

SONNEMAN - A WAY OF LIGHT

TEST REPORT

SCOPE OF WORK

LED Performance Testing

MODEL NUMBER

7473

PROJECT NUMBER

G104119984

REPORT NUMBER

104119984CRT-044

ISSUE DATE

6/20/2020

REVISED DATE

None

TEST DATES

7/6/2020

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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REPORT NUMBER

104119984CRT-044

MODEL NUMBER(s)

7473

REPORT 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-01007713-2.

TEST STANDARDS

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

ANSI NEMA ANSLG C78.377: 2017: Specifications for the Chromaticity of Solid State Lighting (SSL) Products

ANSI/UL 1598-2018: Standard for Safety - Luminaires

In Charge of Testing:

Reviewer:



Gerald Gray
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SAMPLE INFORMATION

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ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	CRT2006151018-002	7473	Mezza Vetro 8" Sconce	Production	6/15/2020

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	7473	1

SAMPLE PHOTOS - TESTED CONFIGURATIONS



SUMMARY**REPORT NO. 104119984CRT-044****PRODUCT INFORMATION AND SUMMARY OF DATA**

Product Model No.:	7473
Product Description:	Mezza Vetro 8" Sconce
LED Model No.:	Not Provided
Driver Model No.:	EBR015U-0300-42
Light Source:	LED

Criteria	Results
Light Output (lumens)	931.2
Input Power (W) @ 120 (Vac)	12.1
Lumen Efficacy (lm/W)	77.1
Input Power Factor () @ 120 (Vac)	0.991

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

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Test Configuration	Tested Model No.	Pass/Fail/NA
1	7473	NA

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

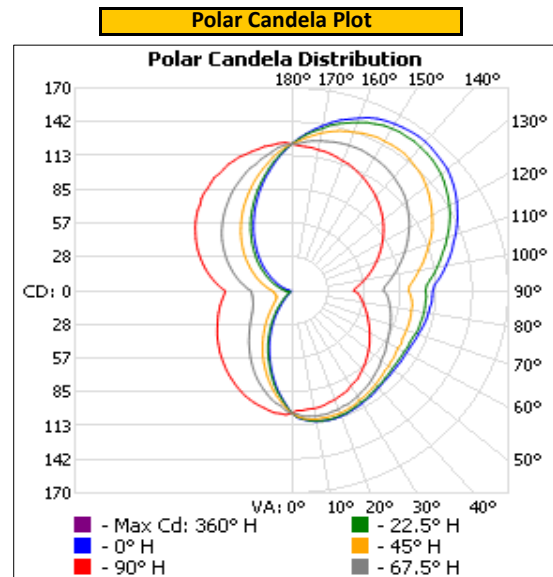
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()
Horizontal	120.06	101.5	12.08	0.991

Light Output (lm)	Lumen Efficacy (lm/W)
931.2	77.1

INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	103	103	103	103	103
5	109	108	108	106	101
10	112	111	110	107	100
15	112	112	110	107	99
20	112	112	110	106	98
25	111	110	108	105	96
30	110	108	106	103	92
35	108	107	104	100	90
40	106	105	102	98	86
45	105	104	100	95	82
50	104	102	99	92	79
55	104	102	98	90	75
60	104	102	96	86	71
65	105	102	96	84	67
70	106	104	96	82	63
75	108	104	96	80	60
80	109	105	95	78	57
85	110	105	95	76	54
90	111	105	92	72	48
95	116	109	96	76	53
100	123	116	102	82	59
105	130	122	108	88	65
110	137	130	115	94	71
115	144	137	122	100	76
120	150	143	127	106	82
125	155	148	133	112	88
130	159	153	138	117	93
135	161	156	142	121	98
140	163	157	144	125	103
145	163	158	145	127	107
150	162	157	145	129	111
155	159	154	144	130	114
160	154	150	142	130	116
165	148	145	139	129	119
170	141	138	134	128	120
175	132	132	129	126	121
180	123	123	123	123	123

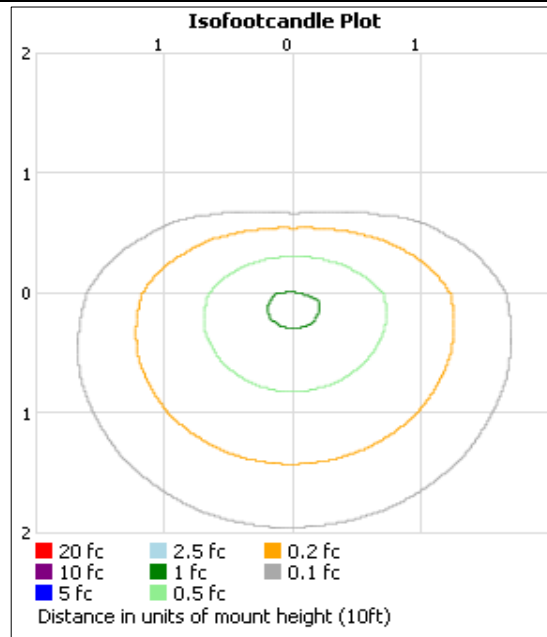
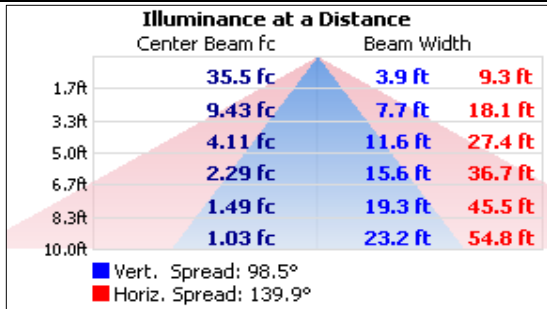
Entire luminous intensity matrix found in .IES file



ILLUMINANCE SUMMARY

Mounting Height: 10ft

Illuminance - Cone Of Light	Isoillumination Plot
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ZONAL LUMENS

Zonal Lumen Summary

Zone	Lumens	Luminaire
0-30	73.9	7.9%
0-40	119.4	12.8%
0-60	222.2	23.9%
60-90	175.3	18.8%
70-100	182.0	19.5%
90-120	211.7	22.7%
0-90	397.5	42.7%
90-180	533.8	57.3%
0-180	931.2	100.0%

Zone	Lumens	Total	Zone	Lumens	Total
0-10	9.5	1.0%	90-100	63.1	6.8%
10-20	26.2	2.8%	100-110	71.3	7.7%
20-30	38.2	4.1%	110-120	77.3	8.3%
30-40	45.4	4.9%	120-130	79.5	8.5%
40-50	49.6	5.3%	130-140	76.5	8.2%
50-60	53.2	5.7%	140-150	67.5	7.2%
60-70	56.4	6.1%	150-160	53.0	5.7%
70-80	59.0	6.3%	160-170	33.8	3.6%
80-90	59.9	6.4%	170-180	11.7	1.3%

EQUIPMENT LIST

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#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	LSI High Speed Mirror Goniometer	6440	---	6/22/2020	7/22/2020
2	Elgar AC Power Supply	CW1251	---	VBU	VBU
3	Yokogawa Power Analyzer	WT210	E464	5/11/2020	5/11/2021
4	Omega Thermometer	DPi8-C24	M263	2/27/2020	2/27/2021
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

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
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