



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

REPORT

3933 US ROUTE 11, CORTLAND, NEW YORK 13045

Project No. G102182053

Date: August 17, 2015

REPORT NO. 102182053CRT-029

TEST OF ONE RECESSED DOWNLIGHT

MODEL NO. A6VECLEL1-M-1330K

LED MODEL NO. CREE CXB-1512

DRIVER MODEL NO. HATCH LC16-0350N-UNV-D

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 500608558.

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 A6VECLEL1-M-1330K. The sample was received by Intertek on August 4, 2015 in undamaged condition and one sample was tested as received. The sample designation was CRT1508040952-001-006.

DATE OF TESTS: August 13, 2015

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SUMMARY:

MODEL NO. A6VECLE1-M-1330K
DESCRIPTION: RECESSED DOWNLIGHT

Criteria	Results
Light Output (Lumens)	1184
Total Power (W)	14.31
Lumen Efficacy (Lm/W)	82.7
Power Factor ()	0.993

EQUIPMENT LIST

Equipment Used	Model No.	Control No.	Last Cal.	Cal. Due
LSI High Speed Mirror Goniometer	6440	---	8/10/2015	9/10/2015
Elgar AC Power Supply	CW1251	---	VBV	VBV
Sorenson DC Power Supply	XG 150-10	---	VBV	VBV
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.

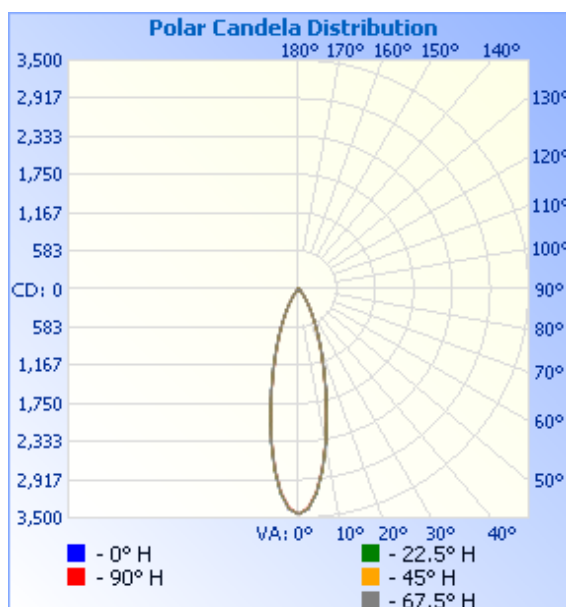
RESULTS:

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)
CRT1508040952-001-006	Base Up	120.0	120.1	14.31	0.993	1184.0	82.7

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	3440	3440	3440	3440	3440
5	3130	3129	3123	3118	3115
10	2389	2386	2374	2371	2369
15	1600	1600	1588	1586	1582
20	1006	1005	997	996	995
25	610	607	603	604	601
30	348	346	344	345	344
35	185	184	184	185	184
40	96	96	95	96	96
45	52	52	51	52	52
50	30	30	30	30	30
55	18	18	18	18	18
60	11	12	12	12	12
65	7	8	7	7	7
70	4	4	4	4	4
75	1	2	1	2	1
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

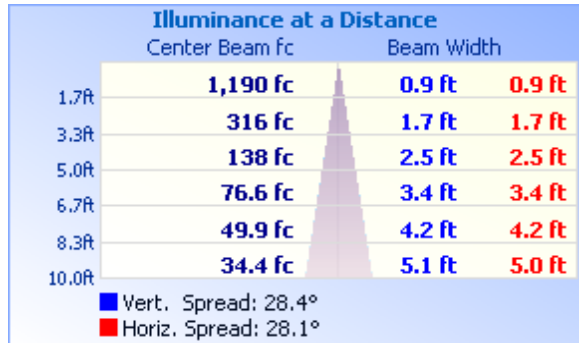


RESULTS:

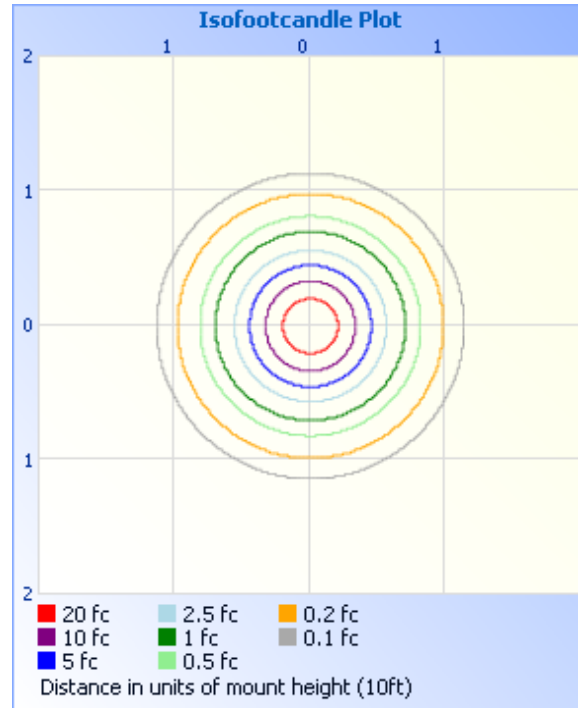
Illumination Plots

Mounting Height: 10

Illuminance - Cone of Light



Isoillumination Plot



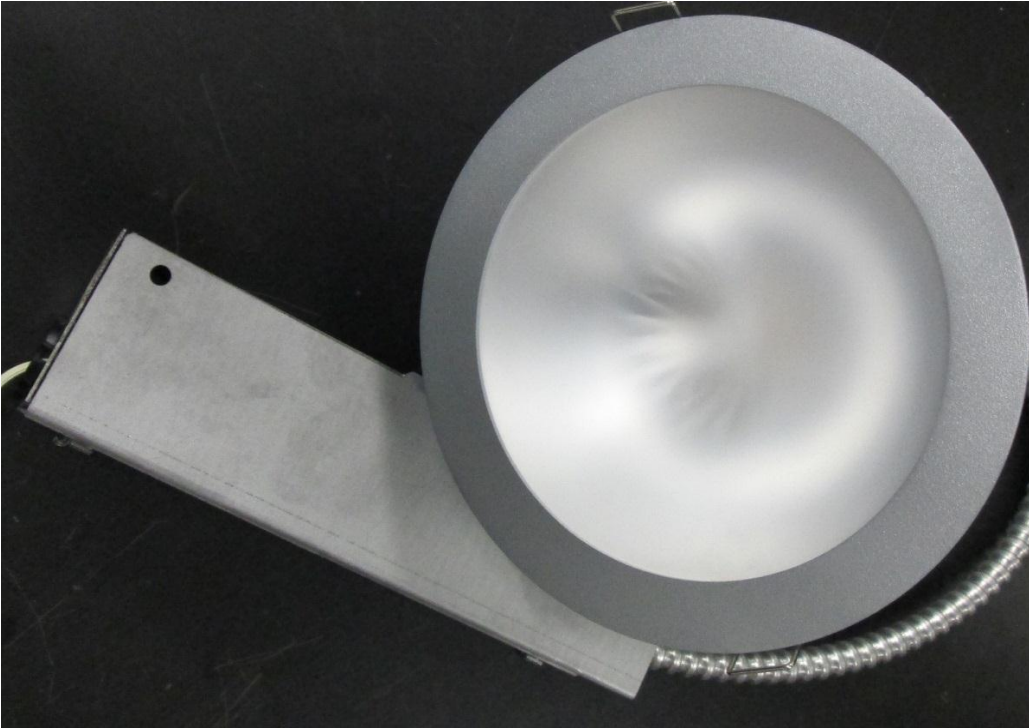
Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	994.0	84.0
0-40	1114.9	94.2
0-60	1174.4	99.2
60-90	9.1	0.8
0-90	1183.5	100.0
90-180	0.0	0.0
0-180	1183.5	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	272.6	23.0
10-20	439.5	37.1
20-30	282.0	23.8
30-40	121.0	10.2
40-50	42.4	3.6
50-60	17.1	1.4
60-70	7.4	0.6
70-80	1.7	0.1
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:



Gerald Gray
Associate Engineer
Lighting Division

Report Reviewed By:



Ryan Siddon
Engineer
Lighting Division

Attachments: IES File - CRT1508040952-001-006