

PURE EDGE LIGHTING

TEST REPORT

SCOPE OF WORK

LED Performance Testing

MODEL NUMBER

TAFX-5W5-WZ-3FT-TC

PROJECT NUMBER

G105870896

REPORT NUMBER

105870896CHI-008

ISSUE DATE

7/15/2024

REVISED DATE

None

TEST DATES

2024-06-28 through 2024-07-02.

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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PAGES

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REPORT NUMBER

105870896CHI-008

MODEL NUMBER(s)

TAFX-5W5-WZ-3FT-TC

REPORT RENDERED TO:

PURE EDGE LIGHTING
1718 WEST FULLERTON
CHICAGO, IL 60614
USA

STATEMENT OF LIMITATION

NVLAP Lab Code 600186-0. 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-01461581-0.

TEST STANDARDS

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

ANSI/IES LM-79-19 Optical and Electrical Measurements of Solid-State Lighting Products

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

ANSI/IES TM-30-18: IES Method for Evaluating Light Source Color Rendition

In Charge of Testing:



David Dalo
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Reviewer:



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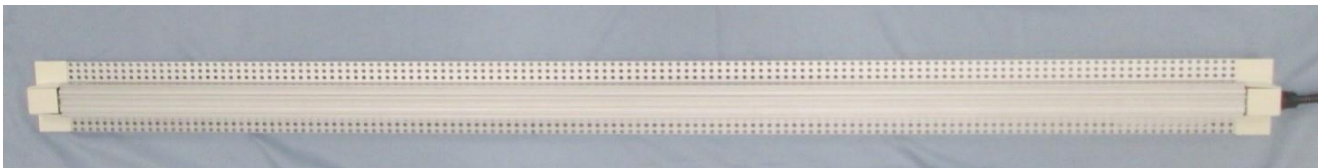
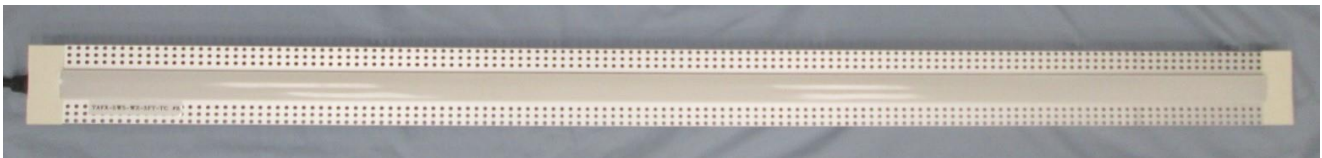
ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	AH06212024013032-008	TAFX-5W5-WZ-3FT-TC	LINEAR ARCH	Production	6/21/2024

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	TAFX-5W5-WZ-3FT-TC	1

SAMPLE PHOTOS - TESTED CONFIGURATIONS



PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	TAFX-5W5-WZ-3FT-TC
Product Description:	LINEAR ARCH
LED Model No.:	LEDWISE/ SS5-12MM-24VDC-C-RGBCW
Driver Model No.:	PURE EDGE/PSBB-96W-WZ-TC5W7-24VDC-RL
Light Source:	LED

Criteria	Results	
	Goniophotometer	Integrating Sphere
Light Output (lumens)	517.4	538.3
Driver Output Power (W) @ 24 (Vdc)	10.79	
Calculated Efficacy (lm/W)	49.9	

Criteria	Results
Correlated Color Temperature (K)	2765
Color Rendering Index - Ra	96.8
Color Rendering Index - R9	79.4
Duv	-0.0022
Chromaticity Coordinate (x)	0.451
Chromaticity Coordinate (y)	0.403
Chromaticity Coordinate (u')	0.260
Chromaticity Coordinate (v')	0.523

TEST METHODS

SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS

No seasoning was performed in accordance with IESNA LM-79.

INTEGRATING SPHERE TESTING

A spectroradiometer and integrating sphere were used to measure the spectral distribution for each EUT resulting in photometric and colorimetric data. 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 inside the sphere and stabilization procedures to LM-79 were followed.

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.

*ANSI/IES Technical Memorandums (TM) reported are not NVLAP accredited

Test Configuration	Tested Model No.	Pass/Fail/NA
1	TAFX-5W5-WZ-3FT-TC	NA

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

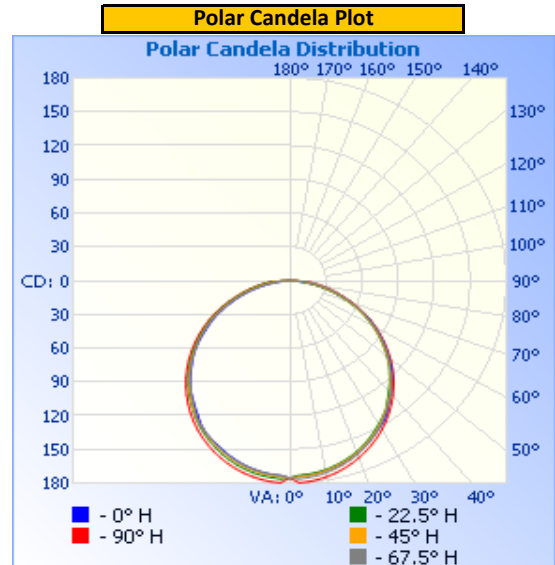
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()
Up	120.02	174.8	17.92	0.854

Light Output (lm)	Lumen Efficacy (lm/W)
517.4	28.9

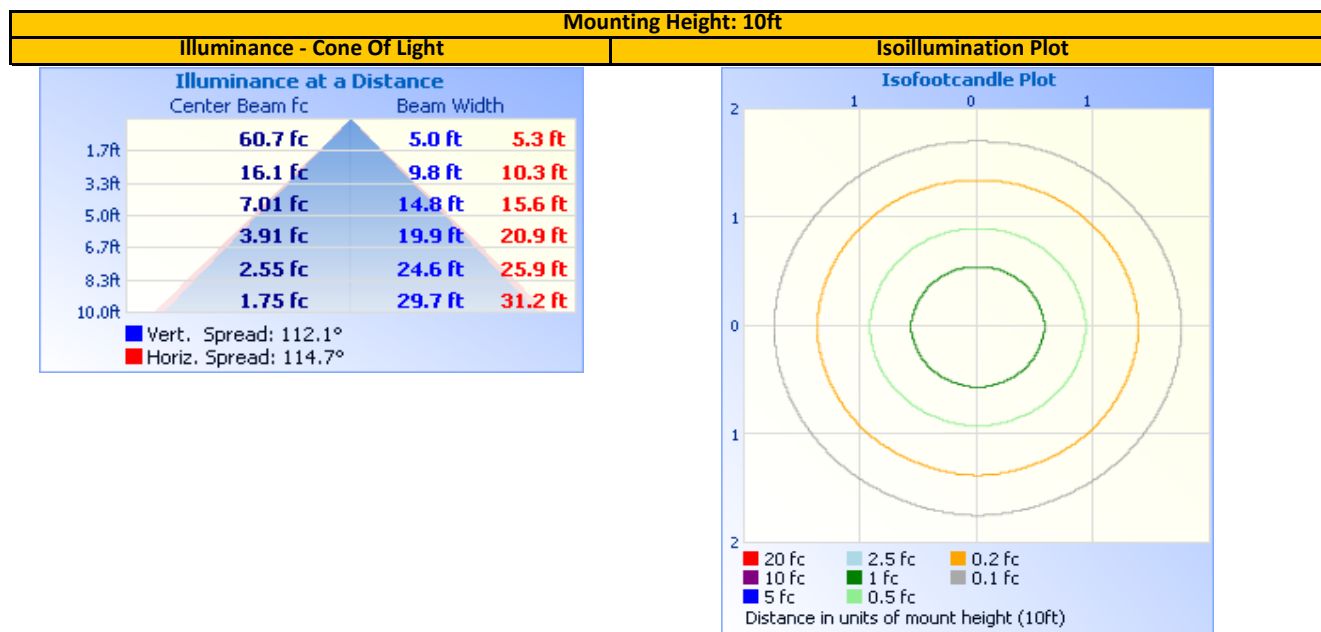
INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	175	175	175	175	175
5	173	173	174	176	179
10	171	171	172	173	177
15	168	167	168	170	173
20	163	162	163	164	168
25	157	155	156	158	161
30	150	147	149	150	153
35	141	139	139	140	144
40	131	128	130	130	133
45	121	117	118	119	122
50	108	106	106	107	110
55	95	93	93	95	96
60	81	79	80	81	83
65	67	65	66	67	68
70	51	50	51	53	54
75	37	35	37	39	40
80	22	21	24	27	28
85	9	10	14	17	18
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



ILLUMINANCE SUMMARY



ZONAL LUMENS

Zonal Lumen Summary					
Zone	Lumens	Luminaire	Zone	Lumens	Total
0-30	136.5	26.4%	90-100	0.0	0.0%
0-40	224.0	43.3%	10-20	47.6	9.2%
0-60	399.2	77.2%	20-30	72.3	14.0%
60-90	118.2	22.8%	30-40	87.6	16.9%
70-100	53.2	10.3%	40-50	91.6	17.7%
90-120	0.0	0.0%	50-60	83.6	16.2%
0-90	517.4	100.0%	60-70	65.0	12.6%
90-180	0.0	0.0%	70-80	39.0	7.5%
0-180	517.4	100.0%	80-90	14.2	2.7%
			100-110	0.0	0.0%
			110-120	0.0	0.0%
			120-130	0.0	0.0%
			130-140	0.0	0.0%
			140-150	0.0	0.0%
			150-160	0.0	0.0%
			160-170	0.0	0.0%
			170-180	0.0	0.0%

Test Configuration	Tested Model No.	Pass/Fail/NA
1	TAFX-5W5-WZ-3FT-TC	NA

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

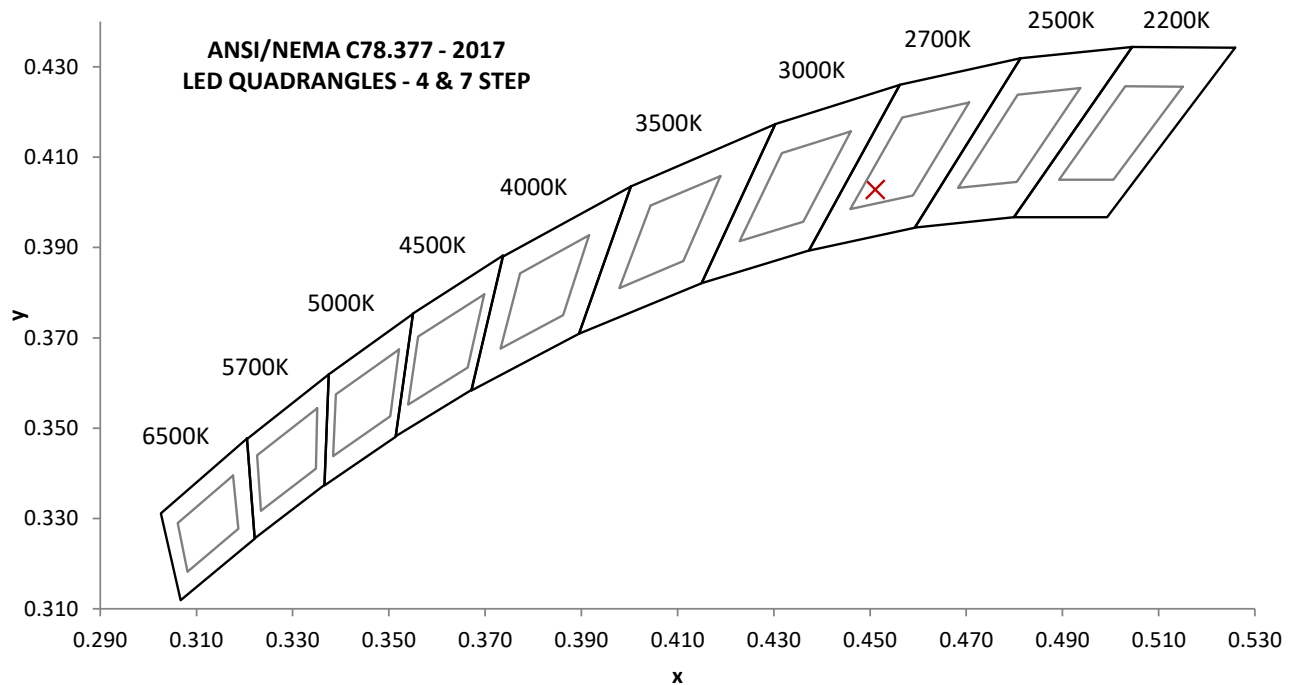
Base Orientation
Up

Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor (l)	Input ATHD (%)
120.03	175.0	17.99	0.856	29.99

Measured at 120.03(Vac)

Light Output (lm)	Lumen Efficacy (lm/W)	CCT (K)	CRI - Ra (l)	CRI - R9 (l)
538.3	29.9	2765	96.8	79.4

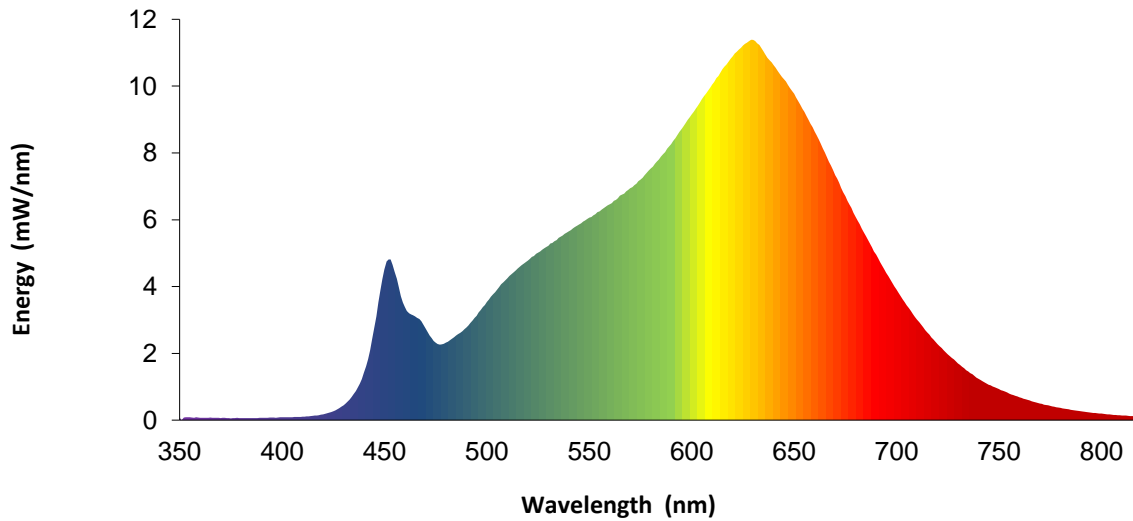
Duv (l)	1931 Chrom (x)	1931 Chrom (y)	1976 Chrom (u')	1976 Chrom (v')
-0.0022	0.451	0.403	0.260	0.523



SPECTRAL DISTRIBUTION OVER WAVELENGTHS

nm	mW/nm		nm	mW/nm		nm	mW/nm		nm	mW/nm
350	0.1		460	3.4		570	6.9		680	6.1
355	0.1		465	3.1		575	7.2		685	5.5
360	0.1		470	2.8		580	7.5		690	5.0
365	0.1		475	2.3		585	7.9		695	4.4
370	0.1		480	2.3		590	8.3		700	3.9
375	0.1		485	2.5		595	8.7		705	3.4
380	0.1		490	2.8		600	9.1		710	3.0
385	0.1		495	3.1		605	9.6		715	2.6
390	0.1		500	3.5		610	10.1		720	2.3
395	0.1		505	3.9		615	10.5		725	2.0
400	0.1		510	4.2		620	10.9		730	1.7
405	0.1		515	4.5		625	11.2		735	1.5
410	0.1		520	4.8		630	11.4		740	1.2
415	0.1		525	5.0		635	11.0		745	1.1
420	0.2		530	5.2		640	10.6		750	0.9
425	0.3		535	5.5		645	10.2		755	0.8
430	0.4		540	5.7		650	9.8		760	0.7
435	0.8		545	5.9		655	9.2		765	0.6
440	1.4		550	6.1		660	8.6		770	0.5
445	2.7		555	6.3		665	8.0		775	0.4
450	4.5		560	6.5		670	7.3		780	0.4
455	4.4		565	6.7		675	6.7		---	---

Without correction of sample absorption.



Portrayed color in graphic is estimated by wavelength (nm) and may not be exact - it is a visual representation only



Total Quality. Assured.

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EQUIPMENT LIST

REPORT NO. 105870896CHI-008

#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	Yokogawa Power Meter	WT310E	CHI0664	4/2/2024	4/2/2025
2	Omega Thermometer	DPI8-C24	146920	10/9/2023	10/9/2024
3	LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU
4	Omega Thermohygrometer	OM-CP-RFPRHTEMP2000A	CHI0764	3/14/2024	3/14/2025
5	Chroma Power Supply	61604	CHI0371	VBU	VBU
8	Omega Thermohygrometer	OM-CP-RFPRHTEMP2000A	CHI0727	3/14/2024	3/14/2025
9	Labsphere Spectroradiometer	CDS2600	CHI0539	VBU	VBU
10	3 Meter Sphere	SPR600	CHI0088	VBU	VBU
11	Elgar AC Power Supply	CW1251	146112	VBU	VBU
12	Sorenson DC Power Supply	XFR150-8	146846	VBU	VBU
13	Yokogawa Power Meter	WT1600	146770	10/11/2023	10/11/2024
17	Omega thermometer	USB TC08	EQAH002615	4/5/2024	4/5/2025
26	Xitron Power Analyzer	XT2640	CHI0611	7/7/2023	7/7/2024

Note: Standard sources listed above are traceable to NIST: National Institute of Standards and Technology

REVISION HISTORY

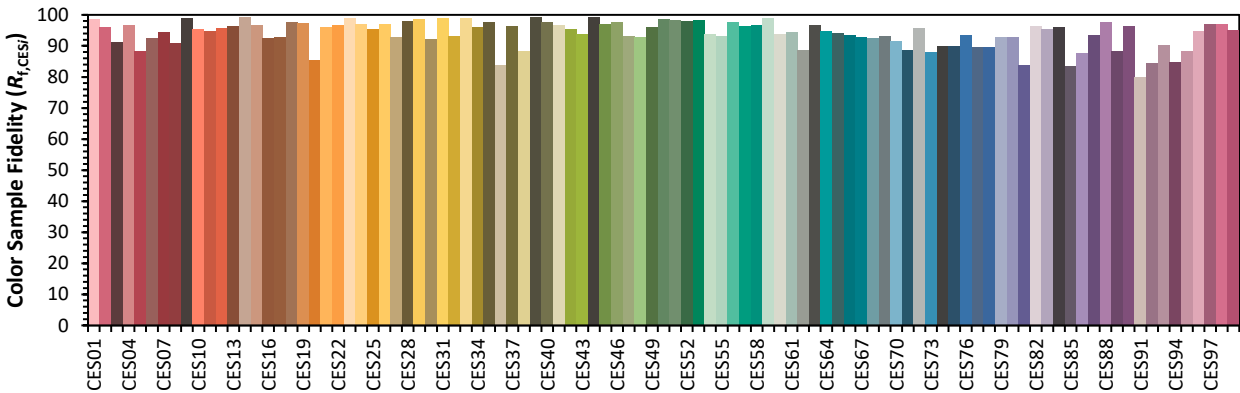
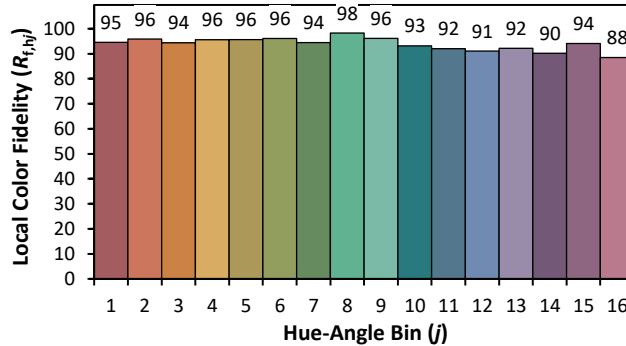
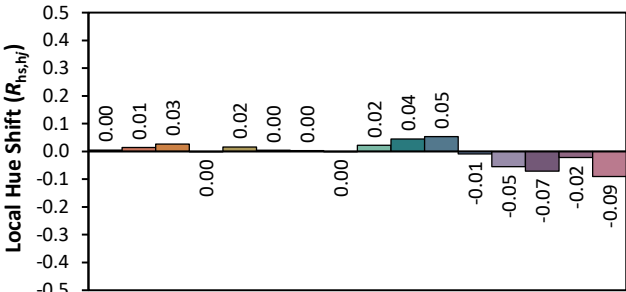
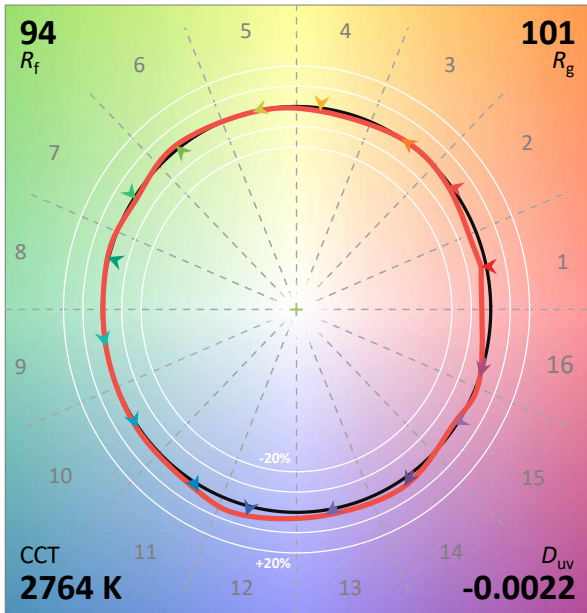
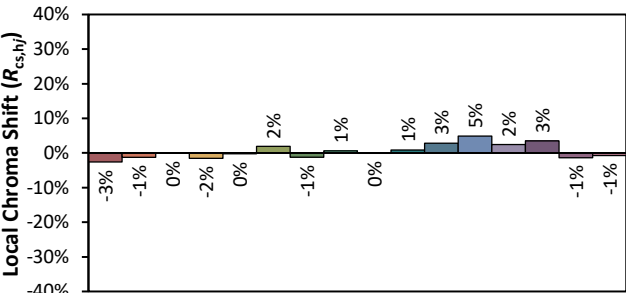
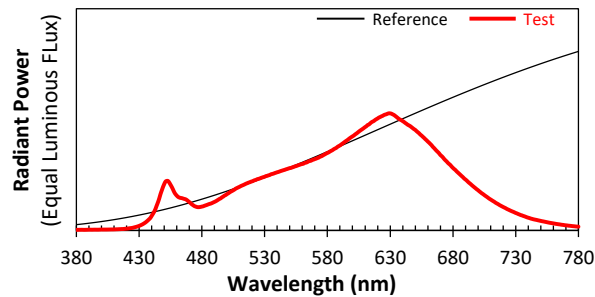
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Test Configuration	Tested Model No.	Pass/Fail/NA
1	TAFX-5W5-WZ-3FT-TC	NA

ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD
Date: 6/28/2024

Manufacturer: Pure Edge Lighting
Model: TAFX-5W5-WZ-3FT-TC



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4511
y 0.4028
u' 0.2603
v' 0.5230