

COMPANY PROFILE

Shenzhen RisingSun Photoelectric Holdings Limited founded in 2012, is a high-tech enterprise specializing in the production of high-quality LED linear light source and lighting series, focusing on the R&D, production and sales of LED Flexible Strips and related products.

RisingSun has been approved by ISO9001 international quality management system, UL certification (North America) and TUV issued CE,RoHs certification (Europe).

Over the years, we have maintained stable cooperative relations with more than 20 countries and regions in the world.

Rising Sun has advanced professional LED lighting production equipment and all kinds of electrical testing equipment. In addition, there is a laboratory with multiple different types of test equipment. "Quality first" is the lifeline of the company and an important part of our corporate culture.



Persist in "innovation" and enhance "customer experience" is our constant pursuit!

LABORATORY FUNCTIONS & STANDARDS

Material Testing:

- 1. Strain Relief Test, To test the PCB max. tensile force.
- 2. Twisting Test, To test the strip anti-twist ability, the strength of the LED bracket, fold resistance and solder stability test of PCB.
- 3. Salt Spray Test, To test the product for corrosion resistance. Based on IEC 68-2-11.
- 4. UV Accelerated Weathering Test. Simulated solar radiation. To test the material whether anti-UV. Test Standard: ASTM-G154

Life Testing:

- 1. Working Temperature Test, Dot temperature control, to check the heat dissipation performance.
- 2.Lumen Flux Maintenance Test, Long time lighting and aging to record the test data for lumen depreciation test.
- 3.Switching Test. Automatic uninterrupted switching (on/off), to test the ability to withstand the impact of transient currents. Guarantee the lifetime of products, which based on CIE:127/GB-T24824.

Reliability Testing:

- 1.Thermal Shock Test, alternating heating and cooling. Instantaneously change -40°C—150°C. Get the test result which have chemical change or physical injury caused by expansion and contraction with heat in a short time. Based on IEC60068-2-14. 2.Power Temperature Cycle Test, -40°C—65°C, Continuous simulation of environment operation, by control the temperature and humidity; To test the product if can be used normally in constant temperature and humidity environment. Based on IEC 60068.
- $3.3 M\, adhesive\, Tape\, Drop\, Test. To\, test\, the\, 3M\, tape\, viscosity, make sure\, the\, reliability\, of\, the\, 3M\, in\, using\, environment.$
- 4. Drop Test. Simulation of dropping. Free fall that may be encountered during handling, test the ability to resist accidental impact. 5. Vibration Test. Simulating the damage caused by bumps in the car transportation, used to identify the ability of a product to withstand environmental vibrations. So improve the material and packaging quality. Test Standard: ISTA-1A

Waterproof Testina:

Measure IP level, Different waterproof grade to 4,5 and 6. Based on IEC60598.

SOL Testing:

Dissolve the fluorescent glue, check the inside LED problem by microscope.

Optical Testing:

- 1. Integrating Sphere Test, Parameters such as Lumen, power and color temperature, CRI(Ra) etc.
- 2. IES / Goniophotometer Test, To get the IES data (Such as lumen, illumination, luminous efficiency, distribution curve flux, UGR index, etc.), meets the requirement CIE and IESNA standards.



Quality Control ////



IQC

- ©Conduct incoming materials quality control with reliable equipment
- OConduct reliable tests
- ©Prepare IQC Reports

IPOC

- ©Conduct first product inspections in different stage of production
- OInspect the process of production
- ©Conduct aging tests
- ©Ensure the consistency and accuracy of products
- © Discover, record and report quality exception





OQC

- © Conduct the finished product quality inspections according to inspection standards and procedures
- ©Provide quality problem analysis and dispose of defective products
- © Test the final products and check the instruments and equipment

QE

- Overify and confirm the whole process of new products, new raw materials, new technologies and new modifications
- © Train the IQC,IPQC,OQC before the massive production of new products
- © Discover and improve the production technology related to the inappropriate procedures
- ©Handle the process exceptions, tracking and improving





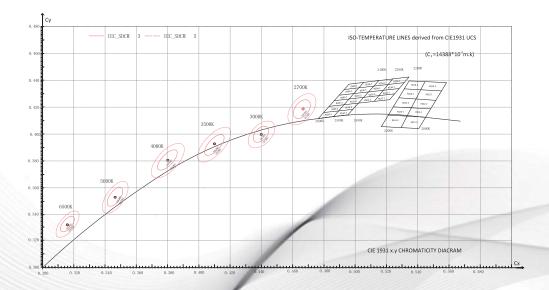
QM

- OProvide quality management
- OProvide staff training
- ©Manage the whole quality control system

CERTIFICATE & PATENT 11111



ISO-TEMPERATURE LINES





CRI

(COLOR RENDERING INDEX)







COMPACT FLUORESCENT

50 CRI

STANDARD LED

LUX HIGH CRI

90+CRI



What is CRI R9 and Why is it Important?



CRI R9 is one of the test color samples (TCS) used in the calculation of extended CRI. Many manufacturers will only report general CRI, however, which does not include the CRI R9 score.

CRI R9 is therefore oftentimes a useful supplemental score to judge a light source's color rendering ability, specifically as it concerns objects whose reflectance spectra contain red wavelengths.

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What is CRI R9?



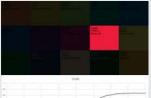
 $\ensuremath{\mathsf{R9}}$ is the score that represents how accurately a light source will reproduce strong red colors.

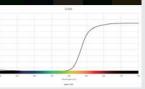
"Accurate" is defined as similarity to daylight or incandescent bulbs, depending on the color temperature.

Just like each of the CRI R value calculations, R9 is calculated by calculating the reflected color from a theoretical object with the reflectance profile defined as TCS9. The reflectance spectra is provided below:

What is notable is that the TCS9 spectrum is almost entirely composed of red light. Spectrum-wise, we see this as wavelengths longer than 600 nm.

This means that if there is not enough red light in the light source, it will make red colors appear "off" or different.





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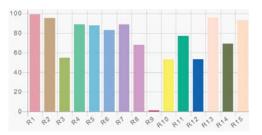
Why is CRI R9 important?



CRI R9 is a very important metric because many light sources will be lacking in red content, but this fact will be hidden due to the averaging out of CRI calculations which do not include R9.

As the chart below shows, an light source can actually perform quite well with the first 8 test color samples, scoring quite well for R1-R8. For the general CRI Ra metric, this means that an LED with poor red color rendering can still get by with an 80 CRI (Ra) rating.

A closer look at the R9 value, however, reveals that the light will perform very poorly for red colors in particular.



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What is a good CRI R9 value?

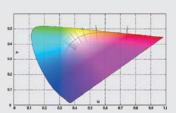


Although the maximum possible value of R9 is also 100, unlike average CRI numbers, R9 should be judged a bit differently.

Mathematically, R9 is far more difficult to achieve a high score compared to the other R values that comprise the CRI calculations, and is far more sensitive to spectral variations. Therefore, an R9 score of 50 or above would be considered "good" while an R9 score of 90 or above would be considered "excellent."

You will therefore find that most lighting products available in the market will rarely specify the R9 value, and when they do, rarely will they guarantee anything higher than 50.

This is due to the fact that CRI utilizes the CIE 1960 uv color space, which is skewed in a way that exaggerates color differences in the red region of the chromatic diagram. Since CRI is a calculation that quantifies color differences between a light source and a reference source, a larger calculated color difference will result in a larger decrease in the R score.





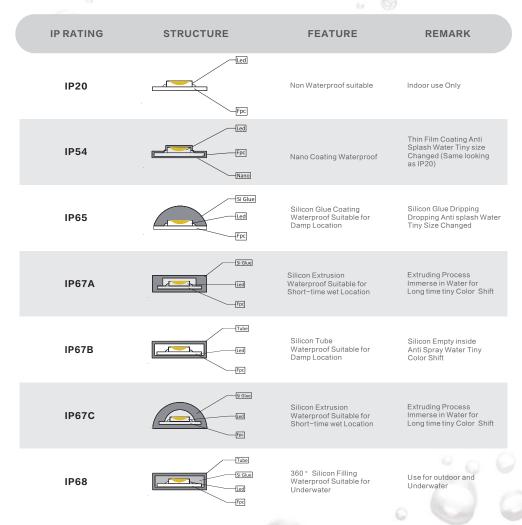
Why is red such an important color?



Red is a crucial color for many applications including photography, textiles and reproduction of human skin tones. When searching for a high color quality LED, be sure to inquire about the CRI as well as its R9 value.

(3) KELVIN COLOR TEMPERATURE **SCALE CHART** 10,000K 7000K 7,000K 6000K: Cloudy Sky 6,000K 5700K 5,000K 4800K 4000K 4,000K 3500K 3000K 3,000K 2700K 1900K: Candle 2,000K 1,000K PAGE **LIGHTING**09 LED STRIP WORLD

WATERPROOF TYPE IP20-IP68

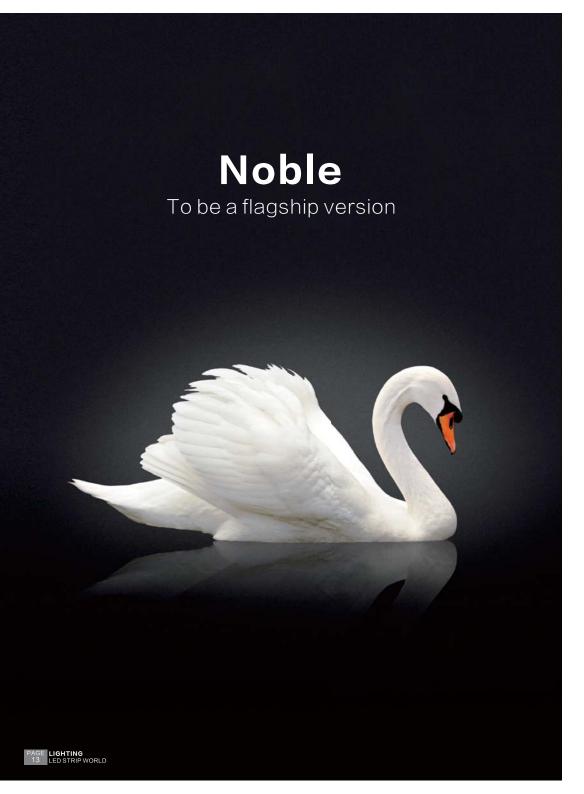


IP code: Ingress Protection Marking, IEC standard 60529

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LED FLEXIBLE STRIP

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High Efficacy Series 150 & 200LM/W

CRI Available 80/90/98











₱Product Options



















 H igh Efficacy Strip will save cost. With stable quality, operating in the low power and excellent in heat dissipation and no need installed with heat sink. Also extended lifespan.



High Efficiency 150 lm/W 2835 64 LEDs/m 4.8 W/m

CRI Available 80/90/98







Diagram



Dimensions (mm/inch)

Length/Reel	Width	Height	Min. Cutting ⅓
5000/196.85	8/0.315	1.65/0.0649	Every125 mm/4.921inch (8 LEDs)

Part Number Working Voltage Power Current LED Qty/m CRI

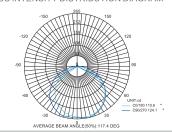
Data

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RS-HE2835-24V-64	ID-08-20	24V	4.8	0.21	64	+08
CCT(° K)	Luminou	s Efficiency	Со	lor	lume	en/m
2700K	145	lm/W	Extra	Warm	6961	m/m
3000K	145	lm/W	Warm	White	6961	m/m
4000K	149	lm/W	Neutr	al White	715	m/m
6000K	1/10	Ilm/\//	Cool	Mhite	7151	m/m

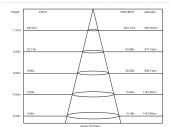


Photometeric Diagrams

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

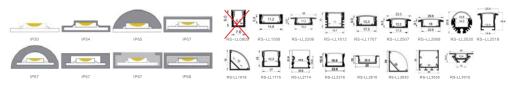


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● IP Rating

AL Profiles



Suitable Accessories Refer to Page 143

High Efficiency 150 lm/W 2835 80 LEDs/m 7.2W/m

CRI Available 80/90/98





🖺 Features

Diagram



Dimensions (mm/inch)

Length/Reel	Width	Height	Min. Cutting⅓
5000/196.85	10/0.3937	1.45/0.057	Every50 mm/1.9685inch (4 LEDs)

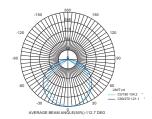
Data

Part Number	Working Voltage	Power (W/m)	Current (A/m)	LED Qty/m	CRI
RS-HE2835-12V-80D-10-20	12V	7.2	0.6	80	+08
CCT(° K) Lumi	inous Efficiency	Co	lor	lumen	/m
2700K	155 lm/W	Extra	Warm	1116 lm	n/m
3000K	155 lm/W	Warm	White	1116 lm	n/m
4000K	172.51 lm/W	Neutra	al White	1242 lm	n/m
6000K	172.51 lm/W	Cool V	Vhite	1242 lm	n/m

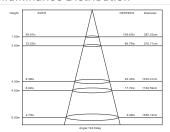


• Photometeric Diagrams

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

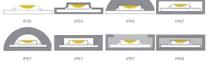


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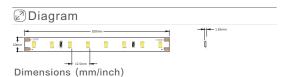
High Efficiency 150 lm/W 2835 80 LEDs/m 7.2W/m

CRI Available 80/90/98





Features



Length/Reel	Width	Height	Min. Cutting⅓
5000/196.85	10/0.3937	1.65/0.0649	Every100 mm/3.937inch (8 LEDs)

Working Voltage Power Current LED Oty/m CRI

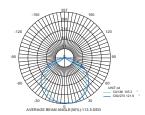
Data

1 art realines	Troining ronage	(W/m)	(A/m)	LLD Qtymi	OICI
RS-HE2835-24V-80D-	10-20 24V	7.2	0.3	80	+08
CCT(° K)	Luminous Efficiency	Col	or	lumen	/m
2700K	155 lm/W	Extra V	Varm	1116 lm	n/m
3000K	155 lm/W	Warm '	White	1116 lm	n/m
4000K	163 lm/W	Neutra	l White	1173.6	lm/m
6000K	163 lm/W	Cool W	/hite	1173.6	lm/m

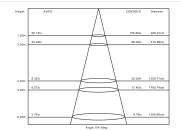


Photometeric Diagrams

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

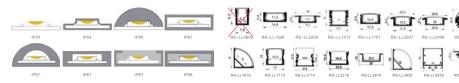


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Suitable Accessories Refer to Page 143

High Efficiency 150 lm/W 2835 120 LEDs/m 9.6W/m

CRI Available 80/90/98





Features

Diagram



Dimensions (mm/inch)

Length/Reel	Width	Height	Min. Cutting ⅓
5000/196.85	10/0.3937	1.45/0.057	Every33.33 mm/1.3122inch (4 LEDs)

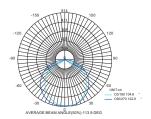
Data

Part Number	Working Voltage	(W/m)	(A/m)	LED Qty/m	CRI
RS-HE2835-12V-120D	12V	9.6	0.8	120	+08
CCT(° K)	Luminous Efficiency	Со	lor	lumen/	m
2700K	155.35 lm/W	Extra	Warm	1491.3	lm/m
3000K	155.35 lm/W	Warm	White	1491.3	lm/m
4000K	163.53 lm/W	Neutra	al White	1569.9	lm/m
6000K	163.53 lm/W	Cool V	Vhite	1569.9	lm/m

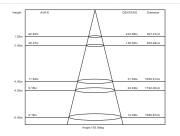


Photometeric Diagrams

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

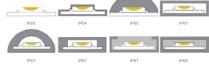


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➤ Suitable Accessories Refer to Page 143





High Efficiency 150 lm/W 2835 128 LEDs/m 9.6W/m

CRI Available 80/90





Features





Dimensions (mm/inch)

Length/Reel	Width	Height	Min. Cutting⅓
5000/196.85	10/0.3937	1.65/0.0649	Every 62.5 mm/2.46inch (8 LEDs)

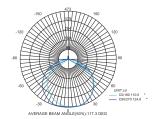
Data

Part Numbe	er wor	King voltage	(W/m)	(A/m)	LED Qty/m	CRI
RS-HE2835-24V-128	ID-10-20	24V	9.6	0.4	128	+08
CCT(° K)	Luminous	s Efficiency	Col	or	lumen	/m
2700K	155	lm/W	Extra \	Warm	1488 In	n/m
3000K	155	lm/W	Warm	White	1488 Im	n/m
4000K	162	.75 lm/W	Neutra	l White	1562.4	lm/m
6000K	162	.75lm/W	Cool W	/hite	1562.4	lm/m

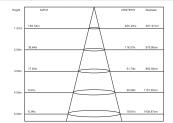


Photometeric Diagrams

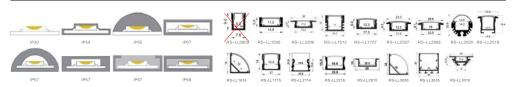
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



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AL Profiles



➤ Suitable Accessories Refer to Page 143

High Efficiency 150 lm/W 2835 160 LEDs/m 14.4W/m

CRI Available 80/90/98





Features

Diagram



Length/Reel	Width	Height	Min. Cutting ⅓
5000/196.85	10/0.3937	1.65/0.0649	Every 50 mm/1.968 inch (8 LEDs)

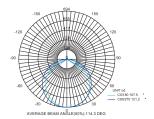
Data

Part Number	Working Voltage	(W/m)	(A/m)	LED Qty/m	CRI
RS-HE2835-24V-160D-	10-20 24V	14.4	0.56	160	+08
CCT(° K) L	uminous Efficiency	Co	lor	lumen	/m
2700K	146 lm/W	Extra	Warm	2103 lm	n/m
3000K	146 lm/W	Warm	White	2103 lm	n/m
4000K	157 lm/W	Neutra	al White	2260 lm	n/m
6000K	157 lm/W	Cool V	Vhite	2260 lm	n/m

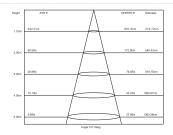


• Photometeric Diagrams

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

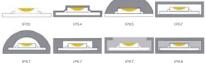


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IP Rating































High Efficiency 150 lm/W 2835 192 LEDs/m 18W/m

CRI Available 80/90





Features

- 8 LEDs in series per circuit section, available to achieve high light, efficac
- Operate longer life and better for energy saving
- Standard strip is CRI>80 and provide High CRI>90 option

Diagram



Dimensions (mm/inch)

Length/Reel	Width	Height	Min. Cutting ⅓
5000/196.85	10/0.3937	1.65/0.0649	Every 41.66 mm /1.64 inch (8 LEDs)

Power Current . __

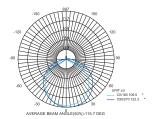
Data

Part Numbe	r Working Voltage	(W/m)	(A/m)	LED Qty/m	CRI
RS-HE2835-24V-1920	D-10-20 24V	18	0.79	192	+08
CCT(° K)	Luminous Efficiency	Col	or	lumen	m /m
2700K	143 lm/W	Extra \	Warm	2574 In	n/m
3000K	143 lm/W	Warm	White	2574 In	n/m
4000K	150 lm/W	Neutra	al White	2700 lm	n/m
6000K	150 lm/W	Cool V	/hite	2700 lm	n/m

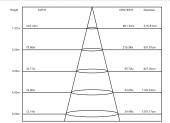


Photometeric Diagrams

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

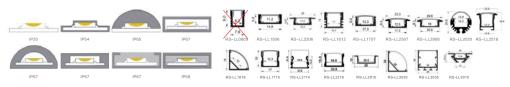


(1) Illuminance Distribution



⚠ IP Rating

AL Profiles



Suitable Accessories
Refer to Page 143

08

High Efficiency 150 lm/W 2835 240 LEDs/m 21.6W/m

CRI Available 80/90



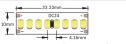
1.65mm



Features

- 8 LEDs in series per circuit section, available to achieve high light, efficacy
 output up to 150lm/W.
- · Operate longer life and better for energy saving

Diagram



Dimensions (mm/inch)

Length/Reel	Width	Height	Min. Cutting ⅓
5000/196.85	10/0.3937	1.65/0.0649	Every33.33 mm/2.46inch (8 LEDs)

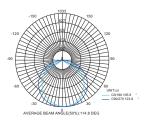
Data

Part Number	Working Voltage	Power (W/m)	Current (A/m)	LED Qty/m	CRI
RS-HE2835-24V-240D-10)-20 24V	21.6	0.9	240	+08
CCT(° K) Lu	minous Efficiency	Co	lor	lumen	/m
2700K	147.87 lm/W	Extra	Warm	3193.9	9 lm/m
3000K	147.87 lm/W	Warm	White	3193.9	9 lm/m
4000K	155.66 lm/W	Neutra	al White	3362.2	5 lm/m
6000K	155.66lm/W	Cool V	Vhite	3362.2	5 lm/m

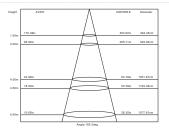


Photometeric Diagrams

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



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