

SONNEMAN - A WAY OF LIGHT TEST REPORT

SCOPE OF WORK

Electrical and Photometric tests as required to the IESNA test standard.

MODEL NUMBER

1XDXXRP23K

PROJECT NUMBER

G103981353

REPORT NUMBER

103981353CRT-013

ISSUE DATE

June 28, 2019

REVISION DATE

None

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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TEST REPORT

REPORT NO.:103981353CRT-013

REPORT DATE: June 28, 2019

TEST OF (1) PRECISE 3-CELL W/ 24° LENS

MODEL NO. 1XDXXRP23K

RENDERED TO:

SONNEMAN - A WAY OF LIGHT
151 AIRPORT DRIVE
WAPPINGERS FALLS, NY 12590

STATEMENT OF LIMITATION

NVLAP Lab Code 100402-0. 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 Qu-00975978-1.

STANDARDS USED

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

SAMPLE INFORMATION

CONTROL NO.	MODEL/SERIAL NO.	DESCRIPTION	TYPE	RECEIVED
CRT1906130954-001-12	1XDXXRP23K	Luminaire	Production	06/13/19
CRT1906130954-001-15	1XZ040003K	3-Cell 24° Lens Kit	Production	06/13/19
N/A	1XB01DR18K	Accessory	Production	06/13/19
N/A	1XC01XX24K	Accessory	Production	06/13/19
N/A	1XB04DR06K	Accessory	Production	06/13/19

DATE OF TESTS

June 28, 2019.

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SUMMARY

MODEL NO:	1XDXXRP23K
DESCRIPTION:	Precise 3-Cell w/ 24° Lens
LED MODEL NO:	Not Reported
DRIVER MODEL NO:	LTF TA60WA24LED

CRITERIA	RESULTS
Lumen Output (lumens)	116.1
Input Power (W) @ 120 (VAC)	3.28
Lumen Efficacy (lm/W)	35.4
Input Power Factor () @ 120 (VAC)	0.923

EQUIPMENT LIST

EQUIPMENT USED	MODEL NO.	CONTROL NO.	CAL DUE DATE	DATE USED
LSI High Speed Mirror Goniometer	6440	---	07/07/19	06/28/19
Elgar AC Power Supply	CW1251	---	VBU	06/28/19
Sorenson DC Power Supply	XG 150-10	---	VBU	06/28/19
Yokogawa Power Analyzer	WT210	E464	05/07/20	06/28/19
Omega Thermometer	DPi8-C24	M263	05/07/20	06/28/19
M-D Building Products Digital Level	Smart Tool	L112	05/01/20	06/28/19
NIST Luminous Intensity Standard Source	NBS10322	N1427	02/11/21	06/28/19
NIST Luminous Intensity Standard Source	NBS10332	N1435	02/11/21	06/28/19
NIST Luminous Intensity Standard Source	NBS10265	N1437	02/11/21	06/28/19
NIST Luminous Flux Standard Source	NBS10428	N1424	01/03/21	06/28/19

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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 Type C Mirror Goniometer was used to measure the intensity (candela) 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.

The calibration of the goniometer-photometer system is traceable to the National Institute of Standards and Technology.

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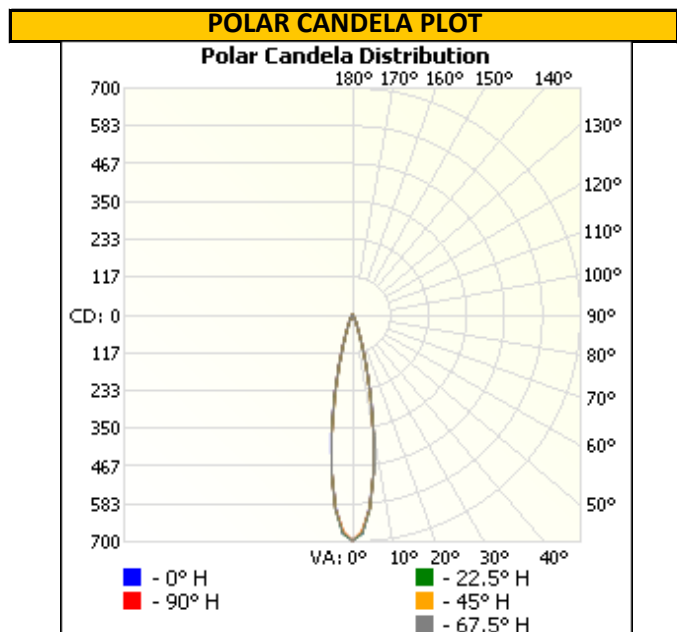
RESULTS OF TESTS

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

INTERTEK CONTROL NO.	BASE POSITION	INPUT VOLTAGE (VAC)	INPUT CURRENT (mA)	INPUT POWER (W)	INPUT POWER FACTOR ()	LIGHT OUTPUT (lm)	LUMEN EFFICACY (lm/W)
CRT1906130954-001-12	Base Up	120.08	29.6	3.28	0.923	116.1	35.4

INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	695	695	695	695	695
5	596	600	599	602	600
10	373	372	368	368	370
15	160	160	157	162	163
20	58	57	57	59	59
25	24	24	25	25	25
30	13	13	13	13	13
35	7	7	8	8	7
40	4	4	5	5	4
45	3	3	4	3	3
50	1	2	2	2	1
55	0	0	1	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



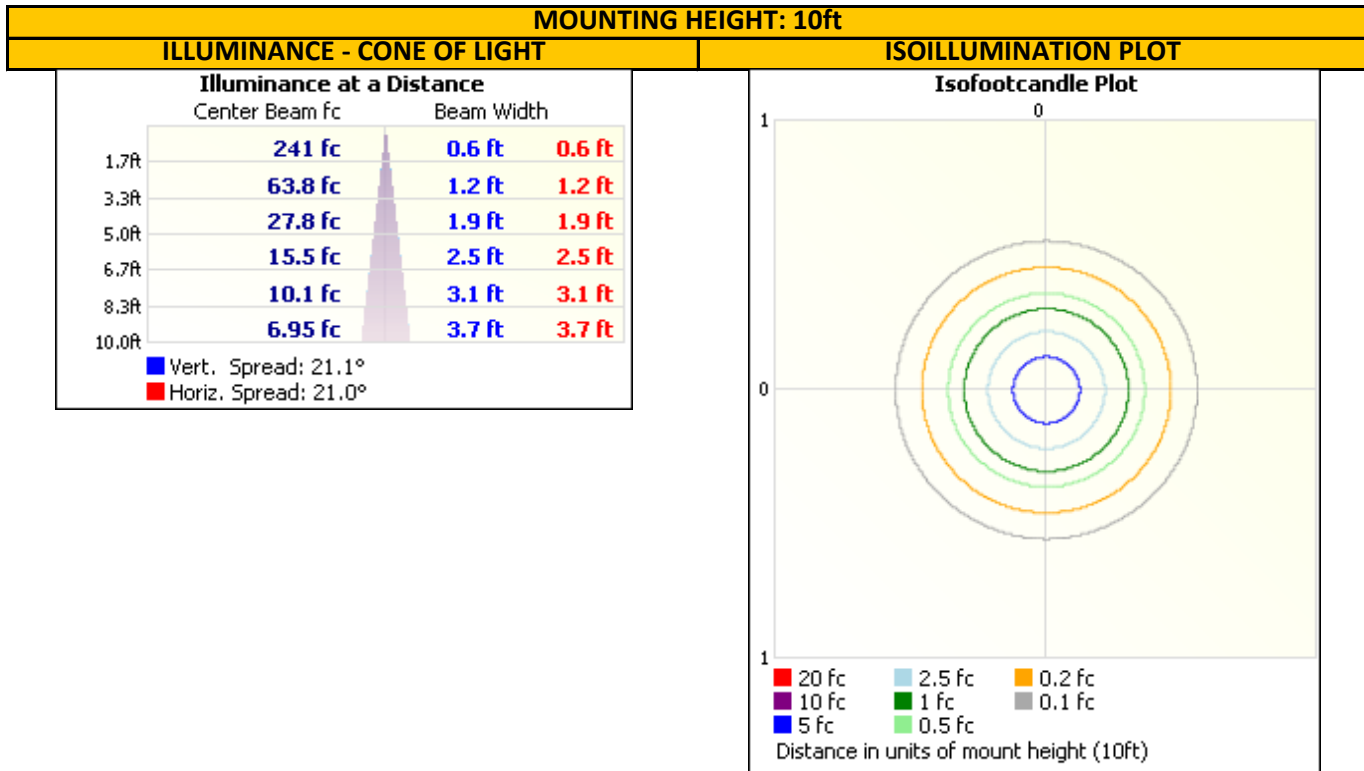
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RESULTS OF TESTS

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)



ZONAL LUMEN SUMMARY AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	108.3	93.3
0-40	113.1	97.5
0-60	116.1	100.0
60-90	0.0	0.0
0-90	116.1	100.0
90-180	0.0	0.0
0-180	116.1	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	49.3	42.5
10-20	46.3	39.9
20-30	12.7	10.9
30-40	4.8	4.1
40-50	2.5	2.1
50-60	0.5	0.4
60-70	0.0	0.0
70-80	0.0	0.0
80-90	0.0	0.0

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PICTURES



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:

Kristie Ray

Kristie Ray
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Report Reviewed By:

Melanie Brittain

Melanie Brittain
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Attachments: .IES File

REVISION HISTORY

JOB NUMBER	DATE OF REVISION	PROJECT HANDLER	REVIEWED BY	REVISION NOTE
None				