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## Photometric Test Report

Relevant Standards  
IES LM-79-2008, ANSI C82.77-2002

**Prepared For**  
**Auroralight Inc**

Stacia Elmore  
2742 Loker Ave W  
#100  
Carlsbad, Ca 92010-6619  
United States

**Catalog Number**  
**LSL30-14-N-30 (14W, 12° Narrow Optic, 3000K)**

Order Number  
13469434  
Test Number  
13469434.03

Test Date

2020-08-25

Prepared By

Javier Caban, Technician

Approved By

Kevin Rodriguez, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Bronzed cast housing, patterned lens enclosure with bronze trim  
**Lamp:** One white LED  
**Mounting:** Path / Area Light  
**Ballast/Driver:** Integral

**Luminaire**



**Luminaire Characteristics**

Luminous Diameter: 2.75 in.  
Luminous Height: 1.630 in.

**Summary of Results**

Roadway Classification:	Type I, Very Short
Cutoff Classification:	Cutoff
BUG Rating:	B2 U1 G0

**Test Conditions**

Test Temperature:	24.4 °C
Voltage:	12.09 VAC
Current:	1.188 A
Power:	13.82 W
Power Factor:	0.962
Frequency:	60 Hz
Current THD:	21.5 %

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
24.4 °C	12.09 VAC	1.188 A	13.82 W	0.962	60 Hz	21.5 %

### Summary of Results

#### Spacing Criteria

0-180: 0.35

90-270: 0.35

Total Lumen Output:

1407 Lumens

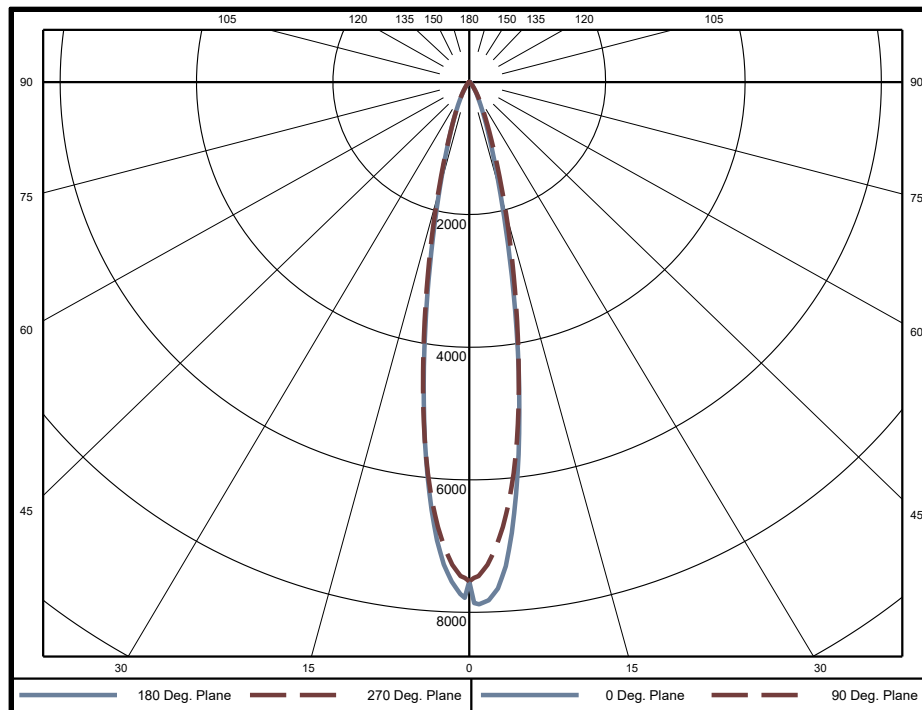
Luminaire Efficacy:

101.8 lm/w

Maximum Candela:

7878 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	166.3	11.8%	60-65	4.7	0.3%	120-125	0	0.0%
5-10	363.5	25.8%	65-70	3.4	0.2%	125-130	0	0.0%
10-15	326.5	23.2%	70-75	2.4	0.2%	130-135	0	0.0%
15-20	208.9	14.8%	75-80	1.5	0.1%	135-140	0	0.0%
20-25	125.6	8.9%	80-85	0.8	0.1%	140-145	0	0.0%
25-30	77.9	5.5%	85-90	0.3	0.0%	145-150	0	0.0%
30-35	48.8	3.5%	90-95	0.0	0.0%	150-155	0	0.0%
35-40	29.5	2.1%	95-100	0	0.0%	155-160	0	0.0%
40-45	18.8	1.3%	100-105	0	0.0%	160-165	0	0.0%
45-50	13.0	0.9%	105-110	0	0.0%	165-170	0	0.0%
50-55	9.0	0.6%	110-115	0	0.0%	170-175	0	0.0%
55-60	6.4	0.5%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1347	95.7%
0-60	1394	99.1%
0-90	1407	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	7532	7532	7532	7532	7532	7532	7532	7532	7532	7532	7532	7532	7532	7532	7532
	5	6826	7183	6947	6663	6360	6054	5795	5587	6477	5587	5795	6054	6360	6663	6947
	10	3815	4895	4664	4314	3909	3554	3285	3057	3797	3057	3285	3554	3909	4314	4664
	15	1588	2366	2271	2105	1893	1697	1539	1429	1773	1429	1539	1697	1893	2105	2271
	20	717	1013	983	923	860	792	732	694	840	694	732	792	860	923	983
	25	357	489	470	450	430	397	377	357	426	357	377	397	430	450	470
	30	201	259	248	239	231	216	202	186	220	186	202	216	231	239	248
	35	115	145	140	134	123	111	100	89	109	89	100	111	123	134	140
	40	75	87	84	79	69	59	47	37	40	37	47	59	69	79	84
	45	57	62	60	55	44	34	22	12	10	12	22	34	44	55	60
	50	40	45	43	39	29	18	8	3	2	3	8	18	29	39	43
	55	31	33	31	26	17	9	2	0	0	0	2	9	17	26	31
	60	23	26	23	19	9	2	0	0	0	0	0	2	9	19	23
	65	18	20	18	12	5	1	0	0	0	0	0	1	5	12	18
	70	15	16	13	7	1	0	0	0	0	0	0	0	1	7	13
	75	11	12	9	4	1	0	0	0	0	0	0	0	1	4	9
	80	7	8	4	1	0	0	0	0	0	0	0	0	0	1	4
	85	3	4	2	0	0	0	0	0	0	0	0	0	0	0	2
	90	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	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	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
	125	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
	135	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
	145	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
	155	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
	165	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
	175	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

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	1966000	1966000
	45	16070	16850
	55	9138	9373
	65	5754	5761
	75	3775	3138
	85	1032	685



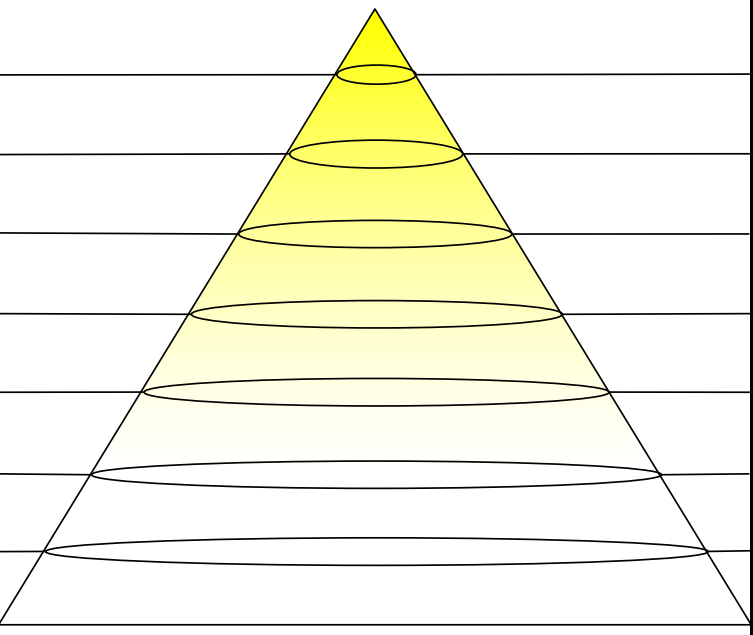
### Utilization of Lumens - Zonal Cavity Method

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	1675	1675	1675	1675	1637	1637	1637	1637	1564	1564	1564	1497	1497	1497	1436	1436	1436	1407
1	1616	1584	1556	1531	1582	1554	1529	1507	1498	1479	1461	1447	1431	1417	1399	1388	1377	1353
2	1559	1505	1461	1424	1530	1482	1442	1408	1438	1406	1378	1397	1372	1349	1360	1340	1321	1301
3	1506	1437	1384	1342	1481	1419	1370	1331	1384	1344	1310	1351	1318	1291	1321	1294	1271	1253
4	1457	1378	1320	1275	1435	1363	1309	1268	1335	1289	1254	1309	1270	1240	1284	1252	1226	1209
5	1411	1325	1264	1220	1392	1313	1257	1215	1290	1241	1204	1269	1227	1194	1249	1213	1185	1168
6	1369	1278	1216	1172	1351	1268	1210	1169	1249	1199	1161	1231	1188	1154	1215	1177	1147	1132
7	1329	1235	1174	1131	1314	1227	1169	1128	1211	1160	1123	1196	1151	1118	1183	1143	1112	1098
8	1292	1196	1136	1095	1278	1189	1132	1093	1176	1125	1088	1164	1118	1084	1152	1111	1080	1066
9	1257	1161	1102	1062	1245	1155	1099	1060	1144	1093	1057	1133	1087	1054	1123	1082	1051	1037
10	1225	1128	1070	1032	1214	1123	1068	1031	1114	1063	1028	1105	1058	1026	1096	1054	1024	1010

#### Beam and Field Information

CIE Type:	Direct
Center Beam Intensity:	7532 Candela
Central Cone Intensity:	7121 Candela
Beam Flux:	560.2 Lumens
Beam Angle (0-180):	20.1 Degrees
Beam Angle (90-270):	20.6 Degrees
Field Angle (0-180):	40.5 Degrees
Field Angle (90-270):	41.8 Degrees

#### Cone of Light Tabulation

Mounting Height (Feet)			Footcandles at Nadir	Diameter (Feet)
6.00			209	2.11
10.0			75.3	3.52
14.0			38.4	4.93
18.0			23.2	6.34
22.0			15.6	7.75
26.0			11.1	9.16
30.0			8.37	10.6



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	716.1	50.6%
FM	(30-60)	81.2	5.7%
FH	(60-80)	11.9	0.8%
FVH	(80-90)	1.1	0.1%
BL	(0-30)	558.0	39.5%
BM	(30-60)	45.2	3.2%
BH	(60-80)	0.3	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		1413.8	100.0%
<b>BUG Rating</b>	<b>B2 U1 G0</b>		