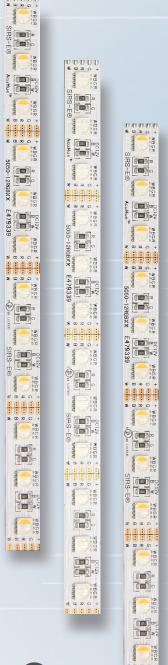




Flexible RGBW LED Strips

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.



AcuHue[™] CV Series AcuHue-XXCV40-XX16 Datasheet

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 Mai	ntenance 75,000 hrs
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-Porc	ous: 3M VHB Adhesive Mounting Tape	Certifications	CUL 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 (Im/W)
Red	632.0	621.5	(0.6936, 0.3054)	59	29.3
Green	516.6	521.9	(0.1429, 0.7237)	160	86.2
Blue	462.2	466.4	(0.1379, 0.0515)	34	17.0

Product Photometrics - White Diode Only

N	Nominal CCT	Luminous Flux	Luminous	CIE	Duv ₁	CRI	TM-3	80-15
	(K)	(lm/ft)	Efficacy (lm/W)	(x,y)	·		Fidelity (Rf)	Gamut (Rg)
	4000 K	172	89.1	(0.4637, 0.4159)	+0.0012	82.3	84.3	93.7

Product Photometrics - All Four Colors at Full Intensity

Nominal CCT (K)	Luminous Flux (lm/ft)	Luminous Efficacy (Im/W)	CIE (x,y)	Duv ₁	CRI	TM-3 Fidelity (Rf)	60-15 Gamut (Rg)
11075 K	414	53.9	(0.2874, 0.2807)	-0.0094	65.6	NA	NA

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

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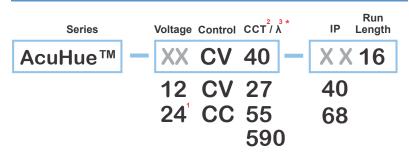
^{2 -} AcuHue™ 24V RGBW LED Strips are Special Order only.

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





Ordering Guide



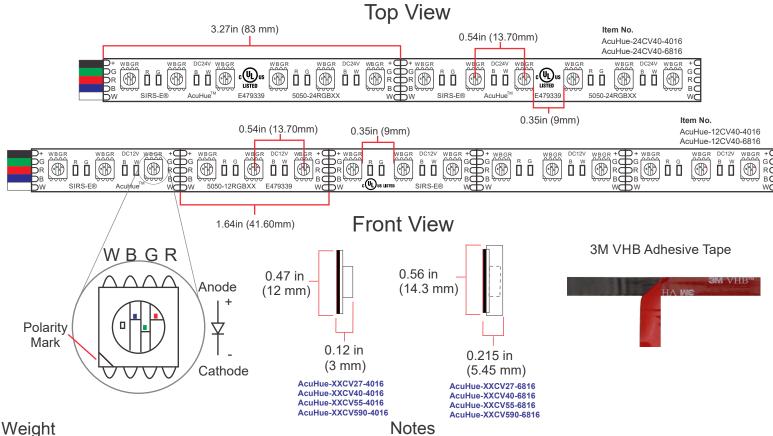
¹Voltage - AcuHue™ 24V RGBW LED Strips are Special Order only.

Product Country of Origin

Product Engi	USA
Assembled	Final Assembly
QC Quality Co	USA
Product Custo	USA
Technical Sup	USA

²27 - RGBW 2700 K

Mechanical Dimensions



Product Weight: 5.3 oz,16.4 ft Reel

IP40, Without Packaging.

18.4 oz,16.4 ft Reel

IP68, Without Packaging.

- 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.

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

 $^{^{\}rm 3}\,\text{\uplambda}$ - Peak Wavelength, represented by the 3 digits of the color wavelength.

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

²40 - RGBW 4000 K

²55 - RGBW 5500 K

³590 - RGBA Amber 590 nm



Accessories Compatible

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





SIRS-E DMC 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.

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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

www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.





UL LLC





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.



Bruce Mahrenholz, Director North American Certification Program

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