

SONNEMAN - A WAY OF LIGHT TEST REPORT

SCOPE OF WORK

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

MODEL NUMBER

1XDXXRP20K w/1XZ010013K

PROJECT NUMBER

G103590523

REPORT NUMBER

103590523CRT-035

ISSUE DATE

August 22, 2018

REVISION DATE

None

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

© 2018 INTERTEK



TEST REPORT

REPORT NO.: 103590523CRT-035

REPORT DATE: August 22, 2018

TEST OF (1) PRECISE CYLINDER W/SNOOT FLOOD LENS

MODEL NO. 1XDXXRP20K W/1XZ010013K

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-00895529.

STANDARDS USED

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

SAMPLE INFORMATION

CONTROL NO.	MODEL/SERIAL NO.	DESCRIPTION	TYPE	RECEIVED
CRT1808031053-001-16	1XDXXRP20K w/1XZ010013K	Luminaire	Production	8/2/2018

DATE OF TESTS

August 22, 2018.

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 permit copying or distribution of 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.

TEST REPORT

REPORT NO.: 103590523CRT-035

REPORT DATE: August 22, 2018

SUMMARY

MODEL NO:	1XDXXRP20K w/1XZ010013K
DESCRIPTION:	Precise Cylinder w/Snoot Flood Lens
LED MODEL NO:	Proprietary-Not Reported
DRIVER MODEL NO:	LTF TA60WA24LED

CRITERIA	RESULTS
Lumen Output (lumens)	203.0
Input Power (W) @ 120 (VAC)	6.17
Lumen Efficacy (lm/W)	32.9
Input Power Factor () @ 120 (VAC)	0.956

EQUIPMENT LIST

EQUIPMENT USED	MODEL NO.	CONTROL NO.	CAL DUE DATE	DATE USED
LSI High Speed Mirror Goniometer	6440	---	9/7/2018	8/22/2018
Elgar AC Power Supply	CW1251	---	VBU	8/22/2018
Sorenson DC Power Supply	XG 150-10	---	VBU	8/22/2018
Yokogawa Power Analyzer	WT210	E464	5/3/2019	8/22/2018
Omega Thermometer	DPi8-C24	M263	5/3/2019	8/22/2018
M-D Building Products Digital Level	Smart Tool	L112	4/21/2019	8/22/2018
NIST Luminous Intensity Standard Source	NBS10322	N1427	1/9/2019	8/22/2018
NIST Luminous Intensity Standard Source	NBS10332	N1435	1/9/2019	8/22/2018
NIST Luminous Intensity Standard Source	NBS10265	N1437	1/9/2019	8/22/2018
NIST Luminous Flux Standard Source	NBS10428	N1424	1/11/2019	8/22/2018

TEST REPORT

REPORT NO.: 103590523CRT-035

REPORT DATE: August 22, 2018

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 (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.

TEST REPORT

REPORT NO.: 103590523CRT-035

REPORT DATE: August 22, 2018

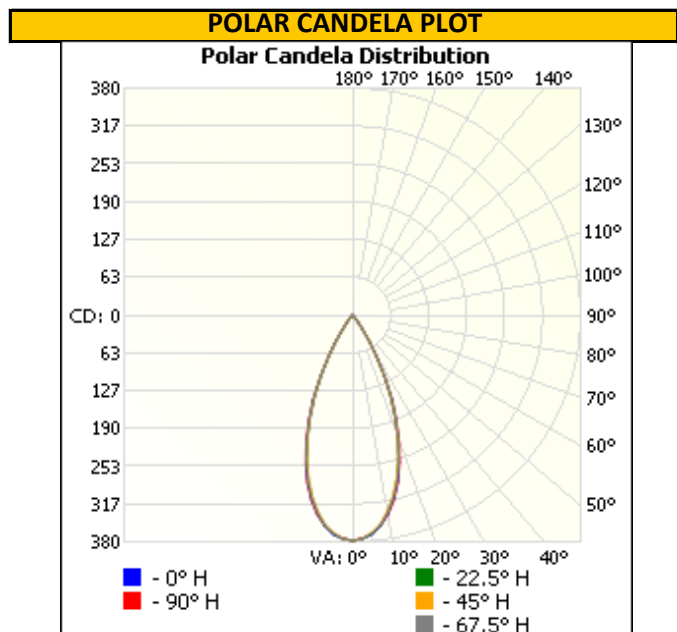
RESULTS OF TESTS

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)
CRT1808031053-001-16	Base Up	120.00	53.8	6.17	0.956	203.0	32.9

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	378	378	378	378	378
5	369	368	365	367	368
10	337	335	334	337	340
15	289	285	284	288	291
20	222	220	219	224	227
25	153	149	150	152	157
30	78	77	78	80	82
35	27	26	26	28	30
40	8	8	8	9	9
45	2	2	2	3	3
50	0	0	0	0	0
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



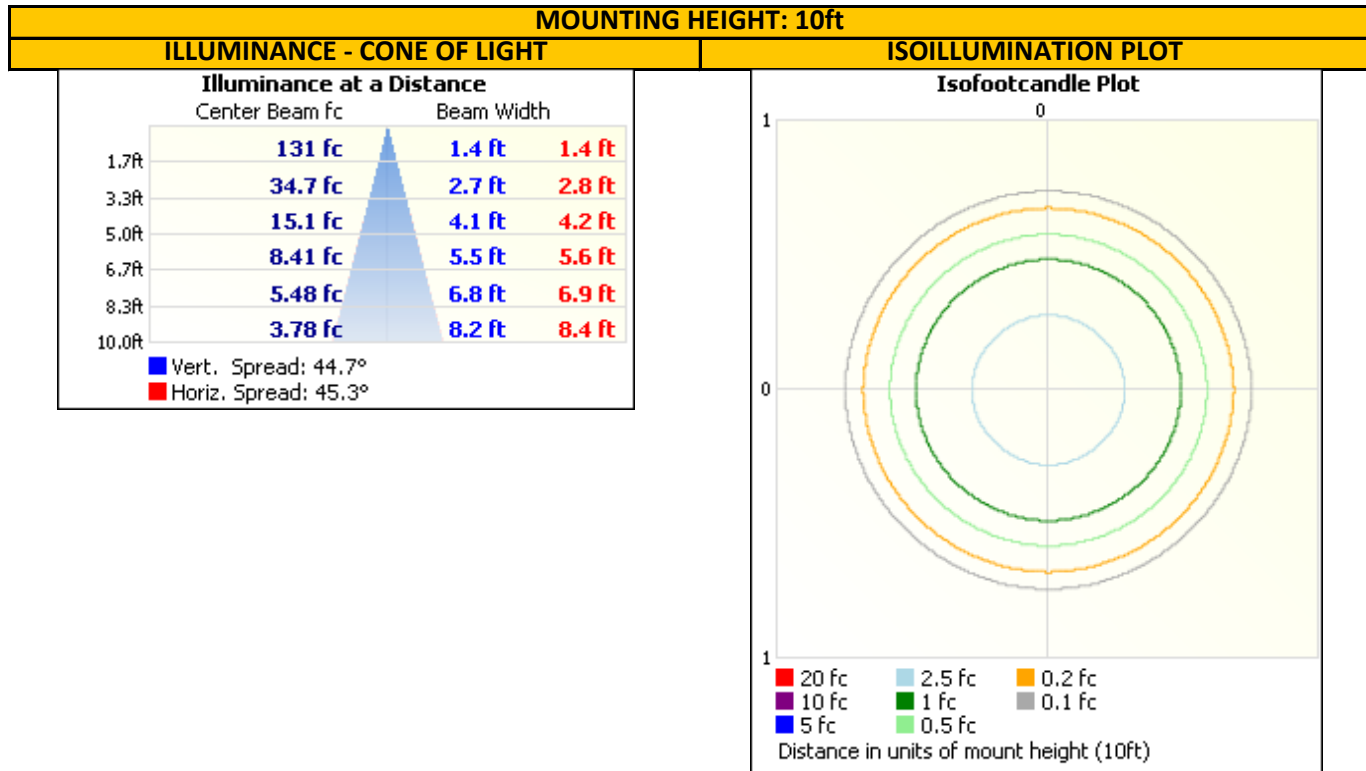
TEST REPORT

REPORT NO.: 103590523CRT-035

REPORT DATE: August 22, 2018

RESULTS OF TESTS

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



ZONAL LUMEN SUMMARY AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	180.2	88.8
0-40	200.7	98.9
0-60	203.0	100.0
60-90	0.0	0.0
0-90	203.0	100.0
90-180	0.0	0.0
0-180	203.0	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	34.0	16.8
10-20	78.6	38.7
20-30	67.6	33.3
30-40	20.6	10.1
40-50	2.3	1.1
50-60	0.0	0.0
60-70	0.0	0.0
70-80	0.0	0.0
80-90	0.0	0.0

TEST REPORT

REPORT NO.: 103590523CRT-035

REPORT DATE: August 22, 2018

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:



Jerry Gray
Associate Engineer
Lighting Division

Report Reviewed By:



Ryan Siddon
Project Engineer
Lighting Division

Attachments: IES File

REVISION HISTORY

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