

# REPORT

3933 US ROUTE 11, CORTLAND, NEW YORK 13045

Project No. G102125122

Date: May 14, 2015

REPORT NO. 102125122CRT-002

TEST OF ONE INDOOR SPOT LIGHT WITH LX-M20-REF-B REFLECTOR

MODEL NO. LX2044-T1913-9827RR-FF-DDVVVC  
LED MODEL NO. XICATO XTM19953013CCA  
DRIVER MODEL NO. M18-U24-0700-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-T1913-9827RR-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 CRT1505071059-001-001.

DATE OF TESTS: May 14, 2015



SUMMARY:

MODEL NO. LX2044-T1913-9827RR-FF-DDVVVC
DESCRIPTION: Indoor Spot Light with LX-M20-REF-B Reflector

Criteria	Results
Light Output (Lumens)	511
Total Power (W)	18.00
Lumen Efficacy (Lm/W)	28.4
Power Factor ( )	0.991

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.

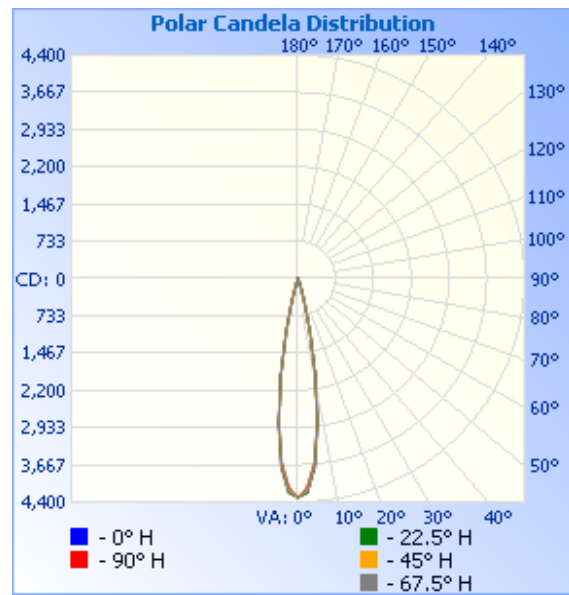
**RESULTS:**

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)
CRT1505071059-001-001	Base Up	120.1	151.3	18.00	0.991	510.6	28.36

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	4315	4315	4315	4315	4315
5	3732	3713	3698	3669	3631
10	1943	1918	1904	1905	1927
15	447	442	446	476	528
20	80	81	82	85	91
25	34	34	34	34	34
30	20	19	19	20	20
35	15	13	14	16	16
40	10	10	10	11	14
45	17	18	18	16	15
50	19	20	19	19	19
55	14	14	14	16	16
60	9	10	10	10	11
65	5	5	5	5	6
70	2	2	1	2	2
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

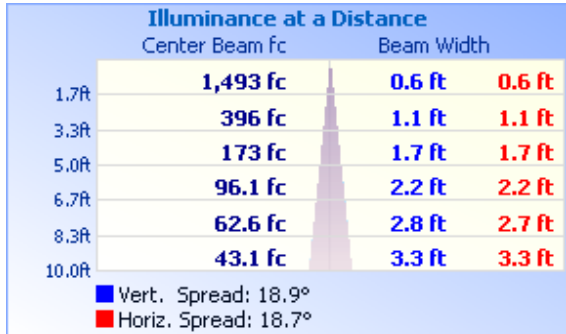


**RESULTS:**

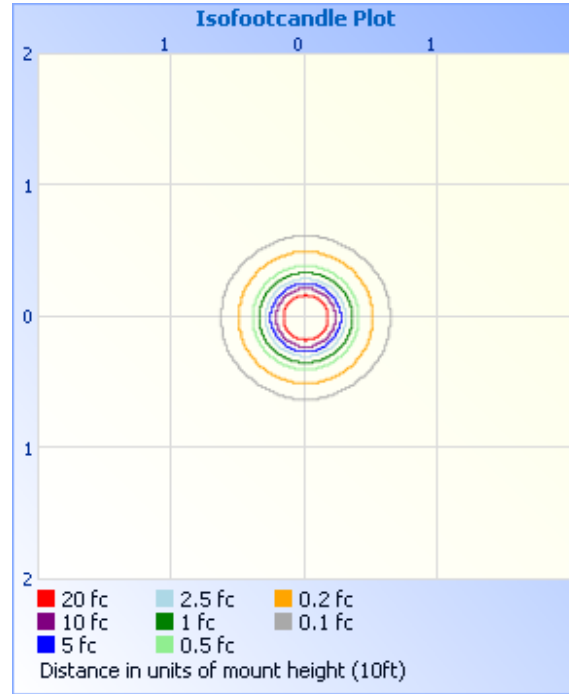
**Illumination Plots**

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	469.8	92.0
0-40	478.9	93.8
0-60	504.5	98.8
60-90	6.2	1.2
70-100	0.5	0.1
90-120	0.0	0.0
0-90	510.6	100.0
90-180	0.0	0.0
0-180	510.6	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	289.8	56.7
10-20	162.4	31.8
20-30	17.7	3.5
30-40	9.1	1.8
40-50	12.2	2.4
50-60	13.3	2.6
60-70	5.7	1.1
70-80	0.5	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:

Handwritten signature of Brittne Stull in black ink.

Brittne Stull  
Project Engineer  
Lighting Division

Report Reviewed By:

Handwritten signature of Jeffrey Davis in black ink.

Jeffrey Davis  
Engineering Supervisor  
Lighting Division

Attachments: IES File - 1505071059-001-001-2