

Customer Name

Project Name

Part Number


### Flexible RGBW LED Strip



### Description

AcuHue™ RGBW LED strip lights allow you to create billions of colors by mixing red, green, blue and a 4th color variant LED diode. Utilizing IC regulators embedded directly on to the high quality flexible LED strip, this new line is able to provide ideal color consistency with no luminous flux loss throughout its run. AcuHue™ consists of 14mm wide, 4 oz density copper PCB, fitted with 3M VHB adhesive tape for secure installation. Voltage dimmable and compatible with SIRS-E®'s line of constant voltage DMX-CON decoders and drivers.

### Product Specifications

Input Voltage	24 V DC	Cuttable Segments	3.3 in (83 mm) for 24V
Limiting Control Method	CC - Current Control	Reel Length	16.4 ft / 5 m
Power Consumption	6.9 W/ft	Max Run Length	32 ft / 10m, no luminous flux loss <sup>3</sup>
LED Chip Type	High Quality SMD 5050 4-Diode	Segment Width	0.56 in (14 mm) for IP40 / 0.68 in (17.33 mm) for IP68
LED Density	22 LEDs/ft / 72 LEDs/m	Luminous Flux Maintenance	75,000 hrs <sup>2</sup>
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, 0.3053)	64.5	30.0
Green	516.2	521.5	(0.1402, 0.7244)	166.5	85.6
Blue	462.5	466.7	(0.1369, 0.0520)	33.6	17.3

### Product Photometrics - White Diode Only

Nominal CCT (K)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)	CIE (x,y)	Duv <sub>1</sub>	CRI	TM-30-15 Fidelity (Rf)	TM-30-15 Gamut (Rg)
5500 K	199	102.4	(0.3318, 0.3440)	+0.0017	82.8	81.0	96.5

### Product Photometrics - All Four Colors at Full Intensity

Nominal CCT (K)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)	CIE (x,y)	Duv <sub>1</sub>	CRI	TM-30-15 Fidelity (Rf)	TM-30-15 Gamut (Rg)
13197 K	443	56.4	(0.2639, 0.2784)	+0.0056	74.3	NA	NA

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

2 - After 75,000 hrs: 30% Luminous Flux loss, 10% Chromaticity change, as per LM-80-2015

3 - Powered only from one end.

### Ordering Guide

Series	Voltage	Control	CCT / $\lambda$ <sup>1 2 *</sup>	IP	Run Length
AcuHue™	24	CC	55	XX	16
			27	40	
			55	68	
			590		

<sup>1</sup> CCT - Correlated Color Temperature, represented by the first 2 digits of the nominal CCT.

<sup>2</sup>  $\lambda$  - Peak Wavelength, represented by the 3 digits of the color wavelength.

\* CCT /  $\lambda$  - applicable on AcuVivid and AcuHue series only.

### Product Country of Origin

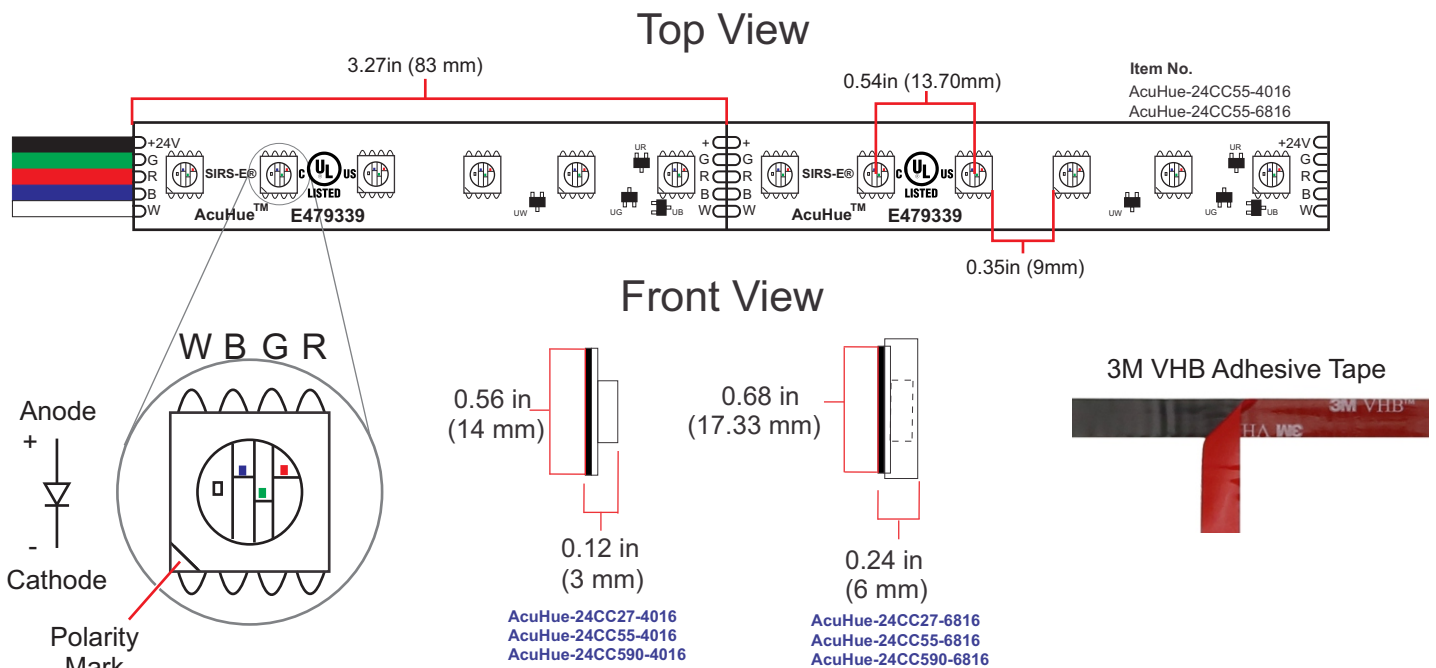
Product Engineering & Design	USA
Assembled	China Preassembled / USA Final Assembly
QC Quality Control	USA
Product Customization	USA
Technical Support	USA

<sup>1</sup> 27 - RGBW 2700 K

<sup>1</sup> 55 - RGBW 5500 K

<sup>2</sup> 590 - RGBA Amber 590 nm

### Mechanical Dimensions



### Weight

Product Weight:	6.2 oz, 16.4 ft Reel IP40, Without Packaging.
	19.3 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

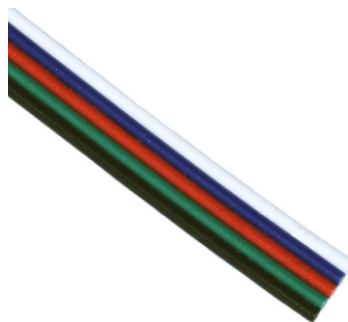
This list shows some of our most sellable accessories compatible for this product. For a complete list, please visit our website.



SIRS-E RF Controllers  
RF-MZR-RGBW



SIRS-E Waterproof  
Accessories



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.