



REPORT

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

Project No. G102929574

Date: August 14, 2017

REPORT NO. 102929574CHI-008

TEST OF ONE OVERBED LIGHT

MODEL NO. RAB505400L30-LW

LED MODEL NO. SAMSUNG 281B

DRIVER MODEL NO. ESPEN VEL6700120H / KEYSTONE KTLD-36-1-1000-FDIM-AK2 (2)

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-00761824-1.

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 prototype sample of model number RAB505400L30-LW. The sample was received by Intertek on July 20, 2017, in undamaged condition and one sample was tested as received. The sample designation was AH07202017091417-008.

DATES OF TESTS: August 14, 2017



SUMMARY

Model No.:	RAB505400L30-LW
Description:	Overbed Light

Criteria	Result
Total Lumen Output (Lumens)	3922
Total Power (W)	89.96
Luminaire Efficacy (LPW)	43.60
Power Factor	0.995

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	08/14/17
Omega Newport Thermometer	DPI8-C24	146920	10/07/16	10/07/17	08/14/17
LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU	08/14/17
Newport Thermohygrometer	iServer	146956	01/06/17	01/06/18	08/14/17
Pacific, AC power supply	118-ACX	CHI0358	VBU	VBU	08/14/17

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 Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

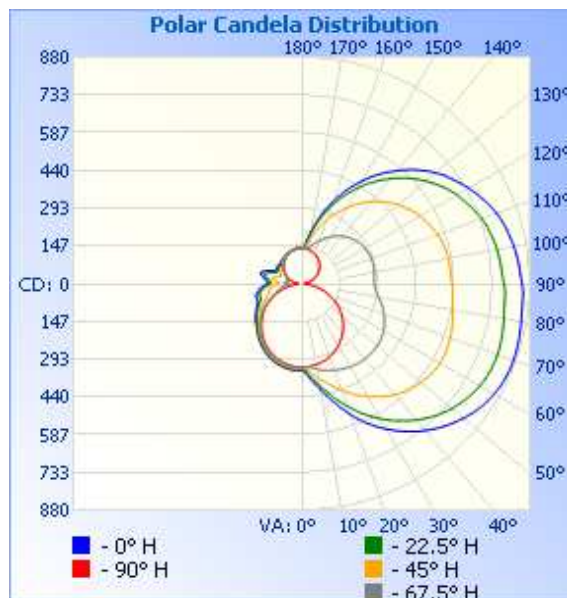
RESULTS OF TEST

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)
AH07202017091417-008	Horizontal	120.0	753.6	89.96	0.995	3922	43.60

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	337	333	329	326	324
5	370	359	342	326	323
10	418	402	372	337	320
15	475	452	404	349	314
20	538	505	438	358	305
25	598	556	473	366	294
30	652	606	505	373	280
35	701	651	536	378	265
40	745	691	562	381	247
45	782	727	582	381	227
50	814	756	599	379	206
55	840	778	610	374	182
60	858	794	616	366	157
65	868	803	616	353	130
70	870	804	611	338	102
75	867	799	602	320	74
80	860	792	592	301	46
85	855	786	583	286	24
90	851	781	580	282	13
95	842	772	576	281	15
100	832	766	575	285	24
105	819	755	568	286	35
110	800	739	560	288	47
115	774	716	544	284	59
120	744	692	528	281	70
125	709	660	505	275	80
130	672	622	480	265	90
135	625	580	450	255	99
140	573	533	416	241	106
145	519	483	379	226	113
150	459	429	339	209	120
155	396	372	298	191	125
160	331	313	254	172	130
165	266	255	212	156	133
170	203	196	171	143	136
175	152	150	143	138	137
180	140	140	138	138	138



RESULTS OF TEST (cont'd)

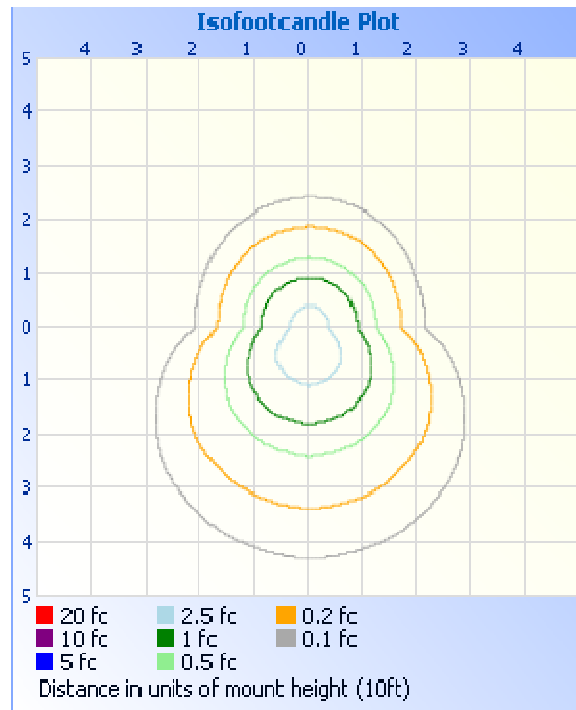
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	310.8	7.9
0-40	555.7	14.2
0-60	1198	30.5
60-90	1050	26.8
0-90	2248	57.3
90-180	1675.0	42.7
0-180	3922	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	32.5	0.8
10-20	102.4	2.6
20-30	175.9	4.5
30-40	244.9	6.2
40-50	301.6	7.7
50-60	340.5	8.7
60-70	356.8	9.1
70-80	354.6	9.0
80-90	338.4	8.6
90-100	326.5	8.3
100-110	319.1	8.1
110-120	284.8	7.3
120-130	245.4	6.3
130-140	197.8	5.0
140-150	145.5	3.7
150-160	93.6	2.4
160-170	48.2	1.2
170-180	13.8	0.4

PICTURES (not to scale)



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:



Hector Huitron
Associate Engineer
Lighting Division

Attachment: None

Report Reviewed By:



Timothy Quigley
Engineer
Lighting Division