



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
LSM3-30 (3000K)

Order Number
13551695
Test Number
13551695.07

Test Date

2020-10-30

Prepared By

Cordaryl Cousar, Technician

Approved By

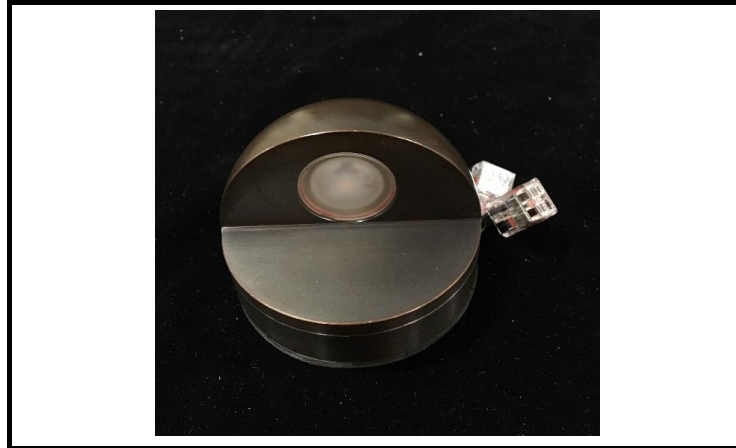
Alexa Lambert, Project Handler

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Luminaire Description: Circular metal mounting plate with metal dome
Lamp: One (1) XP-L 3000K Cree LED
Mounting: Step/Wall
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Length: 1.25 in.
Luminous Width: 1.000 in.
Luminous Height: 1.25 in.

Summary of Results

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

Test Conditions

Test Temperature: 24.7 °C
Voltage: 11.96 VAC
Current: 0.4343 A
Power: 2.975 W
Power Factor: 0.573
Frequency: 60 Hz
Current THD: 107 %

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

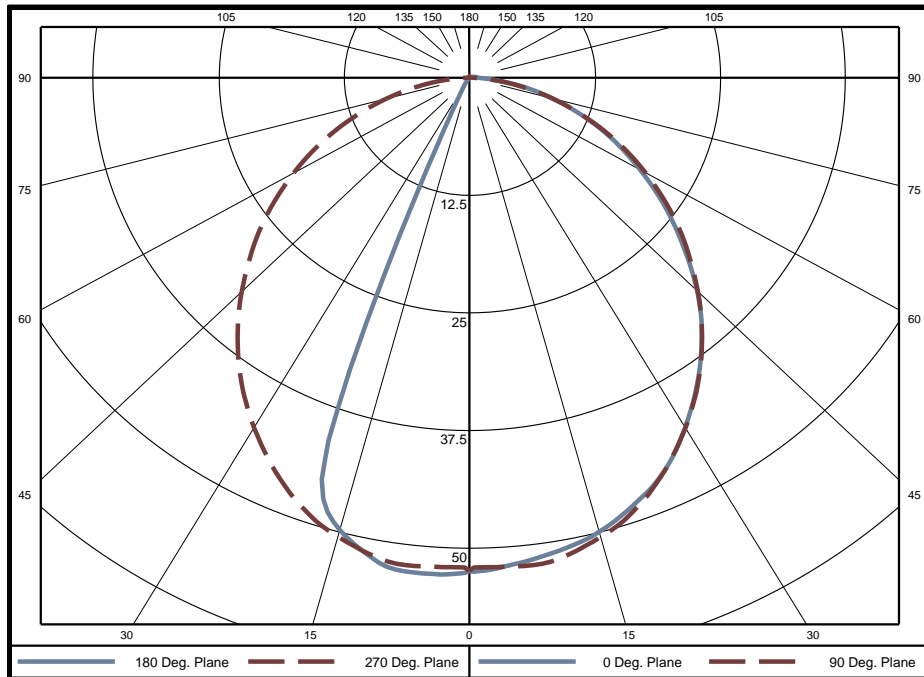
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	11.96 VAC	0.4343 A	2.975 W	0.573	60 Hz	107 %

Summary of Results

Spacing Criteria
 0-180: 1.22
 90-270: 1.22

Total Lumen Output: 104.8 Lumens
Luminaire Efficacy: 35.2 lm/w
Maximum Candela: 53 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.252	1.2%	60-65	5.639	5.4%	120-125	0.021	0.0%
5-10	3.727	3.6%	65-70	4.496	4.3%	125-130	0.016	0.0%
10-15	6.057	5.8%	70-75	3.312	3.2%	130-135	0.015	0.0%
15-20	8.121	7.7%	75-80	2.173	2.1%	135-140	0.015	0.0%
20-25	9.250	8.8%	80-85	1.114	1.1%	140-145	0.015	0.0%
25-30	9.315	8.9%	85-90	0.335	0.3%	145-150	0.015	0.0%
30-35	9.132	8.7%	90-95	0.120	0.1%	150-155	0.015	0.0%
35-40	8.868	8.5%	95-100	0.090	0.1%	155-160	0.013	0.0%
40-45	8.726	8.3%	100-105	0.068	0.1%	160-165	0.011	0.0%
45-50	8.330	7.9%	105-110	0.050	0.0%	165-170	0.009	0.0%
50-55	7.663	7.3%	110-115	0.036	0.0%	170-175	0.006	0.0%
55-60	6.722	6.4%	115-120	0.027	0.0%	175-180	0.002	0.0%

Zone	Lumens	% of Luminaire
0-40	56	53.2%
0-60	87	83.2%
0-90	104	99.5%
90-180	1	0.5%



Candela Tabulation
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	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41	52.41
5	51.88	51.89	51.81	51.80	52.12	52.65	52.85	52.87	52.89	52.87	52.85	52.65	52.12	51.80	51.81	51.89
10	51.07	50.87	51.13	51.58	51.87	52.29	52.44	52.40	52.29	52.40	52.44	52.29	51.87	51.58	51.13	50.87
15	49.95	49.62	50.08	50.46	50.53	50.93	50.90	50.55	49.78	50.55	50.90	50.93	50.53	50.46	50.08	49.62
20	48.19	48.14	48.41	48.69	48.68	49.04	48.68	46.61	40.97	46.61	48.68	49.04	48.68	48.69	48.41	48.14
25	46.07	45.81	45.94	46.06	46.07	46.51	44.88	19.86	4.90	19.86	44.88	46.51	46.07	46.06	45.94	45.81
30	42.99	42.70	42.84	42.97	43.04	43.37	32.87	2.69	1.29	2.69	32.87	43.37	43.04	42.97	42.84	42.70
35	39.61	39.18	39.46	39.63	39.72	39.73	8.08	1.02	0.54	1.02	8.08	39.73	39.72	39.63	39.46	39.18
40	36.04	35.57	35.96	36.10	36.09	35.79	2.28	0.43	0.06	0.43	2.28	35.79	36.09	36.10	35.96	35.57
45	32.13	31.64	32.06	32.19	32.23	31.59	1.11	0.06	0.03	0.06	1.11	31.59	32.23	32.19	32.06	31.64
50	27.83	27.40	27.92	28.17	28.32	26.84	0.61	0.03	0.02	0.03	0.61	26.84	28.32	28.17	27.92	27.40
55	23.77	23.23	23.76	24.12	24.37	21.03	0.32	0.02	0.01	0.02	0.32	21.03	24.37	24.12	23.76	23.23
60	19.73	19.21	19.65	20.04	20.35	15.07	0.15	0.01	0.01	0.01	0.15	15.07	20.35	20.04	19.65	19.21
65	16.00	15.30	15.64	16.06	16.36	10.32	0.05	0.01	0.00	0.01	0.05	10.32	16.36	16.06	15.64	15.30
70	12.23	11.48	11.70	12.04	12.38	6.80	0.02	0.01	0.01	0.01	0.02	6.80	12.38	12.04	11.70	11.48
75	8.68	7.89	7.97	8.27	8.59	4.21	0.02	0.01	0.01	0.01	0.02	4.21	8.59	8.27	7.97	7.89
80	5.32	4.61	4.61	4.77	5.08	2.27	0.01	0.01	0.01	0.01	0.01	2.27	5.08	4.77	4.61	4.61
85	2.37	1.82	1.72	1.77	1.97	0.87	0.01	0.00	0.01	0.00	0.01	0.87	1.97	1.77	1.72	1.82
90	0.87	0.72	0.46	0.27	0.18	0.10	0.01	0.01	0.01	0.01	0.01	0.10	0.18	0.27	0.46	0.72
95	0.71	0.57	0.36	0.16	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.16	0.36	0.57
100	0.53	0.43	0.27	0.12	0.02	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.12	0.27	0.43
105	0.38	0.30	0.19	0.09	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.09	0.19	0.30
110	0.27	0.21	0.14	0.07	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.07	0.14	0.21
115	0.17	0.14	0.10	0.06	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.06	0.10	0.14
120	0.10	0.09	0.07	0.04	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.07	0.09
125	0.06	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.05	0.04	0.03	0.03	0.03	0.04	0.04	0.04
130	0.02	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.02
135	0.00	0.02	0.03	0.04	0.05	0.04	0.05	0.04	0.06	0.04	0.05	0.04	0.05	0.04	0.03	0.02
140	0.01	0.02	0.03	0.04	0.05	0.05	0.05	0.05	0.07	0.05	0.05	0.05	0.05	0.04	0.03	0.02
145	0.02	0.03	0.04	0.05	0.06	0.06	0.05	0.06	0.07	0.06	0.05	0.06	0.06	0.05	0.04	0.03
150	0.02	0.04	0.04	0.06	0.06	0.06	0.06	0.07	0.08	0.07	0.06	0.06	0.06	0.06	0.04	0.04
155	0.04	0.05	0.05	0.06	0.07	0.07	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.06	0.05	0.05
160	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.07	0.06	0.05
165	0.06	0.06	0.07	0.07	0.07	0.08	0.07	0.08	0.08	0.08	0.07	0.08	0.07	0.07	0.07	0.06
170	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.07	0.07
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	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	0.08

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

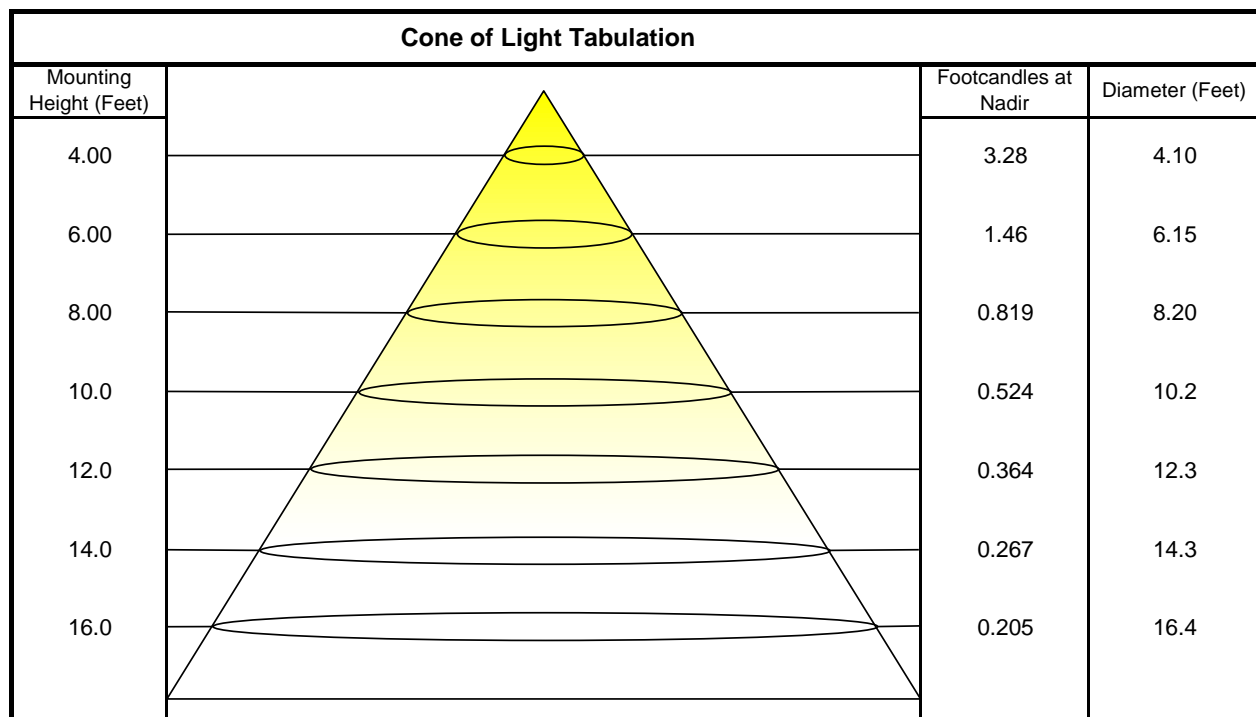
	0	45	90
0	64990	64990	64990
45	28170	21700	25120
55	21170	15700	18910
65	14930	10400	13040
75	8787	5504	7268
85	2709	1273	1828



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	125	125	125	125	122	122	122	122	116	116	116	111	111	111	106	106	106	104
1	115	110	106	103	112	108	104	101	103	100	98	99	97	94	95	93	92	89
2	105	97	91	85	103	95	89	84	92	87	82	88	84	80	85	82	79	76
3	97	87	79	73	94	85	78	72	82	76	71	79	74	69	76	72	68	66
4	89	78	69	63	87	76	68	62	74	67	61	71	65	60	69	64	60	57
5	83	70	61	55	81	69	61	55	67	60	54	65	58	53	63	57	53	51
6	77	64	55	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45
7	72	58	50	44	70	58	49	44	56	49	43	54	48	43	53	47	43	41
8	67	54	45	40	66	53	45	39	52	44	39	50	44	39	49	43	39	37
9	63	50	42	36	62	49	41	36	48	41	36	47	40	36	46	40	35	34
10	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31

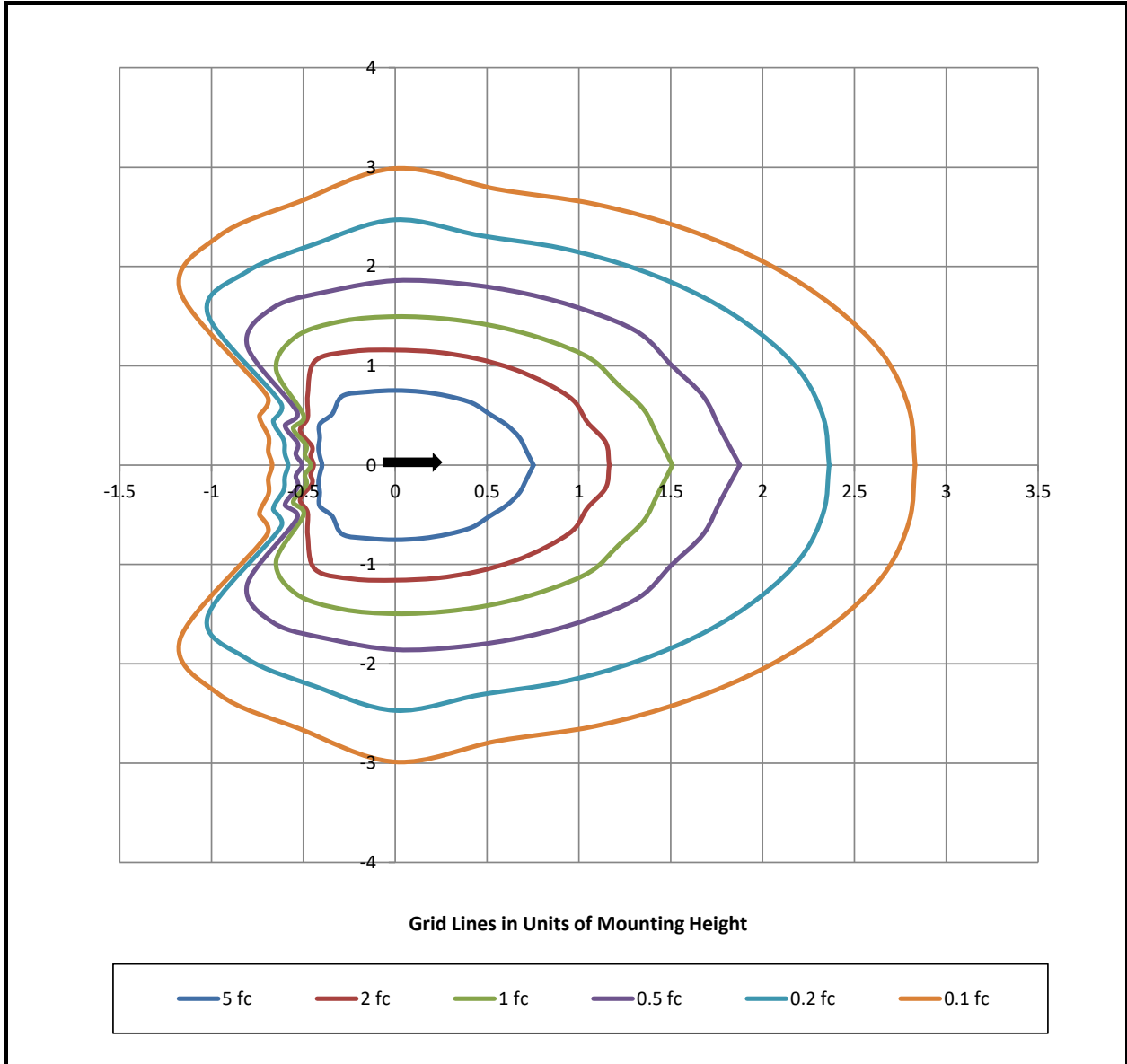
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	52.41 Candela
Central Cone Intensity:	52 Candela
Beam Flux:	74.4 Lumens
Beam Angle (0-180):	73.6 Degrees
Beam Angle (90-270):	105.4 Degrees
Field Angle (0-180):	105.0 Degrees
Field Angle (90-270):	159.5 Degrees





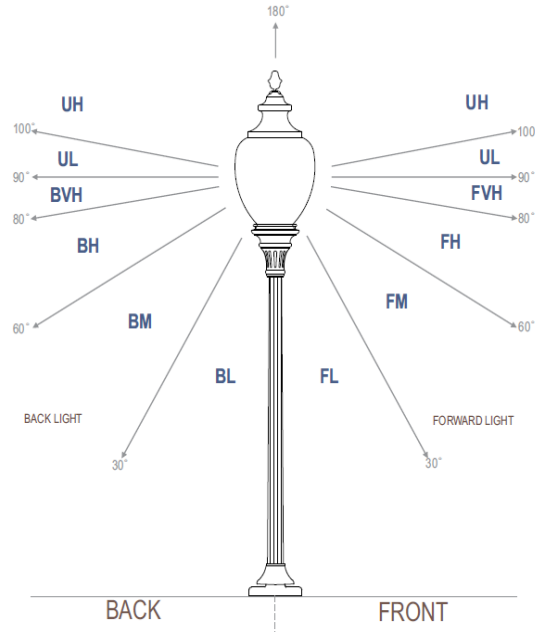
ISOFootcandle Plot

Mounting Height - 2 Feet





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	20.1	19.3%
FM	(30-60)	35.2	33.7%
FH	(60-80)	12.1	11.6%
FVH	(80-90)	1.2	1.1%
BL	(0-30)	17.7	16.9%
BM	(30-60)	13.9	13.3%
BH	(60-80)	3.4	3.3%
BVH	(80-90)	0.3	0.3%
UL	(90-100)	0.2	0.2%
UH	(100-180)	0.3	0.3%
Total		104.4	100.0%
BUG Rating	B0 U1 G0		