

The background of the entire page is a dark, minimalist architectural scene. It features several vertical rectangular columns of varying heights and widths, creating a sense of depth and perspective. A bright, vertical light source is visible on the right side, casting a strong glow and creating a bright vertical line. The overall atmosphere is modern and sophisticated.

enta
architectural lighting

ENTA LIGHTING

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追求光的艺术

THE PURSUING OF ART LIGHT

2020-2021



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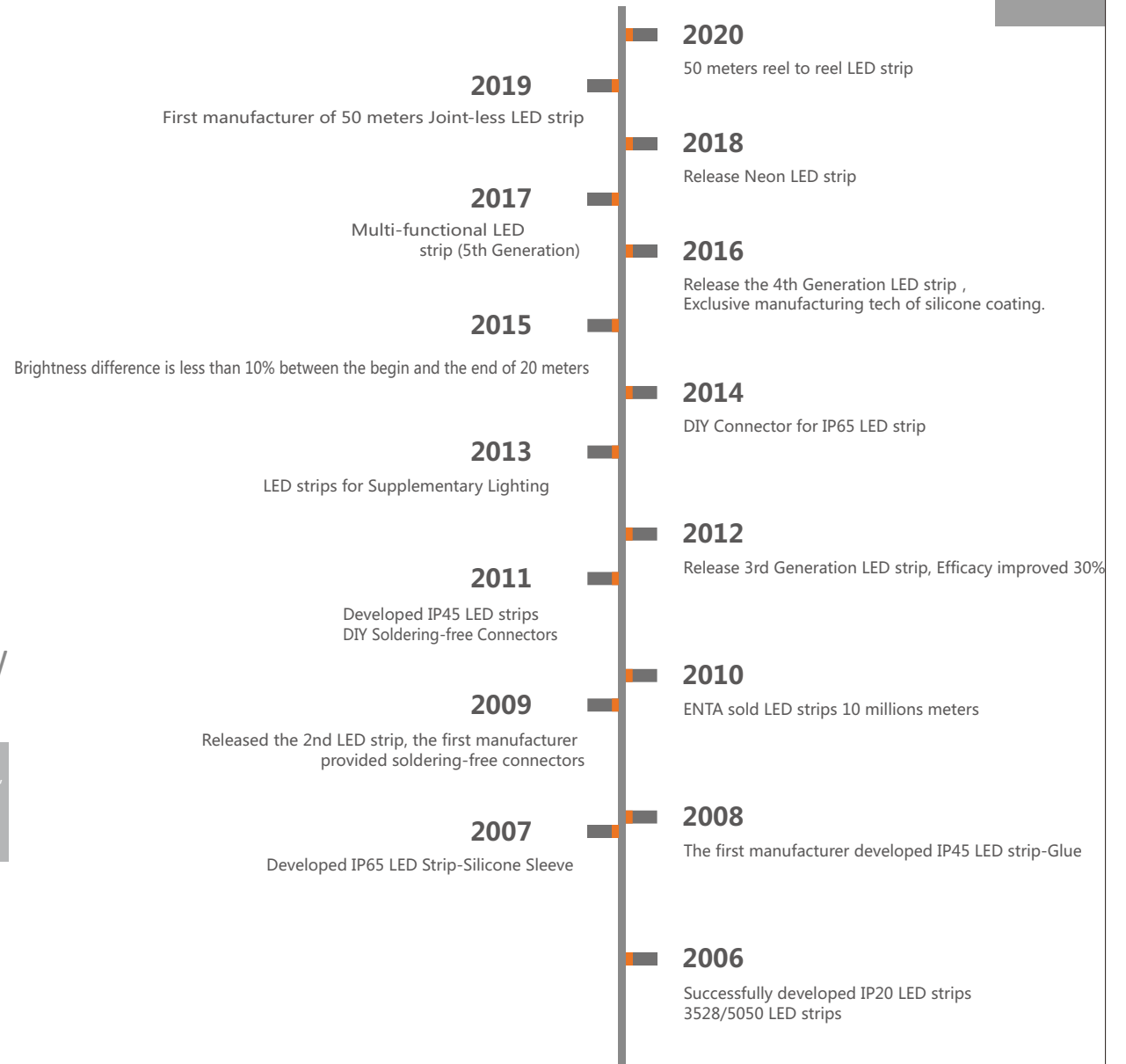
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Company's Development & History

From 2005 to now, 15 years, ENTA has seen the magic of time and rapid grow, we work together to promote human civilization, energy-saving lifestyles . And making home decor has more art choices.



Presentation

Company Profile



ENTA Lighting was founded on 26th April 2005 in Shenzhen, with advanced production base R & D and tests laboratory. Focusing on line lighting, smart lighting and smart system's research and produce. Factory passed ISO9001:2015 ISO14001:2015, products were listed by UL, CE, ROHS, TUV, SAA, PSE.

ENTA is an international registered brand, and has offices in many Chinese cities such as Beijing, Shanghai, Guangzhou. It's a reliable partner of osram, Häfele. And products have received a worldwide recognition from customers.

ENTA collects many senior tech engineers of smart lighting. Providing lighting solutions for 5-star hotels, shopping malls, high end offices. It has a complete logistic system to ensure its smooth supplying. Meanwhile, it has professional staff for consulting and after sale services. ENTA decided to insist on "quality strategy unshakable for 100 years" at its beginning, insist on the innovation of products, tech and management. ENTA emphasizes intellectual property, products are 100% original designed and patented. Quality lighting is its design idea. And it plans to enter into the smart lighting for cars, and making contribution.

Certification & Patents





Products' Reliability Test

Explanation of constant temperature and humidity machine(for new products' C-Samples tests)



Explanation: Simulates the specific temperature and humidity when storing and using the product.

Test Purpose: By simulating the specific temp and humidity (high temp and humidity for example), test the products' changes. Watch the appearance, material's chemistries, functions and data's changes, verify whether it can meet the requirements of product design and quality.

▶ Test Method & Standard

Method: After placing the product into the machine, switch to temperature 45°C, humidity 65%, simulate and test the temperature rise of each components at the 45 Celsius.

Test Time: Uninterrupted 360 hours (Must Test Subject of New Products)

To judge the stability of products.

Judging: the products' performance when at high and low temperature circumstances.

Appearance: the product's structure and size, color, LEDs' fluorescent powder and colloidal changes.

Electrical Light Color: power, currents, temperature change rates.

Explanation of Thermal Shock(for new products' C-samples tests)



Explanation: simulate the high and low temp's alternating, to test the product's stability and reliability.

Test Purpose: through the process, test the products' stability and reliability, watch the product appearance, material, optical and electrical data changes, to discover the defects of product design and others timely, then improve product design and other aspects.

▶ Products Test Standard

Test Method:

- 1.Put the product at the space, keep the product working.
- 2.Set the equipment automatically changes to 80°C in 30 seconds, humidity 80% circumstance for 15-30 minutes
- 3.Set the equipment automatically changes to -15°C in 30 seconds, humidity 0% circumstance for 15-30 minutes.
- 4.Circle that for 24 hours, watch and record the product's working status and changes.

Test Time: Uninterrupted 360 hours (Must Test Subject for New Products)

Judging Subject: Test the product working status under extreme circumstances.

Appearance: Check product's structure, size, color; LEDs' fluorescent power and colloidal changes, any spots, damages.

Electrical: Any color temperature drifts. SDCM, brightness, efficacy, power consumption, currents, voltage change rates.

Mechanical Behaviour: Tensile strength, elongation hardness, impact strength, elongation at break, bending strength and add tests according to the products' features.

Explanation of UV resistance test(for new products' C-Samples phase)



Explanation: simulate the weather, climate, temperature, day and night, sun and storm, natural phenomena.
 Test Purpose: by simulate the sun's ultra-violet radiation, temperature and stormy weather, test the products' weather proof, climate proof, stability and reliability, if it can meet the requirements of products' design. Watch the product appearance, electrical changes, and dsicover the defects timely, improve the product constantly.

► Test Standard

Test Method:

Place the product at the space, power on, adjust irradiation intensity, irradiation time, temperature and rain time. Circle 360 hours
 Watch and record the product's working status and changes at the timing.
 Subject: to see if the product becomes yellow under the amount of outdoor sunshine.
 Appearance: product size, color, structure changes? LEDs' fluorescent powder and colloidal changes.
 Electrical: Color temperature drifts. SDCM, power consumption, brightness, efficacy, voltage, currents change rates.
 Mechanical behaviour: Tensile Strength, elongation hardness, impact strength, elongation at break, bending strength. And add tests according to the product features.

Explanation of salt spray test (for new products' C-Samples phase)



Explanation: simulate the marine climate (salt fog) environment.
 Test Purpose: by simulating the marine climate when storing or using the product. test the salt fog resistance and anti corrosion features of the product. And check if it can meet the requirements of desig, provide evidence for material se selecting

► Test Standard

Test Method:

Put the product at the place, temperature 35°C, Sodium Chloride Solution 5%, spraying for 24 hours.
 Judging Subject
 Appearance: check if any rust, oxide and other damages.

Explanation of Transport Simulator (for new products' C-samples phase)



Explanation: Simulate the vibration the product may encounter when in transportation, storage and application.
 Test Purpose: by the vibration, test the product's package can provide protection or not, and the product's structure, electrical been damaged or invalid after the vibration, if the product can meet the requirements of design.
 Help to improve the product, provide solution and standard for quality assurance.

► Test Standard

Test Method: install the box, equipment switch to 300CPM/50Hz for 48 hours, check the package hardness if qualified.
 The product's appearance, structure, function are OK? Compare the electrical data of before and after, if there's impact
 Judging Subject: Judge the package if it can provide good protection.
 Appearance : Is package look good? Product good? Any cracks, loose, damages?

Drop Testing Machine (for new products' C-samples phase)



Explanation: simulate the unusual drop in the product's process of transportation, installation and usage.
 Test Purpose: by simulate the free fall drop, test the product and package if they meet the requirements of design.
 if any structure or electrical impacts, thus reduce the loss that caused by insufficient rigidity. At the same time, help improving the design of product, provide solution, standard for outgoing quality assurance.

Test Height			
Weight		The Height of Free Fall	
1-20.99 pounds	0.45-9.52kg	30in.	760mm
21-40.99 pounds	9.53-18.59kg	24in.	610mm
41-60.99 pounds	18.6-27.66kg	18in.	460mm
61-100 pounds	27.6-45.36kg	12in.	310mm
Carton		32in.	810mm

► Product Test Standard

Test Method: Put the product at the place, according to the product weight, switch the equipment height.
 Judging Subject : if the product can be protected by the package.
 Appearance: Package integrity and product integrity
 Electrical: height, power consumption.
 Mechanical behaviour: intensitive strength, bending strength, hardness test. And add tests according to the product's features.

Introduction of Key Control Points in Process



Process: SAMSUNG 481

Introduction: SMT machine takes components 55,000 pcs every hour onto PCB pads quickly, Samsung 481 new has identification, it can identify the height pressure between sucker and PCB in 0.2S, adjust sucker's height and pressure, to protect LEDs from being crashed when surface mounting.



Process: AOI (Automated Optical Inspection)

Introduction: after PCB reflowed, into the cool system cool the PCB, then PCB image is inspected, accuracy of inspection is 25-30NM, inspect the components, tin amount, tin points smoothness, positions, LEDs' positive negative poles, if they meet the requirements of quality, move to the next process; if not, they will be marked to the repair area.



Process: Integrating Sphere

Introduction: High speed, accurate, full inspection online for optical and electrical. Test the power, spectrum chromaticity coordinate, main wavelength, peak wavelength, spectral purity, color temperature, color rendering index, SDCM, efficacy, currents. To ensure the uniformity of different batches and fulfill our promise " No Difference for 30,000 meters" .



Process: Print Tacking Code

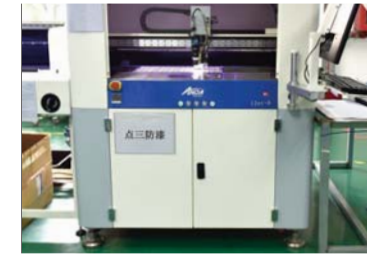
Introduction: Print tracking code on PCB(Tracking Code Rule) In case of product quality problems, to track the source of problem quickly. Besides, at the end of tracking code, there's LEDs S/N and BIN code, when the customer repeat orders we purchase the same LEDs according to the last order's tracking code, to ensure the uniformity of different batches.

Introduction of Key Control Points in Process



Process: De-Panel Machine (Patented Tech)

Introduction: This is ENTA Exclusive, take the Burned-in PCB to de-panel, automatic de-panel, the pad enters the machine smoothly, de-panel neatly. The de-panel process is automatic, no pulling actions, minimize the damage of LEDs in the process of de-panel.



Process: Conformal Coating

Introduction: For the conformal coating of components' solder spot, makes them anti-static, anti-oxidation, moisture proof. High precision machine, 39 times per second, conformal coating accurately, ensure that each solder spot is covered but LEDs surface, against color temperature drift.



Process: High Frequency Vibrator

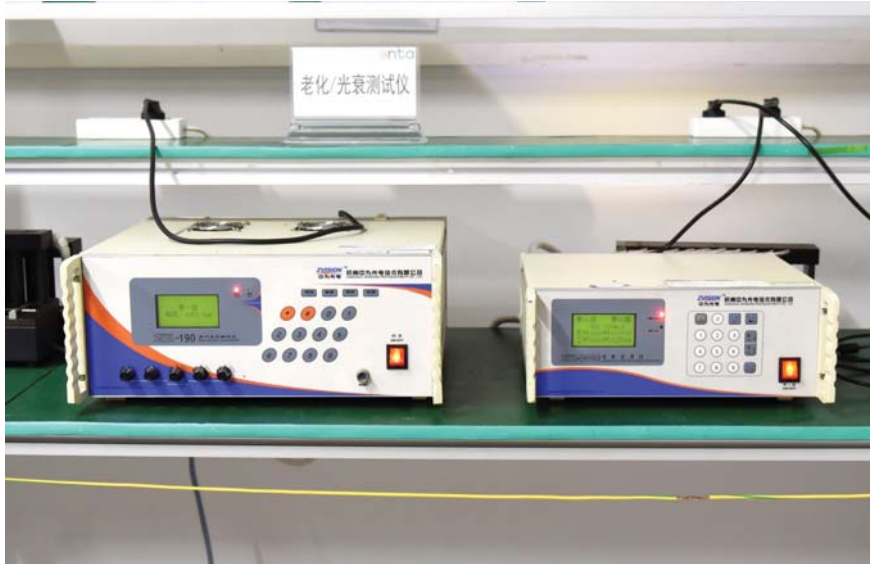
Introduction: After PCBs been soldered to the required length, vibrate them, check the false soldering. Connects with electricity, vibrating for 3 minutes, to check the product's stability.



Process: Waterproof End Caps Solution

Introduction: By the solution, makes the end caps, LED strip more uniform, more safe and more waterproof.

Light Fading Tester(for the approve of LEDs)



Introduction: test the LEDs sample by normal/speedy aging, record the changes of brightness.
 Test Purpose: By the speedy aging and record, judge if sample can meet the standard requirements, if the heat dissipation can meet the requirement, provide evidence for material's selecting, product's design and improvement,

► Test Standard

Test Method: Put sample at the place, switch the currents to the specification of sample, constantly aging 1000H,2000H,3000H,6000H the changes and data will be recorded by the tester automatically.

Judging Subject: by the aging test, record of light output changes, according to the timing and light fading standard, judge if sample can meet the requirements of product' s design.

RoHS Test(for all materials before storage)



Introduction: According to RoHS directives, sustainable directives, analysis the amount of Pb、Hg、Cd、TCr、TBr、Cl
 Test Purpose: By analysis, judge if materials can meet the requirements, if can't, banned from storage. To Gurantee all the products are compliant with RoHS and halogen-free sustainable directives.

► Test Standard

Test Method: : 5% of materials as sample, be place at the scan window, scan by X-ray fluorescent automatically, export the , test report, and judging according to the RoHS standard.

Judging: By the analysis of materials or products, judge if they can meet the requirements of RoHS and sustainable directives.

IES Dark Room

(Must Test for New Products, First Product of Batches)



Introduction: test the light distribution at every directions of light source or fixture, produce an IES file.

Test Purpose: IES test include intensity curve, distribution curve, efficacy, intensity data, area flux, isoilluminance curve, isocandela, isoluminosity curve etc. as well as power consumption, current, voltage, estimate if the test data is within standard, and judge if product can meet the requirements of design, improve electrical design and optical design. IES can be use by DIALUX, simulate real lighting effects, provide convenience for design of lighting.

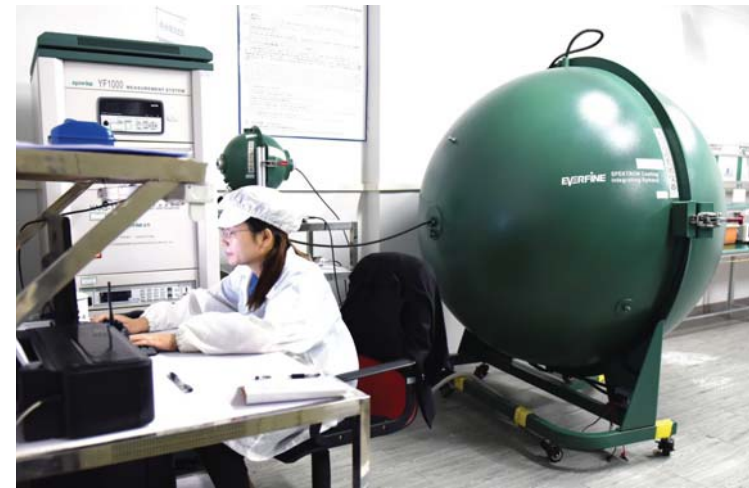
Test Standard

Test Method: Install the product, connects electricity, test report will be created by the computer software.

Judging: Beam angle, intensity curve, distribution curve, efficacy, intensity data, area flux, isoilluminance curve, isocandela, isoluminosity curve etc. as well as power consumption, current, voltage.

Integrating Sphere Introduction

(Must Test for New Product, First Product of Batches)



Introduction: Analysis the electrical and optical data of subject, to assess the LEDs performance and need for improvement. And judge if the data error tolerance is within the standard.

Test Purpose : By Integrating Sphere, estimate the product's electrical and optical performance, result error tolerance is satisfy with standard or not. Judge if product can meet the requirements of design, and further improve the product electrical design and optical design.

▶ Test Standard

Test Method: Install the product, connect electricity, data will be created by the computer.

Judging: electrical and optical data

Electrical parameter: Voltage, currents, power consumption, power factor.

Optical parameter: Color temperature, brightness, efficacy, SDCM, R9

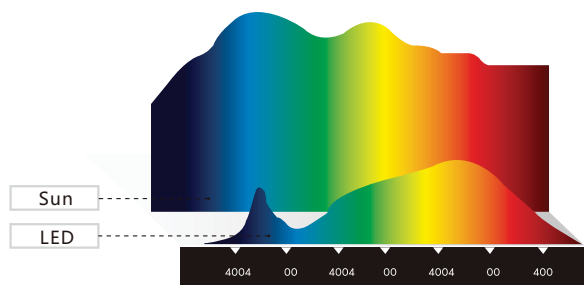
PARTNER & SUCCESS

The company is mainly committed to indoor & outdoor line lighting, found long-term relationship with real estate corporations. Success Case: 2014-2015 Kaide Plaza Chengdu; indoor line lighting Kaide Square. 2016, indoor lighting project, Yiyun Land, Foshan. 2017, indoor line lighting project. Hongtai Plaza, Shanxi. 2018, Vanke Allianz lighting project, Beijing.



HIGH COLOR RENDERING INDEX (CRI)

The light fixtures with CRI>90 make objects look more natural, but very little LED lights can do that, high CRI makes the object's color and material features more outstanding, give expression to the object's features, especially suitable for boutique shop's exhibition and important social occasions.



COLOR RENDERING OF LED WHITE LIGHT

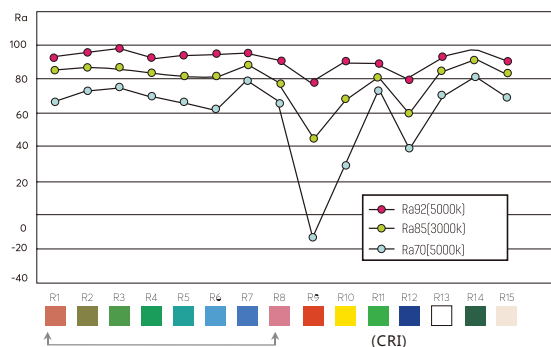
In the design of LED with high CRI, we should not only consider the general CRI Ra, but also pay attention to the special CRI R9 for saturated red and the average value R(9-12) for the 4 saturated colors of red, yellow, green and blue. It is found that the general CRI is inconsistent with the visual evaluation of LED, on the contrary, LED white light with low CRI might be better in visual evaluation. Only when CRI and R9 have high values at the same time can the high visual evaluation of LED white light be ensured.



R9 refers to saturated red, corresponding to the red wavelength of 650nm. When R9<0 it indicates the CRI of red is insufficient, the light source cannot display red. In short the higher R9, the better the effect of illumination in fruit and flowers occasions, the more colorful. Especially, LED lights as the main commercial lighting, R9 value can not be negative.

R9?

Ra of CRI



Ra indicates the average CRI value of R1-R9

Ra is used to evaluate the CRI of lighting products. Similar to the traditional light fixtures' ability of restoring objects' true color.

Ra range is from R1 to R9

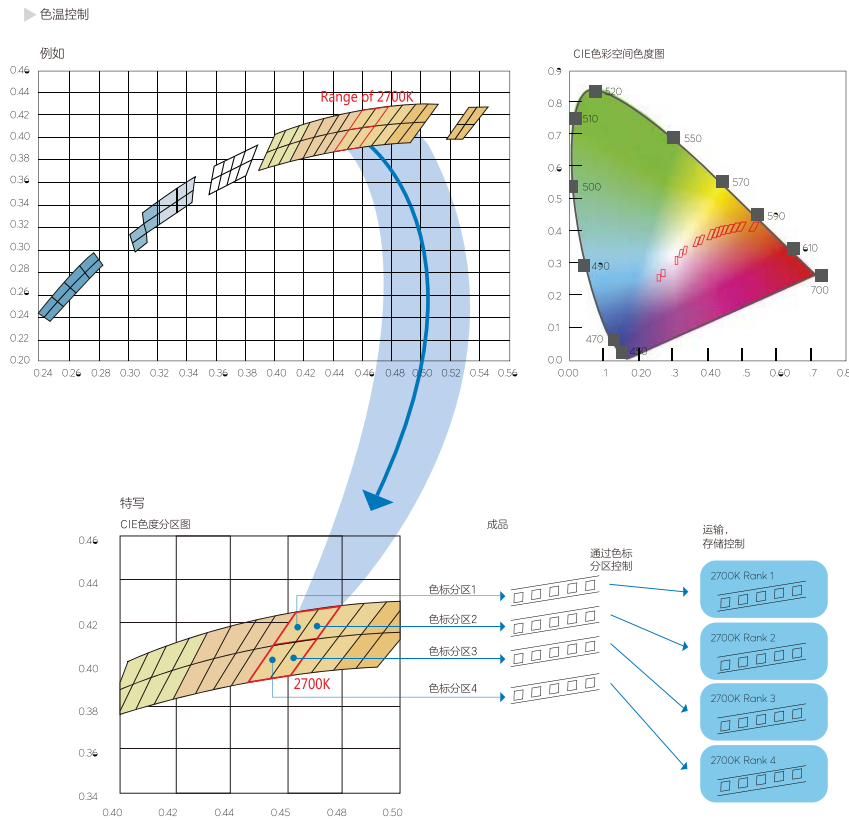


Model No.	Protection	CRI	CCT
SA600	IP20:P20	Ra80:80	2400K : 24
SA1000	IP44:P44	Ra90:90	2700K : 27
SA1400	IP65:P65	Ra95:95	3000K : 30
SA2000	IP66:P66		4000K : 40
	IP67:P67		5000K : 50
			5700K : 57
			6500K : 65

LIGHTING UNIFORMITY

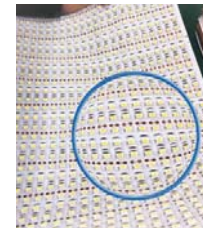
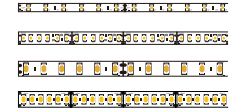
Material Control

The LED we use are purchased according to the grades or self encapsulated, and the LED is sorted and graded according to the chips' color coordinates when encapsulating. In order to avoid confusion of the LED pasted on the same FPC, and ensure that only the same grade of LED are used on the same FPC, we sort and manage the LED according to the grade in the process of storage and transportation. In addition, the products will be visual color inspected before shipment.

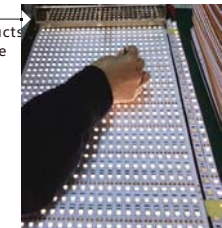


Finishing Products Control

Uniformity is one of the important part of quality LED strips and the quality of LED determines the quality of LED strip. From Phosphor Color Matching, Dispensing, BIN Sorting, Surface Mounting to Testing, every process and chain is very important and has its own strict SOP(Standard Operating Procedure). Before the finished product leaves the factory, the final inspection of uniformity will be carried out. The main inspection steps are as follows:



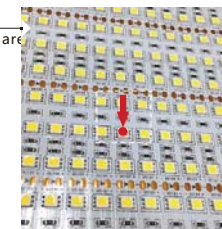
1. Check the surface of LED and visually inspect whether the LED has stain, black spot and chain tin.



2. Put the products on, and label the defects such as dead, cracked colloid, empty soldered, super bright.



3. Cover the product with acrylic plate, compare with the first article, and ensure that the lighting of same batch is uniform and the defects are marked with labels,



4. The defects are sent back for maintenance.

Kaide Real Estate

2014, Kaide Square, Mianyang. Address: East section of Linyuan Road, Haocheng District, Mianyang City, Sichuan Province



Hangzhou Radio & TV Center, Zhejiang international Film & TV Center

2015 international Film & TV Center, Project Address: Ningwei Town, Xiaoshan District, Hangzhou City, Zhejiang Province



Yiyun Land Plaza, Foshan

2016 Yiyun Land Plaza Project, Address: Guicheng Street, Nanhai District, Foshan City



Shanxi Lvliang Hongtai Real Estate

2017 Lvliang Hongtai Real Estate Lighting Project, Address: West side of Jianshe North Street, Lishi District, Lvliang City, Shanxi Province



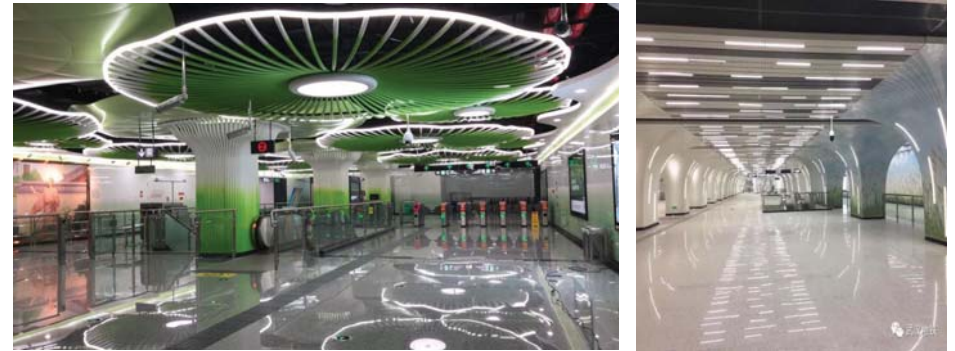
Wuhan Metro indoor lighting project

2017 Wuhan Metro indoor lighting project. Address: No.77, huanle Avenue, Hongshan District, Wuhan



Metro Station Lighting Project, Chengdu, Sichuan

2018 Lighting project of Chengdu Metro in Sichuan Province. Address: Xindu District, Chengdu, Sichuan



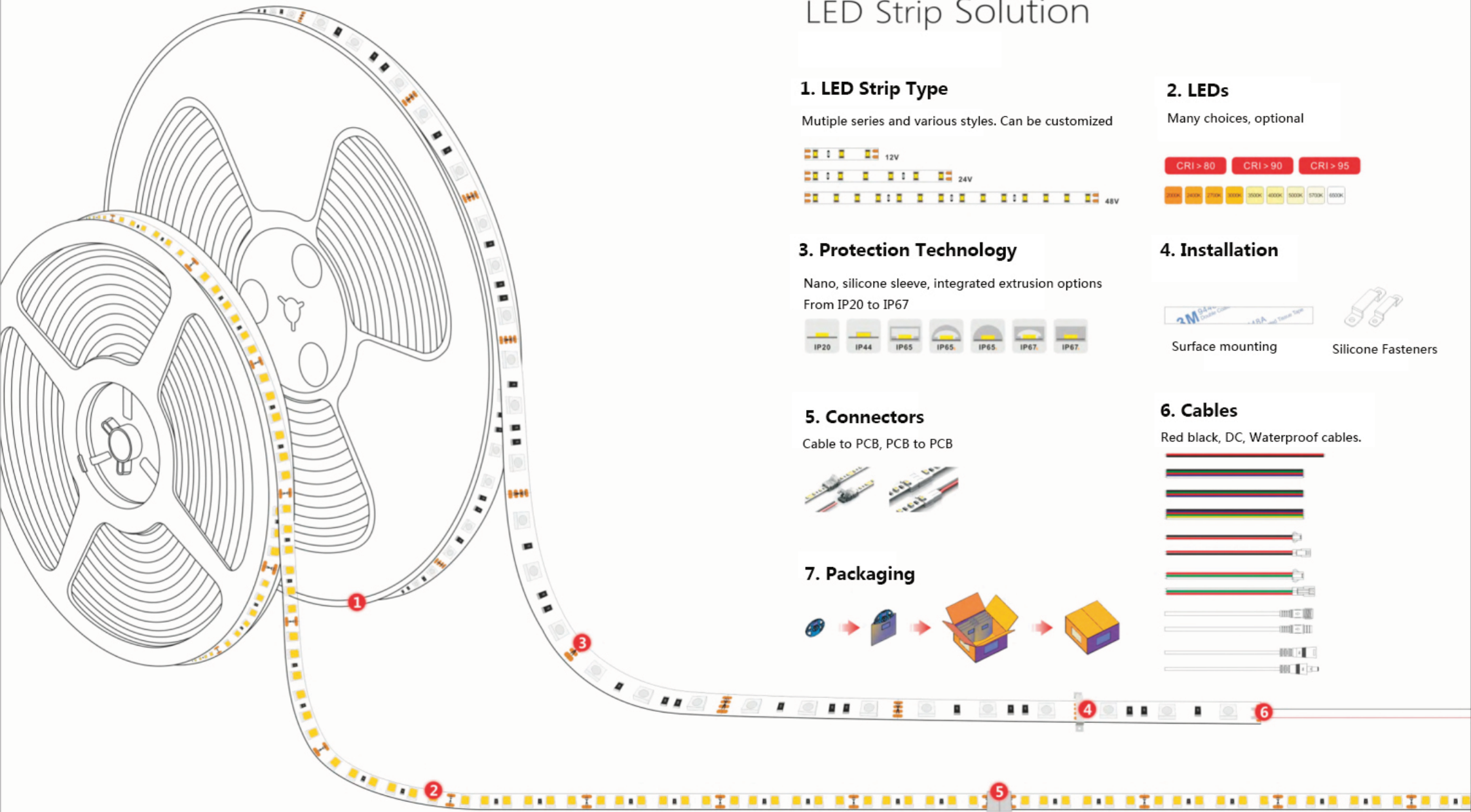
01

Traditional Flexible LED Strip Series

High light transmittance, good flexibility, the appearance is simple, fashionable, exquisite and unique.
Cutttable and easy to install.



LED Strip Solution



1. LED Strip Type

Multiple series and various styles. Can be customized



2. LEDs

Many choices, optional

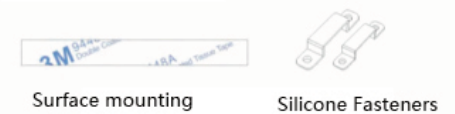


3. Protection Technology

Nano, silicone sleeve, integrated extrusion options
From IP20 to IP67



4. Installation



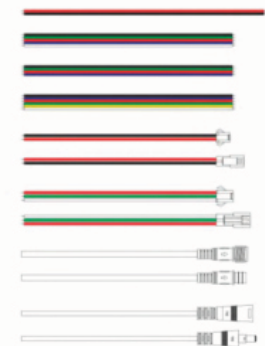
5. Connectors

Cable to PCB, PCB to PCB

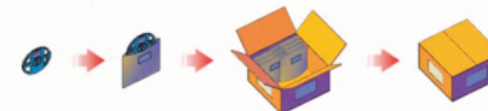


6. Cables

Red black, DC, Waterproof cables.



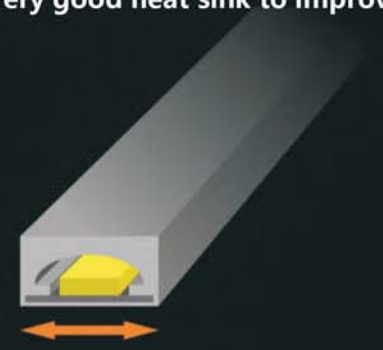
7. Packaging



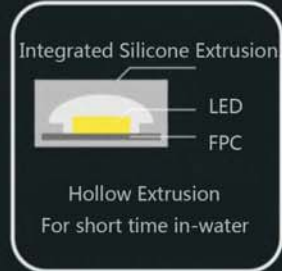
Hollow Extrusion

IP66

- * IP66 waterproof
- * Excellent weather-proof, UV resistance, yellow-proof features
- * Good heatproof and light transmittance
- * Very good heat sink to improve the lifespan and quality of lighting



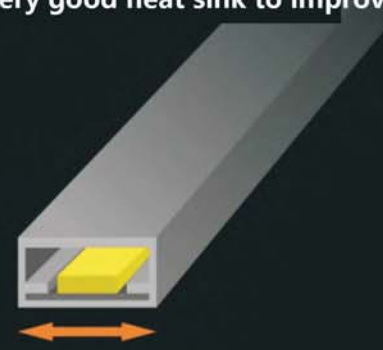
Suitable for
8/10/12mm FPC



Silicone Sleeve

IP65

- * IP66 waterproof
- * Excellent weather-proof, UV resistance, yellow-proof features
- * Good heatproof and light transmittance
- * Very good heat sink to improve the lifespan and quality of lighting



Suitable for
8/10/12mm FPC



SA SERIES



PATENT
RIGHT
★★★★★

Certification: UL TUV SAA CE ROHS CQC etc.

Advantage:

1. First manufacturer of integrated silicone extrusion IP66
2. Invented soldering-free connector for IP66 waterproof
3. Tracking code to control the uniformity of batches
4. Original Samsung LEDs from Korea

SA-2835-70-24-10-IP20

SMD 2835-70D

SMD 2835 LED, LM-80 Approved
 FPC: Double sided film covering and copper, 2 oz
 High uniformity of lighting, SDCM<5
 DC24V
 Dimmable, support 0-10v/ TRIAC/ DALI
 3 years warranty

5 meters/ reel

ALU Profile

1708 1616 2308

SA-2835-70-24-10-IP66

SMD 2835-70D

LED SMD 2835, LM-80 Approved
 FPC: Double sided film covering and copper, 2 oz
 High uniformity of lighting, SDCM<5
 DC24V
 Dimmable, support 0-10v/ TRIAC/ DALI
 Warranty 3 years

5 meters/ reel

1708 1616 2308

Cut Length

IP Rating

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide (W)
SMD 2835	DC 24V	70LEDs/M	4.8-14.4w/m	90/1900-6500K	520-1560lm/m	7LEDs/100mm	10mm

Cut Length

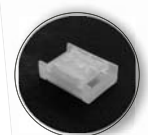
IP Rating

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut Length	Wide (w)
SMD 2835	DC 24V	70 PCS/M	4.8-14.4w/m	90/1900-6500K	520-1560lm/m	7LEDs/100mm	12mm

Accessories:



Soldering free cable

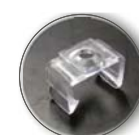


Soldering free connector

Accessories:



Silicone Fastener



PVC Fastener



Soldering free cable



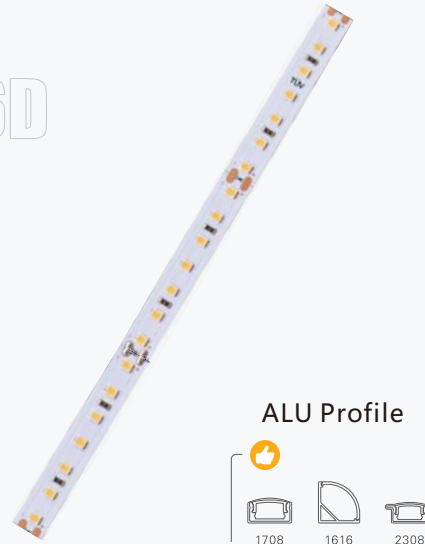
Soldering free connector

SA-2835-126-24-10-IP20

SMD 2835-126D

LED 2835 SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 Good uniformity of lighting SDCM<5.
 DC24V
 Dimmable, support 0-10v/ TRIAC/ DALI
 Warranty 3 years

5 meters/ reel



ALU Profile



Cut Length Diagram

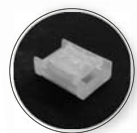


IP Rating



LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut Length(L)	Wide (W)
SMD 2835	DC24V	126PCS/M	4.8-18W/M	90/1900-6500K	520-1980Lm/M	7LEDs/55.56mm	10mm

ACCESSORIES:



Single ended connector with cable

Soldering free connector double ended

SA-2835-126-24-10-IP66

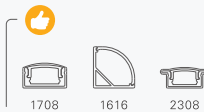
SMD 2835-126D

LED 2835 SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 Good uniformity of lighting, SDCM<5.
 DC24V
 Dimmable, support 0-10/ TRIAC/ DALI
 Warranty 3 years

5 meters/ reel



ALU Profile



Cut Length Diagram

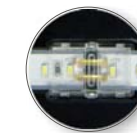


IP Rating



LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut Length(L)	Wide (W)
SMD 2835	DC24V	126PCS/M	4.8-18W/M	90/1900-6500K	495-1881Lm/M	7LEDs/55.56mm	12mm

ACCESSORIES:



Silicone Fastener

PVC Fastener

Soldering free connector

Double ended connector

SA-2835-140-24-10-IP20

SMD 2835-140D

LED 2835 SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 Good uniformity of lighting, SDCM<5.
 DC24V
 Dimmable, support 0-10v/ TRIAC/ DALI
 Warranty 3 years

5 meters/ reel



ALU Profile



Cut Length Diagram

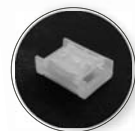


Protection Tech



LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut Length (L)	Wide (W)
SMD 2835	DC24V	140PCS/M	4.8-18W/M	90/1900-6500K	520-1980Lm/M	7LEDs/50mm	10mm

ACCESSORIES:



Single ended connector with cable Double ended connector

SA-2835-140-24-10-IP66

SMD 2835-140D

LED 2835 SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 Good uniformity of lighting, SDCM<5.
 DC24V
 Dimmable, support 0-10v/ TRIAC/ DALI
 Warranty 3 years

5 meters/ reel



Cut Length Diagram



Protection Tech



LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut Length (L)	Wide (W)
SMD 2835	DC24V	140PCS/M	4.8-18W/M	90/1900-6500K	495-1881Lm/M	7LEDs/50mm	12mm

ACCESSORIES:



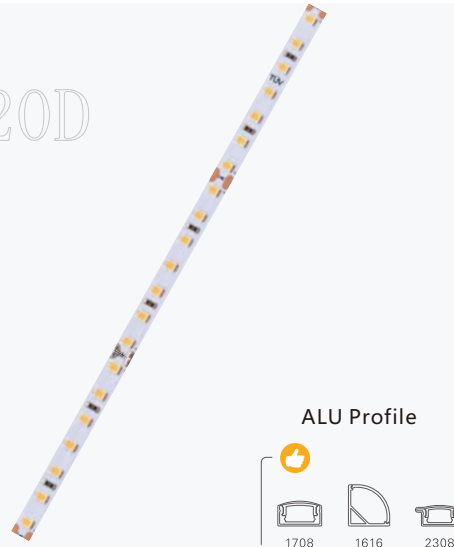
Silicone Fastener PVC Fastener Single end connector Double end connector

SA-2835-120-24-5-IP20

SMD 2835-120D

LED 2835 SMD, LM-80 Approved
 FPC: Double sided film covering and copper, 2 oz
 Uniform lighting, SDCM<5
 DC24V
 Dimmable, support 0-10v/ TRIAC/ DALI
 Warranty 3 years

5 meters/ reel



ALU Profile



Cut Length



IP Rating



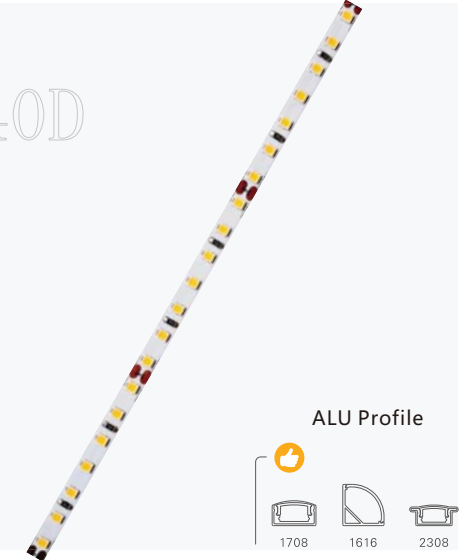
LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut Length(L)	Wide(W)
SMD 2835	DC 24V	120 LEDs/M	3-10W/M	90/ 1900-6500K	300-1000lm/m	6LEDs/50mm	5mm

SA-2835-140-24-5-IP20

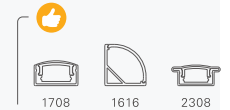
SMD 2835-140D

LED 2835 SMD, LM-80 Approved
 FPC: Double sided film covering and copper, 2 oz
 Uniform lighting, SDCM<5
 DC24V
 Dimmable, support 0-10v/ TRIAC/ DALI
 Warranty 3 years

5 meters/ reel



ALU Profile



Cut Length



IP Rating



LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut Length(L)	Wide(W)
SMD 2835	DC 24V	140 LEDs/M	3-12W/M	90/ 1900-6500K	300-1200lm/m	7LEDs/50mm	5mm

02



2400k-5000k

2700k-6500k

SMD 2835

Dim to Warm series

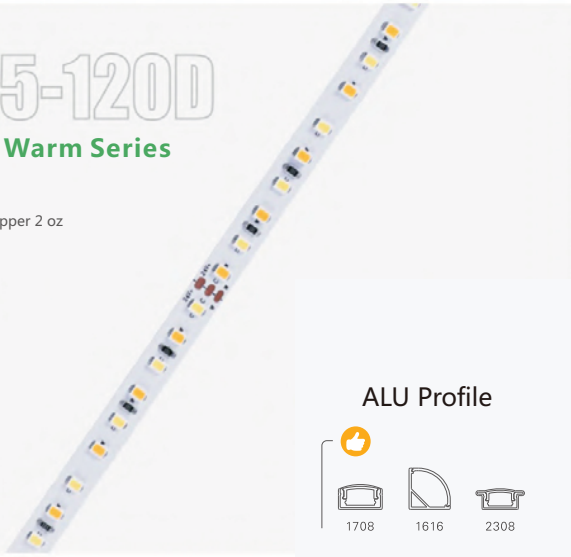
Safe voltage DC 24V, double sided film covering and copper 2 oz prevent voltage drop, meet the need of heat sink for LED



SA-SS-2835-120-24-10-IP20

SMD 2835-120D 恒压双色系 Dim to Warm Series

LED 2835 SMD, LM-80 approved
FPC: Double sided film covering and copper 2 oz
Good uniformity of lighting, SDCM<5.
DC24V
Dimmable, support 0-10v/ TRIAC/ DALI
Warranty 3 years



ALU Profile



5 meters/ reel



参数 / PARAMETER

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide (W)
SMD 2835	DC24V	120PCS/M	14.4W/M	90/2700+6500K	1450Lm/M	6LEDs/50mm	10mm

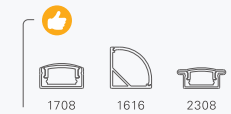
SA-SS-2835-140-24-8-IP20

SMD 2835-140D 恒压双色系 Dim to Warm Series

LED 2835 SMD, LM-80 approved
FPC: Double sided film covering and copper 2 oz
Good uniformity of lighting, SDCM<5
DC24V
Dimmable, support 0-10v/ TRIAC/ DALI
Warranty 3 years



ALU Profile



5 meters/ reel



参数 / PARAMETER

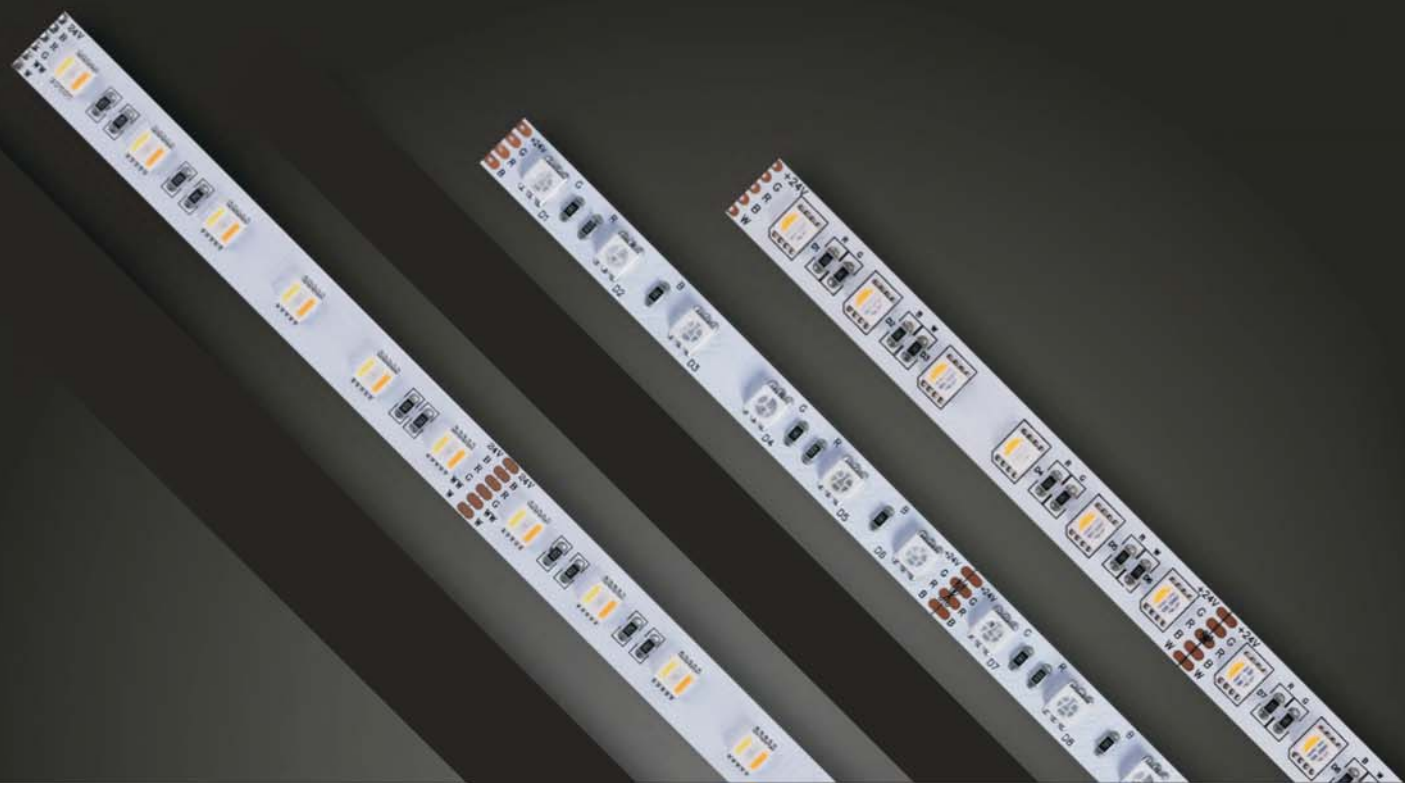
LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide (W)
SMD 2835	DC24V	140PCS/M	14.4W/M	90/2700+6500K	1450Lm/M	14LEDs/100mm	8mm

03

SMD 5050

Dream Color Series

Safe Voltage DC 12/ 24V, double sided film covering and copper 2 oz
prevent voltage drop, meet the need of heat sink for LED



SA-5050RGB-60-12/24-10-IP20

SMD 5050-60D-RGB

Dream Color Series

LED 5050RGB SMD, LM-80 approved

FPC: Double sided film covering and copper 2 oz

DC12/24V optional

Dimmable, support DALI

Warranty 3 years

最小切割长度图例
Legend Of Minimum Cut Length

参数 / PARAMETER

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Width(w)
SMD 5050	DC24V	60PCS/M	14.4w/m	80/RGB	/	6LEDs/100mm	10mm



SA-5050RGBW-60-12/24-12-IP20

SMD 5050-60D-RGBW

Dream Color Series

LED 5050 RGBW SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 DC12V/24V optional
 Dimmable, support DALI
 Warranty 3 years

5 meters/ reel



Cut Length



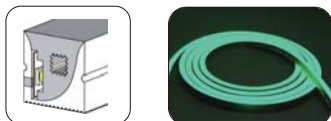
IP Rating



参数 / PARAMETER

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide (W)
SMD 5050	DC 24V	60PCS/M	14w/m	80/ RGBW	/	6LEDs/100mm	12mm

APPLICATION:



SA-5050RGBCW-60-12/24-12-IP20

SMD 5050-60D-RGBCW

Dream Color Series

LED 5050RGBW SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 DC12V/24V optional
 Dimmable, support DALI
 Warranty 3 years

5 meters/ reel



Cut Length



IP Rating



参数 / PARAMETER

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide (W)
SMD 5050	DC 24V	60PCS/M	14w/m	80/ RGBCW	/	6 LEDs/ 100mm	12mm

APPLICATION:



04

SMD 5050

Dream Color Series

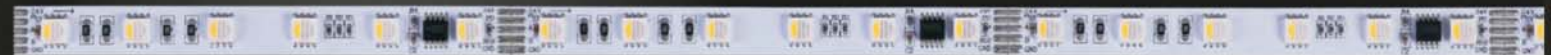
Every group of LED (6 pcs) can be controlled seperately and programmed



DMX Series ▾

Features:

1. Good compatibility
2. High reliability
3. Strong jamproof



SPI Series ▾

Feature:

1. Easy to install
2. Affordable price good quality



SA-5050RGB-60-12/24-10-SPI-IP20

SPI-5050-60D-RGB

Dream Color Series

LED 5050RGB SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 DC12V/24V optional
 SPI dimmable
 Warranty 3 years



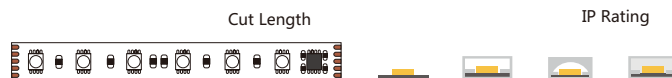
SA-5050RGBW-60-12/24-12-SPI-IP20

SPI-5050-60D-RGBW

Dream Color Series

LED 5050RGBW SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 DC12V/24V optional
 SPI dimmable
 Warranty 3 years

5 meters/ reel



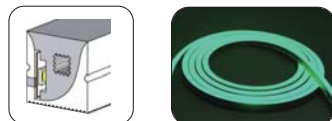
参数 / PARAMETER

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length(L)	Wide(w)
SMD 5050	DC24V	60PCS/M	14.4W/M	80 RGB	/	6LEDs/100mm	10mm

参数 / PARAMETER

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide(W)
SMD 5050	DC24V	60PCS/M	14.4w/m	80/RGBCW	/	6LEDs/100mm	12mm

APPLICATION:



APPLICATION:



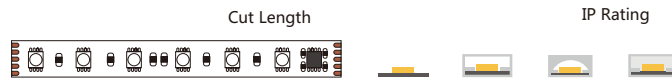
SA-5050RGB-60-12/24-12-DMX-IP20

DMX-5050-60D-RGB

Dream Color Series

LED 5050 RGB + external IC solution, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 DC12V/24V optional
 Dimmable, support DALI.DMX512
 Warranty 3 years

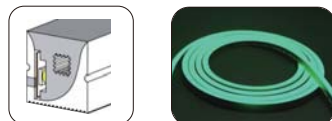
5 meters/ reel



参数 / PARAMETER

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide(w)
SMD 5050	DC24V	60PCS/M	14.4w/m	80/RGB	/	6LEDs/100mm	12mm

APPLICATION:



SA-5050RGBW-60-12/24-12-DMX-IP20

DMX-5050-60D-RGB

Dream Color Series

LED 5050 RGB + external IC solution, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 DC12V/24V optional
 Dimmable, support DALI.DMX512
 Warranty 3 years

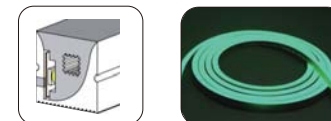
5 meters/ reel



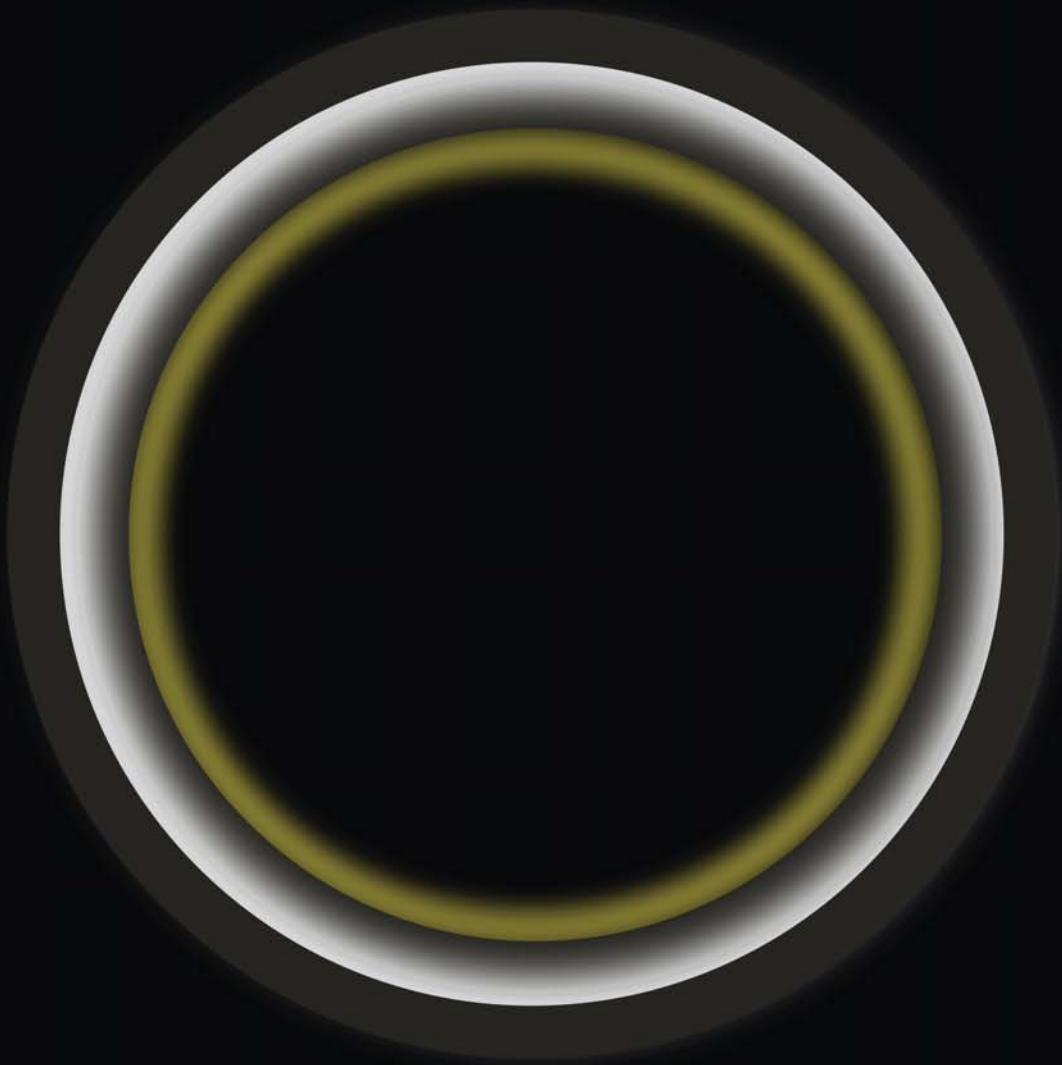
参数 / PARAMETER

LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide(w)
SMD 5050	DC24V	60PCS/M	14.4w/m	80/RGB	/	6LEDs/100mm	12mm

APPLICATION:



05



PATENT
RIGHT

SMD2835

50M Super Long Full power No voltage drop series

Reel to reel 50 meters, safe voltage DC 24V, double sided film covering and copper 2 oz FPC, prevent voltage drop and meet the need of heat sink. Improve the lifespan, suitable for indoor lighting.



50 meters application



SA-CC-2835-70-24-10-IP66

U50M 2835-70D

LED 2835 SMD, LM-80 approved
FPC: Double sided film covering and copper 2 oz
Uniform lighting, SDCM<5
DC24V
Dimmable, support 0-10v/ TRIAC/ DALI
Warranty 3 years



50 meters/ reel



LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide (W)
SMD 2835	DC 24V	70 LEDs/m	4.8-12w/m	90/ 1900-6500K	480-1200lm/m	7LEDs/100mm	12mm

SA-CC-2835-126-24-10-IP66

U50M 2835-126D

LED 2835 SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 Uniform lighting, SDCM<5,
 DC24V optional
 Dimmable, support 0-10V/ TRIAC/ DALI
 Warranty 3 years

50 meters/ reel



SA-CC-2835-140-24-10-IP66

U50M 2835-140D

LED 2835 SMD, LM-80 approved
 FPC: Double sided film covering and copper 2 oz
 Uniform lighting, SDCM<5
 DC24V optional
 Dimmable, support 0-10V/ TRIAC/ DALI
 Warranty 3 years

50 meters/ reel



Cut Length

IP Rating



LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide (W)
SMD 2835	DC24V	126PCS/M	4.8-12w/m	90/1900-6500K	480-1200Lm/M	7LEDs/55.56mm	12mm

Cut Length

IP Rating



LED	Voltage	LED Qty	Power	Ra/ CCT	Flux	Cut length (L)	Wide (W)
SMD 2835	DC24V	140PCS/M	4.8-12/W	90/1900-6500K	480-1200Lm/M	7LEDs/50mm	12mm

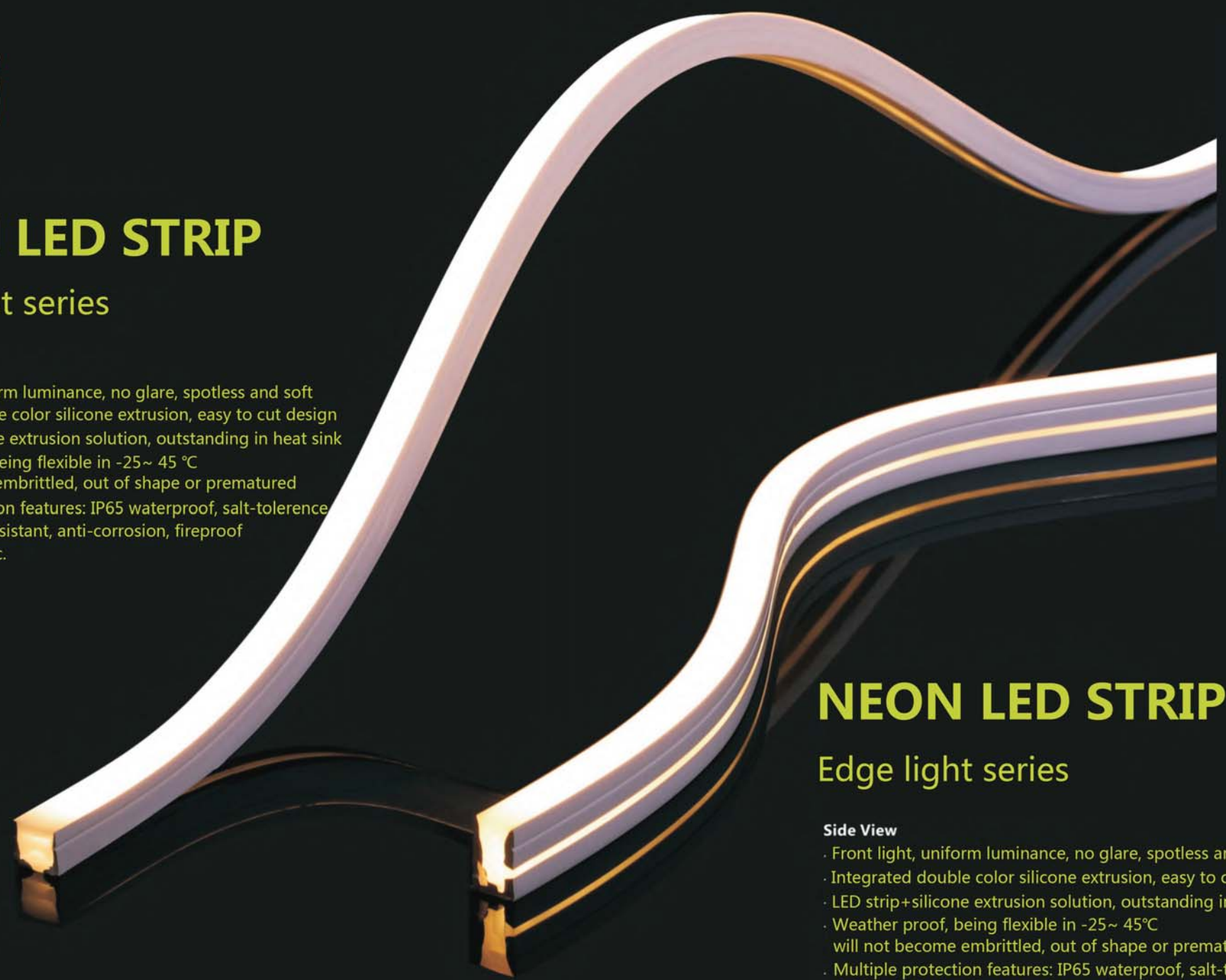
06

NEON LED STRIP

Front light series

Top View

- Front light, uniform luminance, no glare, spotless and soft
- Integrated double color silicone extrusion, easy to cut design
- LED strip+silicone extrusion solution, outstanding in heat sink
- Weather proof, being flexible in -25~ 45 °C will not become embrittled, out of shape or prematured
- Multiple protection features: IP65 waterproof, salt-tolerance Acid and alkali resistant, anti-corrosion, fireproof UV resistance, etc.



NEON LED STRIP

Edge light series

Side View

- Front light, uniform luminance, no glare, spotless and soft
- Integrated double color silicone extrusion, easy to cut design
- LED strip+silicone extrusion solution, outstanding in heat sink
- Weather proof, being flexible in -25~ 45°C will not become embrittled, out of shape or prematured
- Multiple protection features: IP65 waterproof, salt-tolerance Acid and alkali resistant, anti-corrosion, fireproof UV resistance, etc.

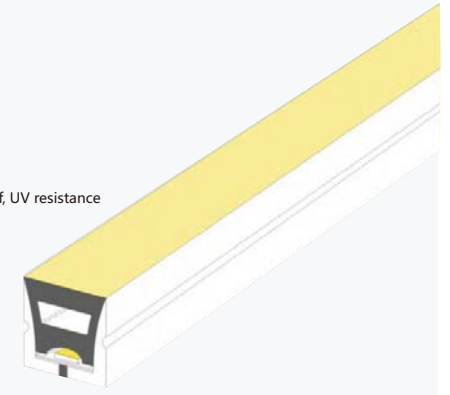


Top view

Front Light Series

Beam angle 120 degrees, front light
Ip65 waterproof
Salt-tolerance, acid and alkali resistant, anti-corrosion, fireproof, UV resistance
Weather proof, being flexible in -25~45 Celsius

5 meters/ roll



参数 /PARAMETER

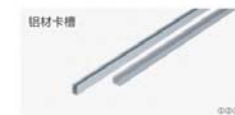
S/N	Model	Size	Ra/CCT	Power	Voltage	Light emit	Cut length
1	SA-NH-24-1010-Z	10*10mm	90/2700-6500K	4.8-12W	DC24V	Front light	50MM
2	SA-NH-24-1212-Z	12*12mm	90/2700-6500K	4.8-12W	DC24V	Front light	50MM
3	SA-NH-24-1515-Z	15*15mm	90/2700-6500K	4.8-15W	DC24V	Front light	50MM
4	SA-NH-24-2020-Z	20*20mm	90/2700-6500K	4.8-15W	DC24V	Front Light	50MM

配件 /Accessories

Cable out: Straight

Cable out: Bottom

Cable out: Side



ALU Profile fastener

Bendable fastener

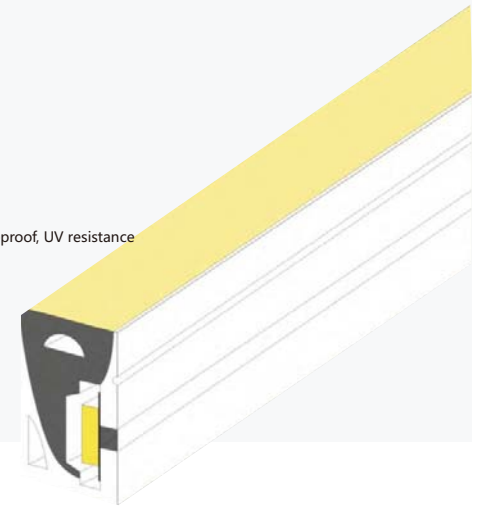


Side view

Edge Light Series

Beam angle 120 degrees, edge light
 Ip65 waterproof
 Salt-tolerance, acid and alkali resistant, anti-corrosion, fireproof, UV resistance
 Weather proof, being flexible in -25~ +45°C

5 meters/ roll



参数 / PARAMETER

S/N	Model	Size	Ra/ CCT	Power	Voltage	Light emit	Cut length
1	SA-NH-24-0612-C	6*12mm	90/2700-6500K	4.8-12W	DC24V	edge light	50MM
2	SA-NH-24-1020-C	10*20mm	90/2700-6500K	4.8-12W	DC24V	edge light	50MM
3	SA-NH-24-1220-C	12*20mm	90/2700-6500K	4.8-15W	DC24V	edge light	50MM
4	SA-NH-24-2020-C	20*20mm	90/2700-6500K	4.8-15W	DC24V	edge light	50MM

配件 / Accessories

Cable out: Straight



ALU profile fastener

Cable out: Bottom



Bendable fastener

Cable out: Side



NEW COB LED STRIP

- Beam angle 180°
- High color efficiency, uniform illumination
- DC 24V
- LED Qty.: 384LED/M 528LED/M
- Ra>90 R9>60

- 2700K
- 3000K
- 4000K
- 6000K



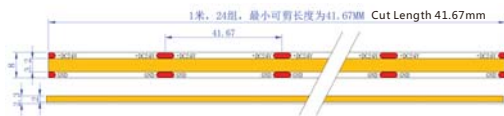
SA-COB-384-24-08-IP33



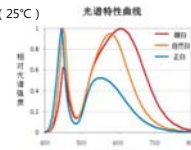
Introduction :

1. 384pcs LED chip, integrated encapsulation, spotless
2. High heat conductive FPC design, flexible
3. LED chip be encapsulated on FPC, beam angle 180
4. DC 24V safe voltage, low voltage drop, 5 meters
5. High viscosity heat conduction double-sided adhesive on the back, durable and firm
6. LED light source, sustainable and compatible with RoHS

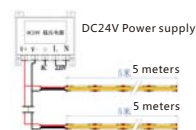
Size Diagram (MM)



Spectral Pattern (25°C)



Install Diagram



Electrical data

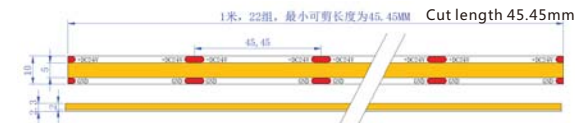
输入电压 Voltage	DC 24V	外形尺寸 Size	5000*8*2.3MM
每米功率 Power	10W/M	光效 Efficacy	>90LM/W (暖白>80LM/W)
PCB 板材质 PCB Material	双面 FPC 电解铜 Double sided electrolytic copper	光源数量 LED Chip	384PCS 384pcs
显指 CRI Ra	>90	固定方式 Installation	高粘性双面背胶 High viscosity twin adhesive
常规色温 Color Temperature	黄光: 2400-2600K; Yellow White 暖白: 2800-3200K; Warm white 自然白: 4000-4500K; Nature White 正白: 6000-6500K; Cold White	可剪长度 Cut Length	最小 41.67MM 41.67mm minimum
出线方式 Cable out	单端 15CM 红黑并线, 20# Single-ended flex 15 cm #20	级联长度 Cascade Length	>5 米 5 meters
		防水等级 IP Rating	IP33 IP 33

SA-COB-528-24-10-IP33

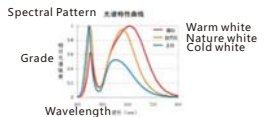


Introduction:

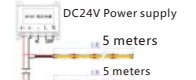
1. 528pcs LED chip, uniform and spotless
2. High heat conductive FPC design, flexible
3. LED chip be encapsulated on FPC, beam angle 180
4. DC 24V safe voltage, low drop of voltage, 5 meters
5. High viscosity heat conduction double-sided adhesive on the back, durable and firm
6. LED light source, sustainable and compatible with RoHS



Spectral Pattern 光谱特性曲线



Wavelength (nm)



Electrical data

输入电压 Voltage	DC 24V	外形尺寸 Size	5000*10*2.3MM 5000*10*2.3mm
每米功率 Power	14W/M	光效 Efficacy	>90LM/W (暖白>80LM/W)
PCB 板材质 PCB Material	双面 FPC 电解铜 Double-sided electrolytic copper FPC	光源数量 LED chip	528PCS
显指 CRI Ra	>90	固定方式 Installation	高粘性双面背胶 High viscosity double-sided adhesive
常规色温 Color Temperature	黄光: 2400-2600K; Yellow white 暖白: 2800-3200K; Warm white 自然白: 4000-4500K; Nature white 正白: 6000-6500K; Cold white	可剪长度 Cut length	最小 45.45MM 45.45MM
出线方式 Cable out	单端 15CM 红黑并线 Single-ended red&black flex 15cm	级联长度 Cascade length	>5 米 5 meters
		防水等级 IP rating	IP33

Installation & Notice

- A. Avoid from sharp objects when install
- B. Prevent the colloid from high temperature
- C. Use DC 24V power supply and select the right power the LED strip total power should be less than 80% of the power supply
- D. Short diameter bend is prohibited to prevent damage
- E. The bend diameter should be more than 1cm as picture



Scenario Analysis

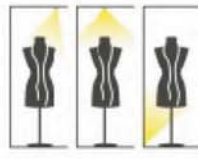
场景分析

With the fast developing of LED industry, high efficiency LED strip lighting can meet the need of main lighting, contrast the environment, increase light vision and save cost.

LED strip lighting has longer lifespan than other light fixtures, low maintenance, 5 ~ 10 years lifespan saving a lot of energy cost



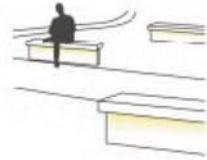
Shelf lighting



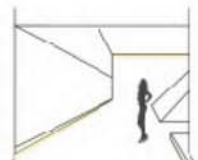
Cabinet lighting



Museum lighting



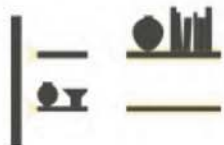
Bench lighting



Showroom



Stairs



Clapboard



Showcase



Showcase bottom



Reflect lighting



Hide lighting

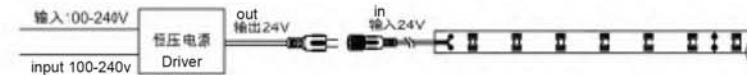


Curve surface lighting

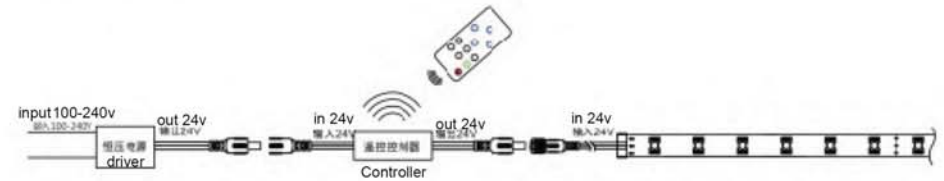
Wiring Application

布线应用

Traditional LED strip wiring



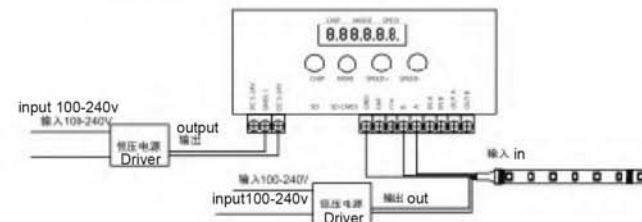
Dim to warm LED strip wiring diagram



RGB LED strip wiring

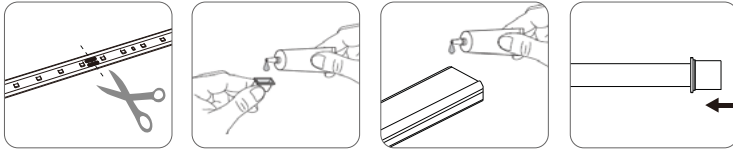


RGBW LED strip wiring



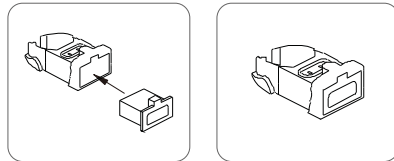
IP 66 Flexible LED Strip Install Diagram

1. With soldering free connectors installation (suitable for SA series)

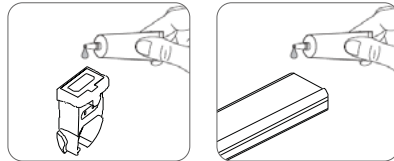


1)
Cut the LED strip at dot line (as picture 1), then drip glue into the silicone end cap until full (as picture 2) and drip a glue circle at the end of LED strip (as picture 3), insert the end cap onto the end of LED strip deeply.

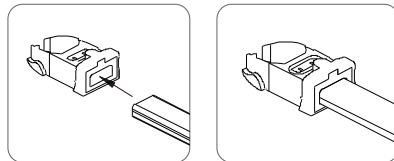
2)
Put the silicone end cap into the fillister of the lower head.



3)
1. Drip glue into the silicone end cap of the lower head until full.
2. Drip a glue circle at the end of LED strip for appropriate amount.

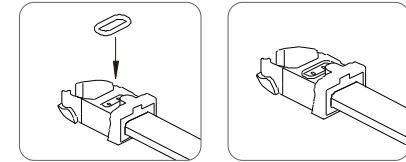


4)
Insert the end of LED strip into the silicone end cap of the lower head deeply.

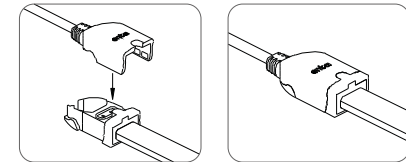


IP 66 Flexible LED Strip Install Diagram

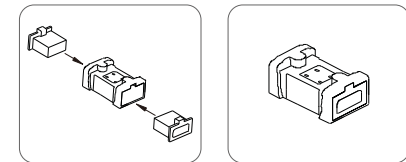
5)
Place the silicone gasket into the oval slot.



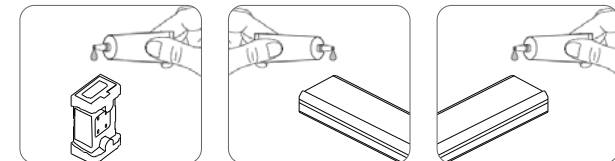
6)
Install the upper head onto the gasket lower head firmly and clean the glue.



7)
Insert waterproof silicone end caps into the two fillisters of the soldering free double ended connector.



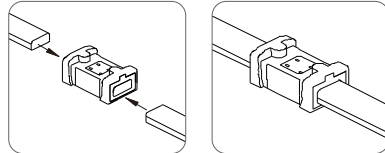
8)
Drip glue into the two end caps until full drip glue circles at the ends of the LED strips.



IP 66 Flexible LED Strip Install Diagram

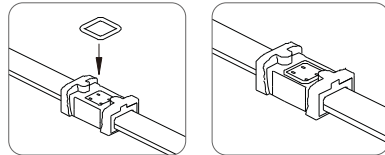
9)

Insert the two glued LED strips into the waterproof soldering free double ended connector.



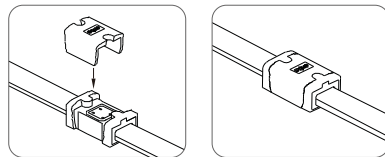
10)

Place the silicone gasket in the oval slot.



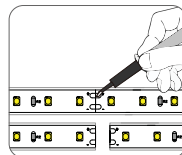
11)

Place the upper head on the double ended connector firmly and clean the redundant glue.



2. Soldering Solution of disconnected LED Strips

Solder the disconnected two ends of LED strip by soldering iron.

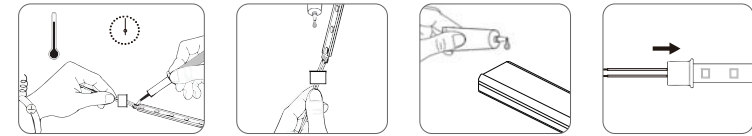


IP 66 Flexible LED Strip Install Diagram

Solution of solder with cable and maintenance

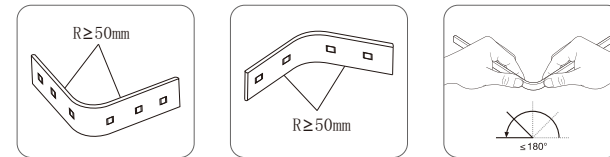
Solution of solder with cable

Solder red and black cable with LED strip by soldering iron, temperature $350^{\circ}\text{C} \pm 10^{\circ}\text{C}$, time < 3s. And then drip glue into the end cap until full, then drip a glue circle at the end of LED strip (appropriate amount), and insert the end cap onto the end of LED strip deeply and clean redundant glue.



Minimum Bending Radius of LED Strip

Whether bend outward or inward, the bending radius should be more than 50mm. Bend once only, please don't repeat and the bending angle should be less than 180°



IP 66 Flexible LED Strip's Special Heat Sink Profile

Straight surface and no turn use Picture 1 solution and profile, screw both ends of the straight profile. Need to bend outward surface use Picture 2's solution and profile. Need to bend inward place use Picture 3 solution and profile, and screw both ends of the profile. Clip the LED strip into the fixed profile.

