

PURE EDGE LIGHTING

TEST REPORT

SCOPE OF WORK

LED Performance Testing

MODEL NUMBER

S5W7-PIN-24V-3-RGBTW

PROJECT NUMBER

G105870896

REPORT NUMBER

105870896CHI-014

ISSUE DATE

7/15/2024

REVISED DATE

None

TEST DATES

2024-06-28 through 2024-07-11.

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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PAGES

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REPORT NUMBER

105870896CHI-014

MODEL NUMBER(s)

S5W7-PIN-24V-3-RGBTW

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
Engineer
Lighting Division

Reviewer:



Jeff Davis
NA Technical Lead
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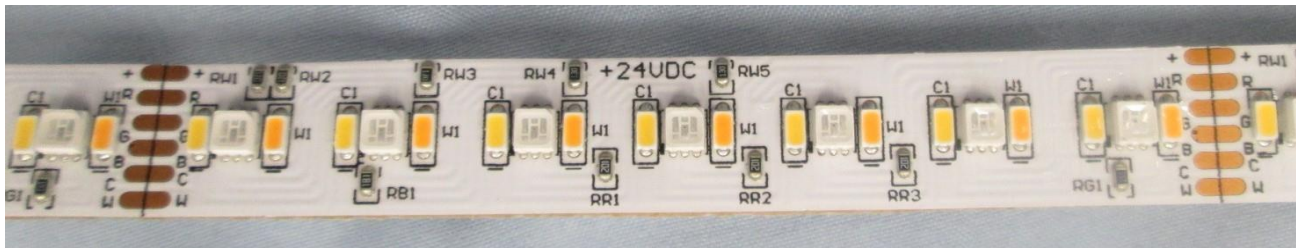
ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	AH06212024013032-014	S5W7-PIN-24V-3-RGBTW	SOFT STRIP	Production	6/21/2024

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	S5W7-PIN-24V-3-RGBTW	1

SAMPLE PHOTOS - TESTED CONFIGURATIONS



PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	S5W7-PIN-24V-3-RGBTW
Product Description:	SOFT STRIP
LED Model No.:	LEDWISE/ SS7-12MM-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)	1506.8	1514.5
Driver Output Power (W) @ 24 (Vdc)	14.14	
Calculated Board Efficacy (lm/W)	107.1	

Criteria	Results
Correlated Color Temperature (K)	2966
Color Rendering Index - Ra	96.7
Color Rendering Index - R9	80.5
Duv	-0.0032
Chromaticity Coordinate (x)	0.435
Chromaticity Coordinate (y)	0.395
Chromaticity Coordinate (u')	0.253
Chromaticity Coordinate (v')	0.518

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

TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

REPORT NO. 105870896CHI-014

Test Configuration	Tested Model No.	Pass/Fail/NA
1	S5W7-PIN-24V-3-RGBTW	NA

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

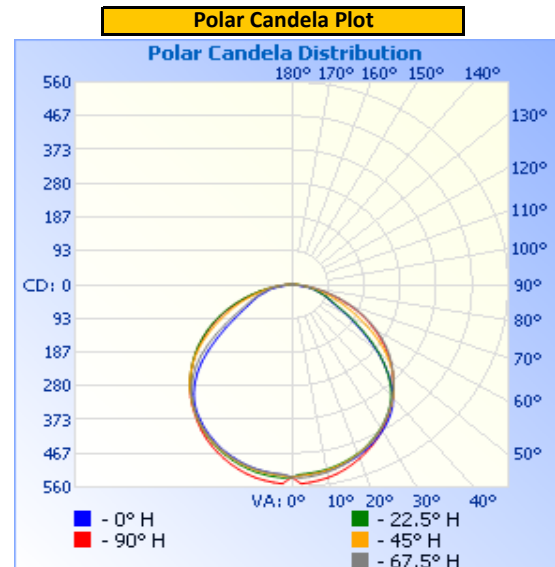
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()
Up	120.08	211.4	22.38	0.882

Light Output (lm)	Lumen Efficacy (lm/W)
1506.8	67.3

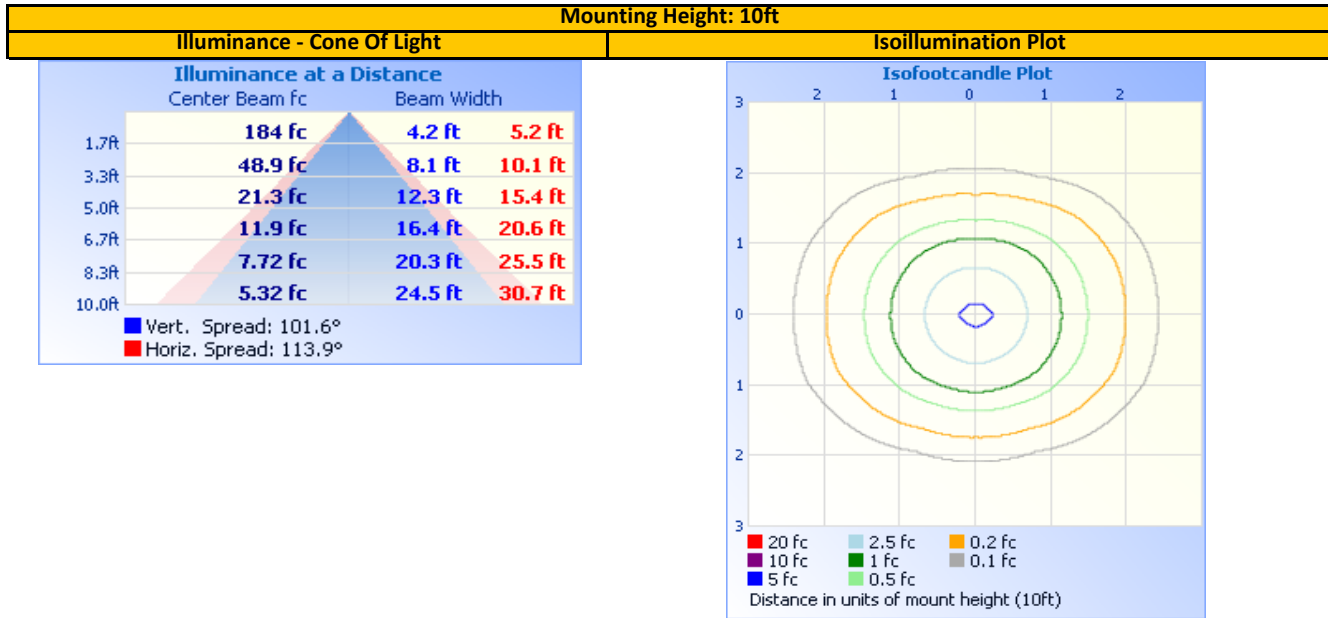
INTENSITY SUMMARY - CANDELA

Angle	0	22.5	45	67.5	90
0	532	532	532	532	532
5	526	523	527	533	549
10	522	519	522	527	542
15	515	510	512	516	529
20	504	497	499	501	512
25	488	480	482	483	491
30	468	459	461	461	466
35	443	433	436	434	437
40	406	401	407	405	406
45	355	353	373	372	371
50	290	294	329	336	333
55	220	228	278	297	292
60	160	167	220	253	248
65	116	120	167	206	202
70	92	93	123	157	153
75	68	69	87	109	104
80	46	48	56	66	59
85	14	29	30	30	22
90	2	16	14	9	3
95	0	5	10	6	1
100	0	0	3	4	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	418.1	27.7%	90-100	6.6	0.4%
0-40	689.8	45.8%	100-110	0.4	0.0%
0-60	1,208.2	80.2%	110-120	0.0	0.0%
60-90	291.6	19.4%	120-130	0.0	0.0%
70-100	132.9	8.8%	130-140	0.0	0.0%
90-120	7.0	0.5%	140-150	0.0	0.0%
0-90	1,499.9	99.5%	150-160	0.0	0.0%
90-180	7.0	0.5%	160-170	0.0	0.0%
0-180	1,506.8	100.0%	170-180	0.0	0.0%

Test Configuration	Tested Model No.	Pass/Fail/NA
1	S5W7-PIN-24V-3-RGBTW	NA

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

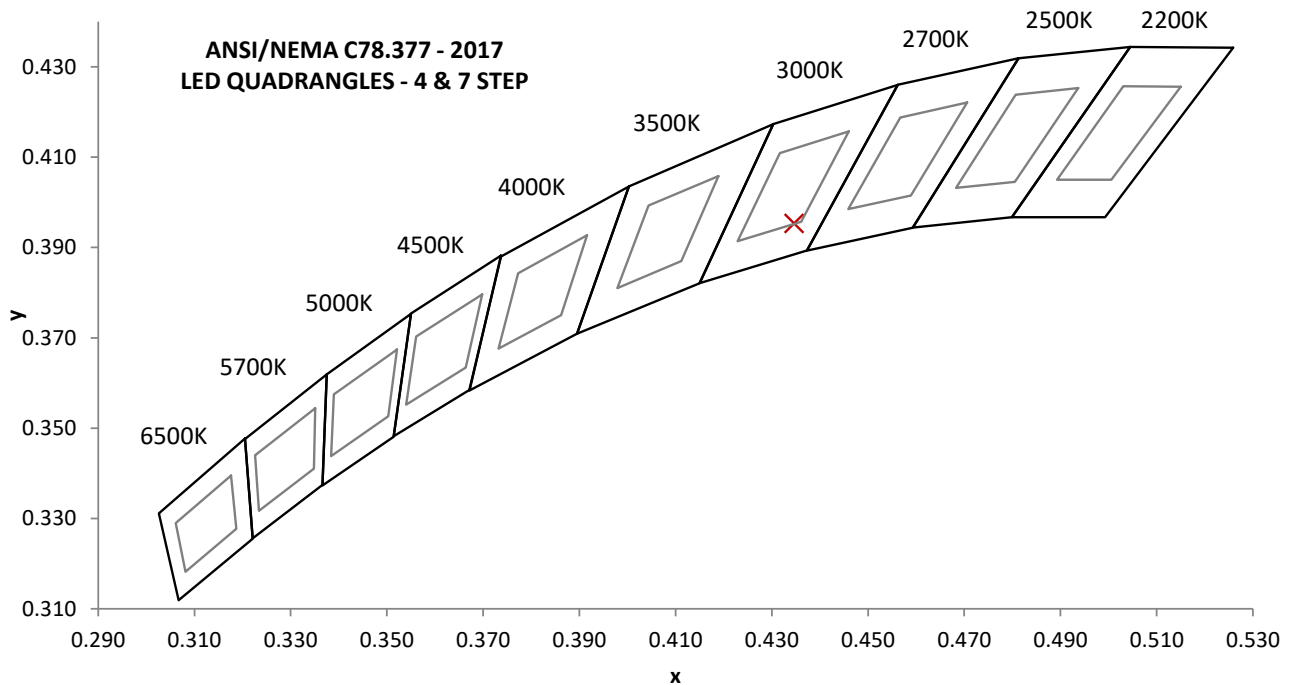
Base Orientation
Up

Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor (l)	Input ATHD (%)
120.00	212.3	22.51	0.884	31.61

Measured at 120(Vac)

Light Output (lm)	Lumen Efficacy (lm/W)	CCT (K)	CRI - Ra (l)	CRI - R9 (l)
1514.5	67.3	2966	96.7	80.5

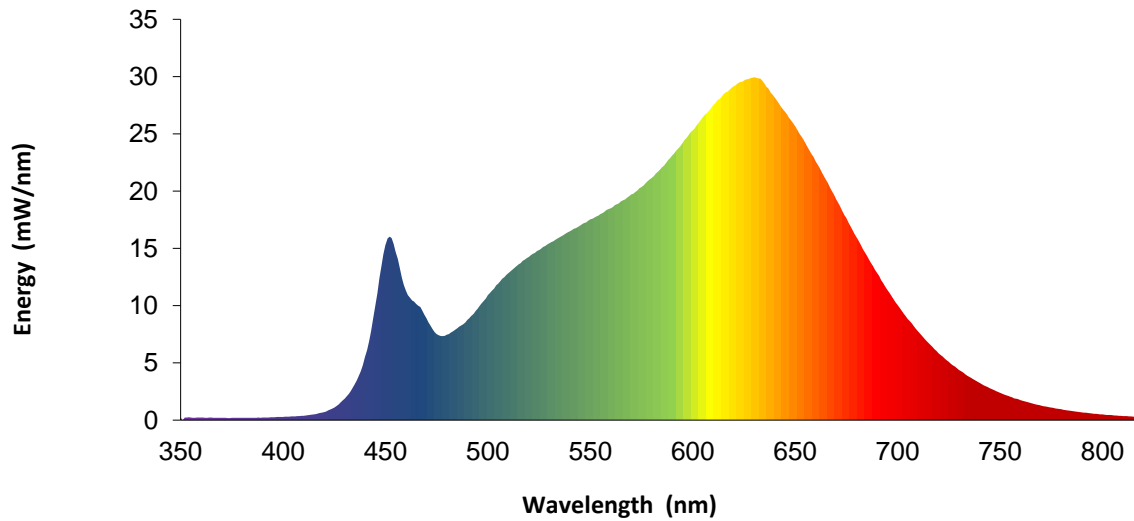
Duv (l)	1931 Chrom (x)	1931 Chrom (y)	1976 Chrom (u')	1976 Chrom (v')
-0.0032	0.435	0.395	0.253	0.518



SPECTRAL DISTRIBUTION OVER WAVELENGTHS

nm	mW/nm		nm	mW/nm		nm	mW/nm		nm	mW/nm
350	0.2		460	11.3		570	19.7		680	15.9
355	0.2		465	10.2		575	20.3		685	14.3
360	0.2		470	8.9		580	21.2		690	12.8
365	0.2		475	7.5		585	22.1		695	11.4
370	0.2		480	7.5		590	23.1		700	10.1
375	0.2		485	8.0		595	24.2		705	8.8
380	0.2		490	8.8		600	25.3		710	7.8
385	0.2		495	9.7		605	26.5		715	6.8
390	0.2		500	10.9		610	27.5		720	5.8
395	0.3		505	11.9		615	28.5		725	5.1
400	0.3		510	12.8		620	29.1		730	4.4
405	0.3		515	13.6		625	29.6		735	3.8
410	0.4		520	14.3		630	29.9		740	3.3
415	0.5		525	14.9		635	29.4		745	2.8
420	0.7		530	15.5		640	28.2		750	2.4
425	1.1		535	16.0		645	26.9		755	2.1
430	1.9		540	16.5		650	25.7		760	1.8
435	3.1		545	17.0		655	24.2		765	1.5
440	5.5		550	17.5		660	22.6		770	1.3
445	9.9		555	18.0		665	21.0		775	1.1
450	15.3		560	18.5		670	19.3		780	0.9
455	14.7		565	19.1		675	17.6		---	---

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.

EQUIPMENT LIST

545 E Algonquin Rd
Arlington Heights, IL 60005
Telephone: (847) 439-5667
www.intertek.com

REPORT NO. 105870896CHI-014

#	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	VBUE	VBUE
4	Omega Thermohygrometer	OM-CP-RFPRHTEMP2000A	CHI0764	3/14/2024	3/14/2025
5	Chroma Power Supply	61604	CHI0371	VBUE	VBUE
8	Omega Thermohygrometer	OM-CP-RFPRHTEMP2000A	CHI0727	3/14/2024	3/14/2025
9	Labsphere Spectroradiometer	CDS2600	CHI0539	VBUE	VBUE
10	3 Meter Sphere	SPR600	CHI0088	VBUE	VBUE
11	Elgar AC Power Supply	CW1251	146112	VBUE	VBUE
12	Sorenson DC Power Supply	XFR150-8	146846	VBUE	VBUE
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

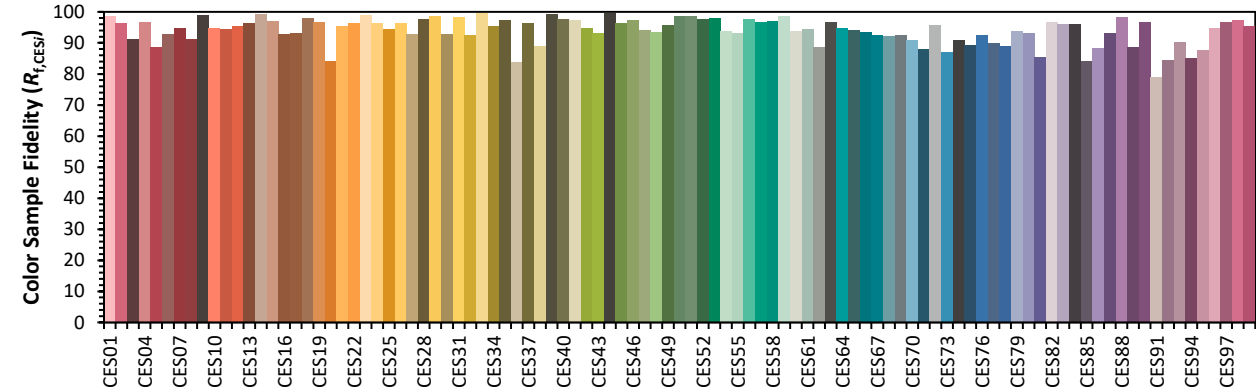
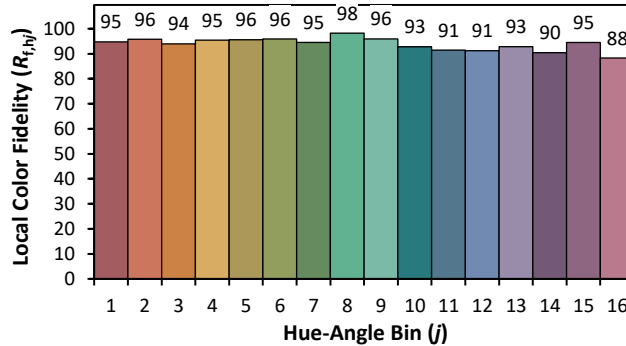
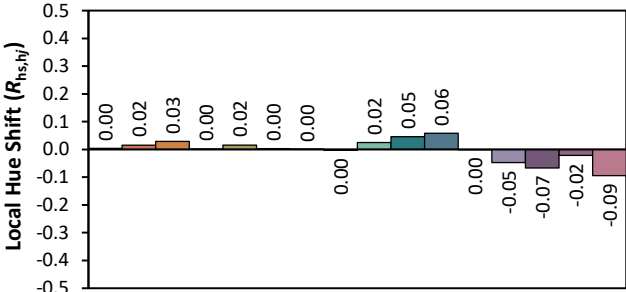
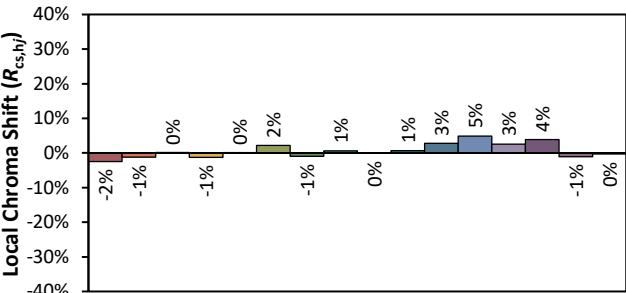
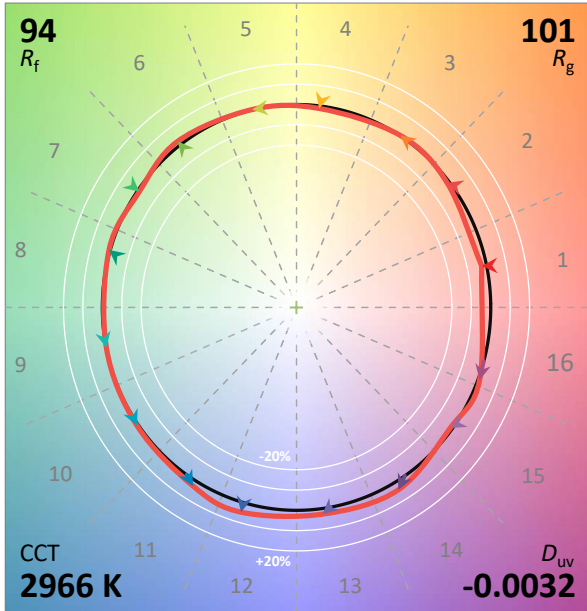
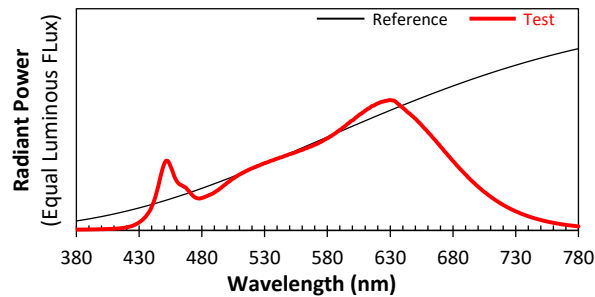
#	Revision Date	Updated By	Reviewed By	Description of Change
---	None	---	---	---
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Test Configuration	Tested Model No.	Pass/Fail/NA
1	S5W7-PIN-24V-3-RGBTW	NA

ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD
Date: 6/28/2024

Manufacturer: Pure Edge Lighting
Model: S5W7-PIN-24V-3-RGBTW



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

x 0.4347
y 0.3953
u' 0.2529
v' 0.5175