



# REPORT

3933 US ROUTE 11, CORTLAND, NEW YORK 13045

Project No. G102125122

Date: May 15, 2015

REPORT NO. 102125122CRT-003

TEST OF ONE INDOOR SPOT LIGHT WITH LX-M40-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

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.



SUMMARY:

MODEL NO. LX2044-T1913-9827RR-FF-DDVVVC
DESCRIPTION: Indoor Spot Light with LX-M40-REF-B Reflector

Criteria	Results
Light Output (Lumens)	804
Total Power (W)	18.02
Lumen Efficacy (Lm/W)	44.7
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.



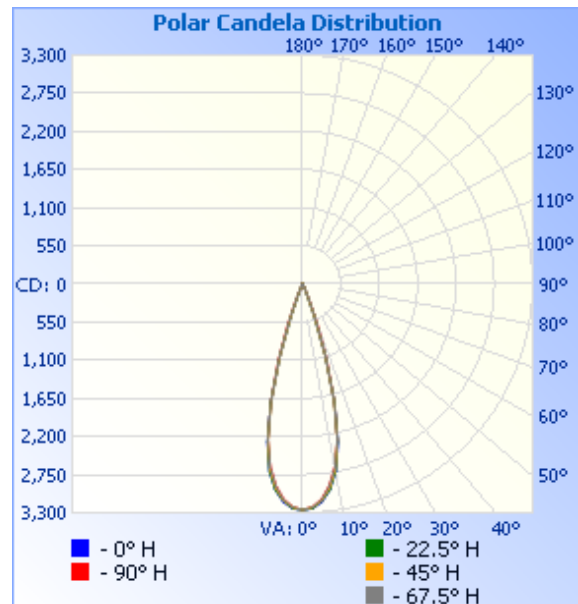
**RESULTS:**

**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	151.4	18.02	0.991	804.4	44.65

**Intensity (Candlepower) Summary at 25°C - Candelas**

Angle	0	22.5	45	67.5	90
0	3255	3255	3255	3255	3255
5	3156	3141	3132	3125	3111
10	2739	2732	2707	2681	2670
15	1764	1759	1733	1741	1768
20	461	472	494	558	623
25	72	76	77	84	98
30	24	24	24	26	28
35	14	14	14	14	15
40	9	10	10	10	10
45	7	6	6	7	8
50	3	3	3	4	4
55	1	0	0	1	1
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

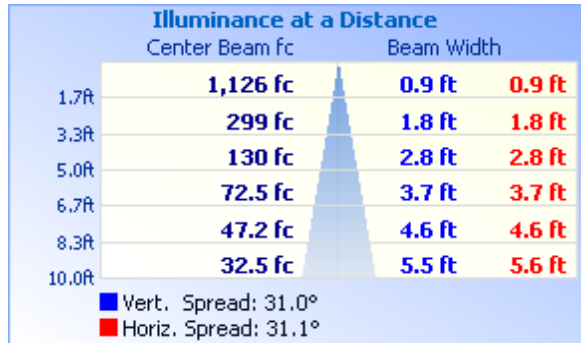


**RESULTS:**

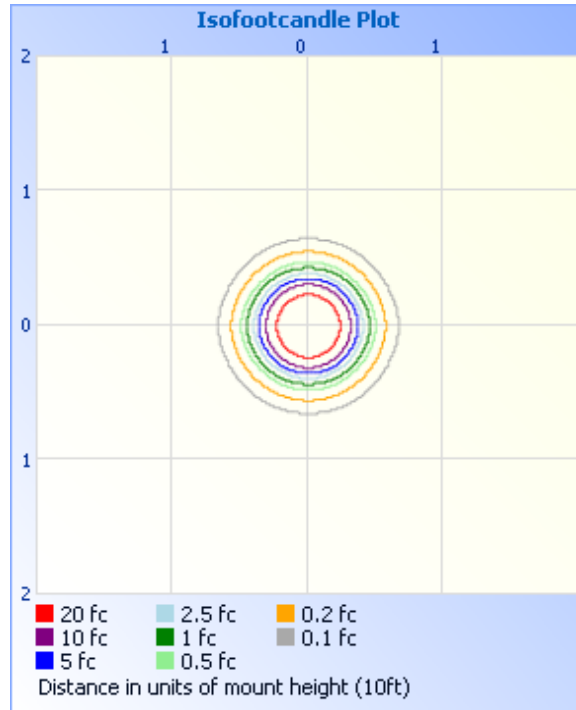
Illumination Plots

Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	788.9	98.1
0-40	798.4	99.3
0-60	804.4	100.0
60-90	0.0	0.0
70-100	0.0	0.0
90-120	0.0	0.0
0-90	804.4	100.0
90-180	0.0	0.0
0-180	804.4	100.0

Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	284.8	35.4
10-20	442.8	55.1
20-30	61.3	7.6
30-40	9.5	1.2
40-50	5.1	0.6
50-60	0.9	0.1
60-70	0.0	0.0
70-80	0.0	0.0
80-90	0.0	0.0

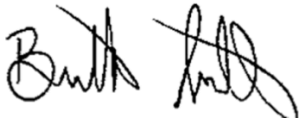
PRODUCT PICTURE:



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:



Brittanie Stull  
Project Engineer  
Lighting Division

Report Reviewed By:



Jeffrey Davis  
Engineering Supervisor  
Lighting Division

Attachments: IES File - 1505071059-001-001-3