



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 23, 2015

REPORT NO. 102182053CRT-015

TEST OF ONE RECESSED DOWNLIGHTS

MODEL NO. A2VOCLED1-0730K-NW

LED MODEL NO. CREE CXB 1507

DRIVER MODEL NO. HATCH LC-14

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 A2VOCLED1-0730K-NW. The sample was received by Intertek on June 24, 2015 in undamaged condition and one sample was tested as received. The sample designation was CRT1507081017-001-002.

DATE OF TESTS: July 22, 2015

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SUMMARY:

MODEL NO. A2VOCLED1-0730K-NW
DESCRIPTION: RECESSED DOWNLIGHTS

Criteria	Results
Light Output (Lumens)	943
Total Power (W)	11.54
Lumen Efficacy (Lm/W)	81.7
Power Factor ()	0.979

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	---	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.

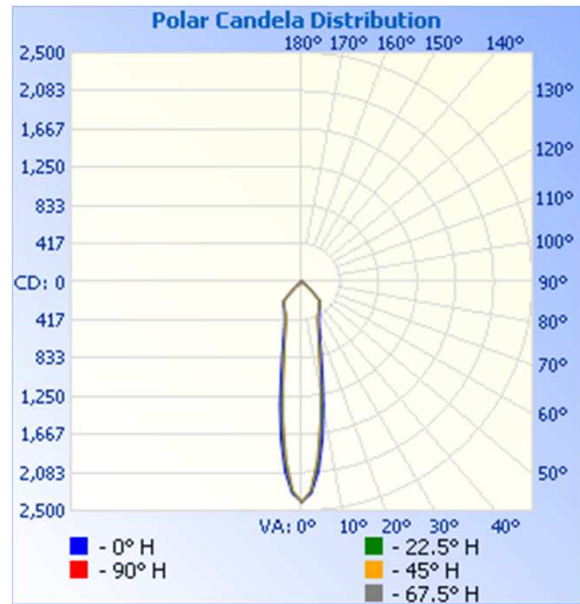
RESULTS:

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)
CRT1507081017-001-002	Base Up	120.0	98.2	11.54	0.979	942.6	81.7

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	2403	2403	2403	2403	2403
5	2080	2002	1947	1955	2003
10	1365	1236	1175	1179	1246
15	814	741	712	716	754
20	562	526	512	512	532
25	443	422	415	414	423
30	377	368	363	360	365
35	333	328	326	324	328
40	302	300	297	297	297
45	228	223	160	211	225
50	61	54	32	54	60
55	17	14	12	13	16
60	7	6	5	6	7
65	3	2	2	3	3
70	1	1	1	1	1
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

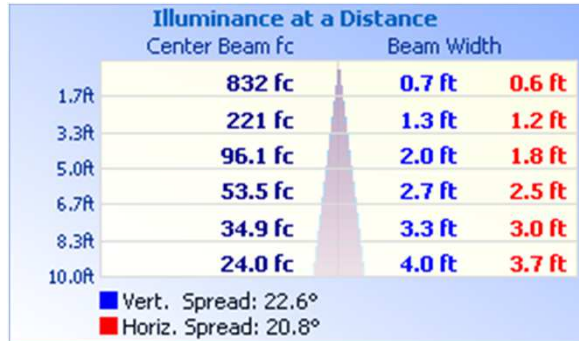


RESULTS:

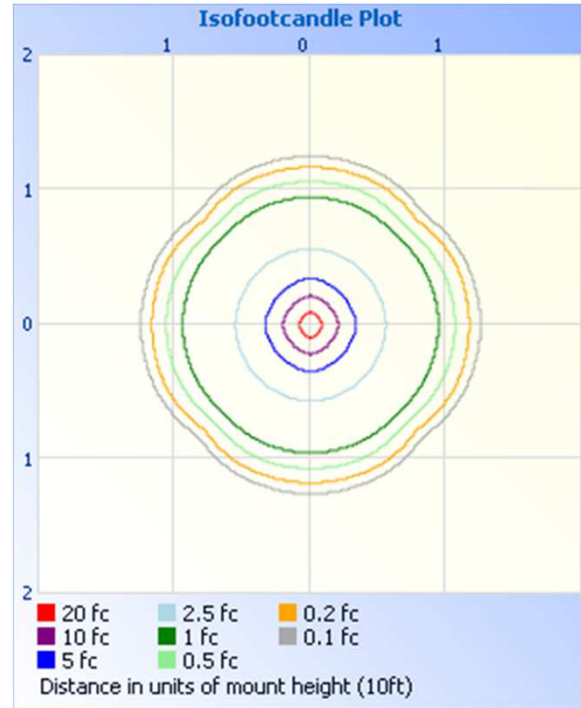
Illumination Plots

Mounting Height: 10

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	572.4	60.7
0-40	778.3	82.6
0-60	939.5	99.7
60-90	3.1	0.3
0-90	942.6	100.0
90-180	0.0	0.0
0-180	942.6	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	162.8	17.3
10-20	212.8	22.6
20-30	196.7	20.9
30-40	205.9	21.8
40-50	144.9	15.4
50-60	16.3	1.7
60-70	2.8	0.3
70-80	0.3	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:



Gerald Gray
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Lighting Division

Report Reviewed By:



Jeffrey Davis
Engineering Supervisor
Lighting Division

Attachments: IES File - CRT1507081017-001-002