

The SIRS-E® DMX Digital (DD) LED Strip Series utilizes a direct DMX512 signal to control a pixel-by-pixel programmable LED tape light via the DMX software of your choice. Each Diode can produce millions of colors by adjusting the light intensity of the different individual primary colors. With the ability to control every individual pixel and channel, the color mixing of effects makes possibilities endless. No additional decoders or signal filters are required. Data and power are the only things needed to control each strip individually. Now, our newly upgraded models comply with all safety requirements defined by UL standards.



Technical Specifications

- Cuttable every pixel / Auto-address
- 14mm (0.56in) Wide including the waterproof sleeve
- 3M VHB Aero-Grade Tape, engineered to dissipate heat
- Male 5-Pin wired XLR connector for standard DMX Connection included
- 5V DC Input Voltage

RGB

- 34 LEDs/m LED Density
- 5m Max length/run

RGBW

- 32 LEDs/m LED Density
- 4m Max length/run

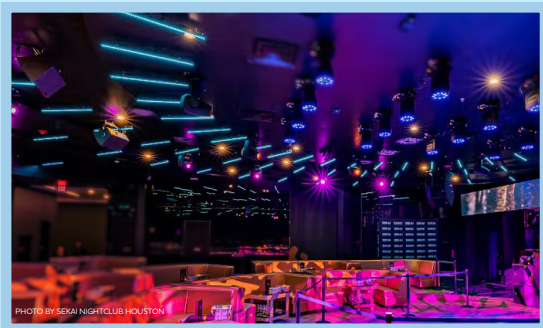
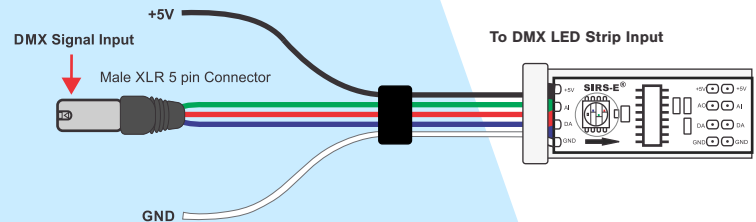
Applications

The **DMX Digital (DD)** LED Series is suitable for all kinds of linear lighting applications such as entertainment, architectural, commercial, residential, productions, shows, and many more.

Main Features

- Available in RGB and RGBW (5500K) Color, waterproof IP67 & IP68
- Individual single pixel LED Control
- Smooth fade
- High refresh rate for film use (Flicker-Free)
- No signal filter required (Version 2.0)
- 5-Year Limited Warranty

Direct DMX Control



Available Versions

- Red/Green/Blue (RGB)
- Red/Green/Blue/White (RGBW)
- IP67
- IP68
- CE and Rohs
- UL Listed, Class 2, E479339

For more information, please download the datasheet pdf or contact SIRS-E Technical Support.

Delivering superior LED strip lighting with a proven record spanning more than a decade without electrical, chromatic, or color rendering issues. SIRS-E® continues to lead the marketplace in the stability, reliability, and efficiency of LED lighting and lighting control systems.



Customer Name

Project Name

Part Number



Description

SIRS-E® DMX RGBW LED Strip lights let you create billions of colors by just mixing red, green and blue colors with a 4th white diode. With the ability to control each individual pixel and channel, the color mix and colors effects possibilities are endless. Compliant with all safety requirements as defined by UL standards

Product Specifications

Input Voltage	5V DC	Cut/Readdress	Cutttable and Readdressable at every pixel ¹
Control Method	DMX 512 Control - Pixel by Pixel	Reel Length	13.1 ft / 4 m
Power Consumption	3.50 W/ft	Max Run Length	13.1 ft / 4 m, powered from both sides
LED Chip Type	High Quality SMD 4-Diode RGBW	Segment Width	0.56 in (14 mm)
LED Density	9 LEDs/ft / 32 LEDs/m	Luminous Flux Maintenance	75,000 hrs ²
Channels/Pixels	4 Channels per Pixel (512 Channels Total) ⁴	Dimming	DMX512 Control - Pixel by Pixel
Board Type/Color	3 oz Density Copper, Black PCB	Environmental	IP 67/68 - Dry and Damp Locations
Operating Temperature	-20°F to 120°F	Warranty	5 Years Limited
Mounting	Non-Porous: 3M Adhesive Tape	Certifications	RoHS  UL Listed E479339



Product Photometrics - Red, Green and Blue Diodes³

Color Diode	Peak Wavelength (nm)	Dominant Wavelength (nm)	CIE (x,y)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)
Red	632	622	(0.6938, 0.3050)	23	17.0
Green	515	520	(0.1351, 0.7104)	47	35.8
Blue	463	468	(0.1368, 0.0567)	11	8.2



Product Photometrics - White Diode Only³

Nominal CCT (K)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)	CIE (x,y)	Duv	CRI	TM-30-15	
						Fidelity (Rf)	Gamut (Rg)
5578	58	43.6	(0.3306, 0.3475)	+0.0041	82.6	84	95



Product Photometrics - All Four Colors at Full Intensity³

Nominal CCT (K)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)	CIE (x,y)	Duv	CRI	TM-30-15	
						Fidelity (Rf)	Gamut (Rg)
11316	130	28.8	(0.2766, 0.2771)	+0.0034	60.5	69	105

1 - The DMX RGBW LED strips are cuttable every pixel. You need to cut at 1.22in (30.98mm), represented where the solder joints are.

2 - After 75,000 hrs: 30% Luminous Flux loss, 10% Chromaticity change, as per LM-80-15

3 - Photometric values obtained from NVLAP Test Report.

4 - The DMX RGBW LED strips are configured by default on channel 1. If you want to change the starting address, you will need a DMX Address Whitter (DMX-STRP-PROG2), available on our website.

Ordering Guide

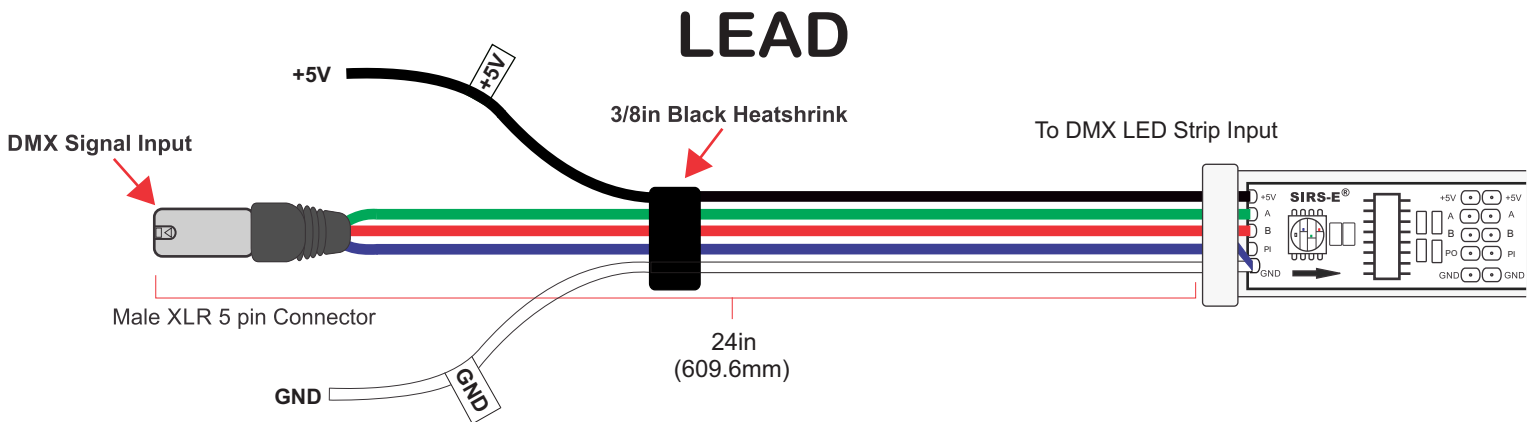
	Voltage	Color	Density	IP
DMX	5	RGBW	32	67
DMX	5	RGBW	32	68*

*IP 68 Version consists of the same Physical Dimensions as IP67

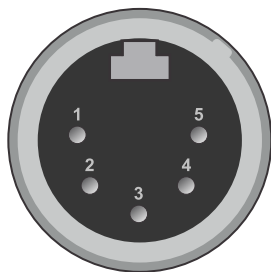
Product Country of Origin

Product Engineering & Design	USA
Assembled	China Preassembled / USA Final Assembly
QC Quality Control	USA
Product Customization	USA
Technical Support	USA

Wiring Diagram



Color Code Male XLR 5 pin



(Front View)
XLR Male Cable

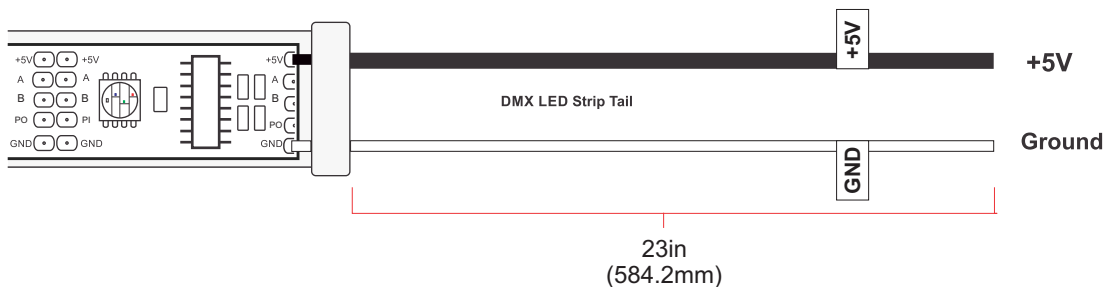
Color Code XLR

Pin 1 - V- / Ground	Blue
Pin 2 - B / DMX-	Red
Pin 3 - A / DMX+	Green
Pin 4 - NC	
Pin 5 - NC	

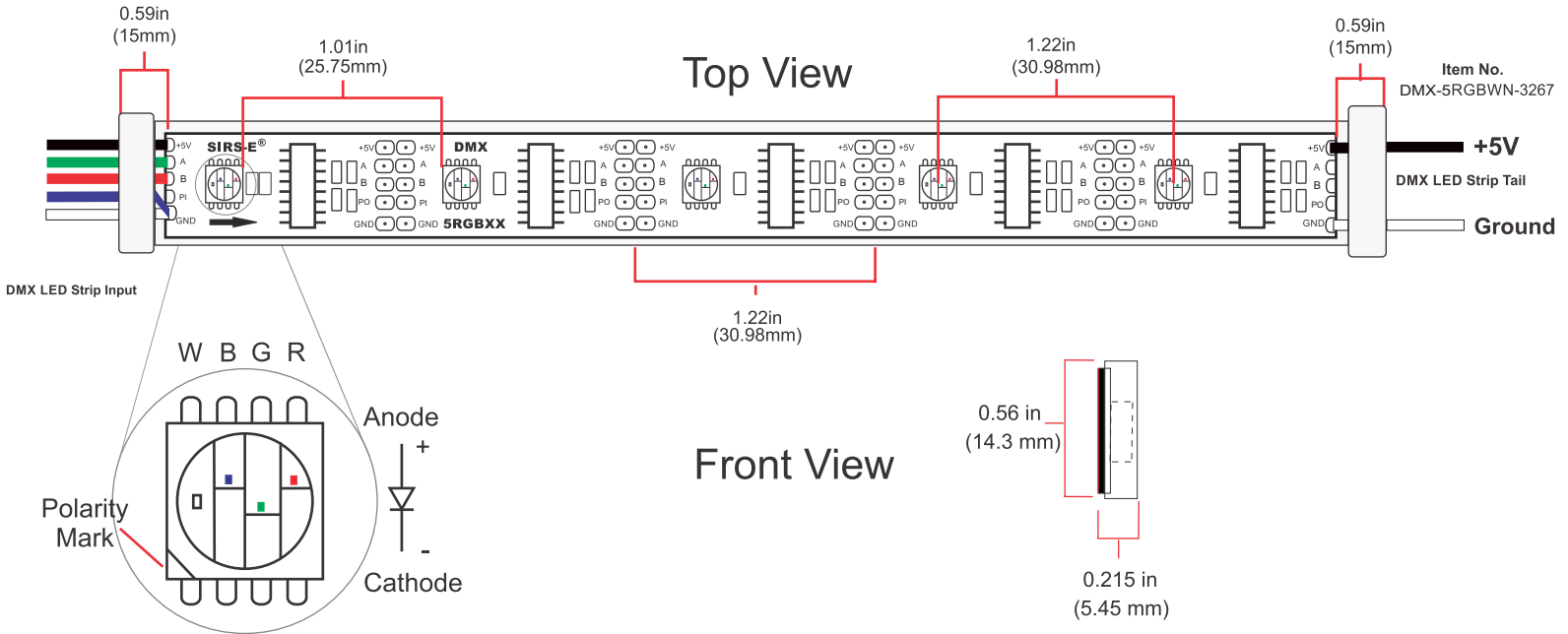
Color Code LED Strip

Black	+5V
Green	A
Red	B
Blue	Ground
White	Ground

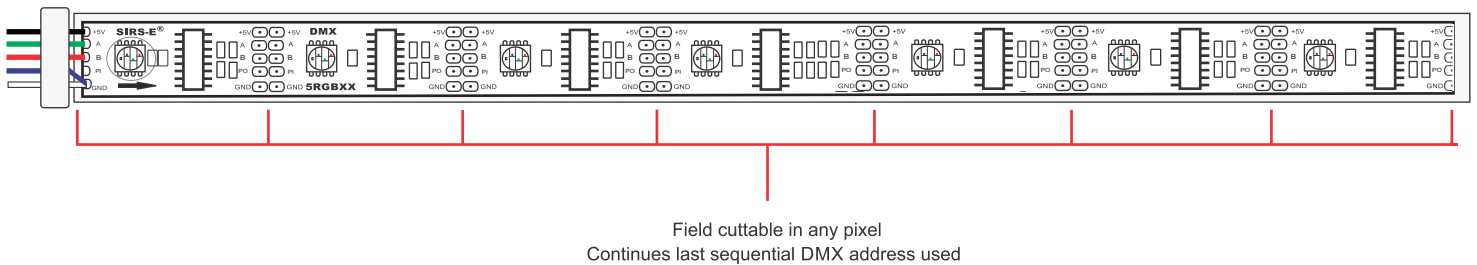
TAIL



Mechanical Dimensions



Cutting & Re-Addressing Instructions



Important:

- The RGBW DMX strips are cuttable in any pixel, and it will continue with the sequential DMX address that was last used.
- If you want to change the starting address back to 001, you will need a **DMX Address Writer** (PN# DMX-STRIP-PROG2), available on our website.

Weight

Product Weight: 11.6 oz, 13.1 ft Reel (Ip67), Without Packaging

Compatible Accessories

This list shows some of our most sellable accessories compatible for this product. For a complete list, please visit our website.



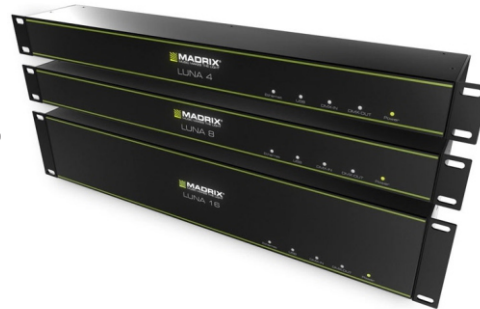
SIRS-E[®]
ArtNet to DMX Interface
Pro 6 Universes
(AD-PRO-6)



MADRIX USB One
DMX512 Interface
& Software License
(Sold Separately)



Meanwell 5V PSU
(LED-PS05V-30W-UL)



MADRIX Luna
ArtNet Interface



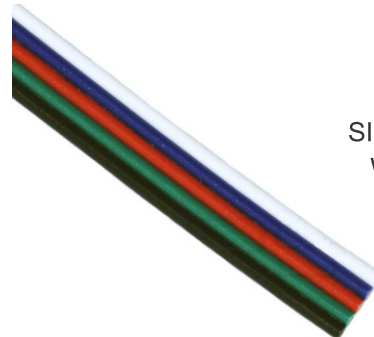
Baxter Controls DMX
Basic Pocket Console
(As a Testing Tool)



DMX Address Writer
(DMX-STRIP-PROG2)



Neutrik
5 PIN Male Connector
(NC5MXX)



SIRS-E RGBW
Wire Leads



Notes

- A good technique to minimize brightness loss and increase lumen output on CV LED Strips is to power the strip on both sides.
- LED electrical and photometric characteristics change with the manufacturing batch/bin date. Approximately 3-Step MacAdam Ellipses between batches.
- We reserve the right to change any data without prior notice.

About Us



SIRS-E /semiconductor • illumination • research • solutions /

In 2004, SIRS-E began research into the use of high powered LED components to be applied in direct lighting fixtures and LED strips.

In 2005, SIRS-E developed the RGB HPL01 – 12 watt (60 lumens per watt efficiency) RGB lighting fixture controlled via DMX using LumiLEDs, one of the first high powered LEDs eventually acquired by Phillips. Included in early research solutions, was the development and testing of many different LED strips intended to be used for direct RGB lighting and effects applications. This was the beginning of what we now know as SIRS – Electronics.



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Integrating Sphere Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-10-2014, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

Prepared For

SIRS Electronics Inc

3307 West St
Rosenburg, TX 77471
United States

Catalog Number

DMX-5RGBWN-326X (RED)

Order Number

14430879

Test Number

14430879.01

Test Date

2022-08-11

Prepared By

Cordaryl Cousar, Technician

Approved By

Jeffrey Lockner, Staff Engineer

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
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.



Luminaire Description: RGB LED strip on formed aluminum with no lens enclosure
Lamp: 10 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: One meanwell GST60A05-P1J driver

Luminaire



Summary of Results

Radiant Flux:	114.2 mW
Luminous Flux:	22.54 lm
Luminaire Efficacy:	17.0 lm/W
CCT:	1000 K
CRI (Ra):	20.9
Chromaticity (x):	0.6938
Chromaticity (y):	0.3050
Chromaticity (u):	0.5263
Chromaticity (v):	0.3471
Duv:	0.0065

Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.0 VAC
Current:	0.03723 A
Power:	1.327 W
Power Factor:	0.297
Frequency:	60 Hz
Current THD:	121 %

Testing was performed in a 2-meter integrating sphere using the 4 π geometry method.
Absorption correction was employed for this measurement.



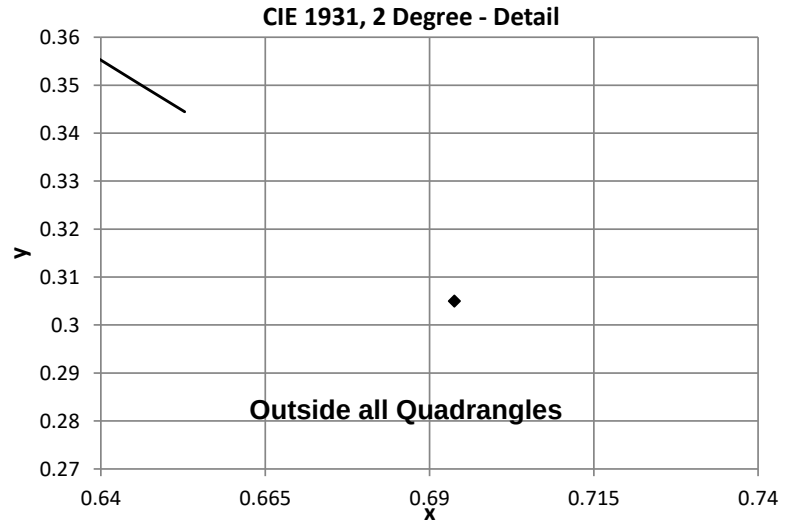
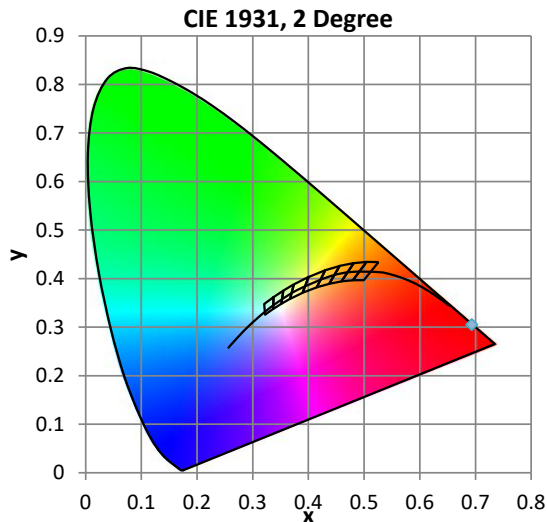
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.0 VAC	0.03723 A	1.327 W	0.297	60 Hz	121 %

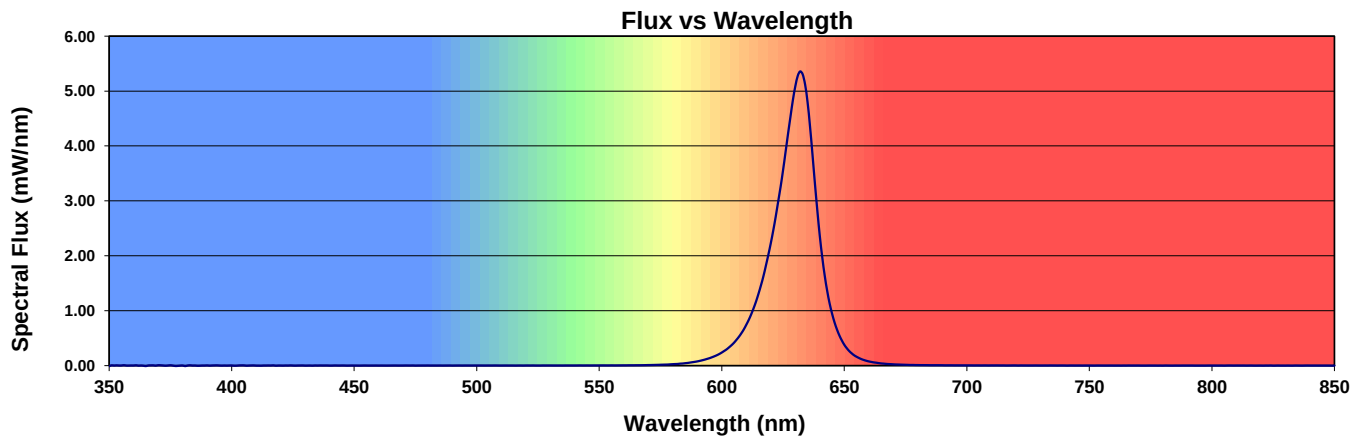
Summary of Results

Total Output:	23 Lumens	Chromaticity (x):	0.6938
Efficacy:	17.0 lm/w	Chromaticity (y):	0.3050
CCT:	1000 K	Chromaticity (u'):	0.5263
CRI (Ra):	20.9	Chromaticity (v'):	0.5206
CRI (R9):	-203.4	TM-30 Rf:	20.8
Peak Wavelength:	632 nm	TM-30 Rg:	N/A
Dominant Wavelength:	622 nm	TM-30 Rcs,h1:	-4%
S/P Ratio:	0.06	Duv:	0.2442
M/P Ratio:	0.01	WELL Building Standard v2	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
20.9	13.3	80.1	35.9	-16.4	9.8	91.6	11.5	-58.9	-203.4	74.5	-3.5	78.1	35.0	62.8	-28.4



ANSI/IES TM-30-18 Color Rendition Report

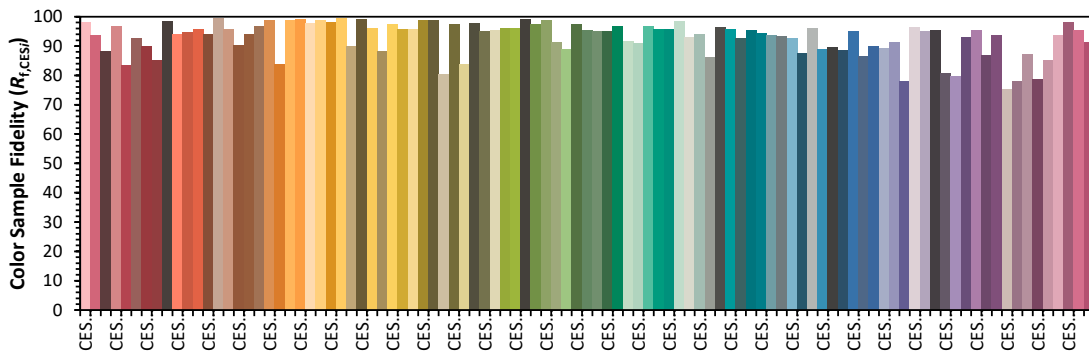
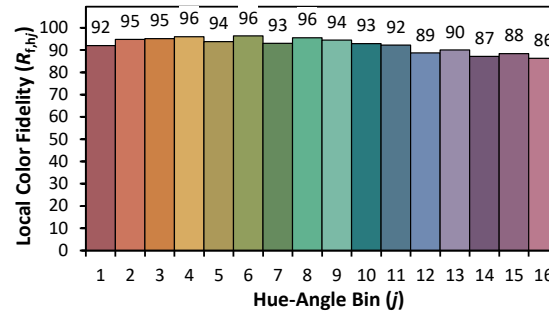
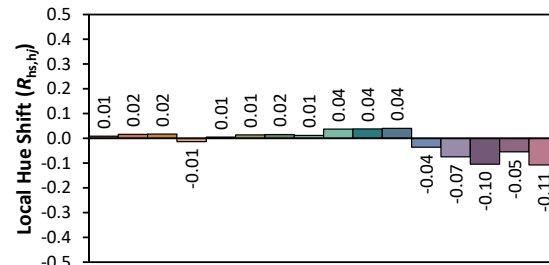
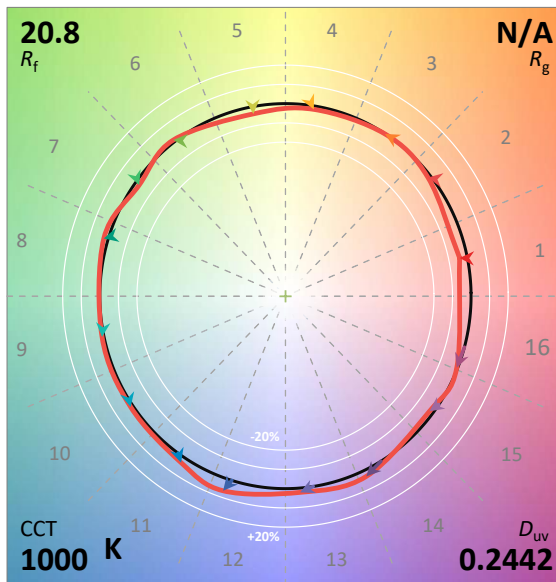
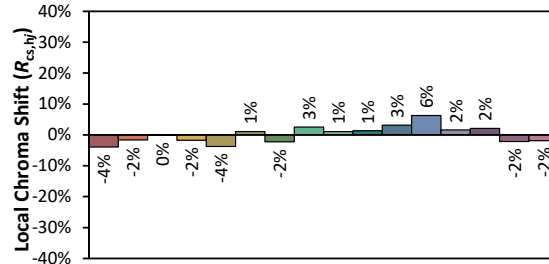
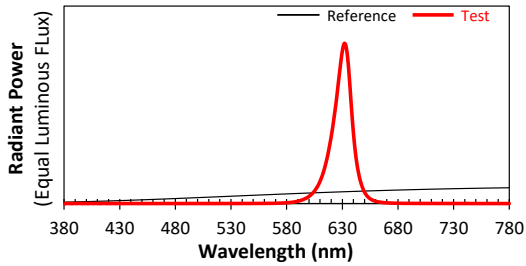
Date: 2022-08-11

Manufacturer:

SIRS Electronics Inc

Model:

DMX-5RGBWN-326X (RED)



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

x 0.6938

y 0.3050

u' 0.5263

v' 0.5206

CIE 13.3-1995
(CRI)

R_a 21

R_g -203

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Integrating Sphere Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-10-2014, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

Prepared For

SIRS Electronics Inc

3307 West St
Rosenburg, TX 77471
United States

Catalog Number

DMX-5RGBWN-326X (GREEN)

Order Number

14430879

Test Number

14430879.03

Test Date

2022-08-12

Prepared By

Cordaryl Cousar, Technician

Approved By

Jeffrey Lockner, Staff Engineer

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
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.



Luminaire Description: RGB LED strip on formed aluminum with no lens enclosure
Lamp: 10 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: One meanwell GST60A05-P1J driver

Luminaire



Summary of Results

Radiant Flux:	108.1 mW
Luminous Flux:	47.32 lm
Luminaire Efficacy:	35.8 lm/W
CCT:	8506 K
CRI (Ra):	-23.8
Chromaticity (x):	0.1351
Chromaticity (y):	0.7104
Chromaticity (u):	0.0480
Chromaticity (v):	0.3787
Duv:	0.1650

Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.0 VAC
Current:	0.03717 A
Power:	1.322 W
Power Factor:	0.296
Frequency:	60 Hz
Current THD:	121 %

Testing was performed in a 2-meter integrating sphere using the 4 π geometry method.
Absorption correction was employed for this measurement.



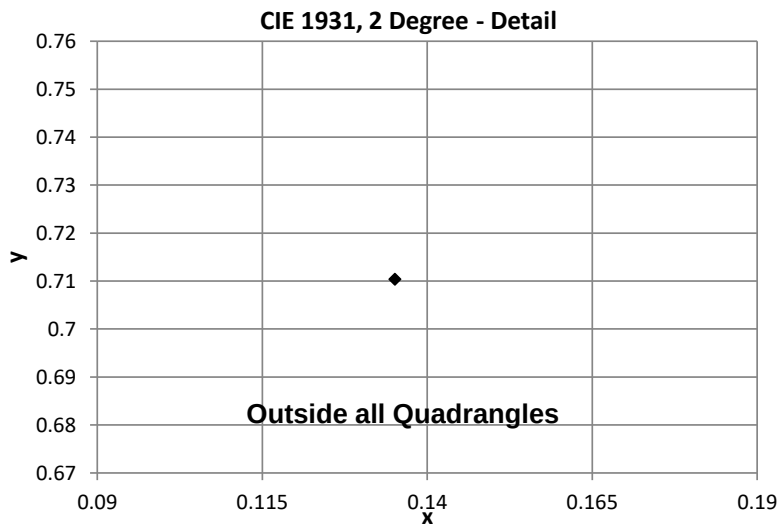
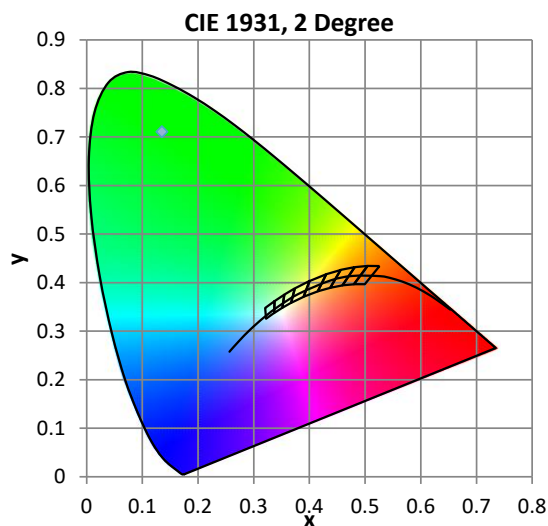
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.0 VAC	0.03717 A	1.322 W	0.296	60 Hz	121 %

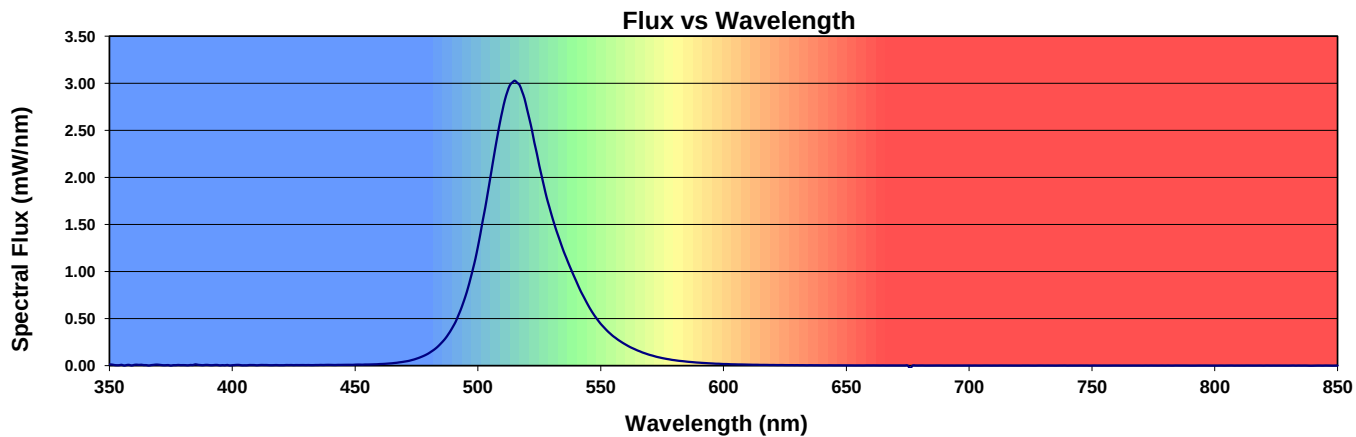
Summary of Results

Total Output:	47 Lumens	Chromaticity (x):	0.1351
Efficacy:	35.8 lm/w	Chromaticity (y):	0.7104
CCT:	8506 K	Chromaticity (u'):	0.0480
CRI (Ra):	-23.8	Chromaticity (v'):	0.5681
CRI (R9):	-353.7	TM-30 Rf:	3
Peak Wavelength:	515 nm	TM-30 Rg:	8
Dominant Wavelength:	520 nm	TM-30 Rcs,h1:	-86%
S/P Ratio:	3.32	Duv:	0.1657
M/P Ratio:	1.29	WELL Building Standard v2	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
-23.8	-35.3	-8.4	-24.0	-61.3	-8.8	-18.1	-5.0	-29.3	-353.7	-108.1	-89.2	-33.5	-42.0	37.9	-36.4



ANSI/IES TM-30-18 Color Rendition Report

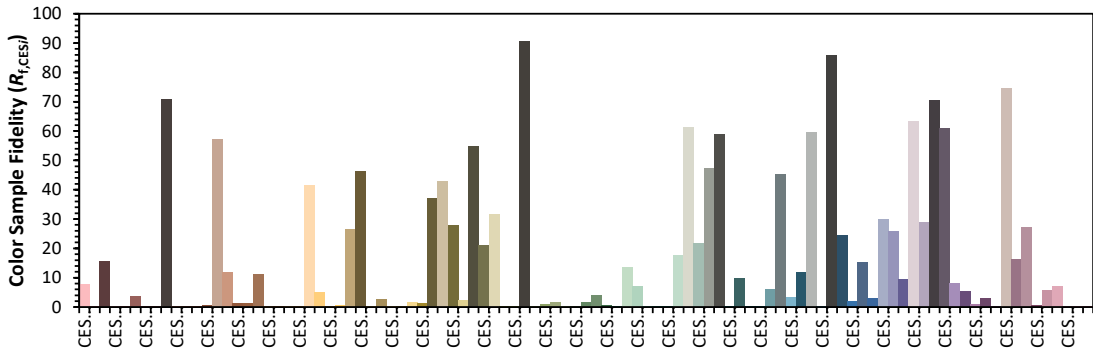
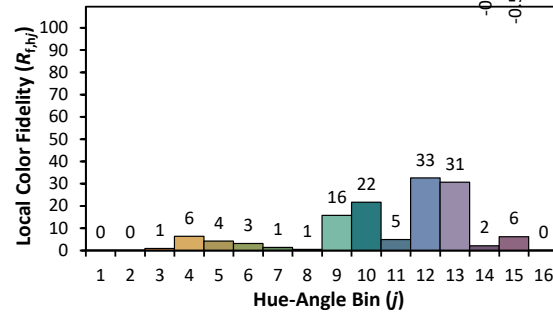
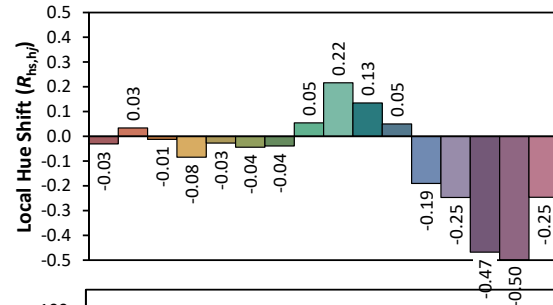
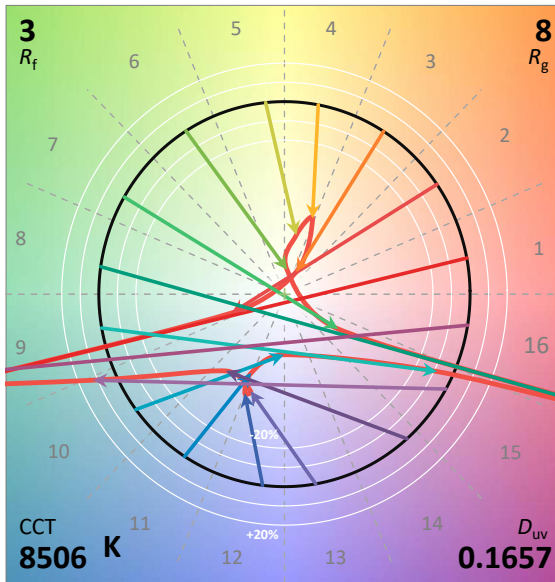
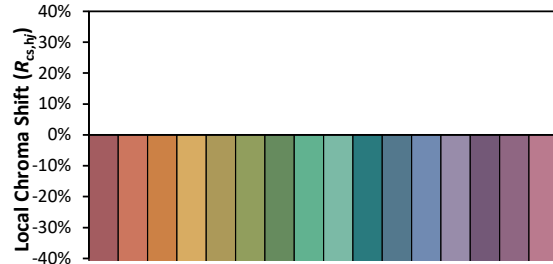
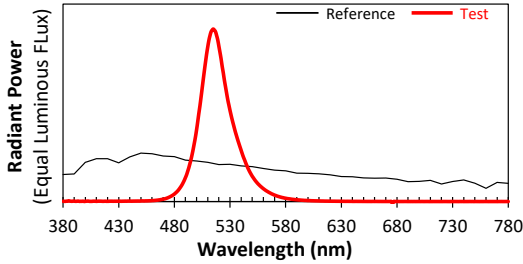
Date: 2022-08-12

Manufacturer:

SIRS Electronics Inc

Model:

DMX-5RGBWN-326X (GREEN)



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

x 0.1351
 y 0.7104
 u' 0.0480
 v' 0.5681

CIE 13.3-1995 (CRI)

R_a -24
 R_g -354

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Integrating Sphere Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-10-2014, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

Prepared For

SIRS Electronics Inc

3307 West St
Rosenburg, TX 77471
United States

Catalog Number

DMX-5RGBWN-326X (BLUE)

Order Number

14430879

Test Number

14430879.02

Test Date

2022-08-12

Prepared By

Cordaryl Cousar, Technician

Approved By

Jeffrey Lockner, Staff Engineer

The results contained in this report pertain only to the tested sample.

This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.

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.



Luminaire Description: RGB LED strip on formed aluminum with no lens enclosure
Lamp: 10 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: One meanwell GST60A05-P1J driver

Luminaire



Summary of Results

Radiant Flux:	166.3 mW
Luminous Flux:	10.8 lm
Luminaire Efficacy:	8.2 lm/W
CCT:	22000 K
CRI (Ra):	-48.5
Chromaticity (x):	0.1368
Chromaticity (y):	0.0567
Chromaticity (u):	0.1607
Chromaticity (v):	0.0999
Duv:	0.0278

Test Conditions

Test Temperature:	24.8 °C
Voltage:	120.0 VAC
Current:	0.03709 A
Power:	1.322 W
Power Factor:	0.297
Frequency:	60 Hz
Current THD:	121 %

Testing was performed in a 2-meter integrating sphere using the 4π geometry method.
Absorption correction was employed for this measurement.



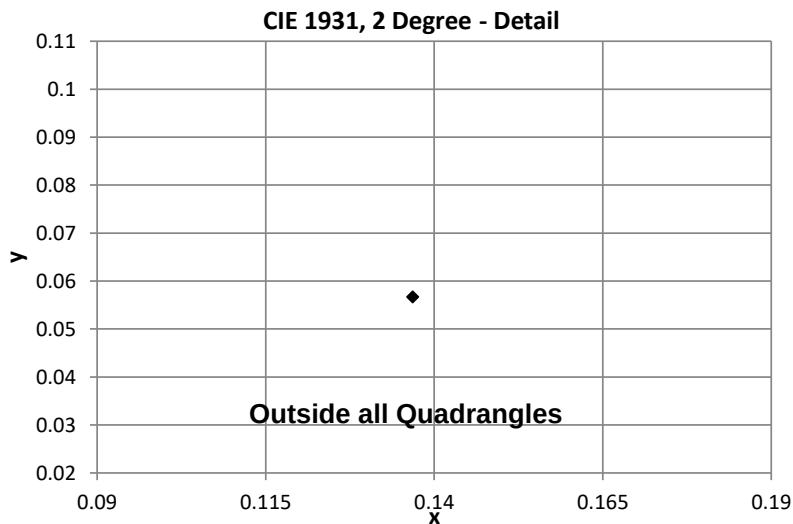
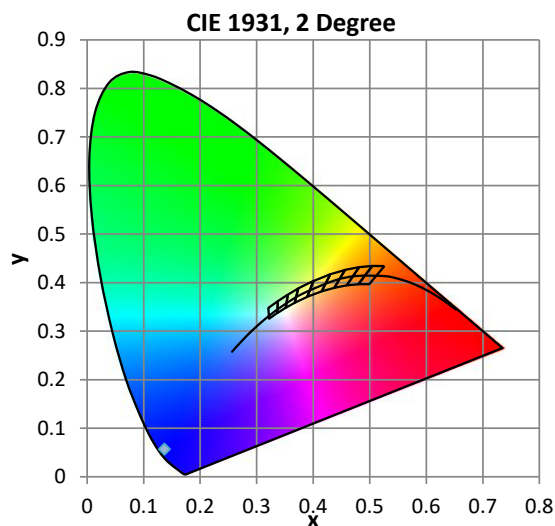
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	120.0 VAC	0.03709 A	1.322 W	0.297	60 Hz	121 %

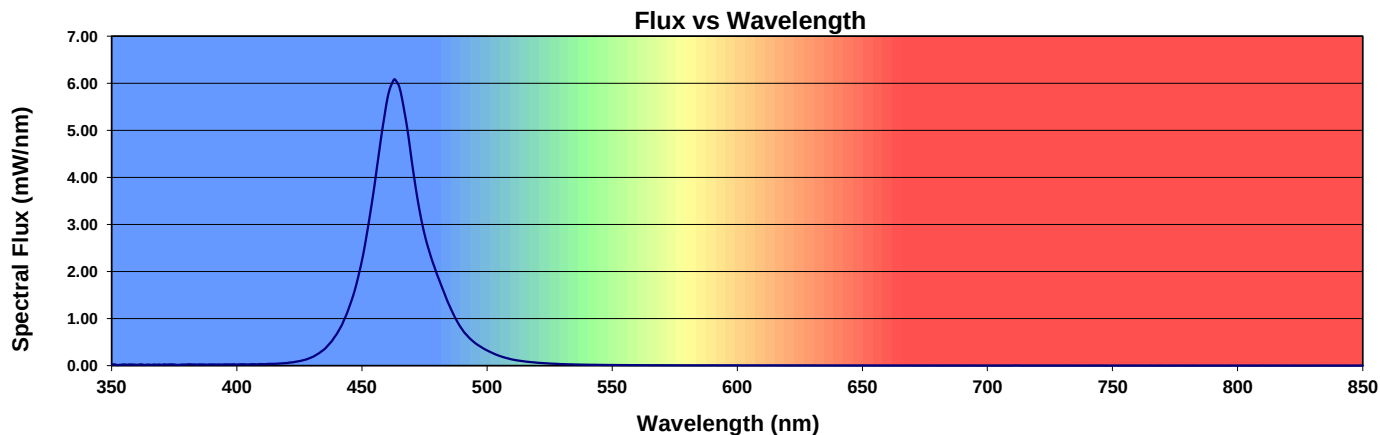
Summary of Results

Total Output:	11 Lumens	Chromaticity (x):	0.1368
Efficacy:	8.2 lm/w	Chromaticity (y):	0.0567
CCT:	22000 K	Chromaticity (u'):	0.1607
CRI (Ra):	-48.5	Chromaticity (v'):	0.1499
CRI (R9):	-289.9	TM-30 Rf:	1
Peak Wavelength:	463 nm	TM-30 Rg:	33
Dominant Wavelength:	468 nm	TM-30 Rcs,h1:	-71%
S/P Ratio:	16.1	Duv:	0.0762
M/P Ratio:	9.56	WELL Building Standard v2	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
-48.5	-18.6	-33.7	-122.2	-83.0	-1.3	-49.9	-41.2	-38.2	-289.9	-197.6	-117.2	-104.9	-31.5	-22.8	-5.7



ANSI/IES TM-30-18 Color Rendition Report

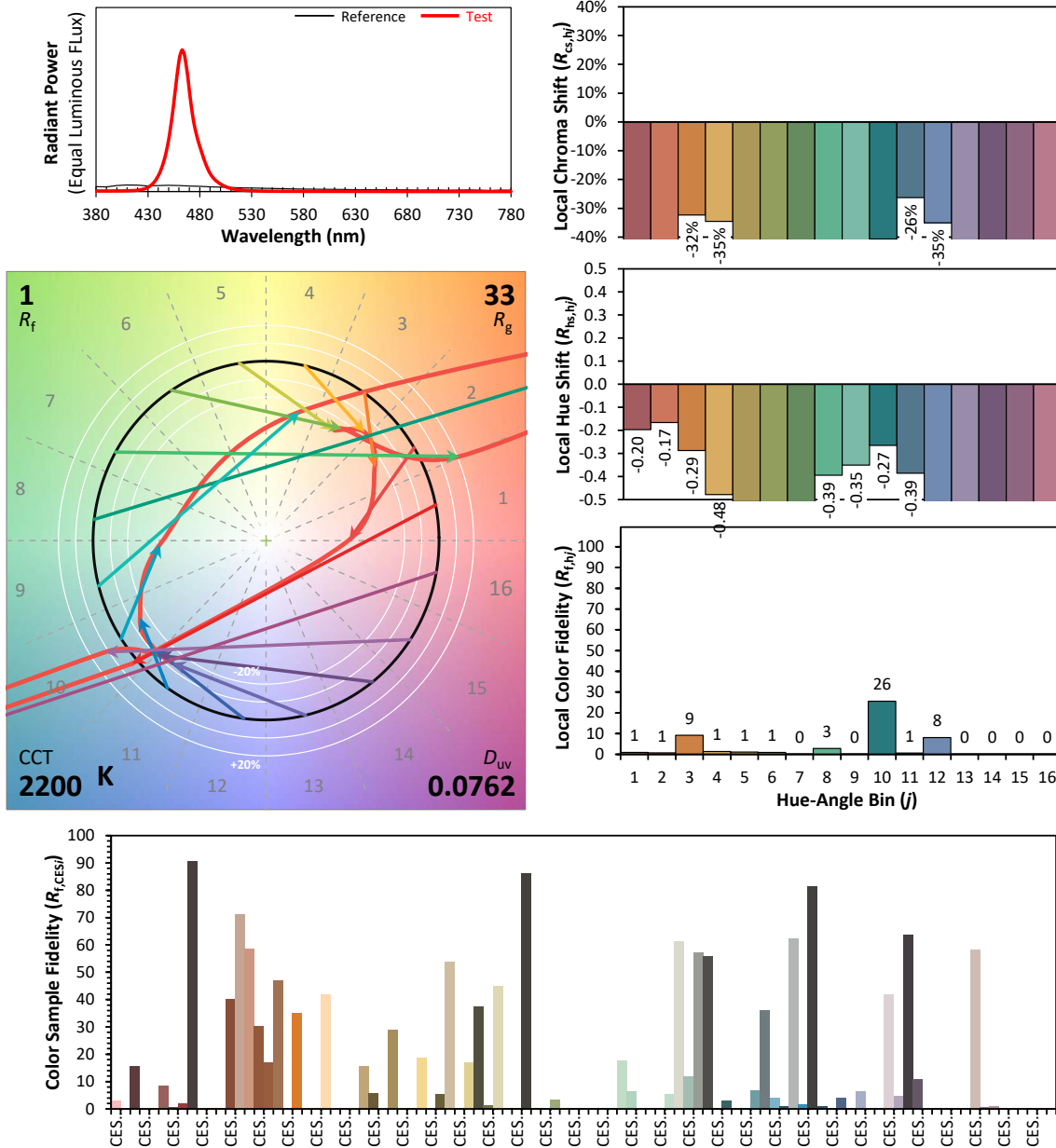
Date: 2022-08-12

Manufacturer:

SIRS Electronics Inc

Model:

DMX-5RGBWN-326X (BLUE)



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

x 0.1368
 y 0.0567
 u' 0.1607
 v' 0.1499

CIE 13.3-1995
(CRI)

R_a -48

R_g -290

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Integrating Sphere Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-10-2014, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

Prepared For

SIRS Electronics Inc

3307 West St
Rosenburg, TX 77471
United States

Catalog Number

DMX-5RGBWN-326X (WHITE)

Order Number

14430879

Test Number

14430879.04

Test Date

2022-08-12

Prepared By

Cordaryl Cousar, Technician

Approved By

Jeffrey Lockner, Staff Engineer

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
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.



Luminaire Description: RGB LED strip on formed aluminum with no lens enclosure
Lamp: 10 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: One meanwell GST60A05-P1J driver

Luminaire



Summary of Results

Radiant Flux:	180.8 mW
Luminous Flux:	57.61 lm
Luminaire Efficacy:	43.6 lm/W
CCT:	5578 K
CRI (Ra):	82.6
Chromaticity (x):	0.3306
Chromaticity (y):	0.3475
Chromaticity (u):	0.2031
Chromaticity (v):	0.3203
Duv:	0.0040

Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.0 VAC
Current:	0.03716 A
Power:	1.323 W
Power Factor:	0.296
Frequency:	60 Hz
Current THD:	121 %

Testing was performed in a 2-meter integrating sphere using the 4 π geometry method.
Absorption correction was employed for this measurement.



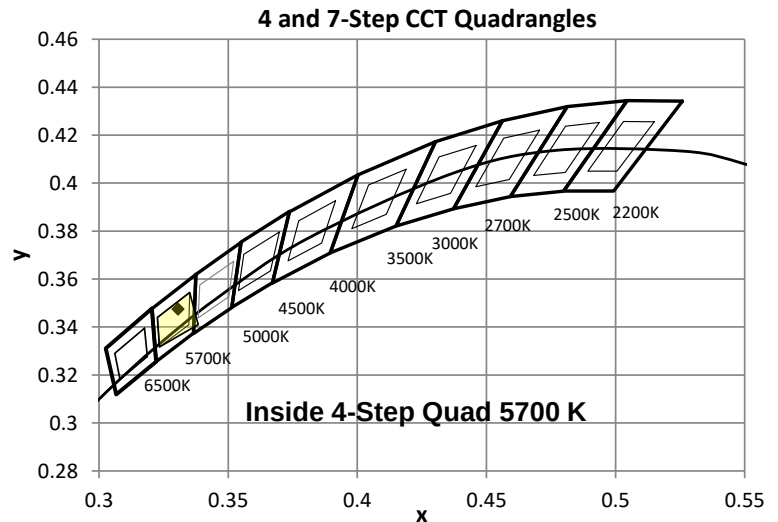
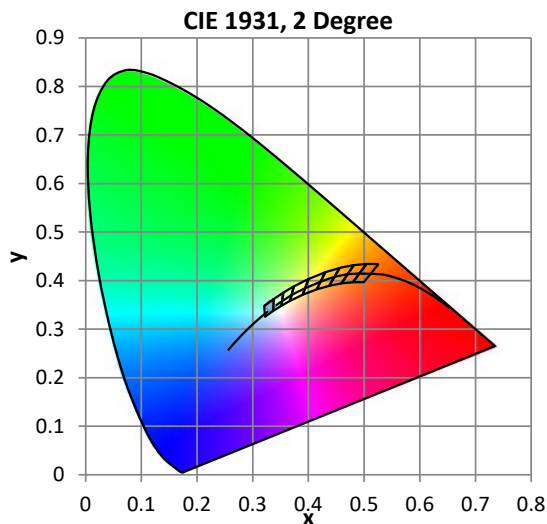
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.0 VAC	0.03716 A	1.323 W	0.296	60 Hz	121 %

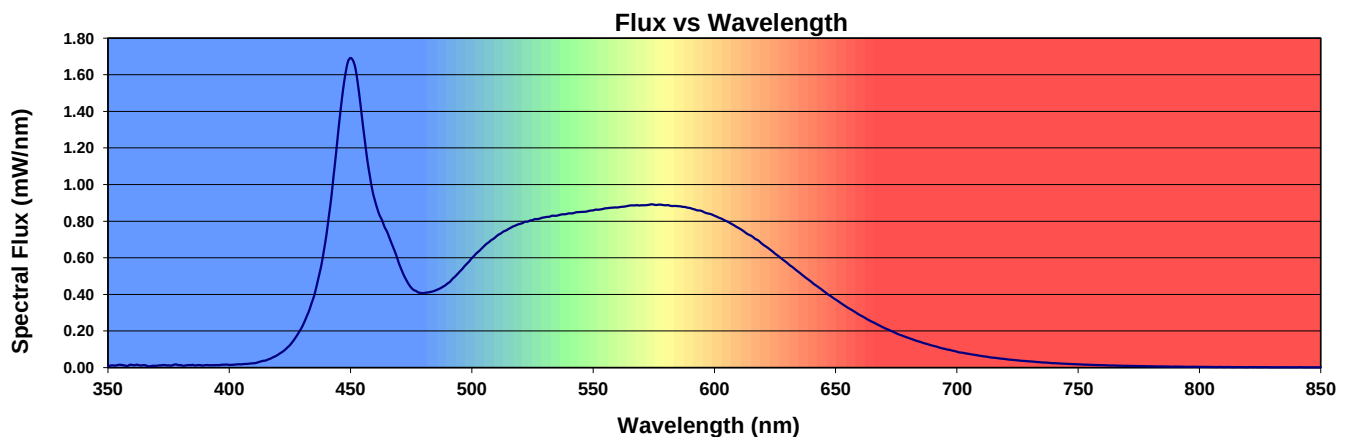
Summary of Results

Total Output:	58 Lumens	Chromaticity (x):	0.3306
Efficacy:	43.6 lm/w	Chromaticity (y):	0.3475
CCT:	5578 K	Chromaticity (u'):	0.2031
CRI (Ra):	82.6	Chromaticity (v'):	0.4805
CRI (R9):	3.1	TM-30 Rf:	84
Peak Wavelength:	450 nm	TM-30 Rg:	95
Dominant Wavelength:	544 nm	TM-30 Rcs,h1:	-13%
S/P Ratio:	2.08	Duv:	0.0041
M/P Ratio:	0.88	WELL Building Standard v2	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
82.6	80.5	87.5	92.1	82.6	81.5	82.5	87.2	67.2	3.1	70.2	81.9	60.3	82.4	95.9	74.6



ANSI/IES TM-30-18 Color Rendition Report

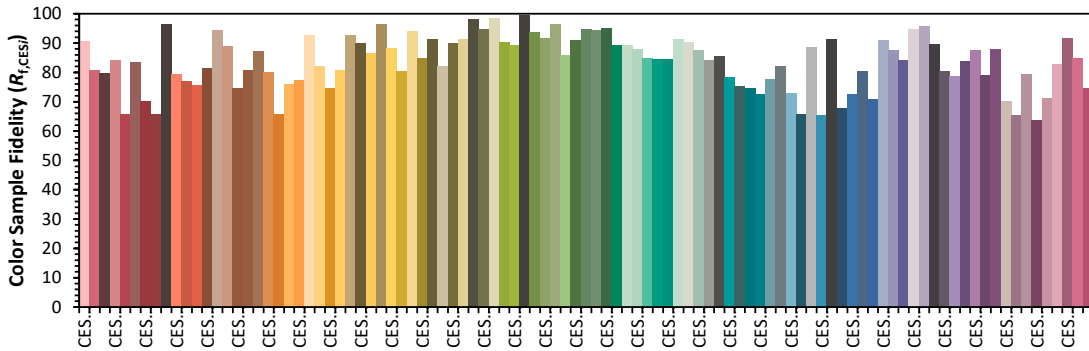
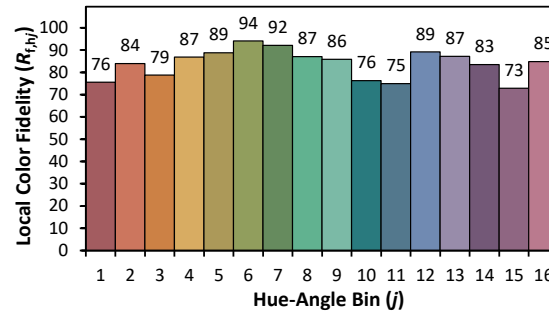
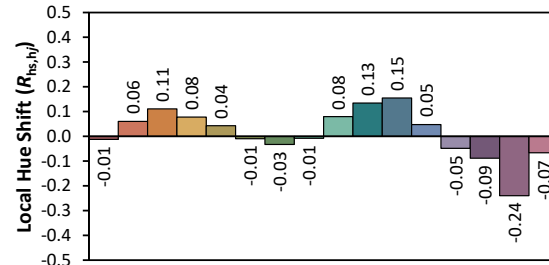
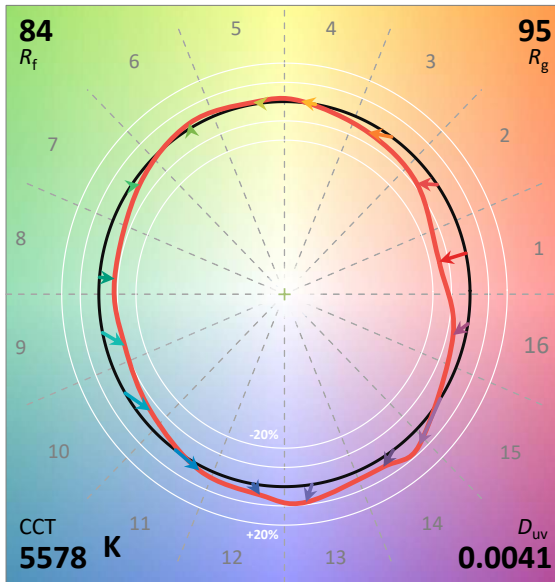
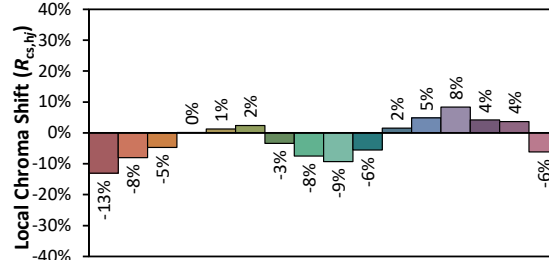
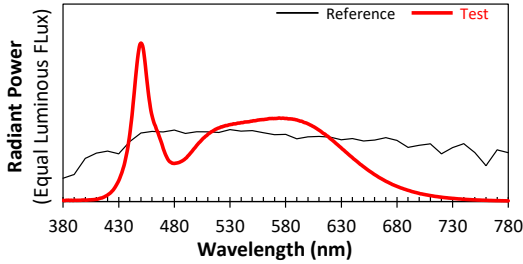
Date: 2022-08-12

Manufacturer:

SIRS Electronics Inc

Model:

DMX-5RGBWN-326X (WHITE)



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

x 0.3306
y 0.3475
u' 0.2031
v' 0.4805

CIE 13.3-1995
(CRI)

R_a 83
R_g 3

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Photometric Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-10-2014, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

Prepared For

SIRS Electronics Inc

3307 West St
Rosenburg, TX 77471
United States

Catalog Number

DMX-5RGBWN-326X (All On)

Order Number

14430879

Test Number

14430879.05

Test Date

2022-08-08 - 2022-08-11

Prepared By

Cordaryl Cousar, Technician

Approved By

Jeffrey Lockner, Staff Engineer

The results contained in this report pertain only to the tested sample.

This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.

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.



Table of Contents

Summary of Results	Page 3
Integrating Sphere Results	Page 4
Distribution Results	
Conditions / Summary of Results / Polar Plot / Zonal Lumens	Page 5
Candela Tabulation / Average Luminance	Page 6
Coefficients of Utilization / Cone of Light	Page 7
ISOFootcandle Plot	Page 8
Full TM-30 Report	Page 9

Laboratory results may not be representative of field performance
Ballast factors have not been applied

Testing was performed in a 2-meter integrating sphere using the 4π geometry method.

Absorption correction was employed for Sphere measurement



Luminaire Description: RGB LED strip on formed aluminum with no lens enclosure
Lamp: 10 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: One meanwell GST60A05-P1J driver

Luminaire



Luminaire Characteristics

Luminous Length: 12.00 in.
Luminous Width: 0.5000 in.

Summary of Results

Integrating Sphere

Luminous Flux: 130.4 Lumens
Efficacy: 28.8 lm/w
CCT: 11316 K
CRI (Ra): 60.5

Distribution

Total Luminaire Output: 129.8 Lumens
Luminaire Efficacy: 28.7 lm/w
Maximum Candela: 43 Candela

Electrical Data at 120 VAC

Test Temperature: 25.5 °C
Voltage: 120.0 VAC
Current: 0.09280 A
Power: 4.528 W
Power Factor: 0.407
Frequency: 60 Hz
Current THD: 189 %



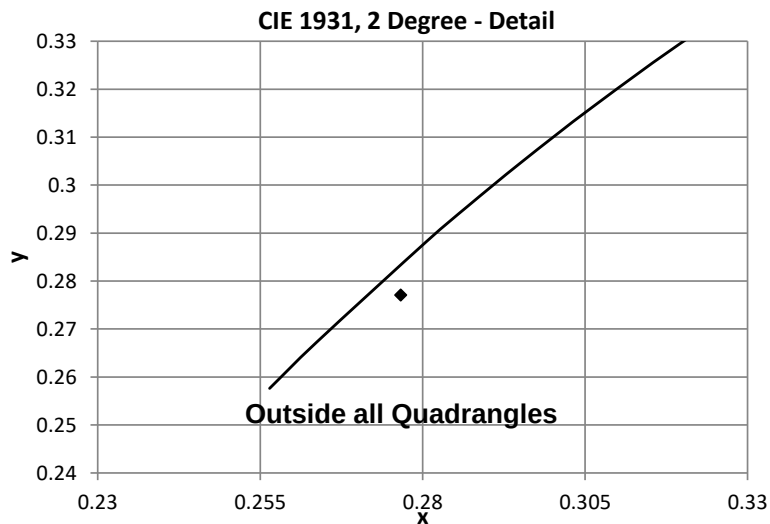
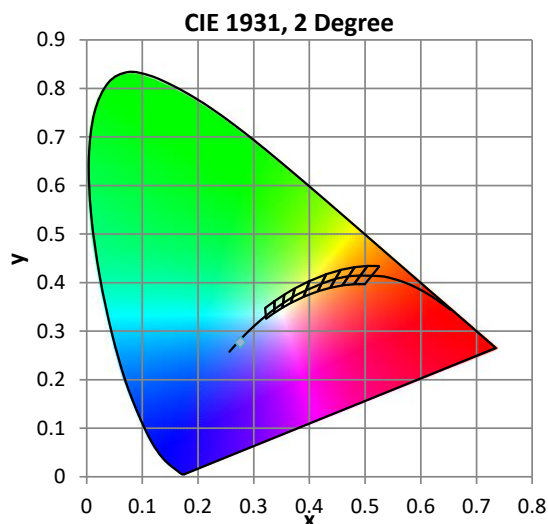
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.5 °C	120.0 VAC	0.09280 A	4.528 W	0.407	60 Hz	189 %

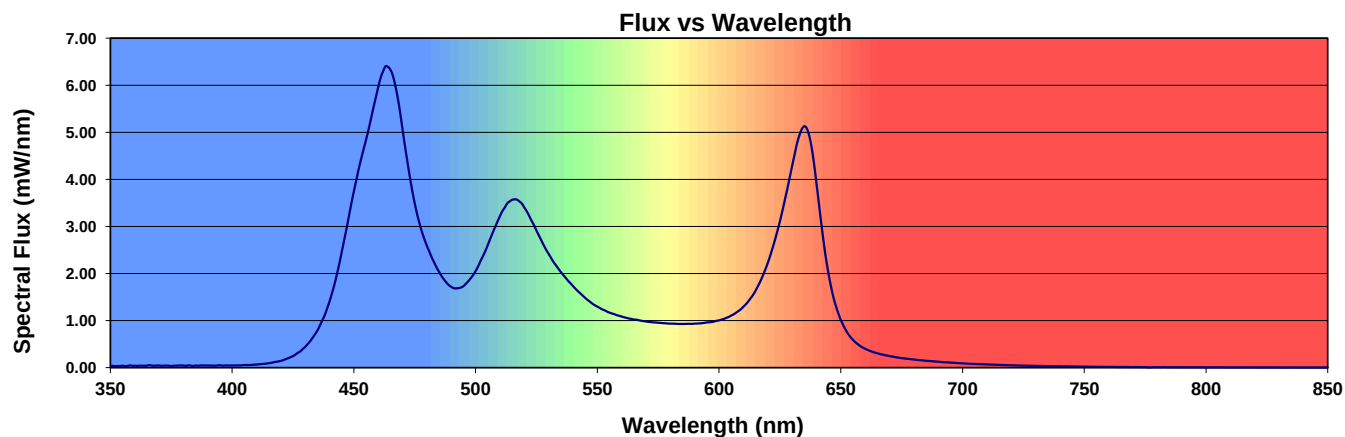
Summary of Results

Total Output:	130 Lumens	Chromaticity (x):	0.2766
Efficacy:	28.8 lm/w	Chromaticity (y):	0.2771
CCT:	11316 K	Chromaticity (u'):	0.1917
CRI (Ra):	60.5	Chromaticity (v'):	0.4321
CRI (R9):	-122.7	TM-30 Rf:	69
Peak Wavelength:	464 nm	TM-30 Rg:	105
Dominant Wavelength:	477 nm	TM-30 Rcs,h1:	27%
S/P Ratio:	3.34	Duv:	-0.0034
M/P Ratio:	1.6	WELL Building Standard v2	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
60.5	47.6	69.0	84.6	58.4	59.6	66.4	72.0	26.7	-122.7	28.3	47.7	64.3	50.5	87.8	33.0





Distribution - Goniophotometer

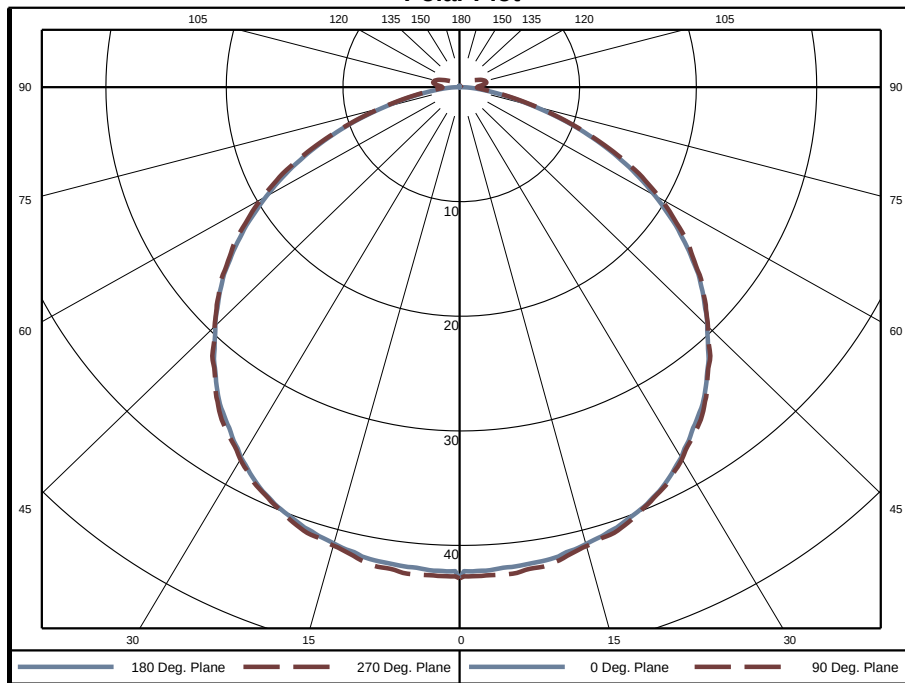
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.0 °C	120.0 VAC	0.08520 A	4.526 W	0.443	60 Hz	168 %

Summary of Results

Spacing Criteria	Total Lumen Output:	129.8 Lumens
0-180: 1.29	Luminaire Efficacy:	28.7 lm/w
90-270: 1.29	Maximum Candela:	43 Candela
Corrected UGR (Room Dimension: X=4H, Y=8H, Reflectances: 70/50/20%, S/H: 1)		
Crosswise: 23.6	Endwise: 23.7	

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.02	0.8%	60-65	8.55	6.6%	120-125	0.23	0.2%
5-10	3.05	2.3%	65-70	6.74	5.2%	125-130	0.14	0.1%
10-15	5.00	3.9%	70-75	4.68	3.6%	130-135	0.07	0.1%
15-20	6.82	5.3%	75-80	2.79	2.1%	135-140	0.03	0.0%
20-25	8.46	6.5%	80-85	1.44	1.1%	140-145	0.02	0.0%
25-30	9.83	7.6%	85-90	0.75	0.6%	145-150	0.02	0.0%
30-35	10.82	8.3%	90-95	0.64	0.5%	150-155	0.02	0.0%
35-40	11.48	8.8%	95-100	0.79	0.6%	155-160	0.02	0.0%
40-45	11.66	9.0%	100-105	0.77	0.6%	160-165	0.02	0.0%
45-50	11.51	8.9%	105-110	0.62	0.5%	165-170	0.01	0.0%
50-55	10.98	8.5%	110-115	0.44	0.3%	170-175	0.01	0.0%
55-60	9.99	7.7%	115-120	0.32	0.2%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	56	43.5%
0-60	101	77.5%
0-90	126	96.7%
90-180	4	3.2%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	42.88	42.88	42.88	42.88	42.88	42.88	42.88	42.88	42.88	42.88	42.88	42.88	42.88	42.88	42.88
	5	42.11	42.86	42.99	42.85	42.71	42.85	42.99	42.86	42.11	42.86	42.99	42.85	42.71	42.85	42.99
	10	41.94	42.66	42.69	42.65	42.41	42.65	42.69	42.66	41.94	42.66	42.69	42.65	42.41	42.65	42.69
	15	41.28	41.96	42.09	41.73	41.46	41.73	42.09	41.96	41.28	41.96	42.09	41.73	41.46	41.73	42.09
	20	40.43	41.19	41.23	41.07	40.69	41.07	41.23	41.19	40.43	41.19	41.23	41.07	40.69	41.07	41.23
	25	39.21	39.94	40.09	39.57	39.27	39.57	40.09	39.94	39.21	39.94	40.09	39.57	39.27	39.57	40.09
	30	37.35	38.12	38.11	37.82	37.48	37.82	38.11	38.12	37.35	38.12	38.11	37.82	37.48	37.82	38.11
	35	35.05	35.83	35.95	35.65	35.43	35.65	35.95	35.83	35.05	35.83	35.95	35.65	35.43	35.65	35.95
	40	32.47	33.26	33.27	33.04	32.54	33.04	33.27	33.26	32.47	33.26	33.27	33.04	32.54	33.04	33.27
	45	29.52	30.41	30.23	29.98	29.59	29.98	30.23	30.41	29.52	30.41	30.23	29.98	29.59	29.98	30.23
	50	26.49	27.15	27.13	26.82	26.65	26.82	27.13	27.15	26.49	27.15	27.13	26.82	26.65	26.82	27.13
	55	22.92	23.75	23.79	23.43	23.36	23.43	23.79	23.75	22.92	23.75	23.79	23.43	23.36	23.43	23.79
	60	19.09	19.74	19.81	19.61	19.58	19.61	19.81	19.74	19.09	19.74	19.81	19.61	19.58	19.61	19.74
	65	15.00	15.62	15.58	15.49	15.50	15.49	15.58	15.62	15.00	15.62	15.58	15.49	15.50	15.49	15.58
	70	10.81	11.20	11.30	11.05	10.99	11.05	11.30	11.20	10.81	11.20	11.30	11.05	10.99	11.05	11.30
	75	6.61	6.98	7.05	6.93	6.89	6.93	7.05	6.98	6.61	6.98	7.05	6.93	6.89	6.93	7.05
	80	3.39	3.72	3.82	3.79	3.73	3.79	3.82	3.72	3.39	3.72	3.82	3.79	3.73	3.79	3.82
	85	1.42	1.71	1.91	1.98	1.95	1.98	1.91	1.71	1.42	1.71	1.91	1.98	1.95	1.98	1.91
	90	0.20	0.80	1.35	1.50	1.47	1.50	1.35	0.80	0.20	0.80	1.35	1.50	1.47	1.50	1.35
	95	0.03	0.69	1.74	1.87	1.82	1.87	1.74	0.69	0.03	0.69	1.74	1.87	1.82	1.87	1.74
	100	0.03	0.65	1.95	2.28	2.29	2.28	1.95	0.65	0.03	0.65	1.95	2.28	2.29	2.28	1.95
	105	0.04	0.45	1.62	2.15	2.22	2.15	1.62	0.45	0.04	0.45	1.62	2.15	2.22	2.15	1.62
	110	0.04	0.19	1.14	1.74	1.91	1.74	1.14	0.19	0.04	0.19	1.14	1.74	1.91	1.74	1.14
	115	0.05	0.06	0.81	1.36	1.50	1.36	0.81	0.06	0.05	0.06	0.81	1.36	1.50	1.36	0.81
	120	0.05	0.05	0.59	1.08	1.17	1.08	0.59	0.05	0.05	0.05	0.59	1.08	1.17	1.08	0.59
	125	0.05	0.06	0.26	0.83	0.92	0.83	0.26	0.06	0.05	0.06	0.26	0.83	0.92	0.83	0.26
	130	0.06	0.06	0.07	0.46	0.68	0.46	0.07	0.06	0.06	0.06	0.07	0.46	0.68	0.46	0.07
	135	0.06	0.07	0.07	0.15	0.29	0.15	0.07	0.07	0.06	0.07	0.07	0.15	0.29	0.15	0.07
	140	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	145	0.07	0.08	0.08	0.07	0.06	0.07	0.08	0.08	0.07	0.08	0.08	0.07	0.06	0.07	0.08
	150	0.08	0.08	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.08
	155	0.09	0.09	0.09	0.08	0.07	0.08	0.09	0.09	0.09	0.09	0.09	0.08	0.07	0.08	0.09
	160	0.09	0.10	0.09	0.09	0.08	0.09	0.09	0.10	0.09	0.10	0.09	0.09	0.08	0.09	0.10
	165	0.10	0.10	0.10	0.09	0.08	0.09	0.10	0.10	0.10	0.10	0.09	0.08	0.09	0.10	0.10
	170	0.10	0.11	0.11	0.10	0.09	0.10	0.11	0.11	0.10	0.11	0.11	0.10	0.09	0.10	0.11
	175	0.10	0.11	0.11	0.10	0.09	0.10	0.11	0.11	0.10	0.11	0.11	0.10	0.09	0.10	0.11
	180	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

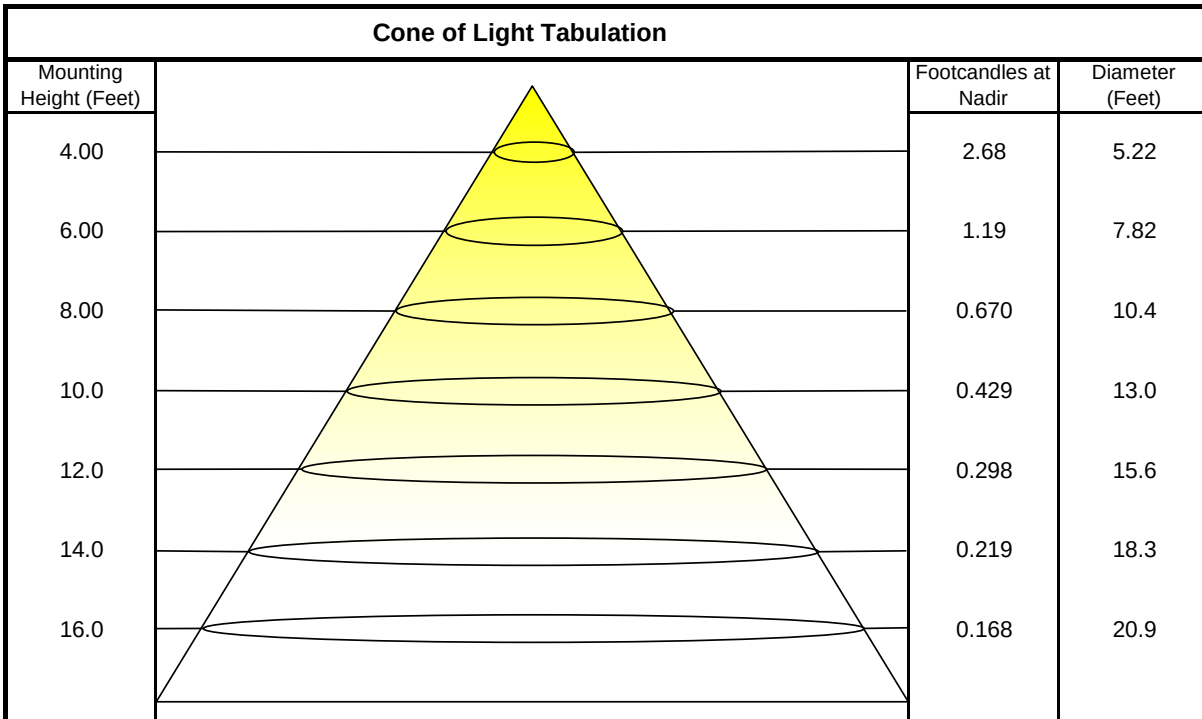
Vertical Angle (Degrees)	0	45	90
	0	11080	11080
	45	10790	10810
	55	10320	10520
	65	9168	9475
	75	6596	6874
	85	4193	5768



Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	104	99	96	105	101	97	94	96	93	90	92	89	87	88	86	84	81
2	98	90	84	78	96	88	82	77	84	79	74	80	76	72	77	73	70	68
3	90	79	71	65	87	77	70	64	74	68	62	71	65	61	68	63	60	57
4	82	70	61	55	80	69	61	54	66	59	53	63	57	52	61	55	51	49
5	75	63	54	47	73	61	53	47	59	52	46	57	50	45	54	49	44	42
6	70	56	47	41	67	55	47	41	53	46	40	51	45	39	49	43	39	37
7	64	51	42	36	63	50	42	36	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	41	35	31	29
9	56	43	34	29	54	42	34	29	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23

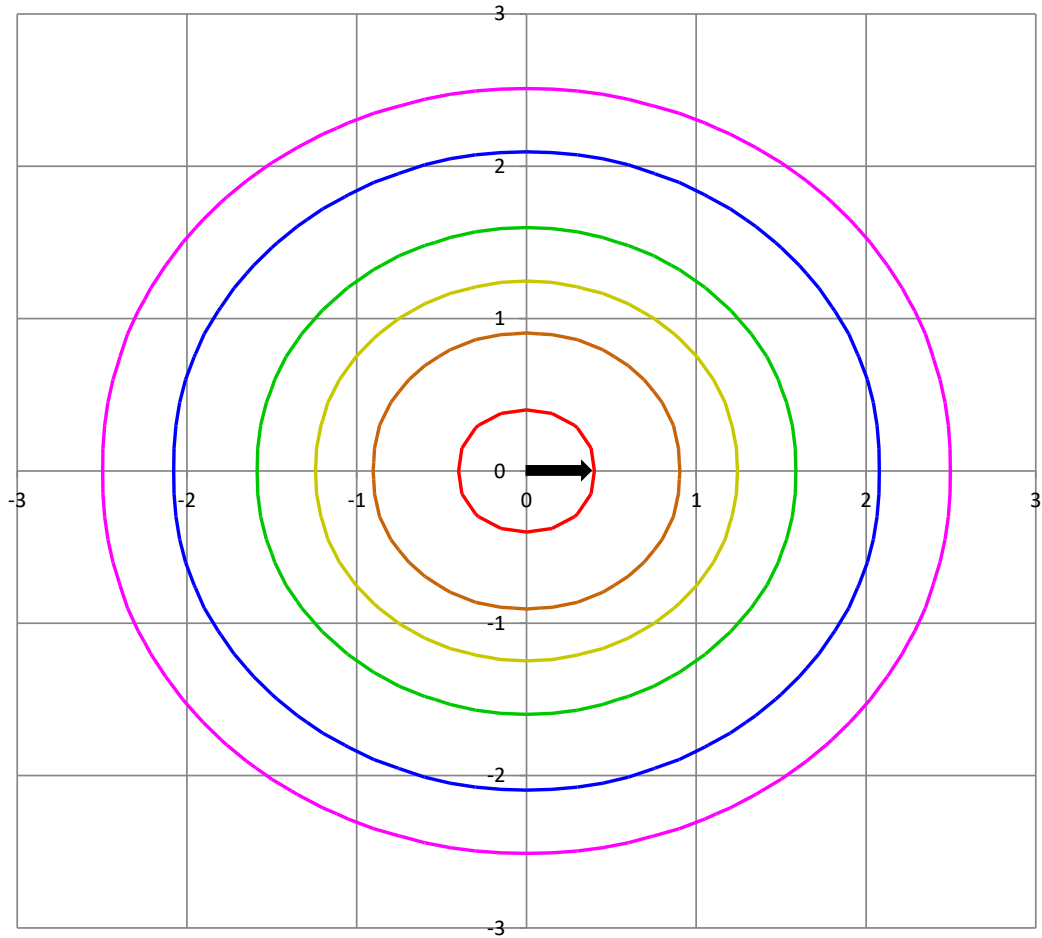
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	42.88 Candela
Central Cone Intensity:	43 Candela
Beam Flux:	96.4 Lumens
Beam Angle (0-180):	114.0 Degrees
Beam Angle (90-270):	115.0 Degrees
Field Angle (0-180):	156.8 Degrees
Field Angle (90-270):	157.9 Degrees



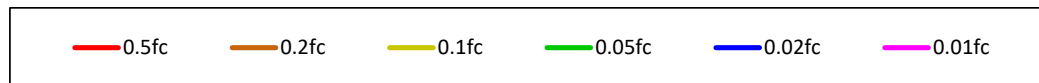


ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height



ANSI/IES TM-30-18 Color Rendition Report

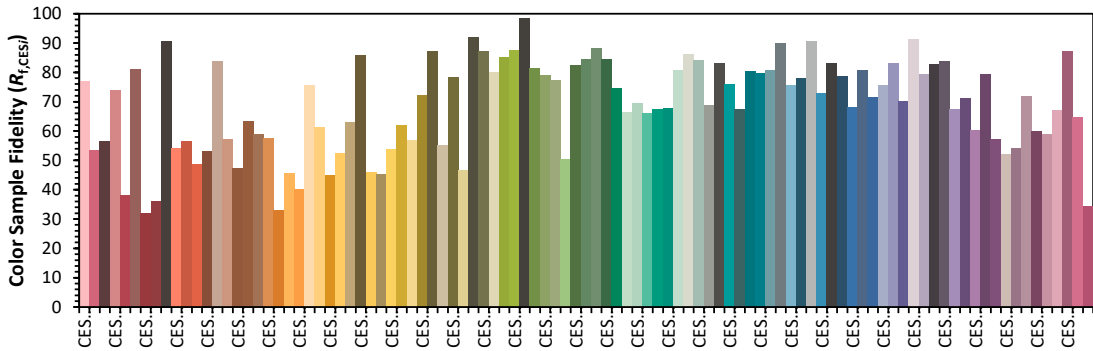
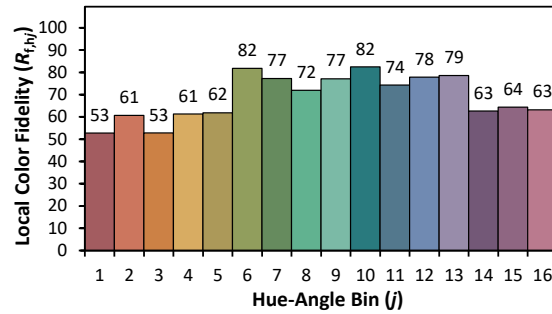
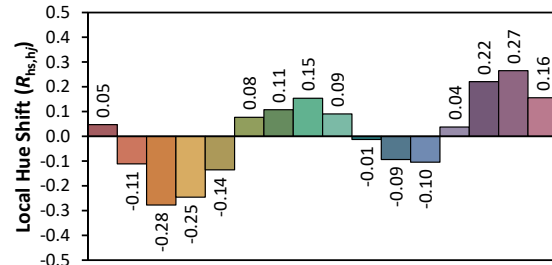
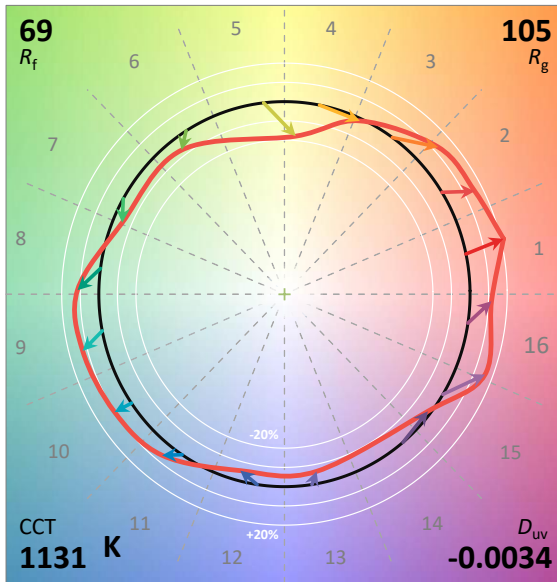
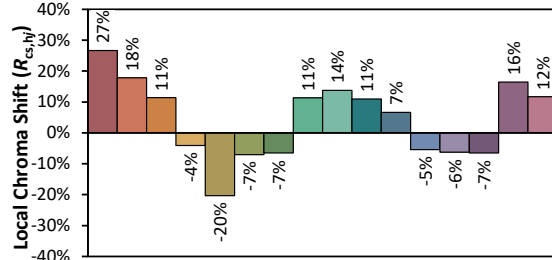
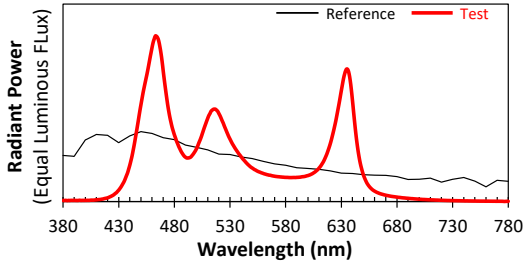
Date: 2022-08-08

Manufacturer:

SIRS Electronics Inc

Model:

DMX-5RGBWN-326X (All On)



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

x 0.2766
y 0.2771
u' 0.1917
v' 0.4321

CIE 13.3-1995
(CRI)

R_a 61
R_g -123

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.