

CONTEMPORARY VISIONS, LLC DBA SONNEMAN - A WAY OF LIGHT TEST REPORT

SCOPE OF WORK

LED Performance Testing

MODEL NUMBER

25FN4RBVSTSK2700MSCFSKV1 (500mA)

PROJECT NUMBER

G104629313

REPORT NUMBER

104629313CRT-083

ISSUE DATE

4/30/2021

REVISED DATE

None

TEST DATES

4/29/2021

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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REPORT NUMBER

104629313CRT-083

MODEL NUMBER(s)

25FN4RBVSTSK2700MSCFSKV1 (500MA)

REPORT RENDERED TO:

CONTEMPORARY VISIONS, LLC DBA SONNEMAN - A WAY OF LIGHT
20 NORTH AVE
LARCHMONT, NY 10538-2463
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-01145763-1.

TEST STANDARDS

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

In Charge of Testing:



Kristie Ray
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Reviewer:



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SAMPLE INFORMATION

REPORT NO. 104629313CRT-083

Aperture	Power	Finish	Nominal CCT	Regress
4"	500mA	Satin Black	2700K	Standard

ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Shape/ Style	Type	Received
1	CRT2103221293-002-036	25L42700V1	Light Engine	N/A	Production	3/22/2021
2	CRT2103221293-002-048	PHB30W-0500-42 @ 500mA	Driver	N/A	Production	3/22/2021
3	CRT2104011108-001-002	25O4MS	Primary Optic	Medium Spot	Production	4/1/2021
4	CRT2103221293-002-034	25T4RBVSTSK	Trim	Round Bevel	Production	3/22/2021
5	CRT2103221293-002-054	25F4RCFSK	Ring	N/A	Production	3/22/2021
6	CRT2103221293-002-023	25R4R	Reject Plate	N/A	Production	3/22/2021
7	CRT2103231335-003	25HICCP	Housing	N/A	Production	3/23/2021

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	25FN4RBVSTSK2700MSCFSKV1 (500mA)	1-7

SAMPLE PHOTOS - TESTED CONFIGURATIONS



SUMMARY

REPORT NO. 104629313CRT-083

PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	25FN4RBVSTSK2700MSCFSKV1 (500mA)
Product Description:	Recessed Downlight
LED Model No.:	Cree CXB1820
Driver Model No.:	ERP PHB30W-0500-42
Light Source:	LED

Criteria	Results
Light Output (lumens)	1577.9
Input Power (W) @ 120 (Vac)	20.45
Lumen Efficacy (lm/W)	77.16
Input Power Factor () @ 120 (Vac)	0.990

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. 104629313CRT-083

Test Configuration	Tested Model No.	Pass/Fail/NA
1	25FN4RBVSTSK2700MSCFSKV1 (500mA)	NA

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

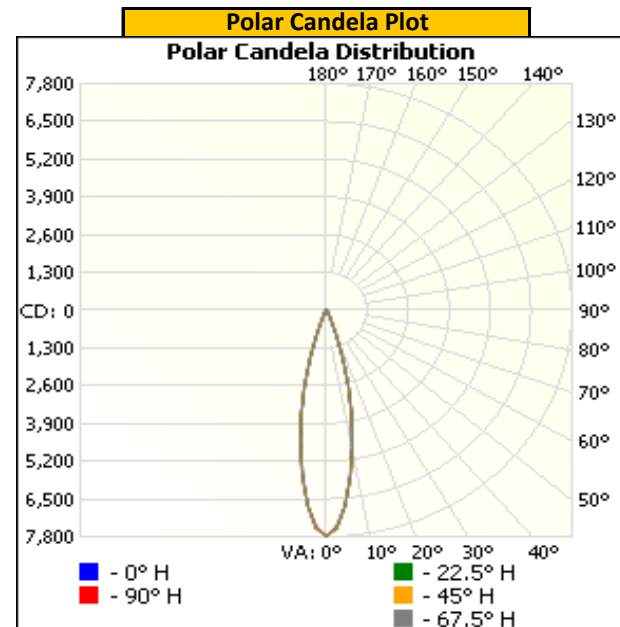
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()
Up	120.02	172.2	20.45	0.990

Light Output (lm)	Lumen Efficacy (lm/W)
1577.9	77.2

INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	7768	7768	7768	7768	7768
5	6760	6765	6767	6764	6755
10	4703	4734	4752	4791	4777
15	2654	2675	2710	2723	2698
20	892	911	952	993	1006
25	270	279	290	299	302
30	157	160	161	164	166
35	114	113	112	115	119
40	91	86	85	85	89
45	59	54	50	50	55
50	14	14	15	17	19
55	3	3	3	3	3
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
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



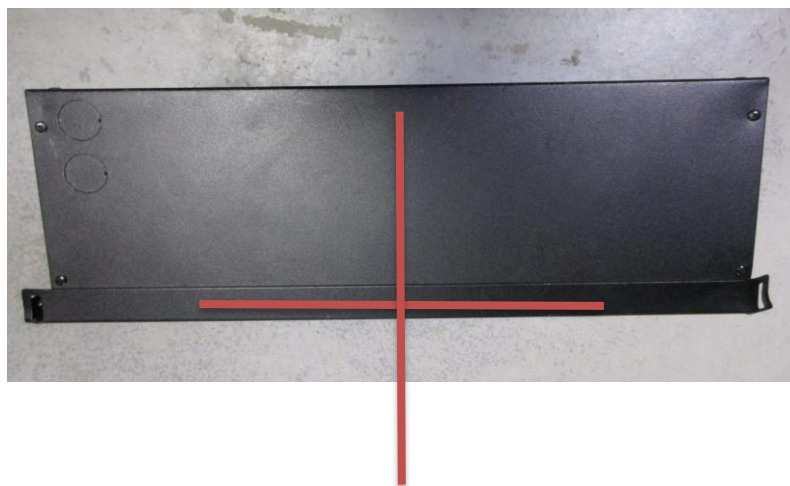
REPORT NO. 104629313CRT-083

ORIENTATION AND ALIGNMENT OF EUT

Luminous Opening		
Length (ft)	Width (ft)	Height (ft)
0.33	0.33	0.00
0°-180° H	90°-270° H	0°-180° V

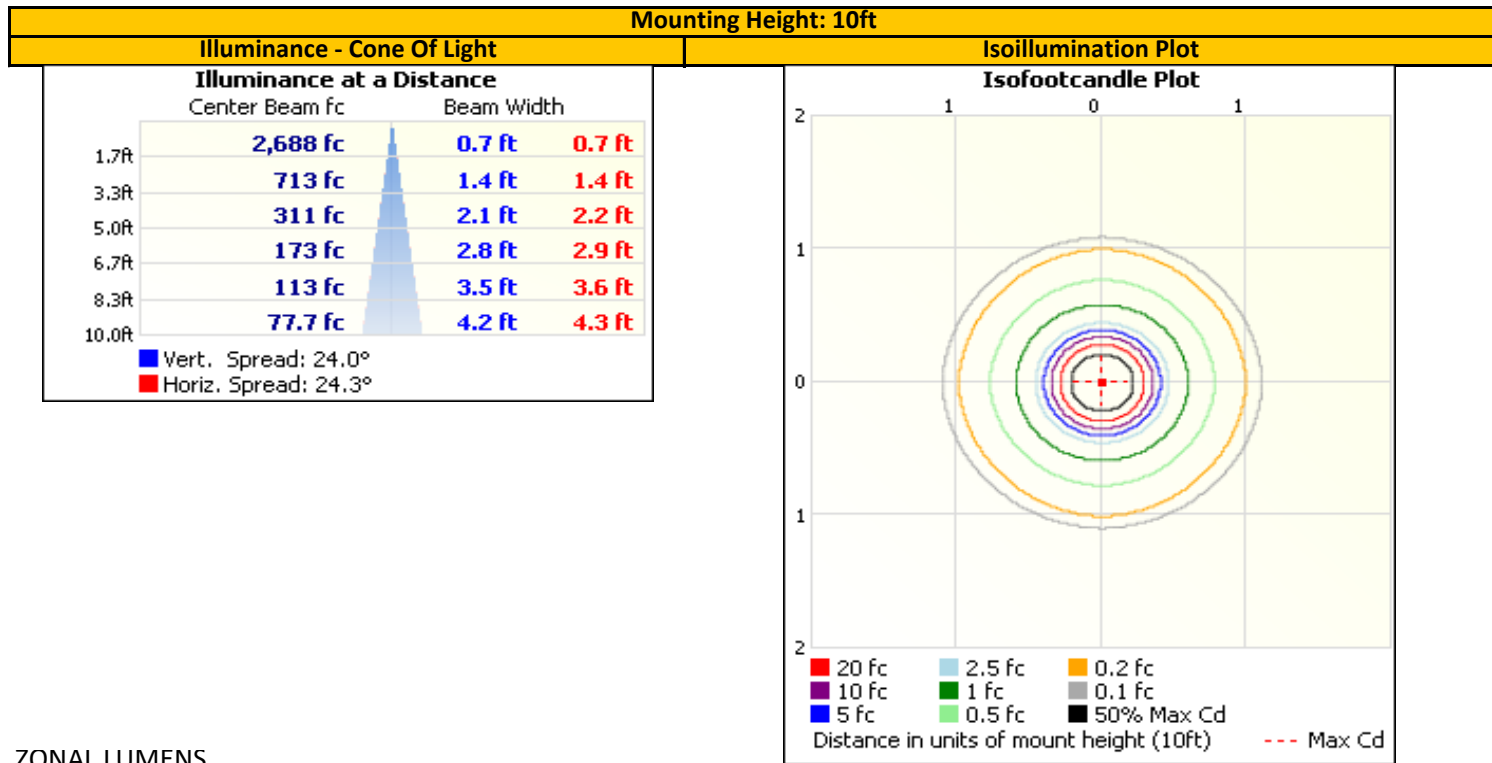
Test Distance (ft)
29.6

PHOTOMETRIC CENTER OF EUT



REPORT NO. 104629313CRT-083

ILLUMINANCE SUMMARY



ZONAL LUMENS

Zonal Lumen Summary										
<div></div>	Zone	Lumens	Luminaire	<div></div>	Zone	Lumens	Total	Zone	Lumens	Total
	0-30	1,461.7	92.6%		0-10	576.3	36.5%	90-100	0.0	0.0%
	0-40	1,534.9	97.3%		10-20	717.6	45.5%	100-110	0.0	0.0%
	0-60	1,577.9	100.0%		20-30	167.8	10.6%	110-120	0.0	0.0%
	60-90	0.0	0.0%		30-40	73.2	4.6%	120-130	0.0	0.0%
	70-100	0.0	0.0%		40-50	39.2	2.5%	130-140	0.0	0.0%
	90-120	0.0	0.0%		50-60	3.8	0.2%	140-150	0.0	0.0%
	0-90	1,577.9	100.0%		60-70	0.0	0.0%	150-160	0.0	0.0%
	90-180	0.0	0.0%		70-80	0.0	0.0%	160-170	0.0	0.0%
	0-180	1,577.9	100.0%		80-90	0.0	0.0%	170-180	0.0	0.0%

EQUIPMENT LIST

REPORT NO. 104629313CRT-083

#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	LSI High Speed Mirror Goniophotometer	6440	---	4/15/2021	7/15/2021
2	Elgar AC Power Supply	CW1251	---	VBU	VBU
3	Yokogawa Power Analyzer	WT210	E464	5/11/2020	5/11/2021
4	Traceable Hygrothermometer	4800	L204	2/21/2021	2/21/2022
5	M-D Building Products Digital Level	Smart Tool	307-L112	5/14/2020	5/14/2021
6	Sorenson DC Power Supply	XG 150-10	---	VBU	VBU
7	Traceable Thermometer	4800	L204	2/12/2021	2/12/2022
8	Bosch Distance Laser	Pro GLM 20	L211	3/3/2021	3/3/2022

REVISION HISTORY

#	Revision Date	Updated By	Reviewed By	Description of Change
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