



REPORT

545 E. Algonquin Rd., Arlington Heights, IL 60005

Project No. G102929574

Date: April 4, 2018

REPORT NO. 103136304CHI-029A

TEST OF ONE ALGIERS OVERBED

MODEL NO. ALB495400L30ENSN-LA
LED MODEL NO. SAMSUNG 281B+
DRIVER MODEL NO. KEYSTONE

RENDERED TO

AFX, INC.
2345 N. ERNIE KRUEGER CIRCLE
WAUKEGAN, IL 60087

TEST: Electrical and Photometric tests as required to the IESNA test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-00761824-0.

STANDARDS USED: The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

DESCRIPTION OF SAMPLE: The client submitted one production sample of model number ALB495400L30ENSN-LA. The sample was received by Intertek on February 2, 2018, in undamaged condition and one sample was tested as received. The sample designation was AH02022018041836-095.

DATES OF TESTS: April 3, 2018

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SUMMARY

Model No.: ALB495400L30ENSN-LA Description: Algiers Overbed
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Criteria	Result
Total Lumen Output (Lumens)	4647
Total Power (W)	79.32
Luminaire Efficacy (LPW)	58.59
Power Factor	0.993

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Yokogawa Power Meter	WT210	146919	07/10/17	07/10/18	04/03/18
Omega Newport Thermometer	DPI8-C24	146920	10/04/17	10/04/18	04/03/18
LSI High Speed Mirror Goniometer	6440T	146928	VBV	VBV	04/03/18
Newport Thermohygrometer	iServer	146957	11/17/17	11/17/18	04/03/18
Pacific, AC power supply	118-ACX	CHI0358	VBV	VBV	04/03/18

TEST METHODS

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IESNA LM-79.

Photometric and Electrical Measurements – Distribution Method

A LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Each sample was operated at input rated voltage in its designated orientation. Each sample was allowed to stabilize for at least thirty minutes before measurements were made. Electrical measurements including voltage, current, and power were measured using the Xitron or Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

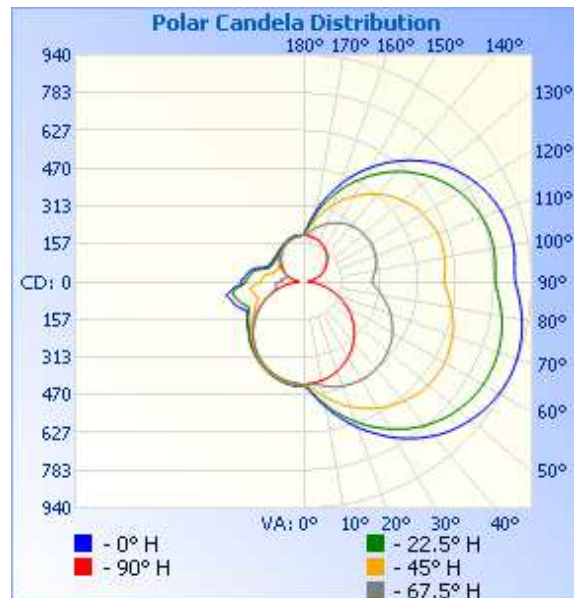
RESULTS OF TEST

Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage {Vac}	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (LPW)
AH02022018041836-095	Horizontal	119.9	666.0	79.32	0.993	4647	58.59

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	25	45	67.5	90
0	430	430	430	430	430
5	473	468	447	426	423
10	529	519	483	437	418
15	585	569	517	451	409
20	642	617	550	461	397
25	695	663	579	468	382
30	748	706	606	472	365
35	794	746	629	472	344
40	835	779	645	469	322
45	869	807	660	463	296
50	895	829	669	452	268
55	916	845	672	440	239
60	930	854	672	423	206
65	937	857	663	402	173
70	936	854	654	381	138
75	928	844	639	354	103
80	914	829	618	328	70
85	894	808	598	301	38
90	872	790	578	283	18
95	873	792	585	290	27
100	878	796	590	301	40
105	875	793	592	311	55
110	864	782	588	316	71
115	845	766	577	320	85
120	821	744	567	322	100
125	790	714	550	320	114
130	752	680	527	317	126
135	707	640	504	312	139
140	657	597	474	303	149
145	604	549	443	294	158
150	546	498	408	282	167
155	487	446	373	268	175
160	424	391	335	253	181
165	362	337	296	236	186
170	300	283	257	219	189
175	240	229	218	202	192
180	193	193	193	193	193



RESULTS OF TEST (cont'd)

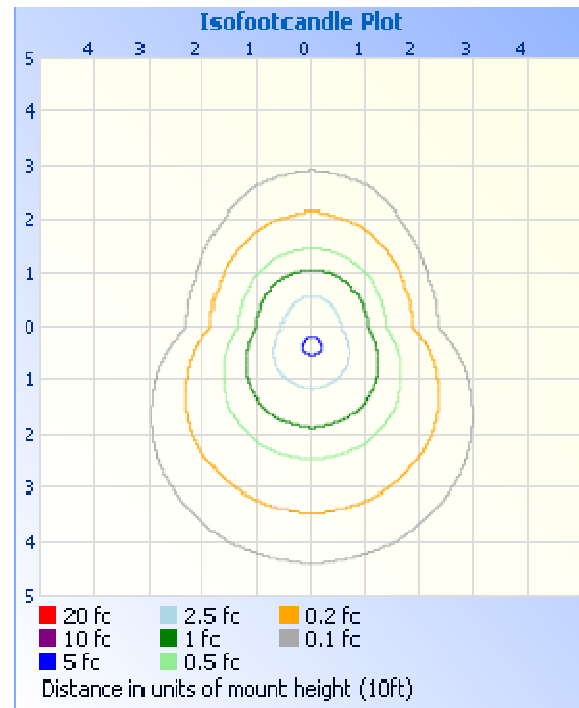
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

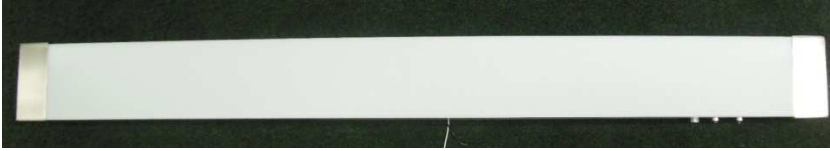
Zone	Lumens	% Luminaire
0-30	392.5	8.4
0-40	691.5	14.9
0-60	1451	31.2
60-90	1232	26.5
0-90	2683	57.7
90-180	1964.0	42.3
0-180	4647	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	42.2	0.9
10-20	130.8	2.8
20-30	219.5	4.7
30-40	299.0	6.4
40-50	360.7	7.8
50-60	399.1	8.6
60-70	414.6	8.9
70-80	419.0	9.0
80-90	398.4	8.6
90-100	373.5	8.0
100-110	355.8	7.7
110-120	323.0	6.9
120-130	285.1	6.1
130-140	236.4	5.1
140-150	180.6	3.9
150-160	122.5	2.6
160-170	67.2	1.4
170-180	20.0	0.4

PICTURES (not to scale)

Front



Top



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CONCLUSION

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:



Tim Quigley
Engineer
Lighting Division

Attachment: None

Report Reviewed By:



Hector Huitron
Associate Engineer
Lighting Division