



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
LPL7-SQ-7-30

Order Number

12472705

Test Number

12472705.02A

Revision of Test Number 12472705.02 on:

2021-06-15

Test Date

2018-08-27

Prepared By

Javier Caban, Technician

Approved By

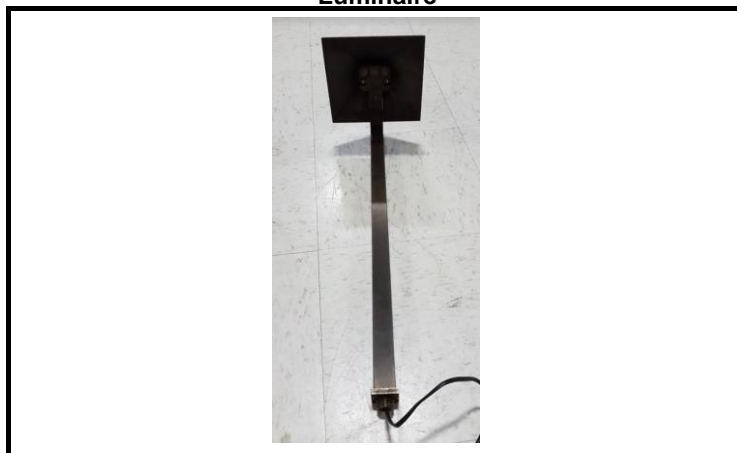
Alexa Lambert, Project Handler

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Luminaire Description: Square 7" copper shade with three (3) acrylic optics, square stem and brass base
Lamp: One (3) XP-L 3000K LEDs with three (3) acrylic optics
Mounting: Path/Area Light
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Length: 6.50 in.
Luminous Width: 6.500 in.

Summary of Results

Roadway Classification: Type I, Very Short
Cutoff Classification: Full Cutoff
BUG Rating: B0 U0 G0

Test Conditions

Test Temperature: 25.6 °C
Voltage: 12.00 VAC
Current: 0.5852 A
Power: 6.941 W
Power Factor: 0.989
Frequency: 60 Hz
Current THD: 8.97 %

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
25.6 °C	12.00 VAC	0.5852 A	6.941 W	0.989	60 Hz	8.97 %

Summary of Results

Spacing Criteria

0-180: 2.26

90-270: 1.31

Total Lumen Output:

258.7 Lumens

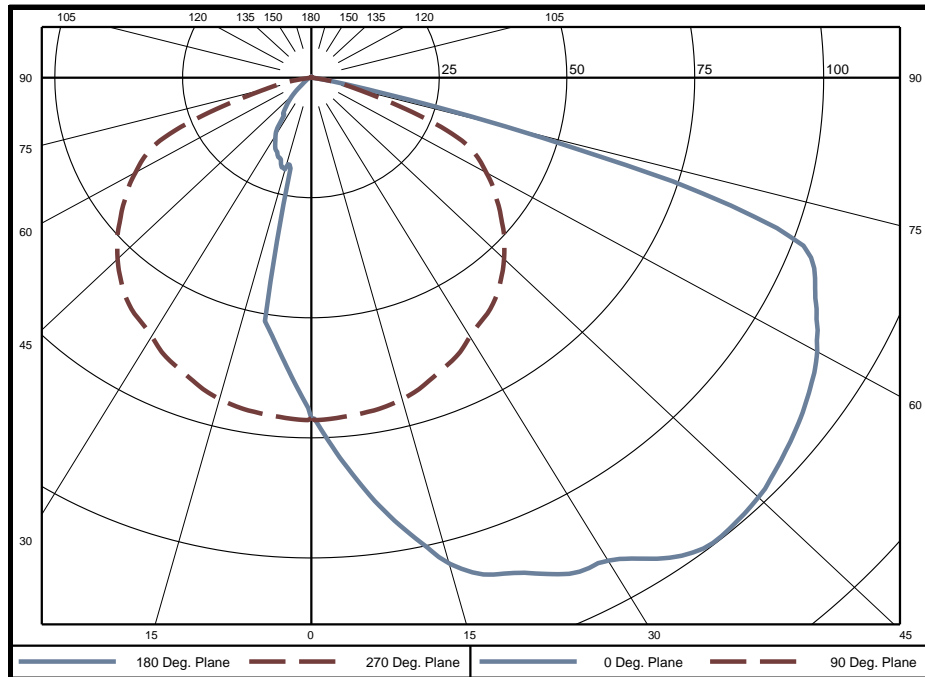
Luminaire Efficacy:

37.3 lm/w

Maximum Candela:

125 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.70	0.7%	60-65	22.61	8.7%	120-125	0	0.0%
5-10	5.10	2.0%	65-70	21.29	8.2%	125-130	0	0.0%
10-15	8.33	3.2%	70-75	16.39	6.3%	130-135	0	0.0%
15-20	11.53	4.5%	75-80	6.15	2.4%	135-140	0	0.0%
20-25	14.43	5.6%	80-85	0.81	0.3%	140-145	0	0.0%
25-30	17.03	6.6%	85-90	0.07	0.0%	145-150	0	0.0%
30-35	19.26	7.4%	90-95	0	0.0%	150-155	0	0.0%
35-40	21.35	8.3%	95-100	0	0.0%	155-160	0	0.0%
40-45	22.66	8.8%	100-105	0	0.0%	160-165	0	0.0%
45-50	23.29	9.0%	105-110	0	0.0%	165-170	0	0.0%
50-55	23.45	9.1%	110-115	0	0.0%	170-175	0	0.0%
55-60	23.28	9.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	99	38.2%
0-60	191	74.0%
0-90	259	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	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
	5	81.5	81.6	78.8	75.2	70.9	66.7	63.1	61.2	59.4	61.2	63.1	66.7	70.9	75.2	81.6
	10	93.7	92.4	87.0	79.0	70.4	62.5	56.3	53.4	51.5	53.4	56.3	62.5	70.4	79.0	92.4
	15	104.8	101.9	93.6	82.0	69.3	58.2	50.5	43.5	19.8	43.5	50.5	58.2	69.3	82.0	101.9
	20	109.9	107.1	97.5	83.1	67.2	53.2	44.7	38.5	17.8	38.5	44.7	53.2	67.2	83.1	107.1
	25	114.0	110.9	99.7	83.7	65.1	48.5	39.4	33.9	16.4	33.9	39.4	48.5	65.1	83.7	110.9
	30	116.1	112.9	100.1	83.0	62.1	43.3	34.2	28.9	13.8	28.9	34.2	43.3	62.1	83.0	112.9
	35	122.0	116.3	102.0	83.0	60.0	38.9	29.5	23.6	9.2	23.6	29.5	38.9	60.0	83.0	116.3
	40	124.6	117.7	102.6	81.5	57.1	34.5	24.7	18.3	7.3	18.3	24.7	34.5	57.1	81.5	102.6
	45	123.5	116.6	101.1	78.3	53.3	29.7	19.8	13.2	4.9	13.2	19.8	29.7	53.3	78.3	101.1
	50	120.9	113.7	98.1	74.0	49.0	25.1	15.5	9.1	2.6	9.1	15.5	25.1	49.0	74.0	98.1
	55	117.9	109.7	94.5	69.2	44.3	21.1	12.5	6.2	1.7	6.2	12.5	21.1	44.3	69.2	94.5
	60	114.1	105.1	89.5	64.3	39.5	18.3	9.8	4.0	1.1	4.0	9.8	18.3	39.5	64.3	89.5
	65	108.6	99.5	82.9	59.1	34.0	15.8	7.4	2.4	0.9	2.4	7.4	15.8	34.0	59.1	82.9
	70	102.3	93.5	77.5	48.0	21.2	12.5	5.6	1.3	0.7	1.3	5.6	12.5	21.2	48.0	77.5
	75	39.2	49.6	59.9	22.0	9.3	6.3	3.5	0.8	0.4	0.8	3.5	6.3	9.3	22.0	59.9
	80	3.0	4.3	14.7	8.4	3.5	1.3	0.9	0.3	0.3	0.3	0.9	1.3	3.5	8.4	14.7
	85	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2
	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Average Luminance (cd/m²)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)			
	0	45	90	
	0	2601	2601	2601
	45	6407	5247	2766
	55	7540	6044	2830
	65	9427	7198	2953
	75	5559	8493	1312
	85	81	223	67



Utilization of Lumens - Zonal Cavity Method

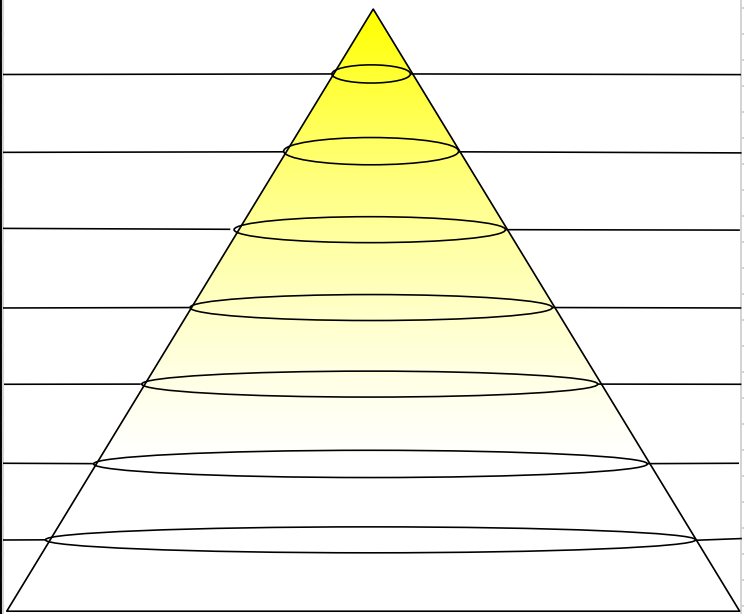
Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	308	308	308	308	301	301	301	301	287	287	287	275	275	275	264	264	264	259
1	280	268	256	246	273	262	251	242	251	242	234	241	233	227	231	225	220	215
2	253	230	211	196	246	225	208	193	216	201	189	207	195	184	199	189	180	174
3	228	199	177	159	222	195	174	158	187	169	155	180	165	152	173	160	149	143
4	208	175	150	132	201	171	148	131	164	145	129	158	141	127	152	138	126	120
5	190	155	130	112	184	152	128	111	146	125	110	141	123	108	136	120	107	101
6	174	138	114	96	169	135	112	96	131	110	95	126	108	94	122	106	93	87
7	161	124	101	84	156	122	100	84	118	98	83	114	96	82	111	94	81	76
8	149	113	90	74	145	111	89	74	107	87	73	104	86	73	101	85	72	67
9	139	103	81	66	135	102	80	66	98	79	65	96	78	65	93	77	65	60
10	130	95	74	59	127	93	73	59	91	72	59	88	71	59	86	70	58	54

Beam and Field Information

CIE Type:	Direct
Center Beam Intensity:	70.9 Candela
Central Cone Intensity:	71 Candela
Beam Flux:	227.2 Lumens
Beam Angle (0-180):	86.2 Degrees
Beam Angle (90-270):	127.8 Degrees
Field Angle (0-180):	118.8 Degrees
Field Angle (90-270):	153.7 Degrees

Cone of Light Tabulation

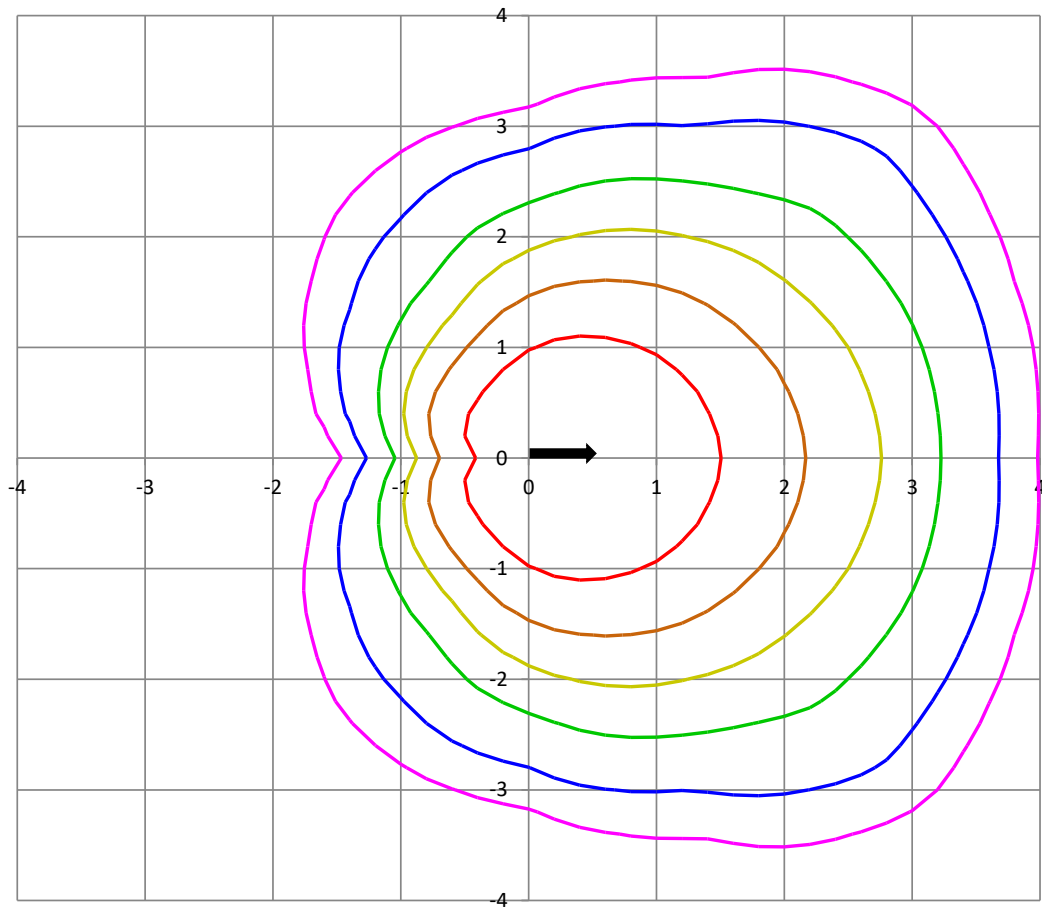
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		4.43	5.63
6.00		1.97	8.45
8.00		1.11	11.3
10.0		0.709	14.1
12.0		0.492	16.9
14.0		0.362	19.7
16.0		0.277	22.5



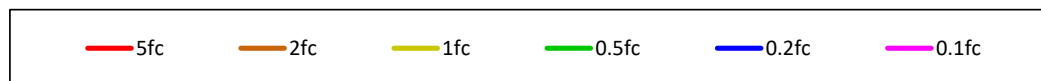


ISOFootcandle Plot

Mounting Height - 2 Feet

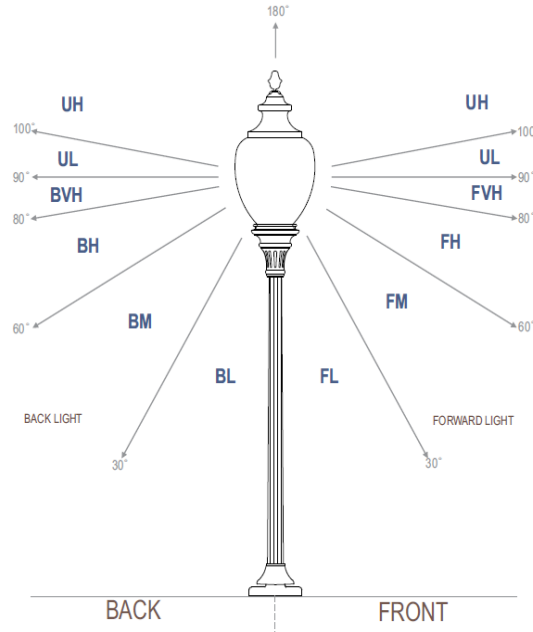


Grid Lines in Units of Mounting Height





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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	39.2	15.1%
FM	(30-60)	108.0	41.7%
FH	(60-80)	59.1	22.8%
FVH	(80-90)	0.8	0.3%
BL	(0-30)	19.3	7.5%
BM	(30-60)	25.3	9.8%
BH	(60-80)	7.1	2.7%
BVH	(80-90)	0.2	0.1%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		259.0	100.0%
BUG Rating	B0 U0 G0		