CONTEMPORARY VISIONS, LLC DBA SONNEMAN - A WAY OF LIGHT

TEST REPORT

SCOPE OF WORK
LED Performance Testing

MODEL NUMBER
25FN3RWWSTSK2700WWCFSKV1SOL

PROJECT NUMBER
G104629313

REPORT NUMBER
104629313CRT-061

ISSUE DATE
4/30/2021

REVISED DATE
None

TEST DATES
4/28/2021

DOCUMENT CONTROL NUMBER
RTTDS-R-AMER-Test-3407

PAGES
9

REPORT NUMBER
104629313CRT-061

MODEL NUMBER(s)
25FN3RWWSTSK2700WWCFSKV1SOL

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:	Reviewer:
Kristie Ray	Melanie Brittain
Kristie Ray Team Lead, Engineering Lighting Division	Melanie Brittain Senior Associate Engineer Lighting Division

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SAMPLE INFORMATION

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Aperture	Power	Finish	Nominal CCT	Regress
3"	500mA	Satin Black	2700K	Standard

ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Shape/ Style	Type	Received
1	CRT2103221293-002-039	25L32700V1	Light Engine	N/A	Production	3/22/2021
2	CRT2103221293-002-048	PHB30W-0500-42 @ 500mA	Driver	N/A	Production	3/22/2021
3	CRT2103221293-002-043	25ZSOL03	Primary Optic	Microprism	Production	3/22/2021
4	CRT2103221293-002-041	25T3RWWSTSK	Trim	Round Wall Wash	Production	3/22/2021
5	CRT2103221293-002-052	25F3RCFSK	Ring	N/A	Production	3/22/2021
6	CRT2103221293-002-021	25R3R	Reject Plate	N/A	Production	3/22/2021
7	CRT2103231335-003	25HICCP	Housing	N/A	Production	3/23/2021
8	CRT2103221293-002-042	White Ring	Accessory	Ring	Production	3/22/2021

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	25FN3RWWSTSK2700WWCFSKV1SOL	1-8

SAMPLE PHOTOS - TESTED CONFIGURATIONS

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SUMMARY **REPORT NO. 104629313CRT-061**

PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	25FN3RWWSTSK2700WWCFSKV1SOL
Product Description:	Recessed Downlight
LED Model No.:	Cree CXB1512
Driver Model No.:	ERP PHB30W-0500-42
Light Source:	LED

Criteria	Results
Light Output (lumens)	972.5
Input Power (W) @ 120 (Vac)	20.78
Lumen Efficacy (lm/W)	46.8
Input Power Factor () @ 120 (Vac)	0.998

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.

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TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

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Test Configuration	Tested Model No.	Pass/Fail/NA
1	25FN3RWWSTSK2700WWCFSKV1SOL	NA

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

Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()
Up	120.03	175.2	20.78	0.998

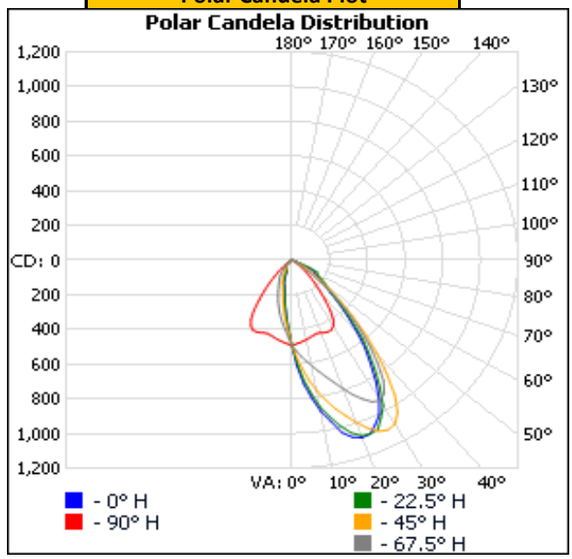
Light Output (lm)	Lumen Efficacy (lm/W)
972.5	46.8

INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	494	494	494	494	494
5	715	690	629	557	477
10	886	859	766	622	463
15	1030	990	886	697	447
20	1088	1077	995	787	445
25	1046	1077	1088	883	456
30	924	968	1091	935	438
35	726	765	952	846	354
40	532	570	703	639	229
45	354	367	452	410	134
50	235	242	261	202	69
55	167	193	145	58	22
60	132	153	69	14	7
65	53	102	14	2	0
70	11	8	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

Polar Candela Plot



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ORIENTATION AND ALIGNMENT OF EUT

Luminous Opening		
Length (ft)	**Width (ft)**	**Height (ft)**
0.10	0.13	0.00
0°-180° H	**90°-270° H**	**0°-180° V**

Test Distance (ft)
29.6

PHOTOMETRIC CENTER OF EUT

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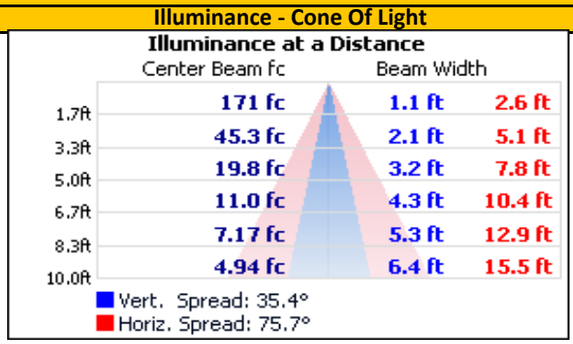
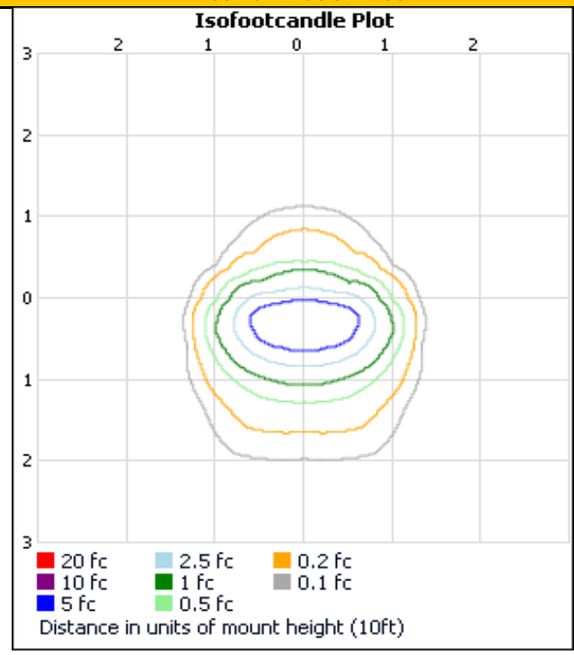
ILLUMINANCE SUMMARY

Mounting Height: 10ft

Illuminance - Cone Of Light



Isoillumination Plot



ZONAL LUMENS

Zonal Lumen Summary

Zone	Lumens	Luminaire
0-30	451.5	46.4%
0-40	720.7	74.1%
0-60	952.0	97.9%
60-90	20.5	2.1%
70-100	0.2	0.0%
90-120	0.0	0.0%
0-90	972.5	100.0%
90-180	0.0	0.0%
0-180	972.5	100.0%

Zone	Lumens	Total	Zone	Lumens	Total
0-10	48.0	4.9%	90-100	0.0	0.0%
10-20	150.8	15.5%	100-110	0.0	0.0%
20-30	252.6	26.0%	110-120	0.0	0.0%
30-40	269.3	27.7%	120-130	0.0	0.0%
40-50	164.0	16.9%	130-140	0.0	0.0%
50-60	67.2	6.9%	140-150	0.0	0.0%
60-70	20.3	2.1%	150-160	0.0	0.0%
70-80	0.2	0.0%	160-170	0.0	0.0%
80-90	0.0	0.0%	170-180	0.0	0.0%

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UNIFIED GLARE RATING (UGR) SUMMARY

Reflectances						
Ceiling Cavity		70	70	50	50	30
Walls		50	30	50	30	30
Floor Cavity		20	20	20	20	20

Room Size		UGR Viewed Crosswise				
X=2H	Y=2H	31.8	33.1	32.2	33.4	33.7
	3H	31.8	32.9	32.2	33.2	33.6
	4H	31.7	32.7	32.1	33.1	33.5
	6H	31.6	32.6	32.1	32.9	33.3
	8H	31.6	32.5	32.0	32.9	33.3
	12H	31.5	32.4	32.0	32.8	33.2
4H	2H	31.6	32.6	32.0	33.0	33.4
	3H	31.6	32.4	32.0	32.8	33.2
	4H	31.5	32.2	31.9	32.6	33.1
	6H	31.4	32.0	31.9	32.5	32.9
	8H	31.3	31.9	31.8	32.4	32.8
	12H	31.3	31.8	31.8	32.3	32.7
8H	4H	31.3	31.9	31.8	32.4	32.8
	6H	31.2	31.7	31.7	32.2	32.7
	8H	31.2	31.6	31.7	32.1	32.6
	12H	31.1	31.5	31.6	32.0	32.5
12H	4H	31.3	31.8	31.8	32.3	32.7
	6H	31.2	31.6	31.7	32.1	32.6
	8H	31.1	31.5	31.6	32.0	32.5

Room Size		UGR Viewed Endwise				
X=2H	Y=2H	17.0	18.3	17.4	18.6	18.9
	3H	16.9	18.0	17.3	18.3	18.7
	4H	16.8	17.8	17.2	18.2	18.5
	6H	16.7	17.6	17.1	18.0	18.4
	8H	16.7	17.5	17.1	17.9	18.3
	12H	16.6	17.4	17.0	17.8	18.3
4H	2H	17.4	18.4	17.8	18.7	19.1
	3H	17.2	18.0	17.6	18.4	18.8
	4H	17.1	17.8	17.6	18.3	18.7
	6H	17.0	17.7	17.5	18.1	18.6
	8H	17.0	17.5	17.4	18.0	18.5
	12H	16.9	17.4	17.4	17.9	18.4
8H	4H	17.0	17.6	17.5	18.0	18.5
	6H	16.9	17.3	17.4	17.8	18.3
	8H	16.8	17.2	17.3	17.7	18.2
	12H	16.7	17.1	17.3	17.6	18.2
12H	4H	16.9	17.4	17.4	17.9	18.4
	6H	16.8	17.2	17.3	17.7	18.2
	8H	16.7	17.1	17.3	17.6	18.2

Maximum UGR
33.7

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EQUIPMENT LIST

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#	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
---	None	---	---	---
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