

# SONNEMAN - A WAY OF LIGHT TEST REPORT

## SCOPE OF WORK

LED Performance Testing

## MODEL NUMBER

1XDXXRP26K w/ 1XZ020102K

## PROJECT NUMBER

G104119984

## REPORT NUMBER

1004119984CRT-047

## ISSUE DATE

8/3/2020

## REVISED DATE

None

## TEST DATES

7/31/2020

## DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

© 2017 INTERTEK



# SAMPLE INFORMATION

REPORT NO. 1004119984CRT-047

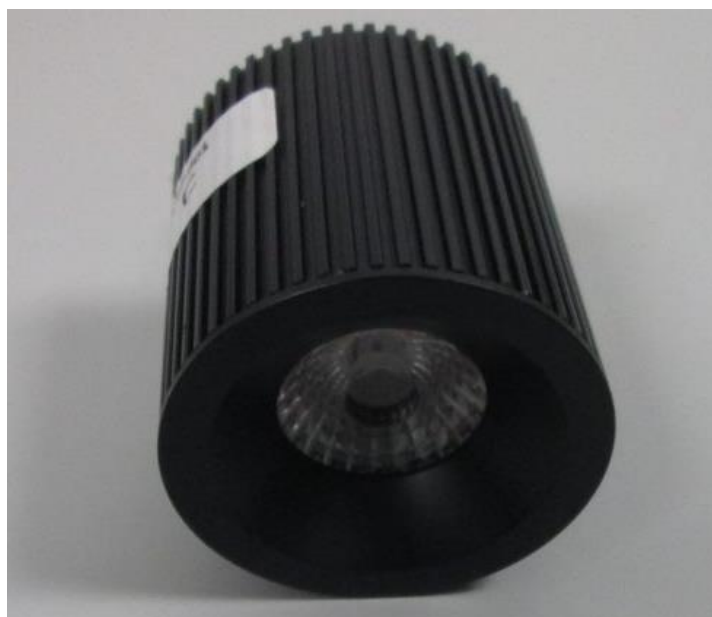
## ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	--	--	Test setup track	Production	--
4	CRT2007201010-001C	1XDXXRP26K w/ 1XZ020102K	Power Precise Cylinder w/ 38° Bezel Trim	Production	7/20/2020

## TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	1XDXXRP26K w/ 1XZ020102K	1 & 4

## SAMPLE PHOTOS - TESTED CONFIGURATIONS



**REPORT NUMBER**

1004119984CRT-047

**MODEL NUMBER(s)**

1XDXXRP26K W/ 1XZ020102K

**REPORT RENDERED TO:**

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

**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-01007713-0.

**TEST STANDARDS**

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

In Charge of Testing:



Jacki Swiernik  
Staff Engineer  
Lighting Division

Reviewer:



Melanie Brittain  
Senior Associate Engineer  
Lighting Division

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.

## SUMMARY

REPORT NO. 1004119984CRT-047

### PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	1XDXXRP26K w/ 1XZ020102K
Product Description:	Power Precise Cylinder w/ 38° Bezel Trim
LED Model No.:	Not reported
Driver Model No.:	LTF TA60WA24LED
Light Source:	LED

Criteria	Results
Light Output (lumens)	335.4
Input Power (W) @ 120 (Vac)	9.37
Lumen Efficacy (lm/W)	35.8
Input Power Factor ( ) @ 120 (Vac)	0.959

## TEST METHODS

### SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS

No seasoning was performed in accordance with IESNA LM-79.

### TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

A Type C Mirror Goniophotometer system was used to measure the luminous intensity (candela) at each angle of distribution for the EUT. Electrical measurements of the unit were measured using a power analyzer. Each EUT was operated at the rated input voltage of the system in its designated orientation. The ambient temperature was measured at a position near the EUT at equal height and stabilization procedures to LM-79 were followed.

**TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING**

**REPORT NO. 1004119984CRT-047**

Test Configuration	Tested Model No.
1	1XDXXRP26K w/ 1XZ020102K

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

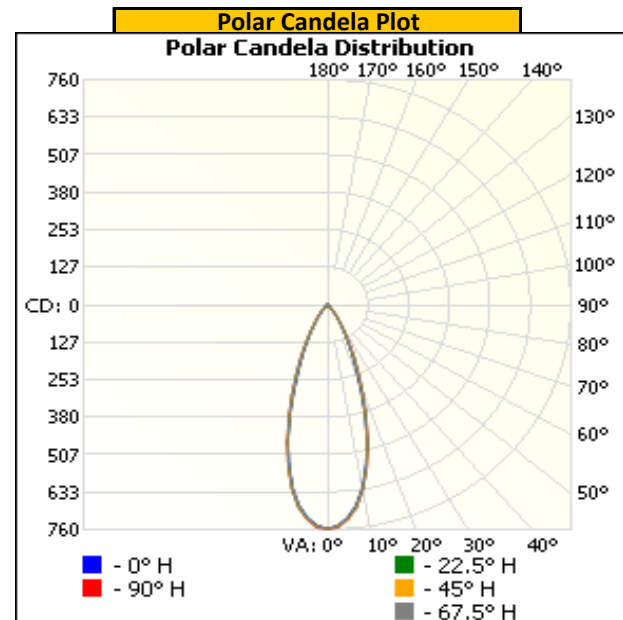
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor (I)
Up	119.98	81.4	9.37	0.959

Light Output (lm)	Lumen Efficacy (lm/W)
335.4	35.8

**INTENSITY SUMMARY - CANDELA**

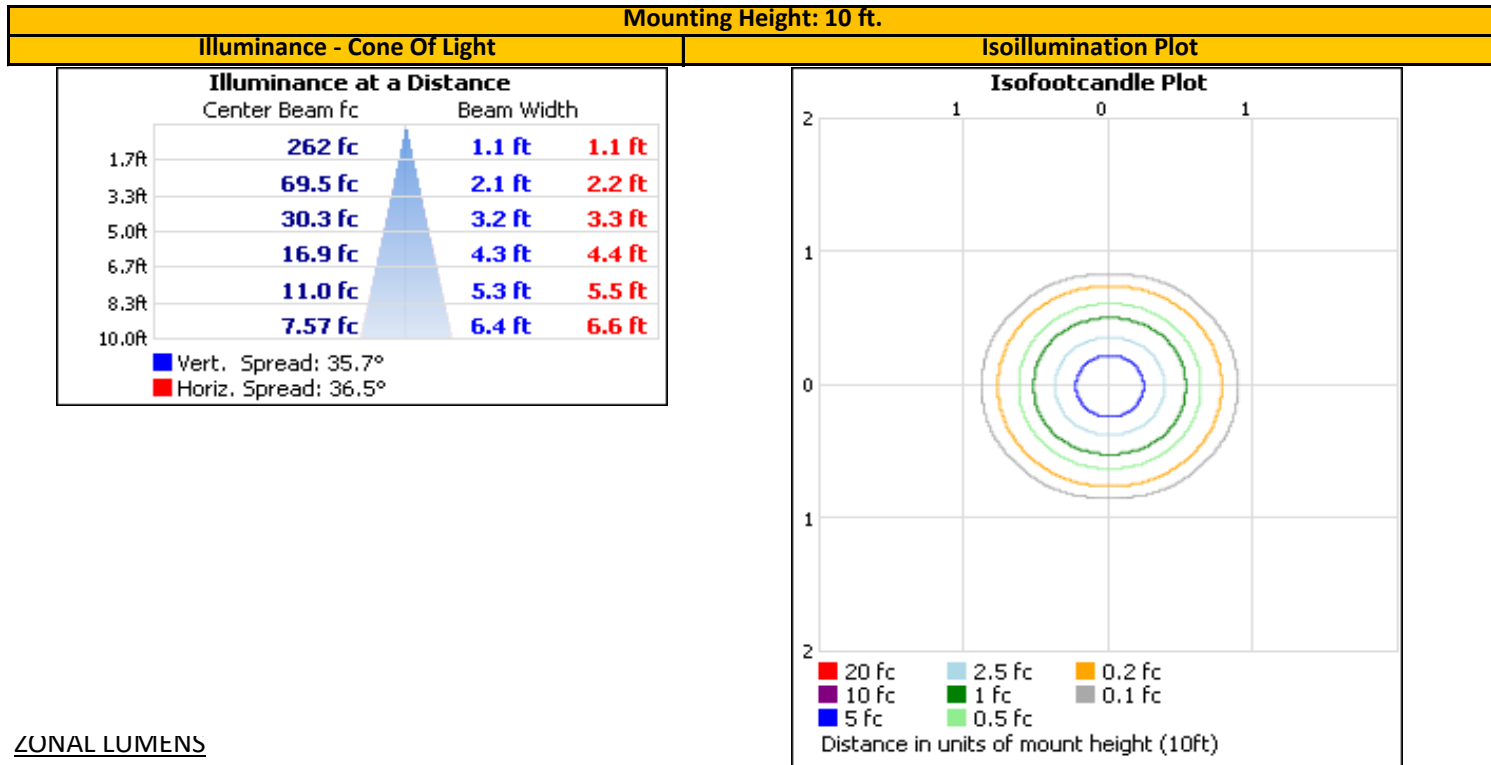
Angle	0	22.5	45	67.5	90
0	757	757	757	757	757
5	721	724	727	726	729
10	628	631	633	633	634
15	476	476	479	485	485
20	304	312	319	326	324
25	178	186	194	201	198
30	101	104	108	111	109
35	53	54	54	58	58
40	22	25	27	30	30
45	11	12	13	14	13
50	6	6	6	6	6
55	2	2	3	3	3
60	1	0	0	0	0
65	0	0	0	0	0
70	0	0	0	0	0
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0
95	0	0	0	0	0
100	0	0	0	0	0
105	0	0	0	0	0
110	0	0	0	0	0
115	0	0	0	0	0
120	0	0	0	0	0
125	0	0	0	0	0
130	0	0	0	0	0
135	0	0	0	0	0
140	0	0	0	0	0
145	0	0	0	0	0
150	0	0	0	0	0
155	0	0	0	0	0
160	0	0	0	0	0
165	0	0	0	0	0
170	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0

Entire luminous intensity matrix found in .IES file



REPORT NO. 1004119984CRT-047

ILLUMINANCE SUMMARY



ZONAL LUMENS

Zonal Lumen Summary					
Zone	Lumens	Luminaire	Zone	Lumens	Total
0-30	285.8	85.2%	0-10	66.2	19.7%
0-40	322.2	96.1%	10-20	130.4	38.9%
0-60	335.4	100.0%	20-30	89.2	26.6%
60-90	0.0	0.0%	30-40	36.5	10.9%
70-100	0.0	0.0%	40-50	10.7	3.2%
90-120	0.0	0.0%	50-60	2.5	0.7%
0-90	335.4	100.0%	60-70	0.0	0.0%
90-180	0.0	0.0%	70-80	0.0	0.0%
0-180	335.4	100.0%	80-90	0.0	0.0%
			90-100	0.0	0.0%
			100-110	0.0	0.0%
			110-120	0.0	0.0%
			120-130	0.0	0.0%
			130-140	0.0	0.0%
			140-150	0.0	0.0%
			150-160	0.0	0.0%
			160-170	0.0	0.0%
			170-180	0.0	0.0%

**EQUIPMENT LIST**

**REPORT NO. 1004119984CRT-047**

#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	LSI High Speed Mirror Goniometer	6440	---	7/21/2020	8/21/2020
2	Elgar AC Power Supply	CW1251	---	VBU	VBU
3	Yokogawa Power Analyzer	WT210	E464	5/11/2020	5/11/2021
4	Traceable Hygrothermometer	4800	L203	2/17/2020	2/17/2021
5	M-D Building Products Digital Level	Smart Tool	307-L112	5/14/2020	5/14/2021
6	NIST Luminous Intensity Standard Source	NBS10322	N1427	2/11/2019	2/11/2021
7	NIST Luminous Intensity Standard Source	NBS10332	N1435	2/11/2019	2/11/2021
8	NIST Luminous Intensity Standard Source	NBS10265	N1437	2/11/2019	2/11/2021
9	NIST Luminous Flux Standard Source	NBS10428	N1424	1/3/2019	1/3/2021
10	Sorenson DC Power Supply	XG 150-10	---	VBU	VBU
11	Omega Thermometer	DPi8-C24	M263	2/27/2020	2/27/2021

Note: Standard sources listed above are traceable to NIST: National Institute of Standards and Technology

**REVISION HISTORY**

#	Revision Date	Updated By	Reviewed By	Description of Change
---	None	---	---	---
---	---	---	---	---
---	---	---	---	---