



FOR THE SCOPE OF
ACCREDITATION UNDER NVLAP LAB
CODE 100402-0.

REPORT

3933 US ROUTE 11, CORTLAND, NEW YORK 13045

Project No. G102182053

Date: July 21, 2015

REPORT NO. 102182053CRT-005

TEST OF ONE RECESSED DOWNLIGHTS

MODEL NO. A4VOCLED1-1330K- MD
LED MODEL NO. XICATO XTM
DRIVER MODEL NO. HARVARD CL7005-UNI-C

RENDERED TO:

LEXINGTON LIGHTING GROUP, LLC DBA VANTAGE LIGHTING
645 MYLES STANDISH BLVD
TAUNTON, MA 02780

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

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

AUTHORIZATION The testing performed was authorized by signed quote number .

STANDARDS USED:

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

DESCRIPTION OF SAMPLE: The client submitted one prototype sample of model number A4VOCLED1-1330K- MD. The sample was received by Intertek on June 24, 2015 in undamaged condition and one sample was tested as received. The sample designation was CRT1506241050-002-002.

DATE OF TESTS: July 21, 2015

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SUMMARY:

MODEL NO. A4VOCLED1-1330K- MD
DESCRIPTION: RECESSED DOWNLIGHTS

Criteria	Results
Light Output (Lumens)	1115
Total Power (W)	14.25
Lumen Efficacy (Lm/W)	78.3
Power Factor ()	0.993

EQUIPMENT LIST

Equipment Used	Model No.	Control No.	Last Cal.	Cal. Due
LSI High Speed Mirror Goniometer	6440	---	7/10/2015	8/10/2015
Elgar AC Power Supply	CW1251	---	VBU	VBU
Sorenson DC Power Supply	XG 150-10	---	VBU	VBU
Yokogawa Power Analyzer	WT210	E464	4/20/2015	4/20/2016
ExTech Hygro Thermometer	445703	T1357	12/10/2014	12/10/2015
Fisher Scientific Stopwatch	14-649-9	N1405	8/25/2014	8/25/2015
M-D Building Products Digital Level	Smart Tool	L112	3/25/2015	3/25/2016
NIST Luminous Intensity Standard Source	NBS10322	N1427	12/12/2014	12/12/2015
NIST Luminous Intensity Standard Source	NBS10215	N1432	12/12/2014	12/12/2015
NIST Luminous Intensity Standard Source	H754	N1433	12/12/2014	12/12/2015
NIST Luminous Flux Standard Source	NBS10428	N1424	12/17/2014	12/17/2015

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 the SSL sample.

Ambient temperature was measured equal to the height of the sample mounted on the goniometer equipment. The SSL sample was operated on the client provided driver at rated input volts in its designated orientation. The SSL sample was allowed to stabilize for at least thirty minutes before measurements were made. Stabilization procedures to LM-79 were followed. Electrical measurements including voltage, current, and power were measured using a power analyzer.

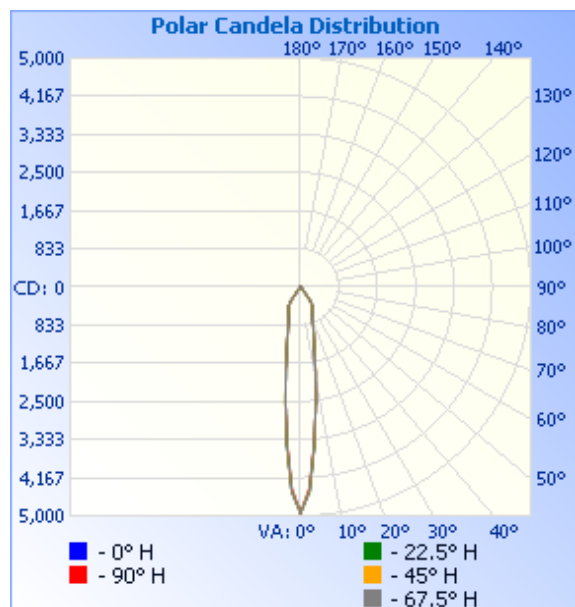
RESULTS:

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

Intertek Control No.	Base Orientation	Input Voltage (VAC)	Input Current (mA)	Input Power (W)	Input Power Factor ()	Light Output (Lumens)	Lumen Efficacy (lm/W)
CRT1506241050-002-002	Base Up	120.1	119.5	14.25	0.993	1115.0	78.26

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	4936	4936	4936	4936	4936
5	3444	3458	3441	3414	3410
10	1844	1846	1860	1846	1855
15	1082	1101	1105	1089	1096
20	767	776	785	782	780
25	608	610	613	618	622
30	512	509	510	520	526
35	351	351	345	359	366
40	72	72	71	73	74
45	40	40	40	40	40
50	23	23	23	23	23
55	11	11	11	11	12
60	4	4	4	4	5
65	1	1	1	1	1
70	0	0	0	0	0
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

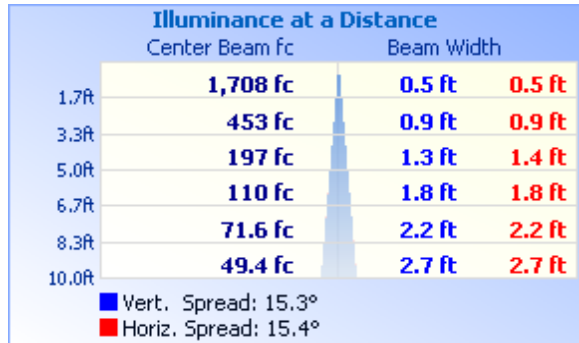


RESULTS:

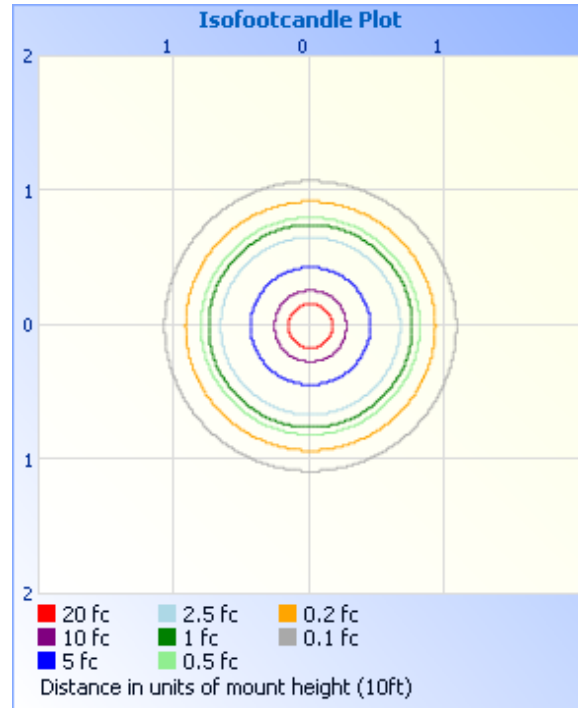
Illumination Plots

Mounting Height: 10

Illuminance - Cone of Light



Isoillumination Plot



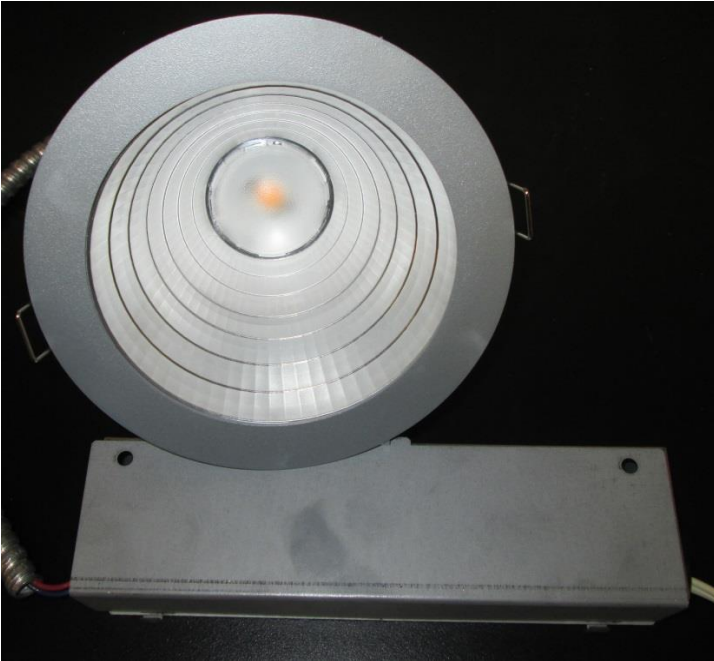
Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	877.9	78.7
0-40	1070.9	96.0
0-60	1114.0	99.9
60-90	1.4	0.1
0-90	1115.3	100.0
90-180	0.0	0.0
0-180	1115.3	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	274.2	24.6
10-20	317.7	28.5
20-30	286.1	25.7
30-40	193.0	17.3
40-50	32.3	2.9
50-60	10.8	1.0
60-70	1.4	0.1
70-80	0.0	0.0
80-90	0.0	0.0

PRODUCT PICTURE:



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:



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Lighting Division

Report Reviewed By:



Jeffrey Davis
Engineering Supervisor
Lighting Division

Attachments: IES File - CRT1506241050-002-002