



REPORT

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

Project No. G102929574

Date: August 23, 2017

REPORT NO. 102929574CHI-013

TEST OF ONE VANITY LIGHT

MODEL NO. IDB394000L30ENBN
LED MODEL NO. SAMSUNG 281B
DRIVER MODEL NO. ADVANCE XI040C110V054BPT1

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 IDB394000L30ENBN. The sample was received by Intertek on July 20, 2017, in undamaged condition and one sample was tested as received. The sample designation was AH07202017091417-013.

DATES OF TESTS: August 23, 2017



SUMMARY

Model No.:	IDB394000L30ENBN
Description:	Vanity Light

Criteria	Result
Total Lumen Output (Lumens)	2271
Total Power (W)	33.34
Luminaire Efficacy (LPW)	68.12
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	08/23/17
Omega Newport Thermometer	DPI8-C24	146920	10/07/16	10/07/17	08/23/17
LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU	08/23/17
Newport Thermohygrometer	iServer	146956	01/06/17	01/06/18	08/23/17
Pacific, AC power supply	118-ACX	CHI0358	VBU	VBU	08/23/17

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.

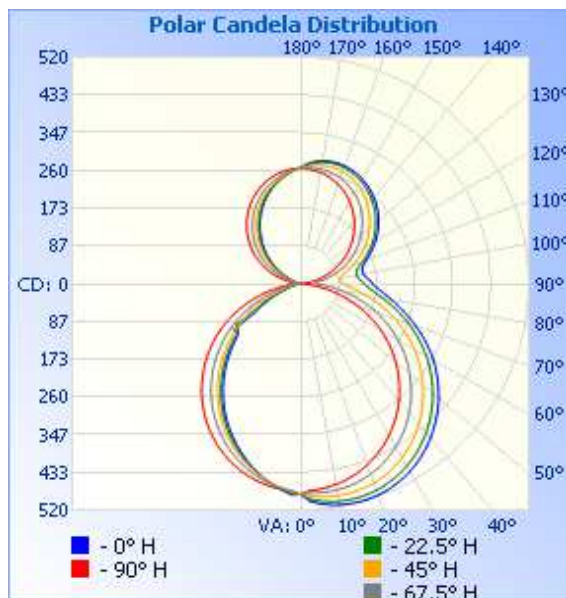
RESULTS OF TEST

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)
AH07202017091417-013	Up	120.1	279.0	33.34	0.995	2271	68.12

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	484	484	484	484	484
5	507	500	491	482	474
10	516	507	494	481	468
15	518	508	493	475	458
20	517	505	487	466	443
25	510	496	477	451	425
30	498	484	462	433	403
35	482	467	443	411	378
40	461	446	420	385	349
45	438	421	393	357	318
50	411	394	364	325	284
55	381	363	333	292	248
60	349	331	299	256	210
65	315	296	263	218	170
70	278	260	226	179	129
75	243	223	187	138	88
80	210	190	150	98	49
85	182	163	118	62	17
90	164	145	98	38	0
95	152	134	90	37	8
100	144	129	92	55	25
105	146	135	108	77	46
110	160	151	129	99	68
115	178	171	149	121	91
120	197	190	170	142	114
125	215	207	188	162	135
130	232	224	205	181	154
135	247	239	222	199	173
140	259	252	237	216	190
145	270	264	251	230	206
150	279	273	261	243	221
155	286	280	270	252	234
160	288	285	275	260	245
165	289	286	277	265	253
170	287	284	276	267	260
175	279	277	272	267	263
180	266	266	266	266	266

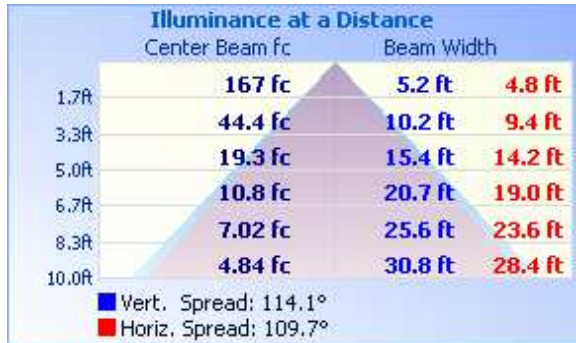


RESULTS OF TEST (cont'd)

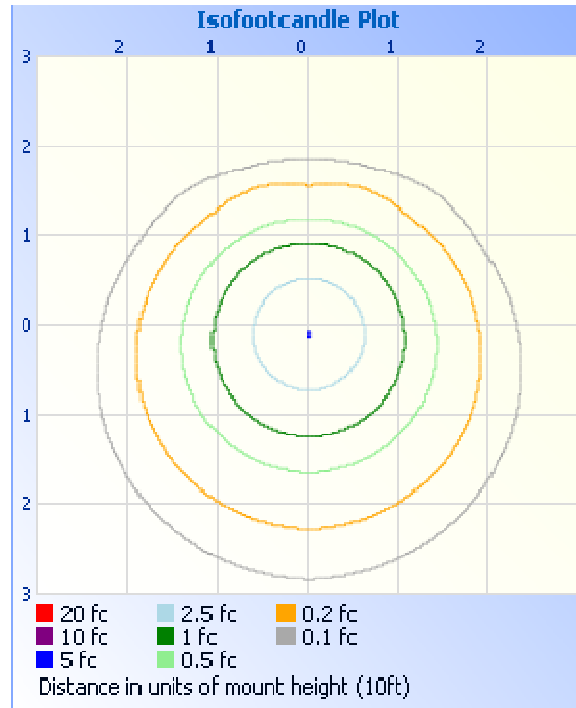
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	377.2	16.6
0-40	618.5	27.2
0-60	1100	48.4
60-90	357.8	15.8
0-90	1458	64.2
90-180	813.9	35.8
0-180	2271	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	45.8	2.0
10-20	131.6	5.8
20-30	199.8	8.8
30-40	241.3	10.6
40-50	250.8	11.0
50-60	230.4	10.1
60-70	178.7	7.9
70-80	115.0	5.1
80-90	64.1	2.8
90-100	48.3	2.1
100-110	65.1	2.9
110-120	97.6	4.3
120-130	125.1	5.5
130-140	137.5	6.1
140-150	132.6	5.8
150-160	110.0	4.8
160-170	72.5	3.2
170-180	25.2	1.1

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