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

REPORT

3933 US ROUTE 11, CORTLAND, NEW YORK 13045

Project No. G102125122 Date: May 15, 2015

REPORT NO. 102125122CRT-010

TEST OF ONE INDOOR SPOT LIGHT WITH LX-M60-REF-CLR REFLECTOR

MODEL NO. LX2044-T1920-8327RR-FF-DDVVVC
LED MODEL NO. XICATO XTM19802720CCA
DRIVER MODEL NO. MAGTECH M28-U36-0700-XP

RENDERED TO:

LIGHTING SERVICES INC
2 HOLT DRIVE
STONY POINT, NY 10980

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 500597082.

STANARDS USED:

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

DESCRIPTION OF SAMPLE: The client submitted one production sample of model number LX2044-T1920-8327RR-FF-DDVVVC. The sample was received by Intertek on May 7, 2015 in undamaged condition and one sample was tested as received. The sample designation was CRT1505071059-001-002.

DATE OF TESTS: May 15, 2015

SUMMARY:

MODEL NO. LX2044-T1920-8327RR-FF-DDVVVC
DESCRIPTION: Indoor Spot Light with LX-M60-REF-CLR Reflector

Criteria	Results
Light Output (Lumens)	1702
Total Power (W)	21.82
Lumen Efficacy (Lm/W)	78.0
Power Factor ( )	0.992

EQUIPMENT LIST

Equipment Used	Model No.	Control No.	Last Cal.	Cal. Due
LSI High Speed Mirror Goniometer	6440	---	5/11/2015	6/11/2015
Elgar Power Supply	CW1251	---	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

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.

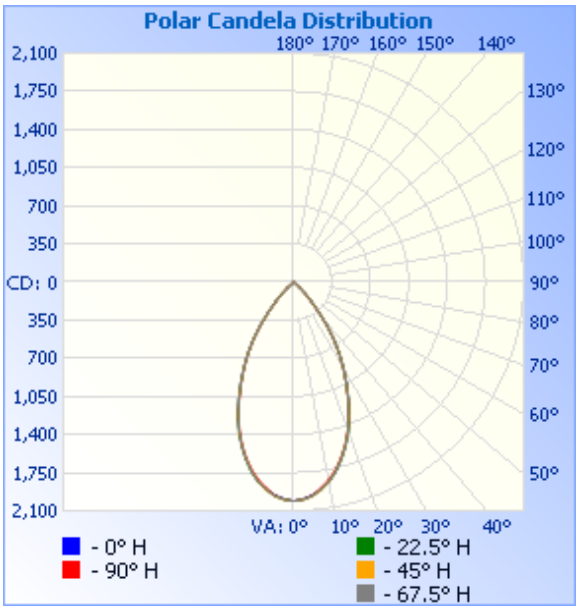
RESULTS:

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)
CRT1505071059-001-002	Base Up	120.1	183.2	21.82	0.992	1702.0	78.02

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	2010	2010	2010	2010	2010
5	1966	1970	1973	1969	1962
10	1861	1861	1858	1856	1842
15	1681	1682	1679	1676	1669
20	1456	1460	1454	1449	1444
25	1184	1184	1182	1174	1173
30	910	908	905	907	903
35	640	637	635	635	633
40	358	355	354	352	352
45	160	157	156	157	156
50	5	4	4	7	12
55	0	0	0	0	0
60	0	0	0	0	0
65	0	0	0	0	0
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

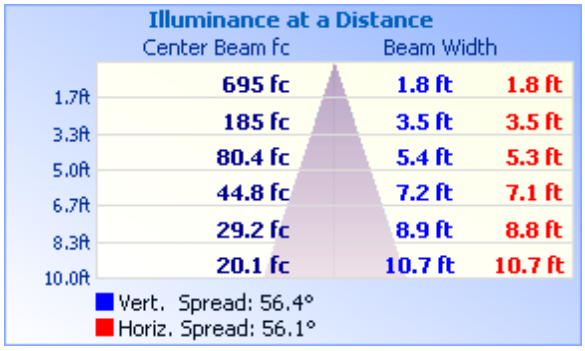


RESULTS:

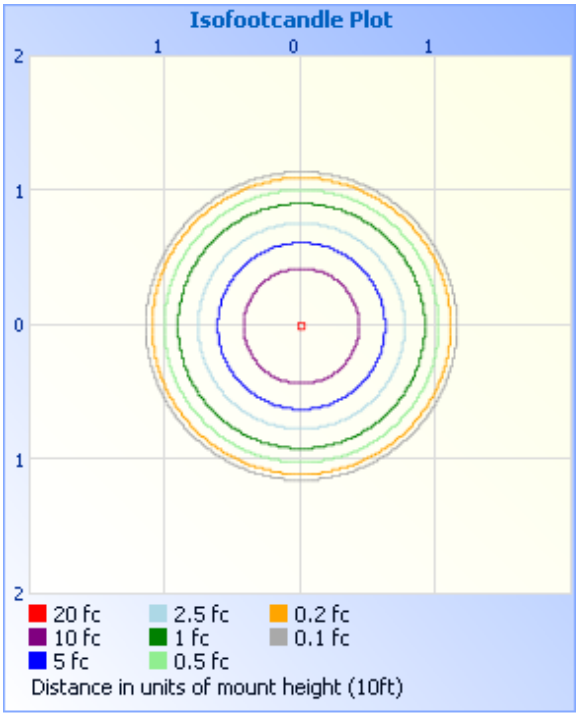
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1189.1	69.9
0-40	1579.3	92.8
0-60	1701.8	100.0
60-90	0.0	0.0
70-100	0.0	0.0
90-120	0.0	0.0
0-90	1701.8	100.0
90-180	0.0	0.0
0-180	1701.8	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	184.0	10.8
10-20	467.0	27.4
20-30	538.1	31.6
30-40	390.2	22.9
40-50	121.9	7.2
50-60	0.6	0.0
60-70	0.0	0.0
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 - 1505071059-001-002-4