulation

Mounting Height (Feet)		Footcandles at Zenith	Diameter (Feet)
16.0		4.05	7.59
14.0		5.29	6.65
12.0		7.20	5.70
10.0		10.4	4.75
8.00		16.2	3.80
6.00		28.8	2.85
4.00		64.8	1.90



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	0.0	0.0%
FM	(30-60)	0.0	0.0%
FH	(60-80)	0.0	0.0%
FVH	(80-90)	0.0	0.0%
BL	(0-30)	0.0	0.0%
BM	(30-60)	0.0	0.0%
BH	(60-80)	0.0	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.1	0.0%
UH	(100-180)	300.0	100.0%
Total		300.1	100.0%
BUG Rating	B0 U3 G0		