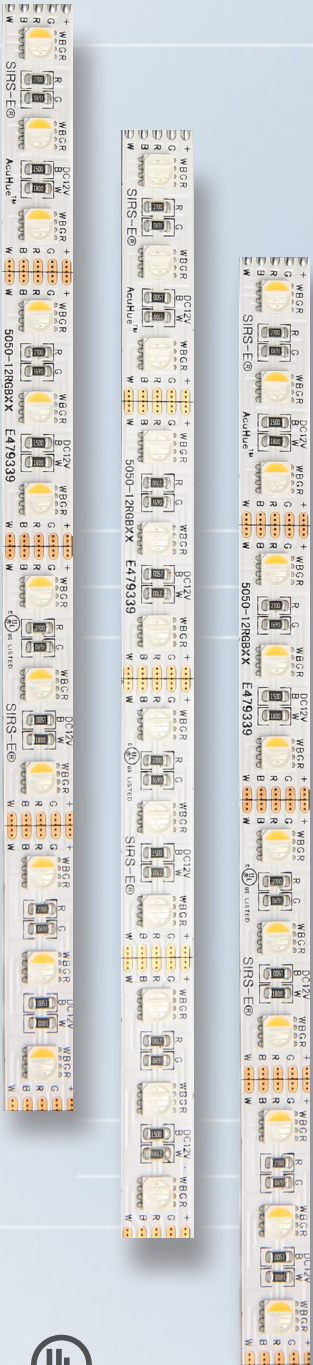


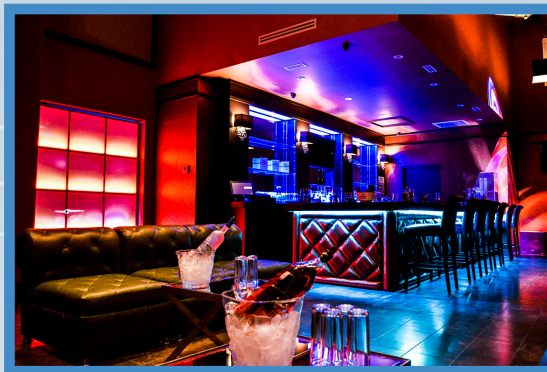
Flexible RGBW LED Strips

The SIRS-E® AcuHue™ CV RGBW LED strip series, consists of High Quality Constant Voltage variants with the ability to create billions of color rich rendering options offered by the addition of a fourth color diode to the RGB equation, including 2700 K, 5500 K white diodes or Amber. With optimal luminosity and superior efficacy, **AcuHue™** provides for limitless applications while complying with all safety requirements as defined by UL standards.



Easily mountable utilizing 3M VHB Aero-Grade tape, engineered to dissipate heat and reduce voltage drop via 4 oz flexible PCB.

- Increased Luminous Flux **+420 lm/ft**
- Improved Luminous Efficacy **+60 lm/W avg**
- Minimal Power Consumption **5.75 W/ft**
- UL Listed, Class 2 - **E479339**



The **AcuHue™** series provides solutions for an endless set of applications including commercial, residential, stage & TV studio, theatrical, film sets, cove lighting and specialized lighting designs.



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 market place in stability, reliability, and efficiency of LED lighting and lighting control systems.

Customer Name

Project Name

Part Number


Flexible RGBW LED Strip



Description

RGBW LED strip lights let you create billions of colors by just mixing red, green, and blue colors with a 4th color diode. Our new AcuHue™ series of CV RGBW strips include a 4oz density PCB that minimizes voltage drop and a 3M VHB adhesive tape for a more secure installation. AcuHue™ RGBW LED strips are offered in many variations such as 12V and 24V and varying IP ratings such as IP40 (indoor, dry locations) or IP68 (damp, wet locations). These strips are free of UV radiation, fully dimmable, and DMX addressable using our SIRS-E[®] line of DMX-CON decoders.

Product Specifications

Input Voltage	12 V DC / 24 V DC ²	Cuttable Segments	1.6 in (42 mm) for 12V / 3.3 in (83 mm) for 24V
Limiting Control Method	CV - Constant Voltage	Reel Length	16.4 ft / 5 m
Power Consumption	6.62 W/ft	Max Run Length	5 meters, 10% luminous flux loss
LED Chip Type	High Quality SMD 5050 4-Diode	Segment Width	0.47 in (12 mm) for IP40 / 0.56 in (14 mm) for IP68
LED Density	22 LEDs/ft / 72 LEDs/m	Luminous Flux Maintenance	75,000 hrs ⁴
Board Type/Color	4 oz Density Copper, White PCB	Dimming	DMX PWM, RF PWM, 0-10V, MLV, Incandescent
Beam Angle	120°	Environmental	IP 40 - Indoor, Dry / IP 68 - Damp, Wet
Operating Temperature	-20°F to 120°F	Warranty	5 Years Limited
Mounting	Non-Porous: 3M VHB Adhesive Mounting Tape	Certifications	 UL Listed, E479339

Product Photometrics - Red, Green and Blue Diodes

Color Diode	Peak Wavelength (nm)	Dominant Wavelength (nm)	CIE (x,y)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)
Red	632.0	621.6	(0.6938, 0.3054)	60	30.1
Green	516.6	522.0	(0.1417, 0.7269)	163	88.4
Blue	462.4	466.5	(0.1370, 0.0511)	35	17.4

Product Photometrics - White Diode Only

Nominal CCT (K)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)	CIE (x,y)	Duv ₁	CRI	TM-30-15	
						Fidelity (Rf)	Gamut (Rg)
5500 K	199	105.0	(0.3318, 0.3460)	+0.0027	82.5	81.1	96.2

Product Photometrics - All Four Colors at Full Intensity

Nominal CCT (K)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)	CIE (x,y)	Duv ₁	CRI	TM-30-15	
						Fidelity (Rf)	Gamut (Rg)
14350 K	428	54.6	(0.2630, 0.2717)	+0.0027	73.0	NA	NA

1 - Duv Chromaticity Consistency is throughout the run length. Typically below 1-step MacAdam Ellipse.

2 - AcuHue™ 24V RGBW LED Strips are Special Order only.

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

Ordering Guide

Series	Voltage	Control	CCT / λ ^{2,3*}	IP	Run Length
AcuHue™	XX	CV	55	XX	16
	12	CV	27		40
	24 ¹	CC	55		68
			590		

¹ Voltage - AcuHue™ 24V RGBW LED Strips are Special Order only.

² CCT - Correlated Color Temperature, represented by the first 2 digits of the nominal CCT.

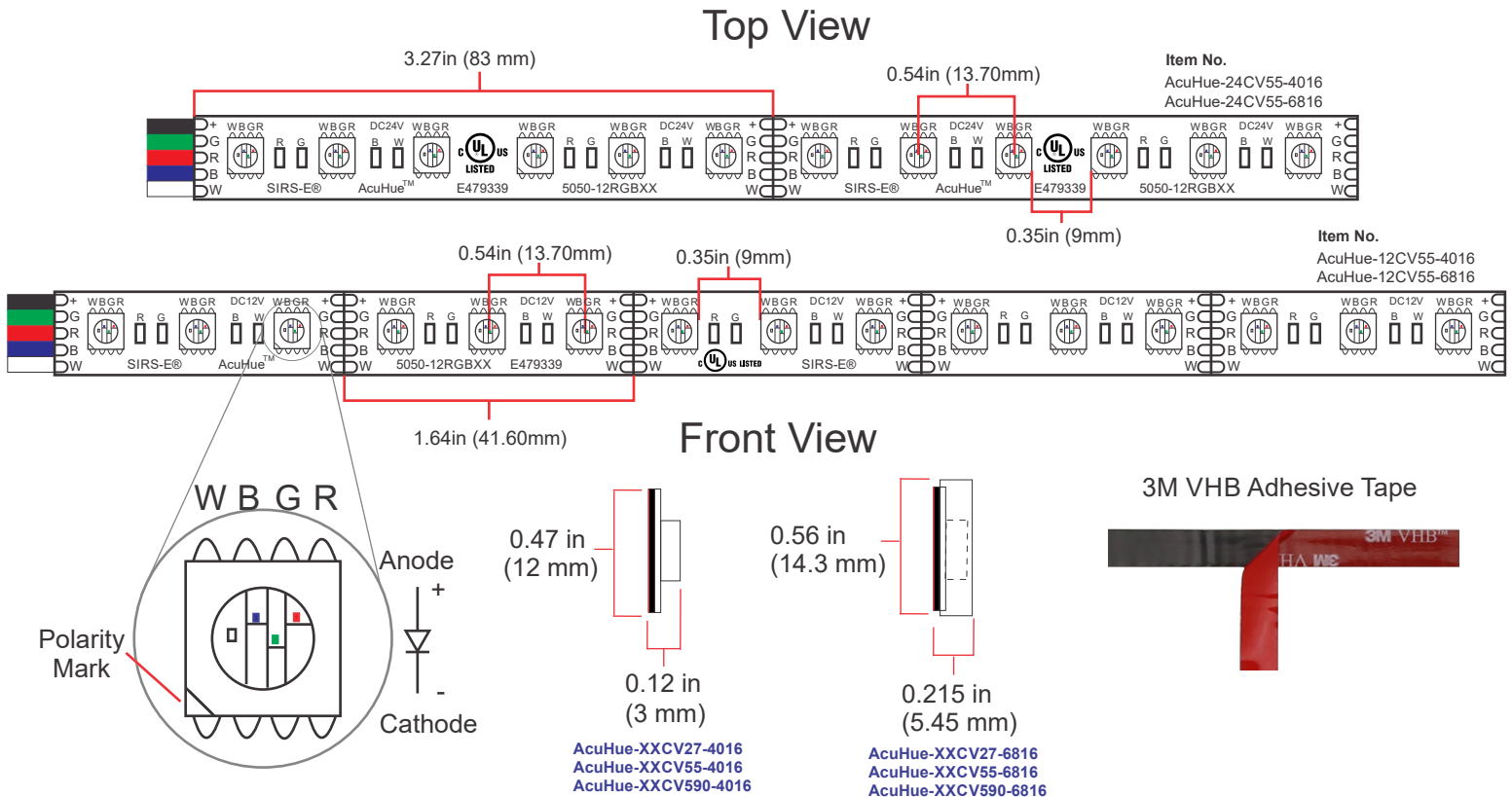
³ λ - Peak Wavelength, represented by the 3 digits of the color wavelength.

* CCT / λ - applicable on AcuVivid and AcuHue series only.

Product Country of Origin

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

Mechanical Dimensions



Weight

Product Weight:	5.3 oz, 16.4 ft Reel IP40, Without Packaging.
	18.4 oz, 16.4 ft Reel IP68, Without Packaging.

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.

Accessories Compatible

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



Meanwell 12V & 24V PSUs
LED-PS12V-60W-UL
LED-PS24V-90W-UL



SIRS-E DMX Controllers
DMX-CON4V2-C2



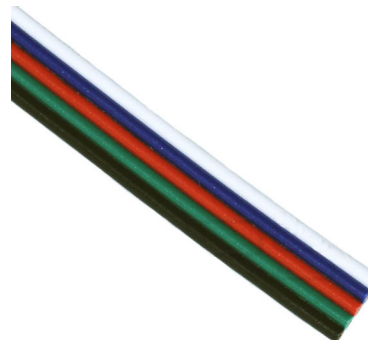
SIRS-E RF Controllers
RF-MZRX-RGBW



SIRS-E DMX Controllers
DMX-CON4-C2



SIRS-E Waterproof
Accessories



SIRS-E RGBW Wire Leads



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.

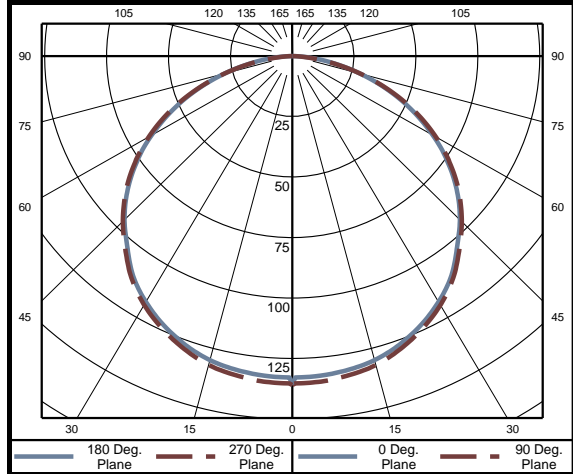


SIRS Electronics Inc
Catalog Number
ACUHUE-12CV55-4016 - ALL COLORS



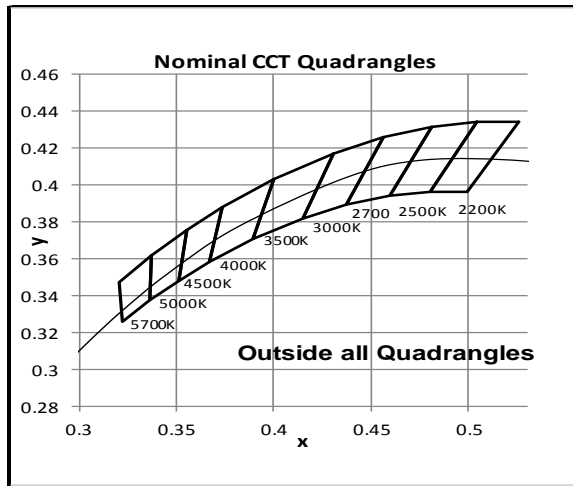
Electrical Test Conditions						
Temp	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.7 °C	12.01 VDC	0.6751 A	8.105 W	N/A	N/A	N/A

Summary of Results	
Total Lumen Output	427.5 Lumens
Luminaire Efficacy	54.6 lm/w
Maximum Candela	137 Candela
CCT	14357 K
CRI	73.0
Duv	0.0027
TM-30 Rf	0.0
TM-30 Rg	0.0



Intensity (Candlepower) Summary		
Angle	Mean CP	Lumens
0	136	
5	136	13
10	135	
15	133	38
20	130	
25	126	58
30	121	
35	115	72
40	107	
45	99	76
50	90	
55	80	71
60	69	
65	56	55
70	43	
75	30	32
80	17	
85	7	8
90	0	

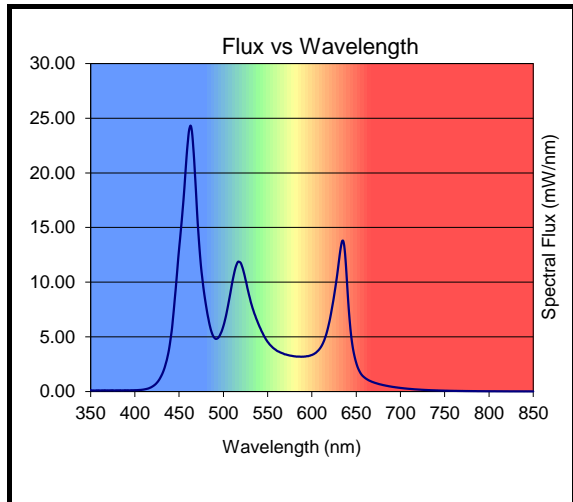
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	108	25.7%
0-40	180	42.6%
0-60	327	77.5%
0-90	423	100.0%
40-90	243	57.4%
60-90	95	22.5%
90-180	0	0.0%
0-180	423	100.0%



Spacing Criteria	
0-180	1.29
90-270	1.29

Color Rendering Index Details	
Ra (CRI)	73.0
R1	64
R2	78.5
R3	88.8
R4	73.9
R5	74.7
R6	78.3
R7	77.6
R8	48.3
R9	-67.3
R10	51.1
R11	66.8
R12	66.7
R13	65
R14	90.5

Average Luminance cd/m ²	
Vertical Angle	Horizontal Angle 0°
0	32430
45	32500
55	32190
65	30680
75	26930
85	19810



Cone of Light Tabulation		
Mounting Height (Ft)	Footcandles at Nadir	Diameter (Ft)
4.00	8.50	5.27
6.00	3.78	7.91
8.00	2.12	10.5
10.0	1.36	13.2
12.0	0.944	15.8
14.0	0.694	18.4
16.0	0.531	21.1

Chromaticity Coordinates	
Chromaticity (x)	0.2630
Chromaticity (y)	0.2717
Chromaticity (u)	0.1835
Chromaticity (v)	0.2843
Chromaticity (u')	0.1835
Chromaticity (v')	0.4264
Duv	0.0027

Testing was performed in accordance with LM-79-08
The results contained in this summary pertain only to report #11714176.14



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



Integrating Sphere Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-2002, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2015, IES TM-30-2015

Prepared For

SIRS Electronics Inc

4705 Hwy 36 S
STE 5
Rosenberg, TX 77471
United States

Catalog Number

ACUHUE-12CV55-4016 - RED

Order Number

11714176

Test Number

11714176.10

Test Date

2017-04-13

Prepared By

Kevin Rodriguez, Technician

Approved By

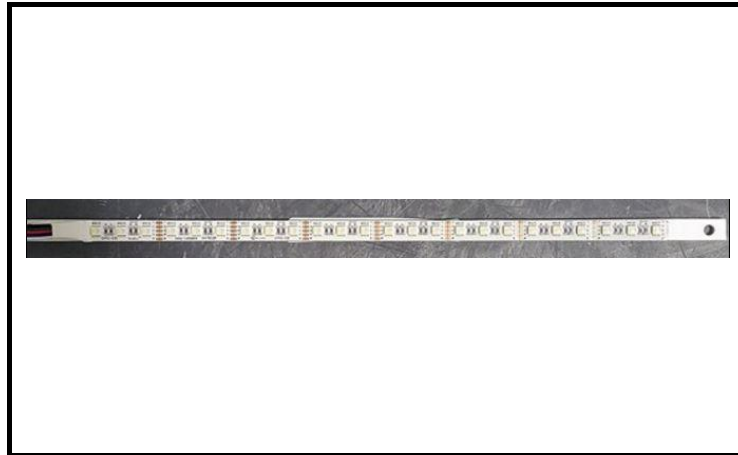
Justin Benner, Project Handler

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Luminaire Description: Formed aluminum backing plate, LED strip with no lens enclosure - 1' length (304.8mm)
Lamp: 24 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: None

Luminaire



Summary of Results

Radiant Flux:	301.5 mW
Luminous Flux:	60.47 lm
Luminaire Efficacy:	30.1 lm/W
Chromaticity (x):	0.6938
Chromaticity (y):	0.3054
Chromaticity (u):	0.5259
Chromaticity (v):	0.3472
Duv:	0.0064

Test Conditions

Test Temperature:	25.1 °C
Voltage:	12.01 VDC
Current:	0.1674 A
Power:	2.010 W

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



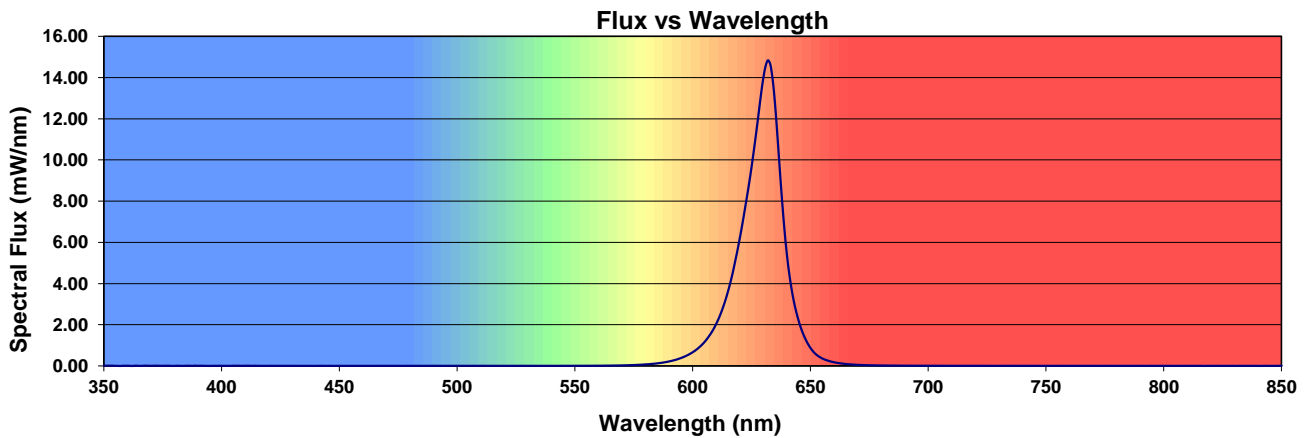
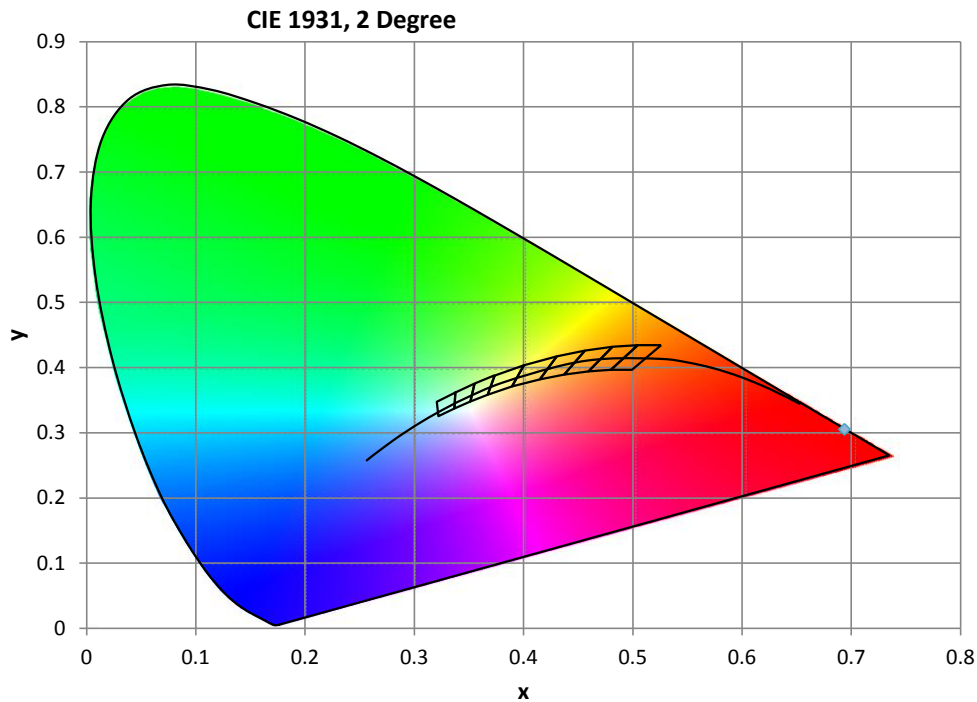
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	12.01 VDC	0.1674 A	2.010 W	N/A	N/A	N/A

Summary of Results

Total Output:	60 Lumens	Chromaticity (x):	0.6938
Efficacy:	30.1 lm/w	Chromaticity (y):	0.3054
Peak Wavelength:	632 nm	Chromaticity (u'):	0.5259
Dominant Wavelength:	621.6 nm	Chromaticity (v'):	0.5208
S/P Ratio:	0.059	Duv:	0.0064





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



Integrating Sphere Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-2002, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2015, IES TM-30-2015

Prepared For

SIRS Electronics Inc

4705 Hwy 36 S
STE 5
Rosenberg, TX 77471
United States

Catalog Number

ACUHUE-12CV55-4016 - GREEN

Order Number

11714176

Test Number

11714176.11

Test Date

2017-04-14

Prepared By

Kevin Rodriguez, Technician

Approved By

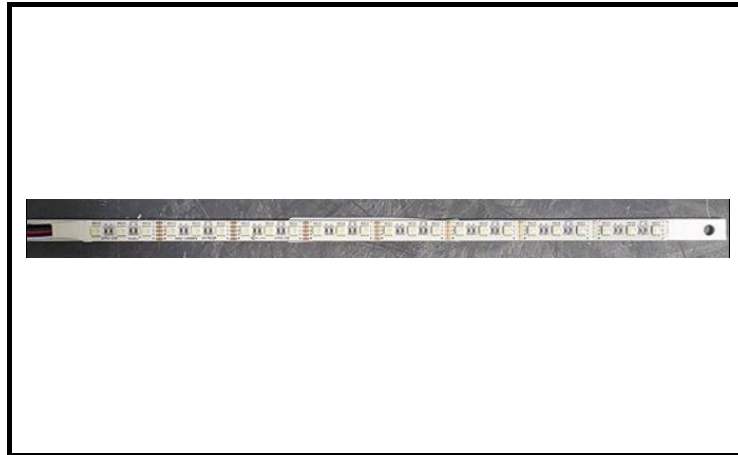
Justin Benner, Project Handler

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Luminaire Description: Formed aluminum backing plate, LED strip with no lens enclosure - 1' length (304.8mm)
Lamp: 24 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: None

Luminaire



Summary of Results

Radiant Flux:	356.8 mW
Luminous Flux:	163.1 lm
Luminaire Efficacy:	88.4 lm/W
Chromaticity (x):	0.1417
Chromaticity (y):	0.7269
Chromaticity (u):	0.0496
Chromaticity (v):	0.3813
Duv:	0.1647

Test Conditions

Test Temperature:	25.0 °C
Voltage:	12.00 VDC
Current:	0.1538 A
Power:	1.844 W

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



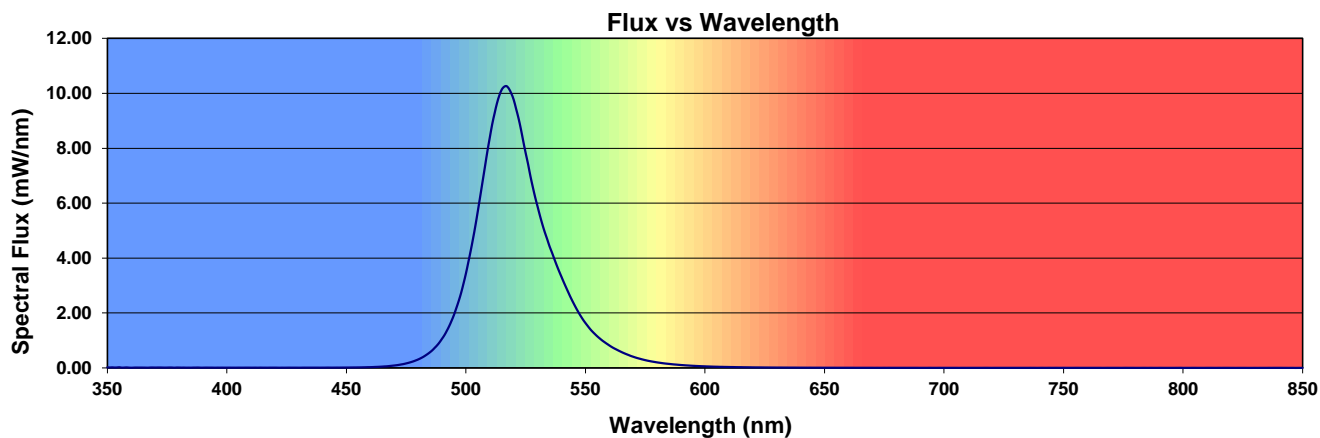
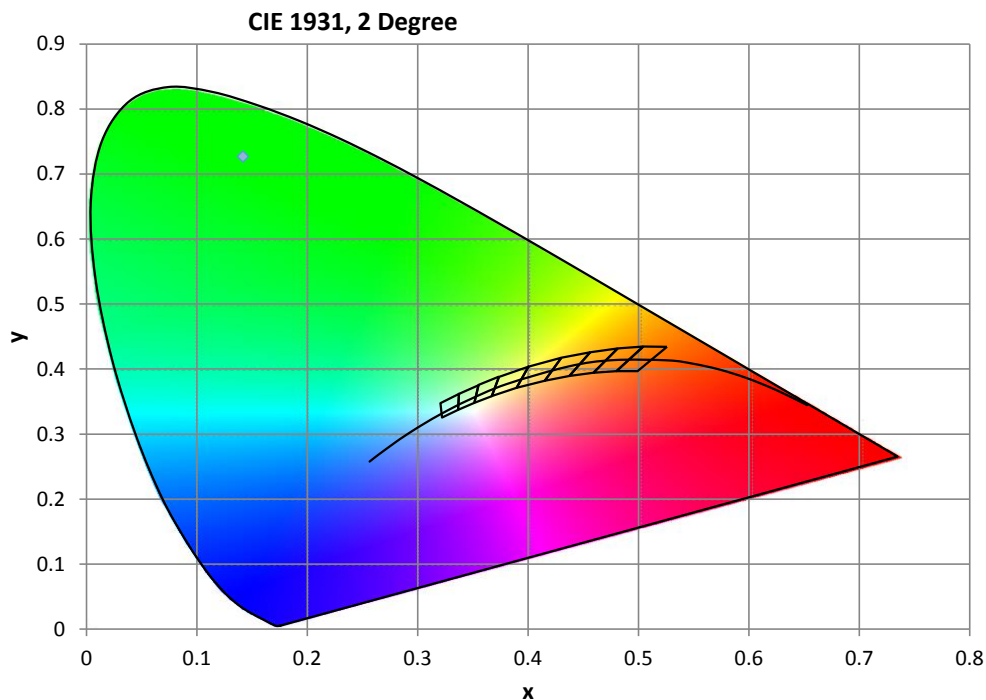
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	12.00 VDC	0.1538 A	1.844 W	N/A	N/A	N/A

Summary of Results

Total Output:	163 Lumens	Chromaticity (x):	0.1417
Efficacy:	88.4 lm/w	Chromaticity (y):	0.7269
Peak Wavelength:	516.6 nm	Chromaticity (u'):	0.0496
Dominant Wavelength:	522 nm	Chromaticity (v'):	0.5719
S/P Ratio:	3.15	Duv:	0.1647





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



Integrating Sphere Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-2002, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2015, IES TM-30-2015

Prepared For

SIRS Electronics Inc

4705 Hwy 36 S
STE 5
Rosenberg, TX 77471
United States

Catalog Number

ACUHUE-12CV55-4016 - BLUE

Order Number

11714176

Test Number

11714176.12

Test Date

2017-04-14

Prepared By

Kevin Rodriguez, Technician

Approved By

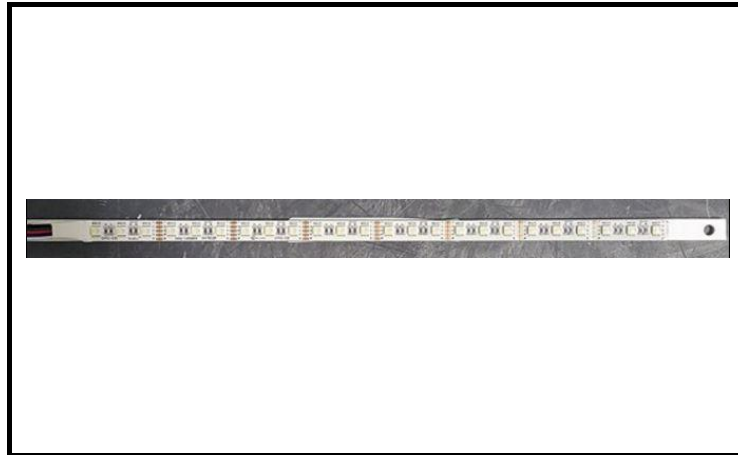
Justin Benner, Project Handler

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Luminaire Description: Formed aluminum backing plate, LED strip with no lens enclosure - 1' length (304.8mm)
Lamp: 24 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: None

Luminaire



Summary of Results

Radiant Flux:	587.4 mW
Luminous Flux:	35.36 lm
Luminaire Efficacy:	17.4 lm/W
Chromaticity (x):	0.1370
Chromaticity (y):	0.0511
Chromaticity (u):	0.1641
Chromaticity (v):	0.0918
Duv:	0.0334

Test Conditions

Test Temperature:	24.9 °C
Voltage:	12.00 VDC
Current:	0.1691 A
Power:	2.028 W

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



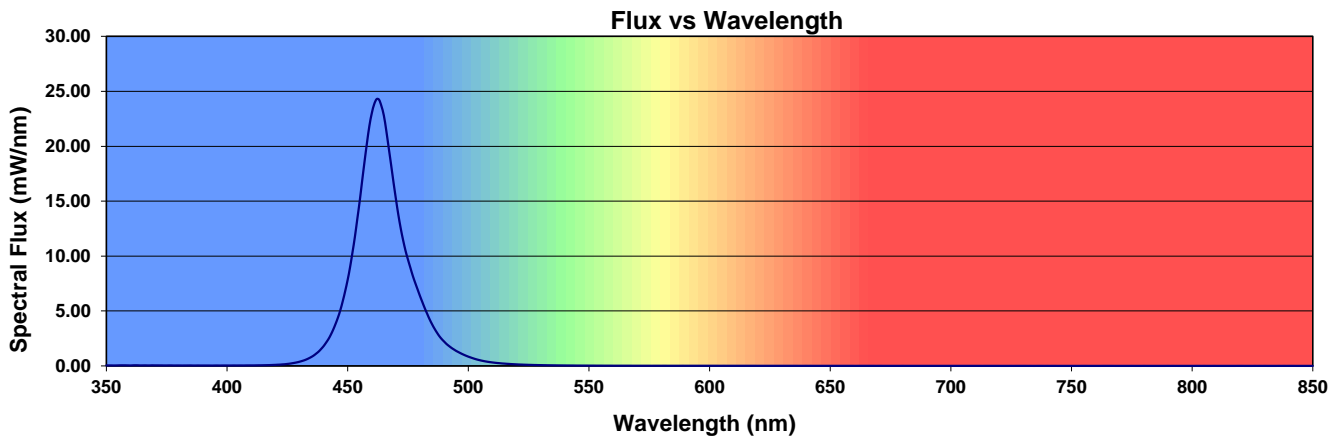
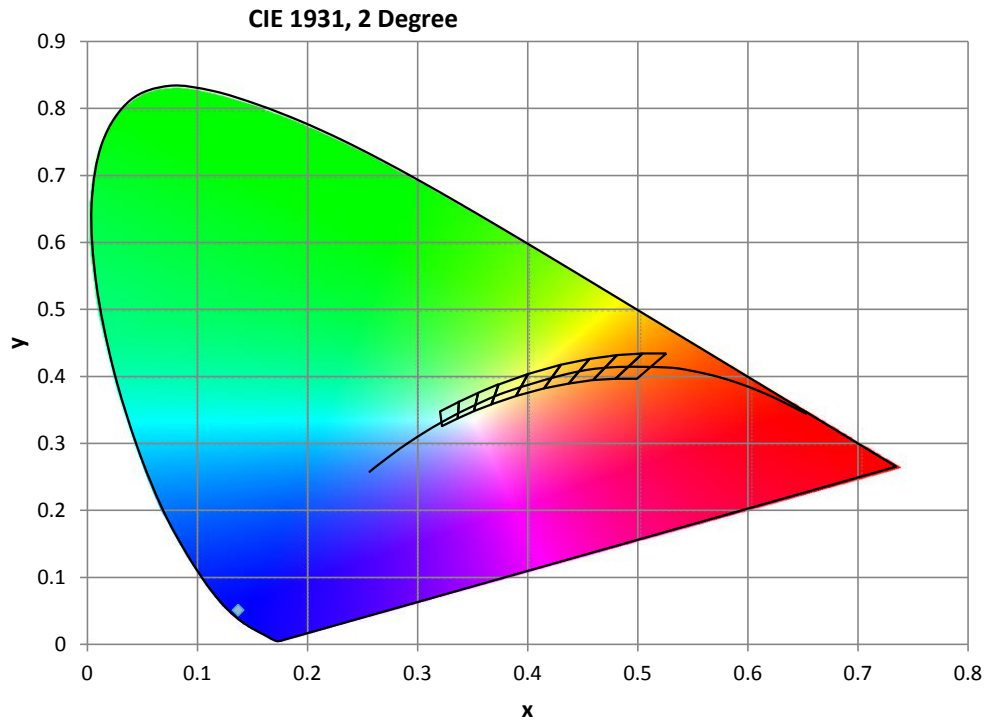
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	12.00 VDC	0.1691 A	2.028 W	N/A	N/A	N/A

Summary of Results

Total Output:	35 Lumens	Chromaticity (x):	0.1370
Efficacy:	17.4 lm/w	Chromaticity (y):	0.0511
Peak Wavelength:	462.4 nm	Chromaticity (u'):	0.1641
Dominant Wavelength:	466.5 nm	Chromaticity (v'):	0.1378
S/P Ratio:	17.31	Duv:	0.0334





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



Integrating Sphere Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2015, IES TM-30-2015

Prepared For
SIRS Electronics Inc

4705 Hwy 36 S
STE 5
Rosenberg, TX 77471
United States

Catalog Number
ACUHUE-12CV55-4016 - WHITE

Order Number
11714176
Test Number
11714176.13

Test Date

2017-04-14

Prepared By

Kevin Rodriguez, Technician

Approved By

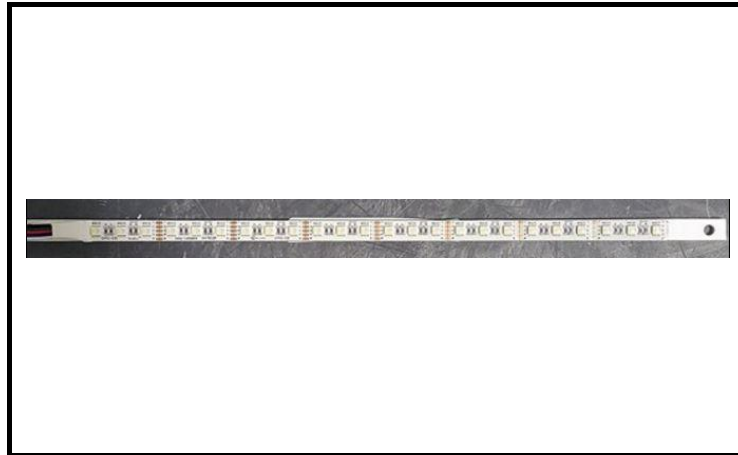
Justin Benner, Project Handler

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Luminaire Description: Formed aluminum backing plate, LED strip with no lens enclosure - 1' length (304.8mm)
Lamp: 24 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: None

Luminaire



Summary of Results

Radiant Flux:	623.5 mW
Luminous Flux:	198.5 lm
Luminaire Efficacy:	105.0 lm/W
CCT:	5523 K
CRI (Ra):	82.5
Chromaticity (x):	0.3318
Chromaticity (y):	0.3460
Chromaticity (u):	0.2046
Chromaticity (v):	0.3200
Duv:	0.0027

Test Conditions

Test Temperature:	24.3 °C
Voltage:	12.01 VDC
Current:	0.1574 A
Power:	1.890 W

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



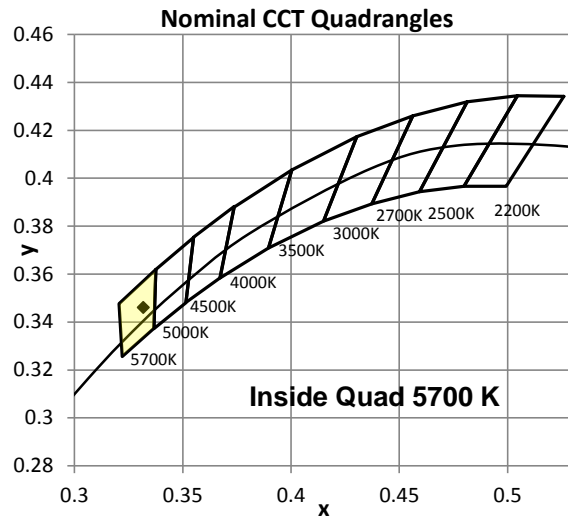
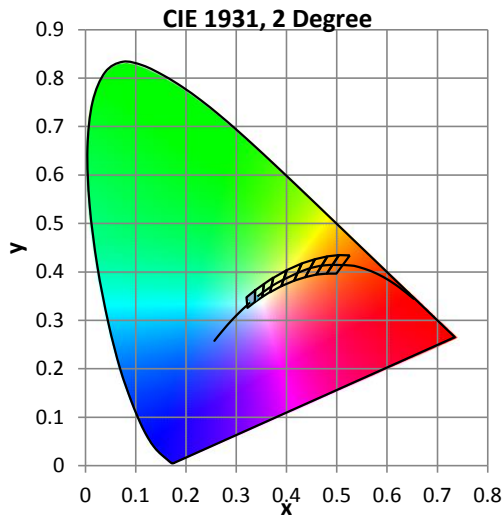
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.3 °C	12.01 VDC	0.1574 A	1.890 W	N/A	N/A	N/A

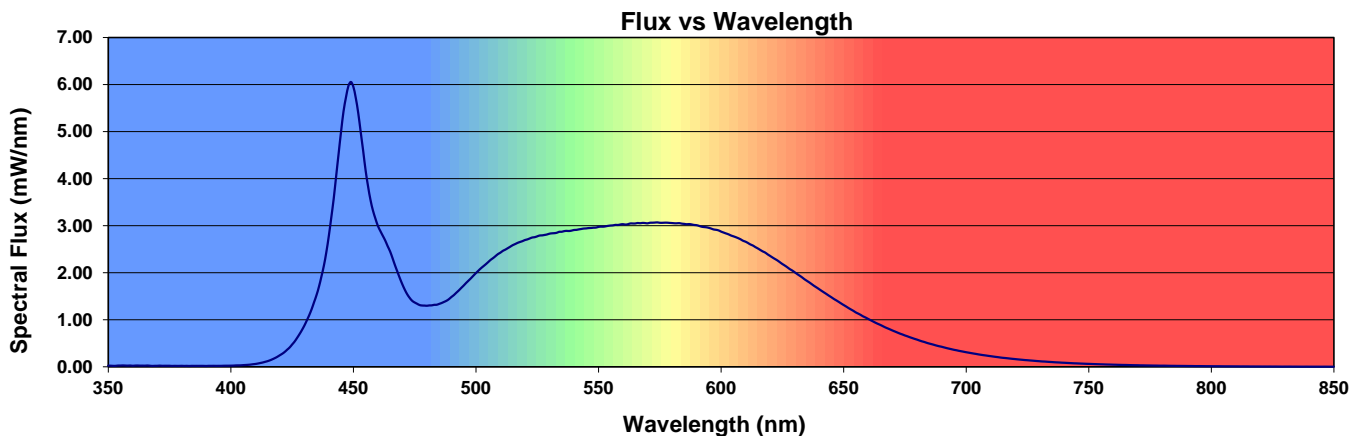
Summary of Results

Total Output:	199 Lumens	Chromaticity (x):	0.3318
Efficacy:	105.0 lm/w	Chromaticity (y):	0.3460
CCT:	5523 K	Chromaticity (u'):	0.2046
CRI (Ra):	82.5	Chromaticity (v'):	0.4799
CRI (R9):	5.7	TM-30 R_f:	81.1
Peak Wavelength:	449 nm	TM-30 R_g:	96.2
Dominant Wavelength:	548.4 nm	Duv:	0.0027
S/P Ratio:	2.048		



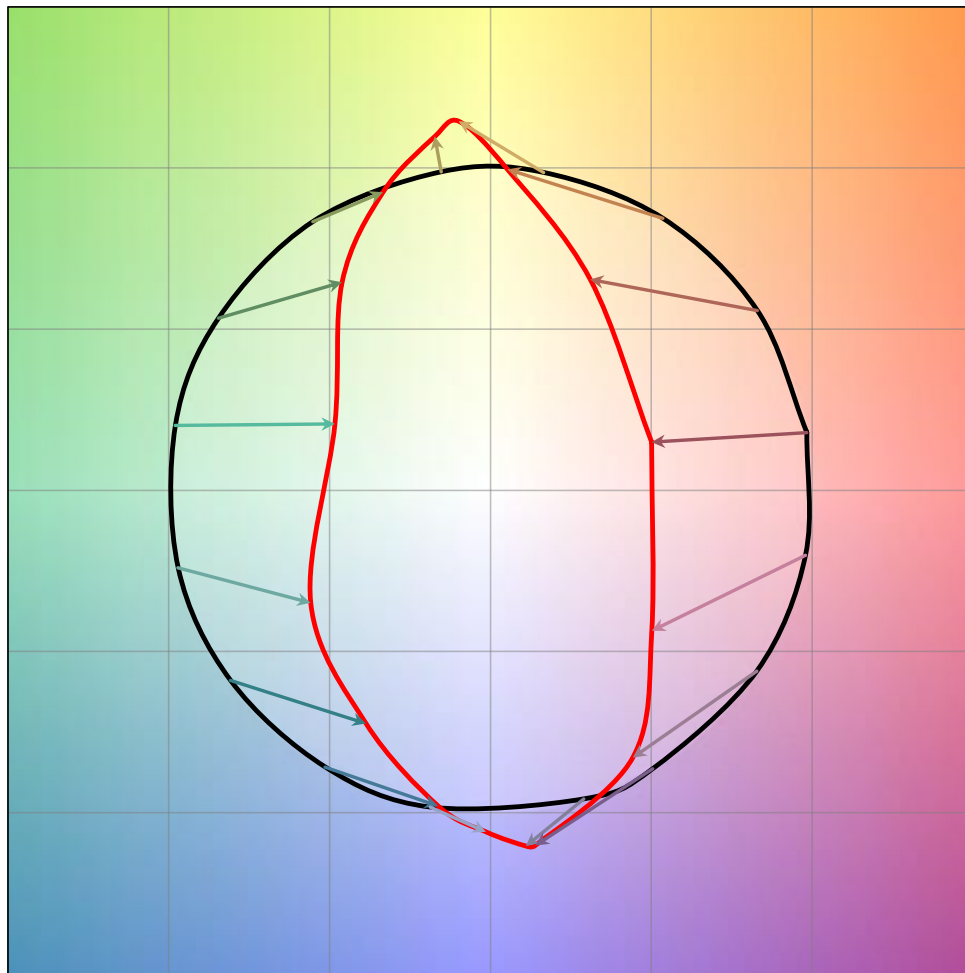
Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
82.5	80.9	86.7	90.6	83.2	81.8	81.5	87.1	68.3	5.7	68.3	82.6	60.4	82.3	95.0





COLOR VECTOR GRAPHIC



— Reference Source — Test Source

HUE ANGLE ANALYSIS															
Hue Bin (<i>j</i>)	Count (<i>m</i>)	Average of Test SPD		Average of Ref SPD		Average ΔE	Average θ	Color Distortion Icon Parameters						R_{thj}	Change of Chroma
		<i>a'</i>	<i>b'</i>	<i>a'</i>	<i>b'</i>			<i>da</i> _relative	<i>db</i> _relative	<i>path_x</i> ref	<i>path_y</i> ref	<i>path_x</i> test	<i>path_y</i> test		
1	7	21.19	4.31	24.20	5.32	3.530	0.21	-0.12	-0.04	0.98	0.21	0.86	0.17	73	-13%
2	6	16.57	12.27	18.84	12.12	2.409	0.60	-0.10	0.01	0.82	0.57	0.72	0.57	82	-8%
3	8	10.67	21.42	13.80	20.66	3.360	0.95	-0.13	0.03	0.58	0.82	0.45	0.85	75	-4%
4	8	2.00	22.76	4.00	22.14	2.225	1.40	-0.09	0.03	0.17	0.99	0.08	1.01	83	1%
5	9	-2.93	20.35	-1.75	19.98	1.851	1.69	-0.06	0.02	-0.12	0.99	-0.18	1.01	86	3%
6	8	-10.51	18.10	-10.19	17.37	1.050	2.10	-0.02	0.04	-0.51	0.86	-0.52	0.90	92	4%
7	5	-16.95	12.69	-17.80	12.24	1.108	2.55	0.04	0.02	-0.83	0.56	-0.79	0.58	92	-2%
8	5	-22.47	2.33	-24.22	2.20	1.852	3.06	0.07	0.01	-1.00	0.09	-0.92	0.09	86	-7%
9	7	-13.89	-3.91	-15.60	-3.17	2.026	-2.94	0.11	-0.05	-0.98	-0.20	-0.87	-0.25	85	-10%
10	5	-17.07	-13.30	-19.95	-11.55	3.559	-2.60	0.12	-0.08	-0.86	-0.52	-0.73	-0.59	73	-6%
11	9	-10.04	-21.39	-13.10	-19.10	3.954	-2.20	0.13	-0.10	-0.58	-0.81	-0.45	-0.91	70	1%
12	2	-2.26	-22.04	-3.40	-20.76	1.883	-1.74	0.05	-0.06	-0.17	-0.99	-0.11	-1.05	86	5%
13	6	2.17	-17.21	2.36	-15.70	1.901	-1.42	-0.01	-0.10	0.15	-0.99	0.14	-1.08	86	9%
14	3	12.39	-20.28	13.17	-18.31	2.393	-0.94	-0.03	-0.09	0.59	-0.81	0.55	-0.90	82	5%
15	6	11.45	-11.36	12.78	-8.09	3.866	-0.57	-0.09	-0.22	0.84	-0.54	0.75	-0.76	71	5%
16	5	21.30	-4.70	22.84	-3.33	2.213	-0.15	-0.07	-0.06	0.99	-0.15	0.92	-0.21	83	-5%



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



Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2015, IES TM-30-2015

Prepared For
SIRS Electronics Inc

6101 N 23rd St
STE K
McAllen, TX 78504
United States

Catalog Number
ACUHUE-12CV55-4016 - ALL COLORS

Order Number
11714176
Test Number
11714176.14

Test Date

2017-04-12 - 2017-04-19

Prepared By

Kevin Rodriguez, Technician

Approved By

Justin Benner, Project Handler

The results contained in this report pertain only to the tested sample.
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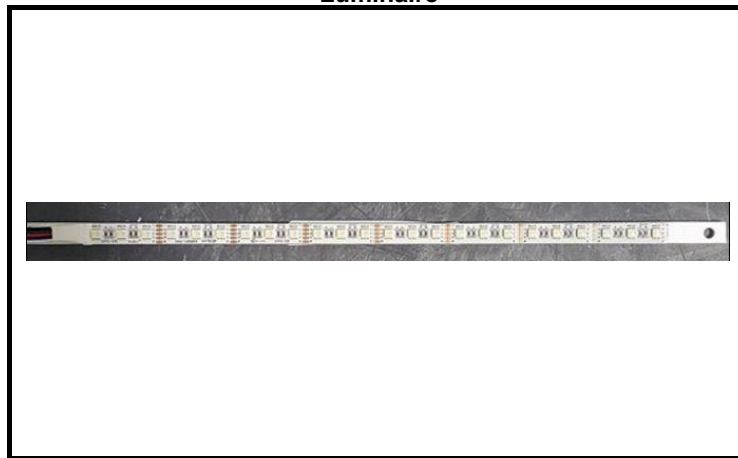
Laboratory results may not be representative of field performance
Ballast factors have not been applied

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



Luminaire Description: Formed aluminum backing plate, LED strip with no lens enclosure - 1' length (304.8mm)
Lamp: 24 RGB LEDs
Mounting: Surface – Ceiling
Ballast/Driver: None

Luminaire



Luminaire Characteristics

Luminous Length: 13.00 in.
Luminous Width: 0.5000 in.

Summary of Results

Integrating Sphere

Luminous Flux: 428 Lumens
Efficacy: 54.6 lm/w
CCT: 14357 K
CRI (Ra): 73.0

Distribution

Total Luminaire Output: 422.6 Lumens
Luminaire Efficacy: 52.1 lm/w
Maximum Candela: 137 Candela

Electrical Data at 12 VDC

Test Temperature: 25.0 °C
Voltage: 12.02 VDC
Current: 0.6518 A
Power: 7.830 W



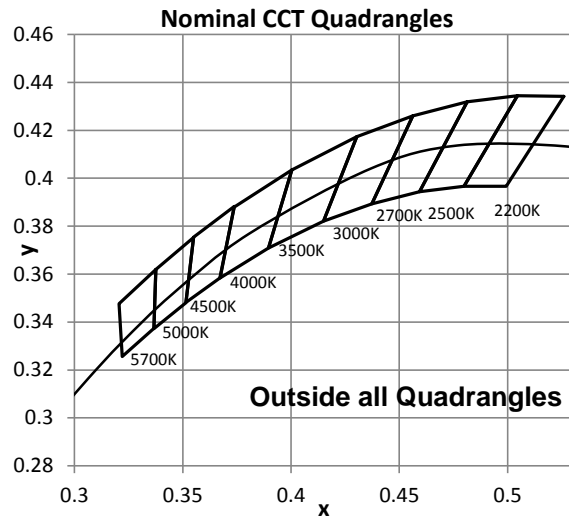
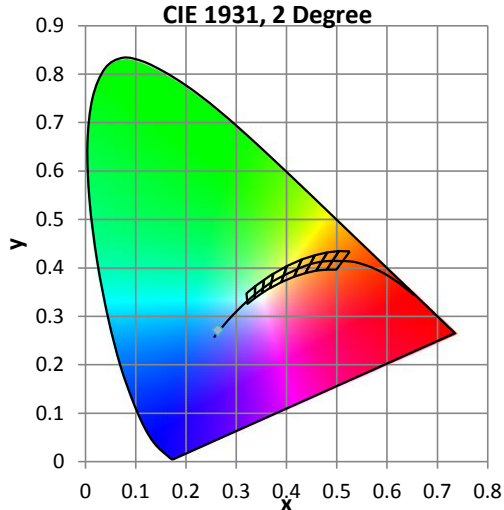
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	12.02 VDC	0.6518 A	7.830 W	N/A	N/A	N/A

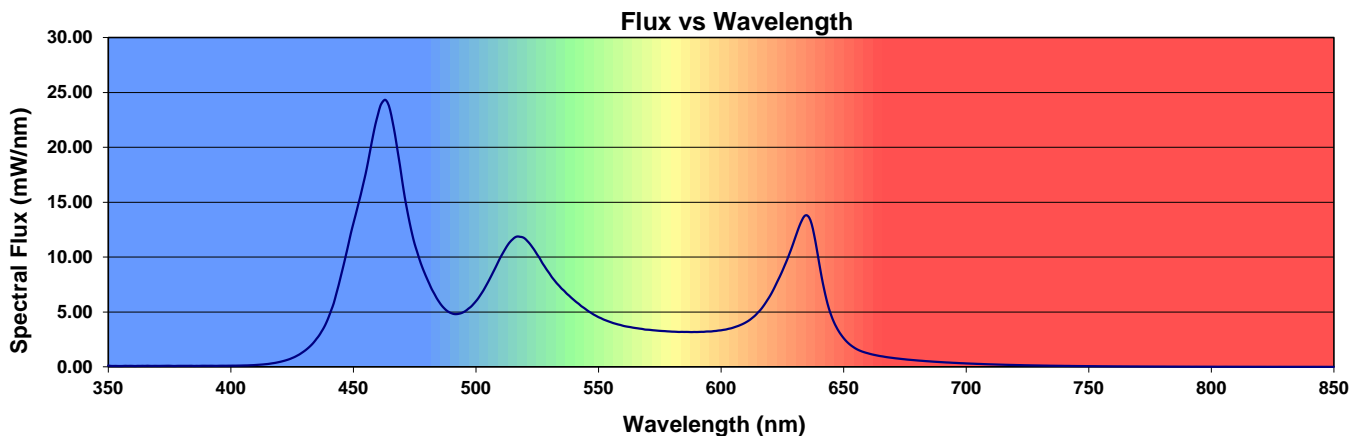
Summary of Results

Total Output:	428 Lumens	Chromaticity (x):	0.2630
Efficacy:	54.6 lm/w	Chromaticity (y):	0.2717
CCT:	14357 K	Chromaticity (u'):	0.1835
CRI (Ra):	73.0	Chromaticity (v'):	0.4264
CRI (R9):	-67.3	TM-30 R_f:	
Peak Wavelength:	462.8 nm	TM-30 R_g:	
Dominant Wavelength:	479.2 nm	Duv:	0.0027
S/P Ratio:	3.406		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
73.0	64.0	78.5	88.8	73.9	74.7	78.3	77.6	48.3	-67.3	51.1	66.8	66.7	65.0	90.5





Distribution - Goniophotometer

Distribution Test Conditions

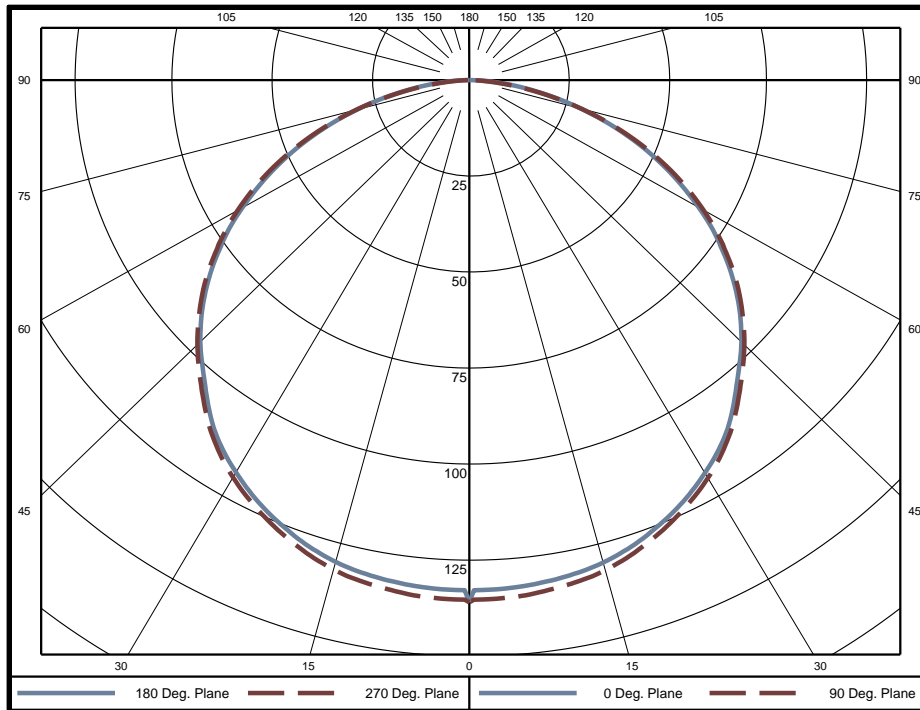
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.7 °C	12.01 VDC	0.6751 A	8.105 W	N/A	N/A	N/A

Summary of Results

Spacing Criteria
 0-180: 1.29
 90-270: 1.29

Total Lumen Output: 422.6 Lumens
Luminaire Efficacy: 52.1 lm/w
Maximum Candela: 137 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	3.25	0.8%	60-65	30.32	7.2%	120-125	0	0.0%
5-10	9.67	2.3%	65-70	25.18	6.0%	125-130	0	0.0%
10-15	15.88	3.8%	70-75	19.09	4.5%	130-135	0	0.0%
15-20	21.65	5.1%	75-80	12.57	3.0%	135-140	0	0.0%
20-25	26.79	6.3%	80-85	6.40	1.5%	140-145	0	0.0%
25-30	31.19	7.4%	85-90	1.74	0.4%	145-150	0	0.0%
30-35	34.68	8.2%	90-95	0	0.0%	150-155	0	0.0%
35-40	36.92	8.7%	95-100	0	0.0%	155-160	0	0.0%
40-45	37.99	9.0%	100-105	0	0.0%	160-165	0	0.0%
45-50	38.12	9.0%	105-110	0	0.0%	165-170	0	0.0%
50-55	36.92	8.7%	110-115	0	0.0%	170-175	0	0.0%
55-60	34.29	8.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	180	42.6%
0-60	327	77.5%
0-90	423	100.0%
90-180	0	0.0%



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	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0
	5	132.6	135.7	137.0	136.4	135.1	136.4	137.0	135.7	132.6	135.7	137.0	136.4	135.1	136.4	137.0	135.7
	10	131.6	134.7	135.9	135.3	133.9	135.3	135.9	134.7	131.6	134.7	135.9	135.3	133.9	135.3	135.9	134.7
	15	130.0	133.1	134.1	133.4	132.0	133.4	134.1	133.1	130.0	133.1	134.1	133.4	132.0	133.4	134.1	133.1
	20	127.0	130.0	130.9	130.2	128.8	130.2	130.9	130.0	127.0	130.0	130.9	130.2	128.8	130.2	130.9	130.0
	25	123.0	126.1	126.8	126.0	124.6	126.0	126.8	126.1	123.0	126.1	126.8	126.0	124.6	126.0	126.8	126.1
	30	118.1	121.3	121.9	120.9	119.5	120.9	121.9	121.3	118.1	121.3	121.9	120.9	119.5	120.9	121.9	121.3
	35	112.1	115.2	115.8	114.7	113.3	114.7	115.8	115.2	112.1	115.2	115.8	114.7	113.3	114.7	115.8	115.2
	40	104.1	107.4	107.8	106.6	105.4	106.6	107.8	107.4	104.1	107.4	107.8	106.6	105.4	106.6	107.8	107.4
	45	96.4	99.5	99.8	98.6	97.4	98.6	99.8	99.5	96.4	99.5	99.8	98.6	97.4	98.6	99.8	99.5
	50	87.5	90.8	91.0	89.8	88.5	89.8	91.0	90.8	87.5	90.8	91.0	89.8	88.5	89.8	91.0	90.8
	55	77.4	80.4	80.8	79.8	78.5	79.8	80.8	80.4	77.4	80.4	80.8	79.8	78.5	79.8	80.8	80.4
	60	66.4	69.0	69.5	68.6	67.7	68.6	69.5	69.0	66.4	69.0	69.5	68.6	67.7	68.6	69.5	69.0
	65	54.4	56.5	57.0	56.3	55.7	56.3	57.0	56.5	54.4	56.5	57.0	56.3	55.7	56.3	57.0	56.5
	70	41.9	43.5	43.9	43.2	42.7	43.2	43.9	43.5	41.9	43.5	43.9	43.2	42.7	43.2	43.9	43.5
	75	29.2	30.2	30.4	29.7	29.3	29.7	30.4	30.2	29.2	30.2	30.4	29.7	29.3	29.7	30.4	30.2
80	17.2	17.6	17.8	17.0	16.5	17.0	17.8	17.6	17.2	17.6	17.8	17.0	16.5	17.0	17.8	17.6	
85	7.2	7.3	7.0	6.4	5.9	6.4	7.0	7.3	7.2	7.3	7.0	6.4	5.9	6.4	7.0	7.3	
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

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

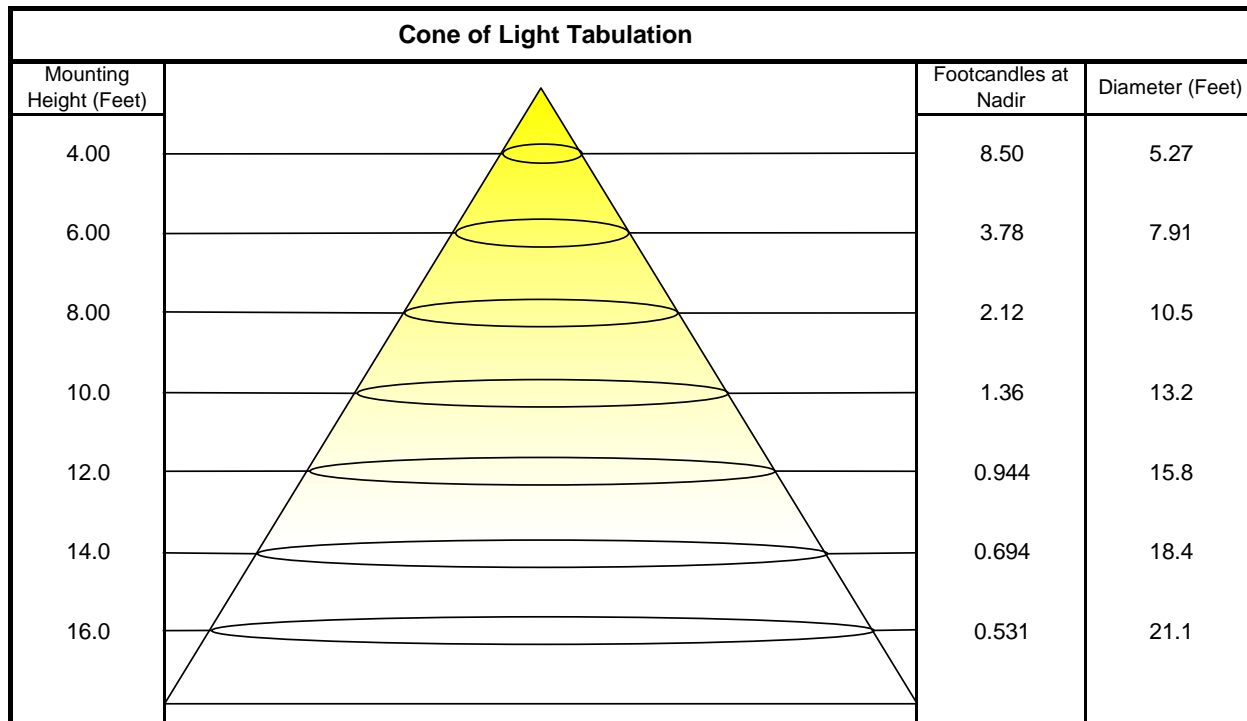
Vertical Angle (Degrees)	0	45	90	
	0	32430	32430	32430
	45	32500	33650	32830
	55	32190	33570	32650
	65	30680	32160	31400
	75	26930	28020	27010
	85	19810	19050	16120



Utilization of Lumens - 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 Lumens delivered to the task surface **																	
0	503	503	503	503	491	491	491	491	470	470	470	450	450	450	431	431	431	423
1	458	438	419	402	447	428	411	396	410	396	383	393	382	371	378	369	360	351
2	416	380	350	325	404	372	344	321	356	333	314	343	323	306	330	314	299	290
3	378	332	297	268	367	325	292	266	312	284	261	301	277	256	290	269	252	242
4	345	293	255	226	335	287	252	224	277	246	221	267	240	218	257	234	215	206
5	317	261	222	193	308	256	220	192	247	215	190	239	210	188	231	206	186	177
6	292	234	196	168	284	230	194	167	223	190	166	215	186	164	209	183	163	154
7	270	212	174	148	263	209	173	147	202	170	146	196	167	145	190	164	144	135
8	251	193	156	131	245	190	155	131	184	153	130	179	150	129	174	148	128	120
9	235	177	142	118	229	174	141	117	169	139	117	165	136	116	161	135	115	108
10	220	163	129	106	214	161	128	106	157	126	106	153	125	105	149	123	105	97

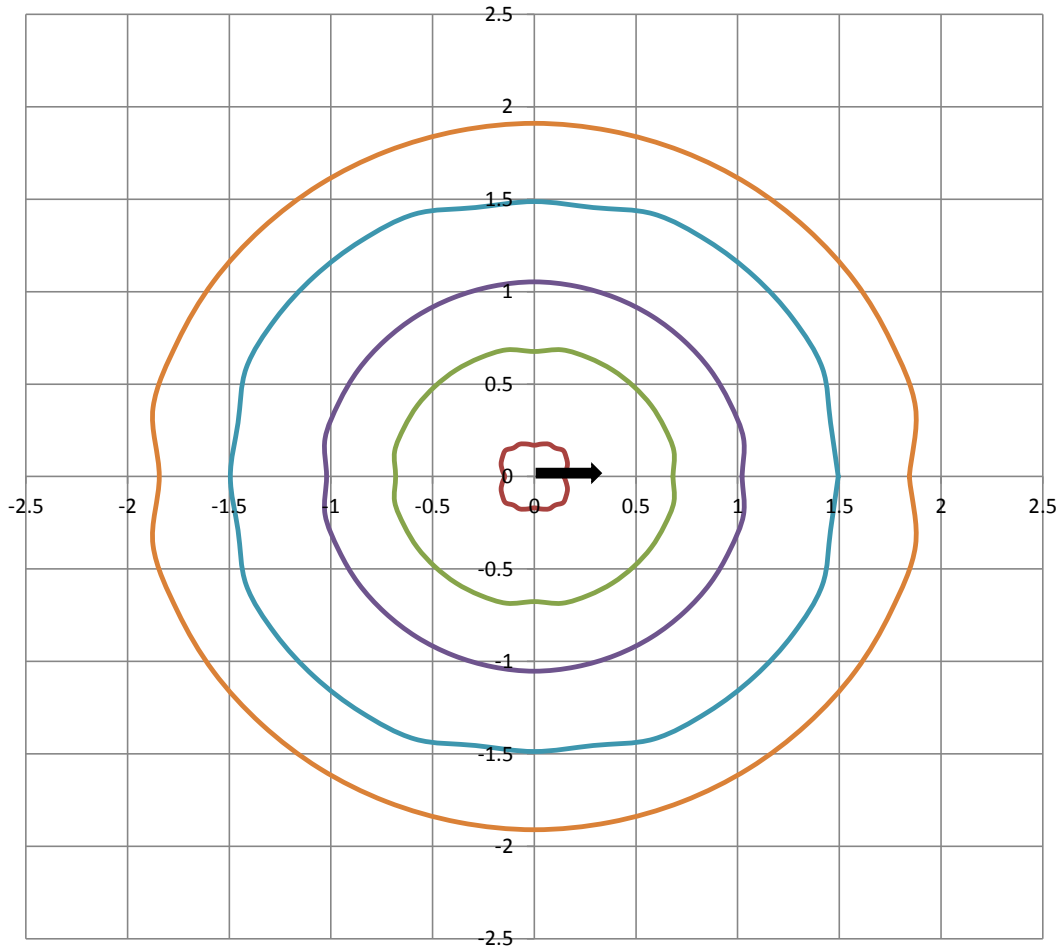
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	136.0 Candela
Central Cone Intensity:	136 Candela
Beam Flux:	328.9 Lumens
Beam Angle (0-180):	118.6 Degrees
Beam Angle (90-270):	119.7 Degrees
Field Angle (0-180):	163.4 Degrees
Field Angle (90-270):	162.5 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height



CERTIFICATE OF COMPLIANCE

Certificate Number 20170427-E479339
Report Reference E479339-20151029
Issue Date 2017-APRIL-27

Issued to: SIRS ELECTRONICS INC
4705 HWY 36 S, SUITE 5
ROSENBERG TX 77471

**This is to certify that
representative samples of**

LOW-VOLTAGE LIGHTING SYSTEMS, POWER UNITS,
LUMINAIRES AND FITTINGS

See addendum for models.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 2108, Low Voltage Lighting Systems
CSA C22.2 NO. 9.0, Luminaires

Additional Information: See the UL Online Certifications Directory at
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Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

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Bruce Mahrenholz, Director North American Certification Program

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CERTIFICATE OF COMPLIANCE

Certificate Number 20170427-E479339
Report Reference E479339-20151029
Issue Date 2017-APRIL-27

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Low voltage luminaires, LED strip lights, models 5050-LED-RGB, 5050-LED-4RGBXX-72 where XX is A, WH or WW, 5050-LED-WH, -WW, -CW; may be followed additional alphanumeric characters.

Low voltage luminaires, LED strip lights, models 5050-12RGB, 5050-12RGBXX where XX is A, WN or WW, 5050-12WX where X is N, W, or C; may be followed by additional alphanumeric characters.

Low voltage luminaires, LED strip lights, 5050-24V-RGB, 5050-24V-4RGBXX where XX is A, WH or WW, 5050-24V- WH, -WW, -CW; may be followed additional alphanumeric characters.

Low voltage luminaires, LED strip lights, models 5050-24RGB, 5050-24RGBXX where XX is A, WN or WW, 5050-24WX where X is N, W or C; may be followed by additional alphanumeric characters.

Low voltage luminaires, LED strip lights, model series ACUVIBRANT, ACUHUE, ACUVIVID; may be followed by additional alphanumeric characters.



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