

# SONNEMAN - A WAY OF LIGHT

## TEST REPORT

### SCOPE OF WORK

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

### MODEL NUMBER

2667

### PROJECT NUMBER

G103703321

### REPORT NUMBER

103703321CRT-072

### ISSUE DATE

March 26, 2019

### REVISION DATE

None

### DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

© 2019 INTERTEK



**TEST REPORT**

**REPORT NO.: 103703321CRT-072**

**REPORT DATE: March 26, 2019**

**TEST OF (1) INFINITY REFLECTIONS LED PENDANT**

MODEL NO. 2667

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-00932265.

**STANDARDS USED**

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

**SAMPLE INFORMATION**

CONTROL NO.	MODEL/SERIAL NO.	DESCRIPTION	TYPE	RECEIVED
CRT1903200935-002	2667	Infinity Reflections LED Pendant	Production	3/20/2019

**DATE OF TESTS**

March 25, 2019.

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.: 103703321CRT-072

REPORT DATE: March 26, 2019

SUMMARY

<b>MODEL NO:</b>	2667
<b>DESCRIPTION:</b>	Infinity Reflections LED Pendant
<b>LED MODEL NO:</b>	Not Provided
<b>DRIVER MODEL NO:</b>	ERP EBR020U-0700-30

CRITERIA	RESULTS
Lumen Output (lumens)	1367.7
Input Power (W) @ 120 (VAC)	21.16
Lumen Efficacy (lm/W)	64.6
Input Power Factor ( ) @ 120 (VAC)	0.985

EQUIPMENT LIST

EQUIPMENT USED	MODEL NO.	CONTROL NO.	CAL DUE DATE	DATE USED
LSI High Speed Mirror Goniometer	6440	---	4/5/2019	3/25/2019
Elgar AC Power Supply	CW1251	---	VBU	3/25/2019
Sorenson DC Power Supply	XG 150-10	---	VBU	3/25/2019
Yokogawa Power Analyzer	WT210	E464	5/3/2019	3/25/2019
Omega Thermometer	DPI8-C24	M263	5/3/2019	3/25/2019
M-D Building Products Digital Level	Smart Tool	L112	4/21/2019	3/25/2019
NIST Luminous Intensity Standard Source	NBS10322	N1427	2/11/2021	3/25/2019
NIST Luminous Intensity Standard Source	NBS10332	N1435	2/11/2021	3/25/2019
NIST Luminous Intensity Standard Source	NBS10265	N1437	2/11/2021	3/25/2019
NIST Luminous Flux Standard Source	NBS10428	N1424	1/3/2021	3/25/2019

**TEST REPORT****REPORT NO.: 103703321CRT-072****REPORT DATE: March 26, 2019****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.

TEST REPORT

REPORT NO.: 103703321CRT-072

REPORT DATE: March 26, 2019

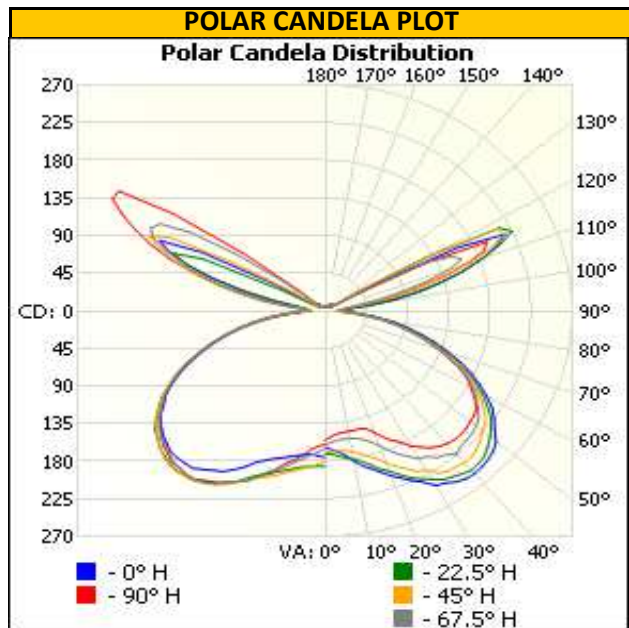
RESULTS OF TESTS

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)
Crt1903200935-002	Base Up	120.12	178.8	21.16	0.985	1367.7	64.6

INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	163	172	170	160	155
5	170	175	168	155	148
10	183	181	172	155	146
15	196	191	180	159	146
20	210	204	193	171	154
25	224	220	208	189	171
30	242	233	219	204	187
35	250	242	234	214	200
40	254	249	237	223	207
45	252	246	234	219	210
50	244	235	223	215	207
55	226	221	213	204	202
60	203	198	191	187	184
65	176	170	165	163	161
70	143	138	132	130	129
75	108	103	98	97	97
80	74	70	64	65	64
85	37	34	28	31	29
90	18	17	12	16	14
95	27	25	17	20	20
100	78	70	44	32	49
105	132	129	104	85	102
110	182	183	170	144	166
115	217	225	215	154	195
120	71	129	135	67	40
125	8	13	14	11	10
130	6	8	10	11	11
135	5	7	8	11	11
140	6	6	8	10	10
145	5	6	7	8	9
150	5	6	6	7	8
155	6	6	6	6	7
160	6	6	6	6	6
165	6	6	6	6	6
170	6	5	6	6	6
175	6	5	5	6	6
180	6	6	5	5	6



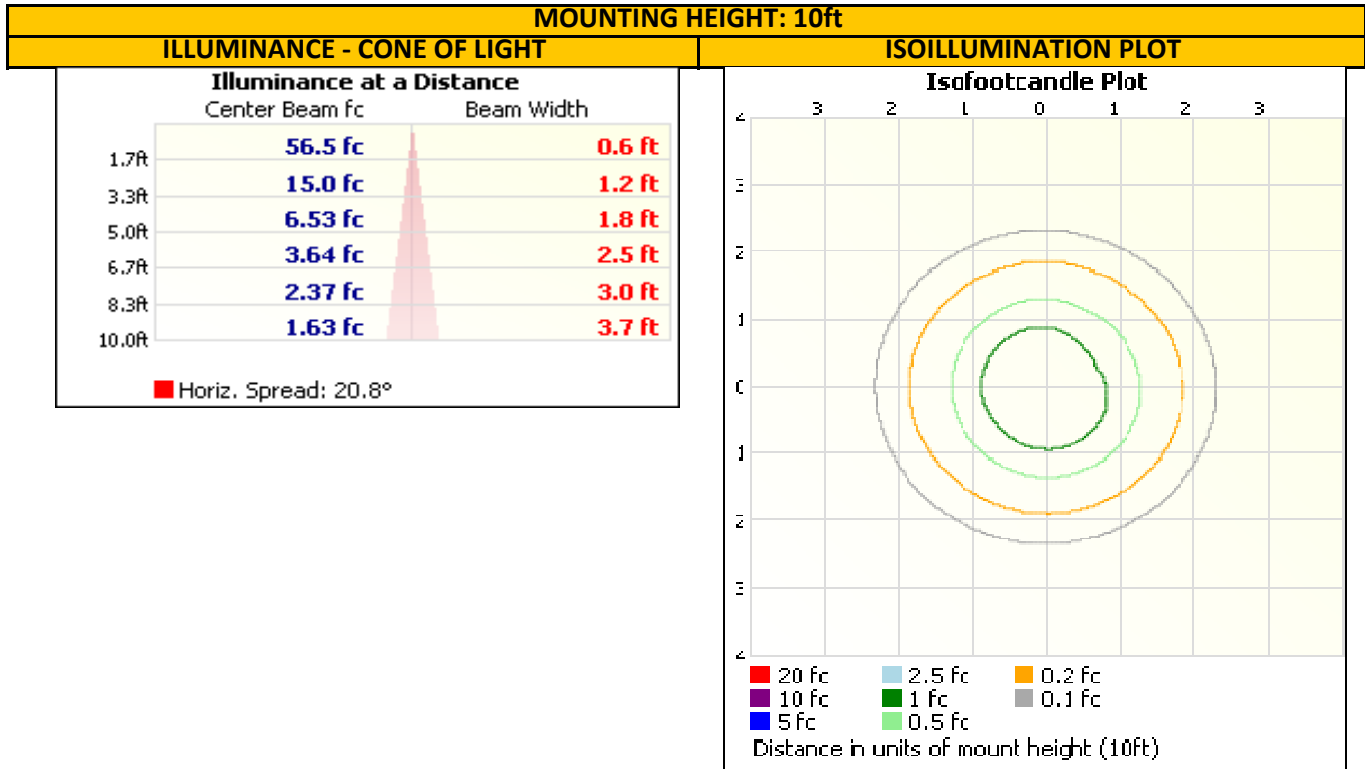
TEST REPORT

REPORT NO.: 103703321CRT-072

REPORT DATE: March 26, 2019

RESULTS OF TESTS

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



**ZONAL LUMEN SUMMARY AND PERCENTAGES**

ZONE	LUMENS	% LUMINAIRE
0-30	164.1	12.0
0-40	308.2	22.5
0-60	678.5	49.6
60-90	322.9	23.6
0-90	1001.3	73.2
90-180	366.4	26.8
0-180	1367.7	100.0

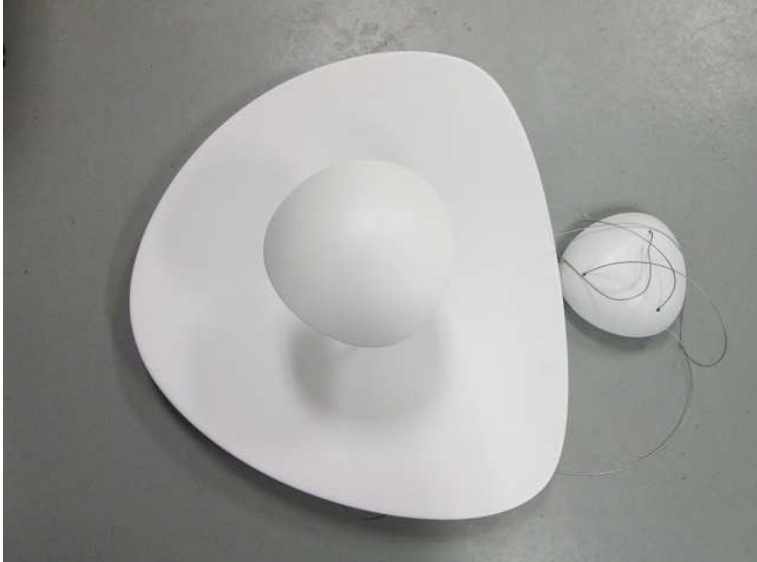
ZONE	LUMENS	% LUMINAIRE
0-10	16.2	1.2
10-20	51.8	3.8
20-30	96.1	7.0
30-40	144.1	10.5
40-50	179.6	13.1
50-60	190.7	13.9
60-70	167.7	12.3
70-80	112.2	8.2
80-90	43.0	3.1
90-100	29.3	2.1
100-110	115.3	8.4
110-120	167.6	12.3
120-130	37.7	2.8
130-140	6.7	0.5
140-150	4.6	0.3
150-160	3.0	0.2
160-170	1.6	0.1
170-180	0.5	0.0

TEST REPORT

REPORT NO.: 103703321CRT-072

REPORT DATE: March 26, 2019

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:

Gerald Gray  
Associate Engineer  
Lighting Division

Report Reviewed By:

Jeff Davis  
Engineering Supervisor  
Lighting Division

Attachments: .IES File

REVISION HISTORY

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