

SONNEMAN - A WAY OF LIGHT

TEST REPORT

SCOPE OF WORK

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

MODEL NUMBER

2850-FD

PROJECT NUMBER

G103590523

REPORT NUMBER

103590523CRT-040

ISSUE DATE

September 17, 2018

REVISION DATE

None

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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TEST REPORT**REPORT NO.: 103590523CRT-040**
REPORT DATE: September 17, 2018

TEST OF (1) VOTIVES LED SCONCE W/FLAT DIFFUSER LENS

MODEL NO. 2850-FD

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
CRT1809041010-001-1	2850-FD	Votives LED Sconce w/Flat Diffuser Lens	Production	9/4/2018

DATE OF TESTS

September 17, 2018.

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SUMMARY

MODEL NO:	2850-FD
DESCRIPTION:	Votives LED Sconce w/Flat Diffuser Lens
LED MODEL NO:	Proprietary-Not Reported
DRIVER MODEL NO:	LTF DA6W700C0509XX

CRITERIA	RESULTS
Lumen Output (lumens)	340.4
Input Power (W) @ 120 (VAC)	5.54
Lumen Efficacy (lm/W)	61.5
Input Power Factor () @ 120 (VAC)	0.915

EQUIPMENT LIST

EQUIPMENT USED	MODEL NO.	CONTROL NO.	CAL DUE DATE	DATE USED
LSI High Speed Mirror Goniometer	6440	---	10/7/2018	9/17/2018
Elgar AC Power Supply	CW1251	---	VBU	9/17/2018
Sorenson DC Power Supply	XG 150-10	---	VBU	9/17/2018
Yokogawa Power Analyzer	WT210	E464	5/3/2019	9/17/2018
Omega Thermometer	DPi8-C24	M263	5/3/2019	9/17/2018
M-D Building Products Digital Level	Smart Tool	L112	4/21/2019	9/17/2018
NIST Luminous Intensity Standard Source	NBS10322	N1427	1/9/2019	9/17/2018
NIST Luminous Intensity Standard Source	NBS10332	N1435	1/9/2019	9/17/2018
NIST Luminous Intensity Standard Source	NBS10265	N1437	1/9/2019	9/17/2018
NIST Luminous Flux Standard Source	NBS10428	N1424	1/11/2019	9/17/2018

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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.

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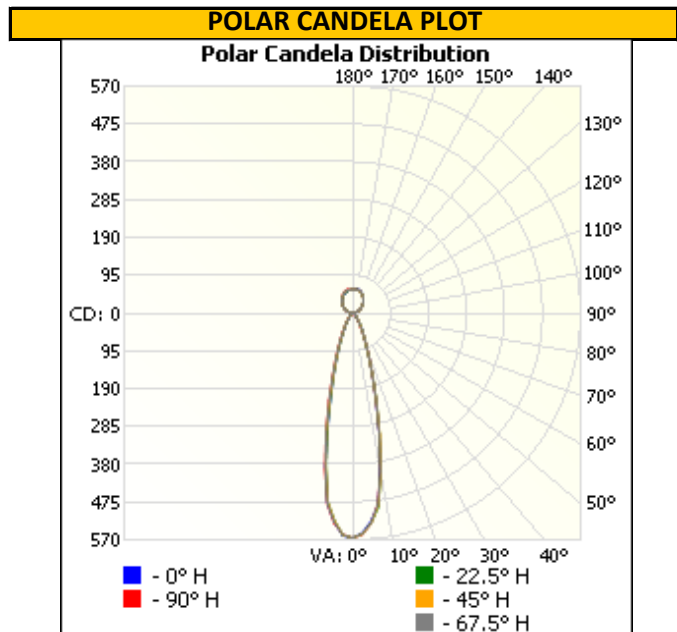
RESULTS OF TESTS

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)
CRT1809041010-001-1	Base Up	120.09	50.4	5.54	0.915	340.4	61.5

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	565	565	565	565	565
5	525	529	531	530	530
10	398	404	408	404	399
15	225	230	229	229	228
20	121	120	121	123	124
25	70	71	71	72	69
30	46	46	45	44	40
35	30	30	29	27	25
40	19	19	20	18	15
45	13	14	14	12	10
50	11	11	10	9	8
55	9	9	9	7	6
60	8	8	7	6	5
65	7	6	6	5	4
70	6	6	6	5	4
75	6	5	5	4	3
80	5	5	4	3	2
85	4	4	3	2	1
90	0	0	0	0	0
95	4	4	3	2	2
100	6	6	6	5	5
105	10	10	10	10	10
110	14	14	14	14	14
115	19	19	19	19	19
120	24	24	24	24	24
125	28	28	28	28	28
130	33	33	33	33	33
135	38	37	37	37	37
140	42	42	42	42	42
145	46	46	46	46	46
150	51	50	50	50	50
155	55	54	54	54	54
160	58	58	57	58	58
165	61	60	60	60	60
170	60	60	60	60	60
175	59	59	59	59	59
180	59	59	59	59	59

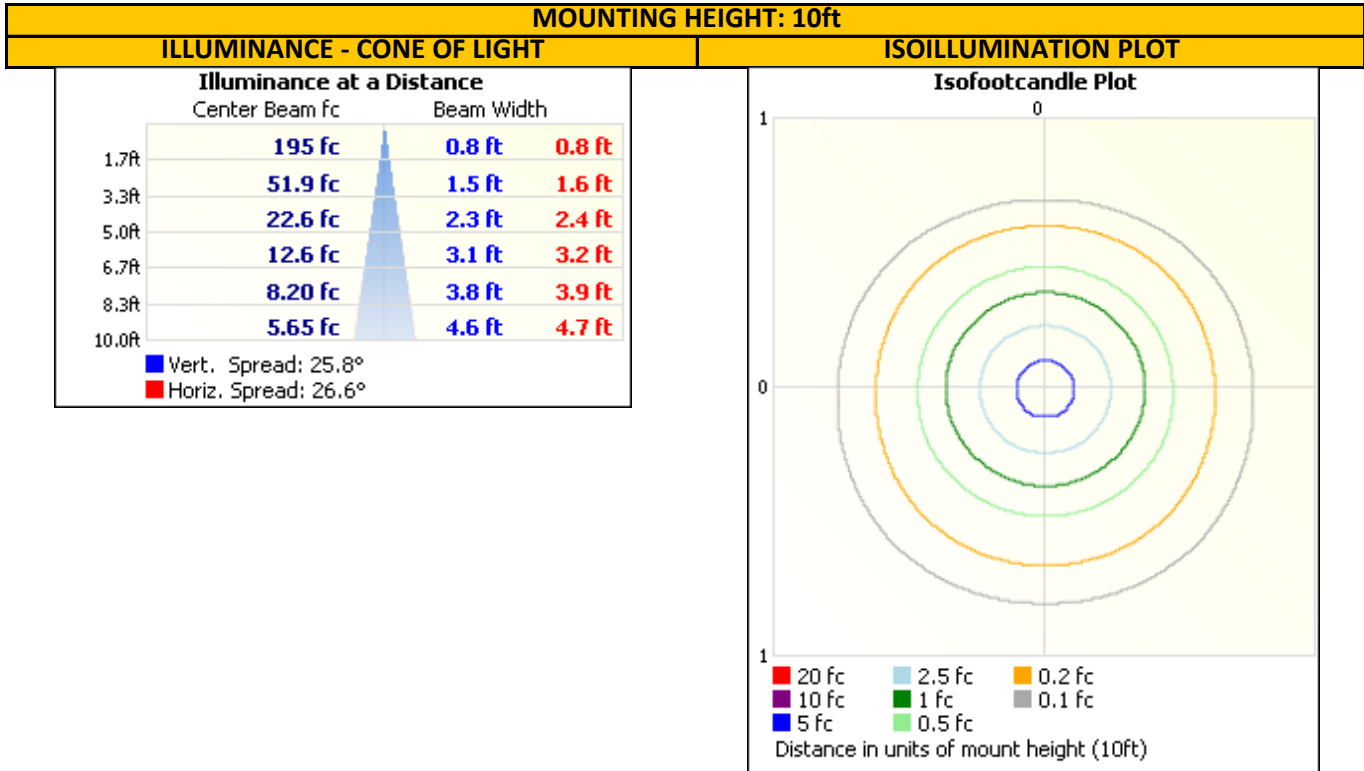


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RESULTS OF TESTS

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



ZONAL LUMEN SUMMARY AND PERCENTAGES

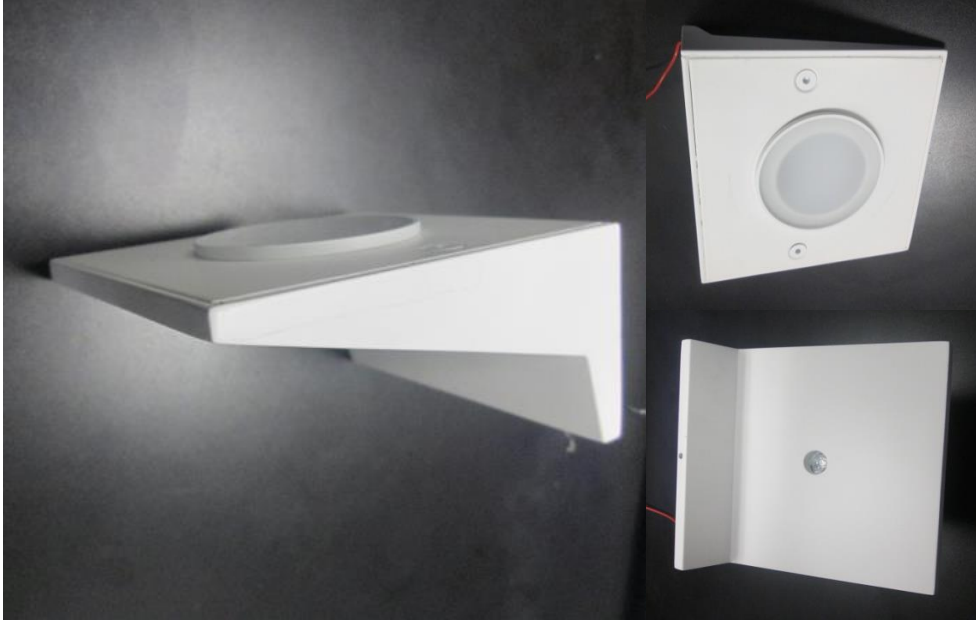
ZONE	LUMENS	% LUMINAIRE
0-30	141.2	41.5
0-40	157.3	46.2
0-60	170.9	50.2
60-90	8.2	2.4
0-90	179.2	52.6
90-180	161.2	47.4
0-180	340.4	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	46.3	13.6
10-20	62.6	18.4
20-30	32.3	9.5
30-40	16.1	4.7
40-50	8.1	2.4
50-60	5.5	1.6
60-70	3.8	1.1
70-80	2.9	0.8
80-90	1.5	0.5
90-100	2.7	0.8
100-110	10.4	3.0
110-120	18.8	5.5
120-130	25.2	7.4
130-140	28.7	8.4
140-150	28.6	8.4
150-160	24.6	7.2
160-170	16.6	4.9
170-180	5.6	1.7

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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:

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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				