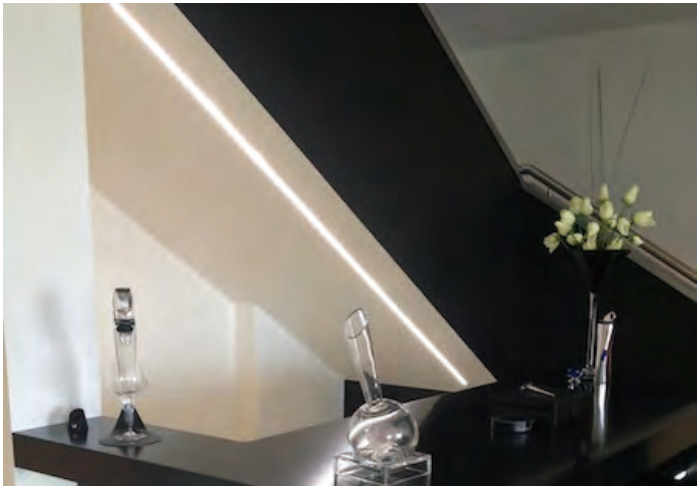


BALBOA

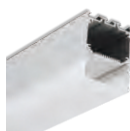
Application places

Linear lighting integrates light and space perfectly. Suitable for indoor laminate boards, floors, walls, cabinets, stairs, etc. give space a new definition.





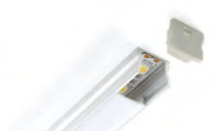
CHANNELS



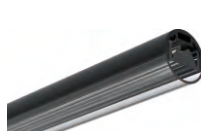
VAL056-DR



VAL3030



VAL004-R



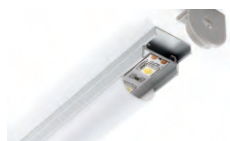
VAL142



VAL012



VAL 1707



VAL010



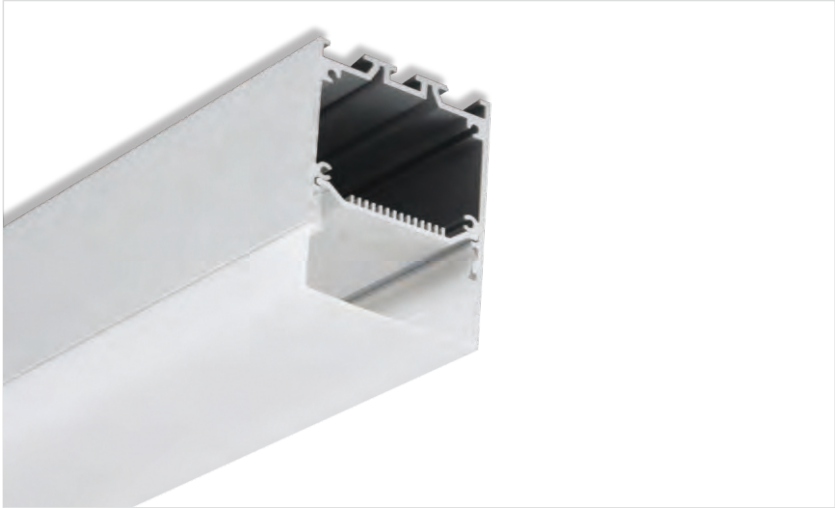
VAL011



VAL6812

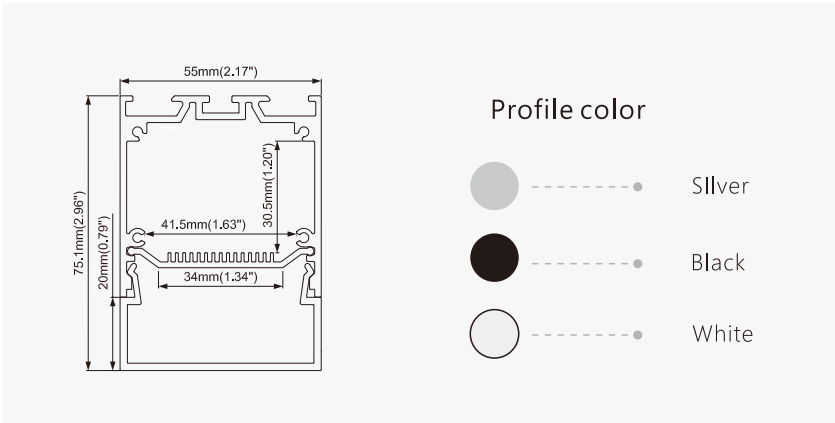


VAL7121



Specifications

Material	VAL066-DR
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	WW55* H75mm
Installation	Surface Mount



END CAPS



End Caps

DIFFUSERS



PC frosted

ACCESSORIES



Steel wire

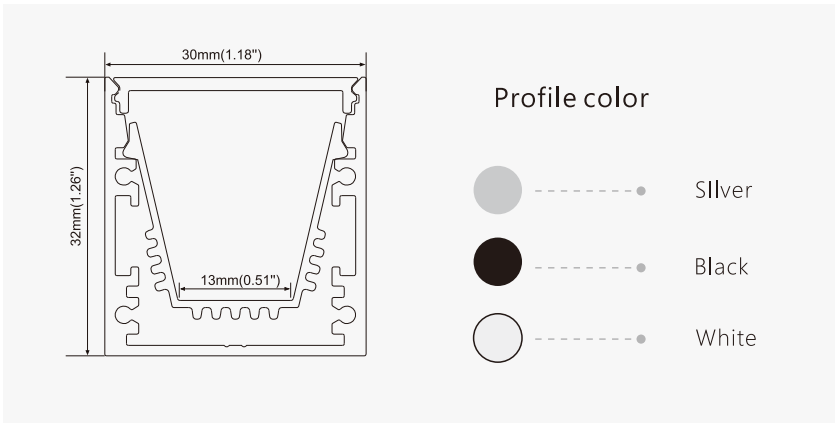


Mounting clip (metal)



Specifications

Material	VAL3030
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	WW30* H32mm
Installation	Surface Mount



END CAPS



End Cap

DIFFUSERS



PC frosted

ACCESSORIES



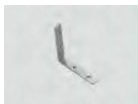
Steel wire



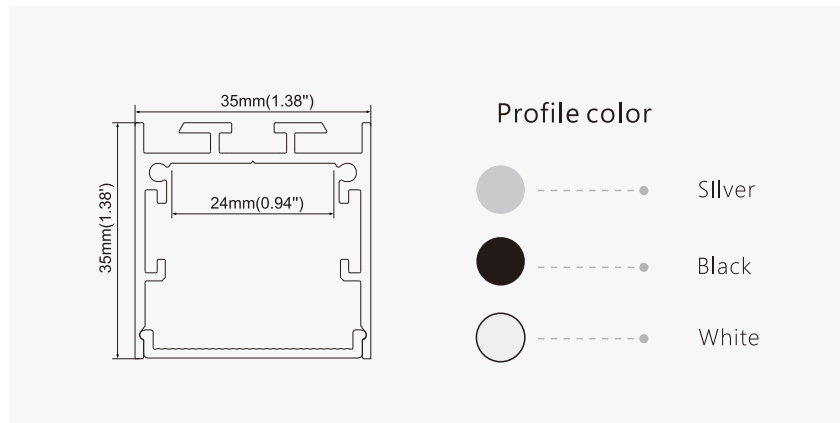
180° Connector



90° Horizontal connector



90° Vertical connector



Specifications

Material	VAL018
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	WW35* H35mm
Installation	Surface Mount

END CAPS



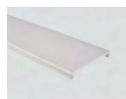
Aluminium end cap without hole

ACCESSORIES



Mounting clip (metal)

DIFFUSERS



PMMA opal matte
PMMA semi-clear
PC diffused



Steel wire



Black PC



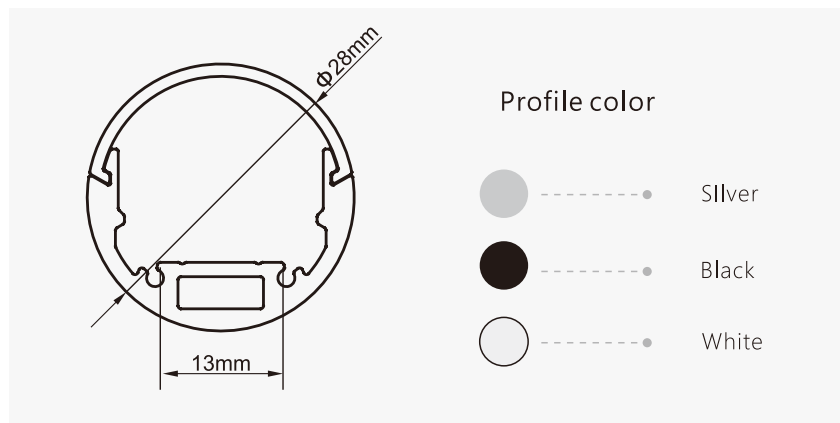
Connector T



Connector X



Connector IL



Specifications

Material	VAL142
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	28* W13mm
Installation	Surface Mount

END CAPS



End Caps



Hanging end caps

DIFFUSERS



PC diffused



PC clear



PMMA lens

ACCESSORIES



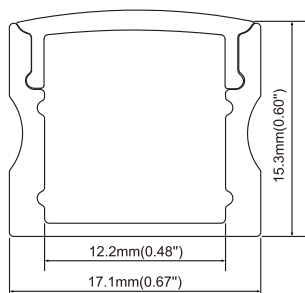
Black PC clip



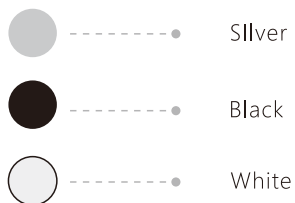
Clear PC clip



Steel wire



Profile color



Specifications

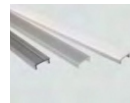
Material	VAL004R
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	WW17.1*H15.3mm
Installation	Surface Mount

END CAPS



End cap with hole
End cap without hole

DIFFUSERS



PMMA opal matte
PMMA semi-clear
PMMA clear
PC diffused

ACCESSORIES



Mounting clip(metal)



Mounting clip (PC)



Adjustable bracket



90° Connector

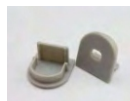


180° Connector

Specifications

Material	VAL010
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	WW19.6*H20.1mm
Installation	Surface Mount

END CAPS

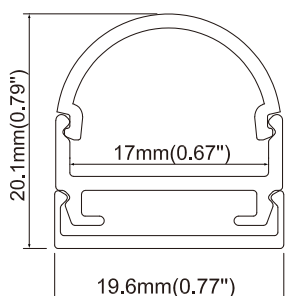


End cap with hole
End cap without hole

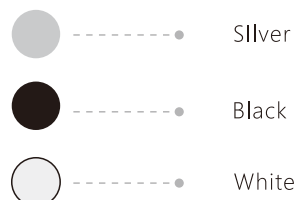
DIFFUSERS



PMMA opal matte
PMMA semi-clear
PC diffused



Profile color

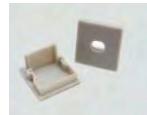




Specifications

Material	VAL011
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	WW19.6* H20mm
Installation	Surface Mount

END CAPS

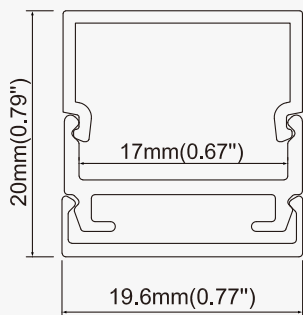


End cap with hole
End cap without hole

DIFFUSERS



PMMA opal matte
PMMA semi-clear
PMMA clear
PC diffused



Profile color

- Silver
- Black
- White



Specifications

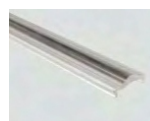
Material	VAL012
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	WW19.6* H16mm
Installation	Surface Mount

END CAPS

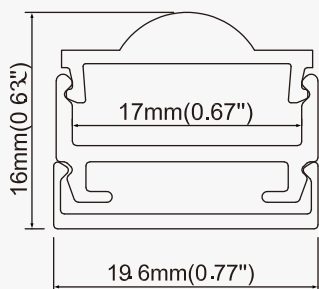


End cap with hole
End cap without hole

DIFFUSERS

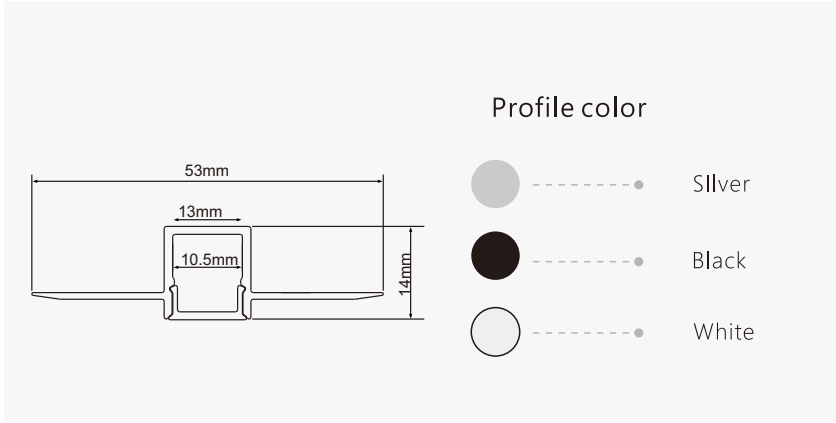
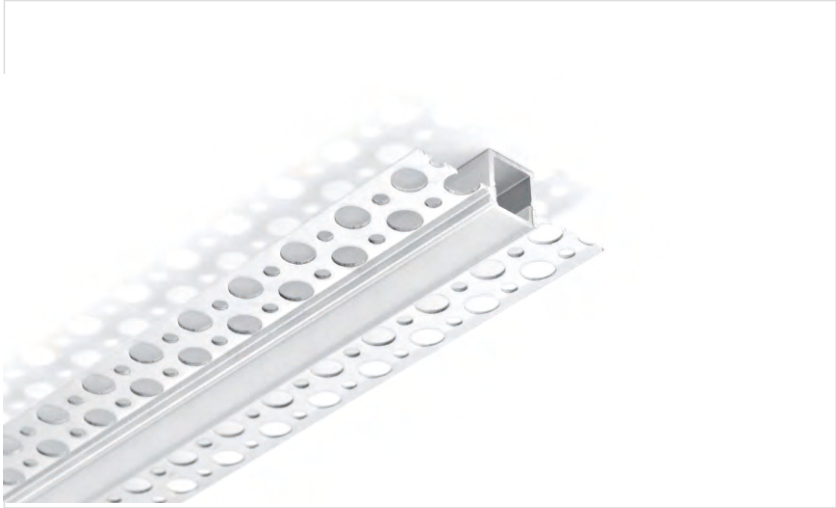


PMMA clear cover



Profile color

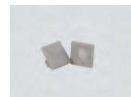
- Silver
- Black
- White



Specifications

Material	VAL6812
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	W13* H14mm
Installation	Recessed Mount

END CAPS



End cap with hole
End cap without hole

DIFFUSERS



PC diffused

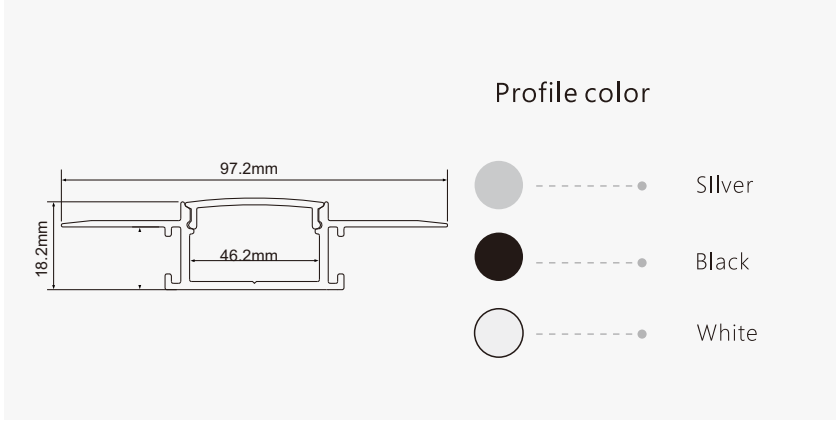


Black PC

ACCESSORIES



Disposable cover



Specifications

Material	VAL7121
Finish	Silver/Black/White
Diffuser	PC milky/Black
Dimension	W46.2 * 18.2mm
Installation	Recessed Mount

END CAPS



End cap with hole
End cap without hole

DIFFUSERS



PMMA opal matte
PMMA semi-clear
PMMA clear
PC diffused



Black PC

ACCESSORIES



180° Connector



90° Horizontal connector



120° Horizontal connector



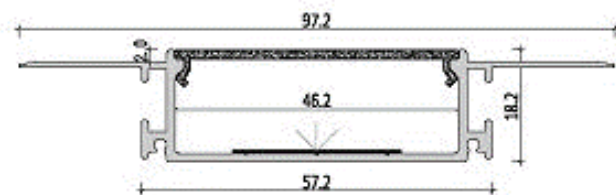
Disposable cover

STRIP LIGHT

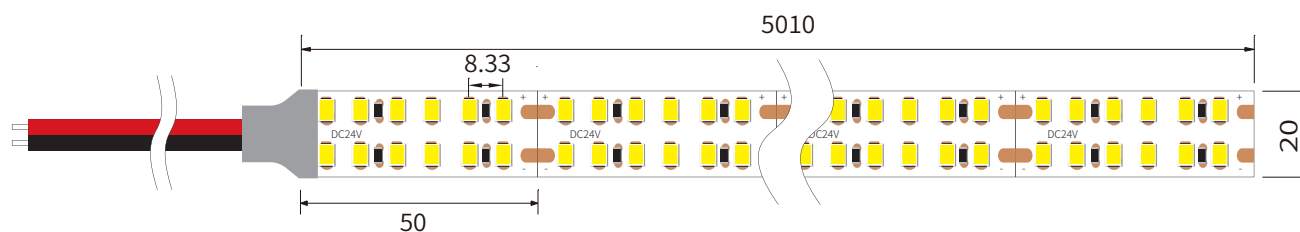
SMD2835 240LEDs Strip

Product Features

- Good chip with golden wire
- Thick copper double-sided PCB
- 24V DC input
- Geniue 3M tape on backside
- Easy to cut in 25mm segments



Structure & Parameter



Optical Parameter

Model No.	S30.24.20.40
Input voltage	DC 24V
Power/m	30w
Max current / LED	31.25mA
CRI(Ra)	>80Ra
Color temperature	4000k±250
Lumen / m	2970lm

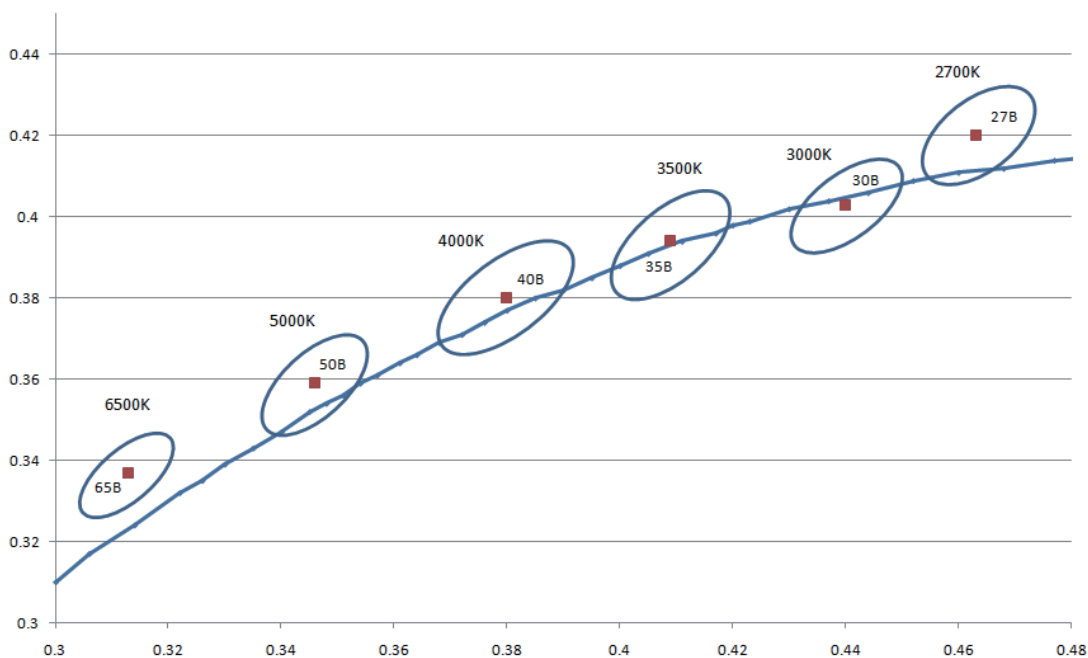
Basic Parameter

LED Q'ty/m	240/m
SMD Type	2835
Working hour	30000h
Warranty	3years
Working temperture	-20 °C ~+45 °C
Minim cuttable length	50mm
PCB Width	20mm

Bin Range of Chromaticity Coordinate

CCT	Bin code Bin		CIE-X	CIE-Y
6500k	65B	6200-6800	0.313	0.337
6000K	60B	5800-6300	0.322	0.336
5000K	50B	4800-5200	0.346	0.359
4000K	40B	3800-4200	0.380	0.380
3500k	35B	3250-3650	0.409	0.394
3000K	30B	2900-3100	0.44	0.403
2700K	27B	2600-2800	0.463	0.42

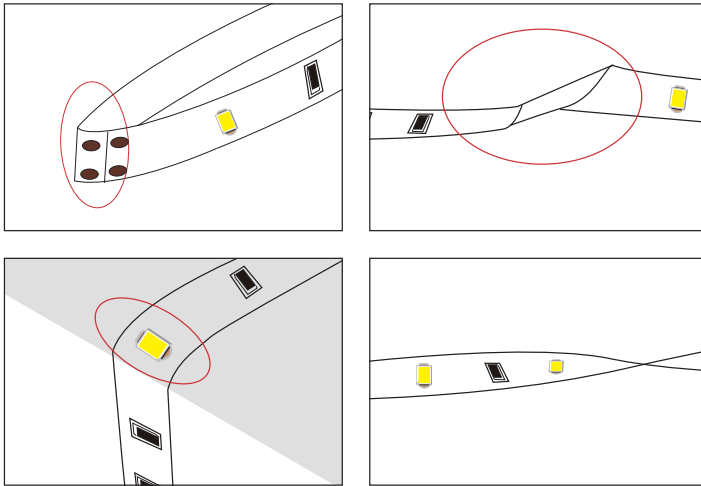
CIE Chromaticity Diagram



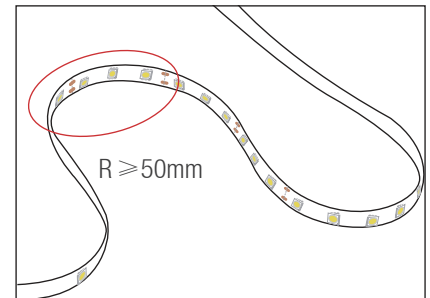
SMD2835 STRIP

Cautions

When install the led strip,please note the installation technique.The led strip can be bent,but not distorted,as shown below.



Distortion(Wrong)

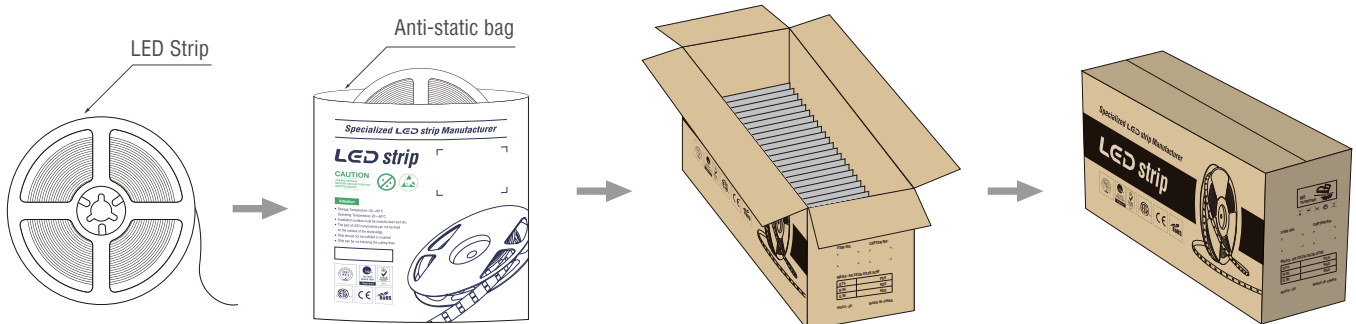


Bend(Right)

➤ LED strips are low votage products,you must use the power supply(transformer).Please don,t connect the led strip directly to the AC 110v or AC 220v,otherwise it will burn out the LED strips.

➤ Clean up the installation surface,it will ensure the reliability of the adhesive,The electrical connection process must be operated by a professional person.

Package

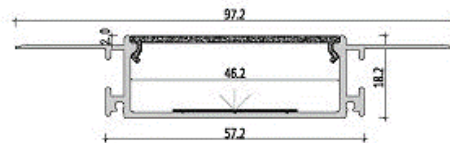


SMD2835 240LEDs Strip

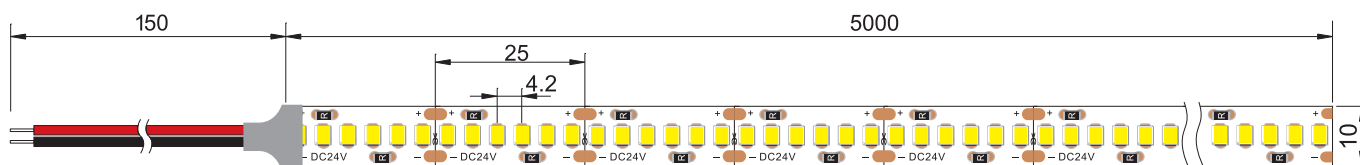


Product Features

- Good chip with golden wire
- Thick copper double-sided PCB
- 24V-DC input
- Geniue 3M tape on backside
- Easy to cut in 25mm segments



Structure & Parameter



Optical Parameter

Model No.	S20.24.20.40
Input voltage	DC 24V
Power/m	20w
Max current / LED	20.83mA
CRI(Ra)	>80Ra
Color temperature	4000k±250
Lumen / m	2080lm

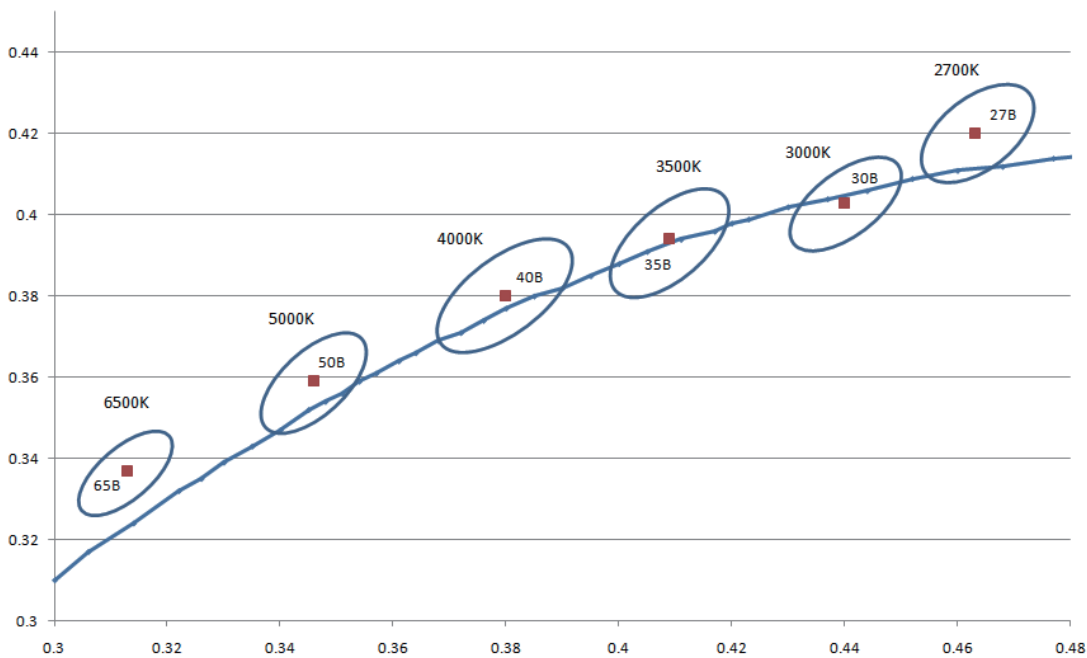
Basic Parameter

LED Q'ty/m	240/m
SMD Type	2835
Working hour	30000h
Warranty	3years
Working temperture	-20 °C ~+45 °C
Minim cuttable length	25mm
PCB Width	10mm

Bin Range of Chromaticity Coordinate

CCT	Bin code Bin		CIE-X	CIE-Y
6500k	65B	6200-6800	0.313	0.337
6000K	60B	5800-6300	0.322	0.336
5000K	50B	4800-5200	0.346	0.359
4000K	40B	3800-4200	0.380	0.380
3500k	35B	3250-3650	0.409	0.394
3000K	30B	2900-3100	0.44	0.403
2700K	27B	2600-2800	0.463	0.42

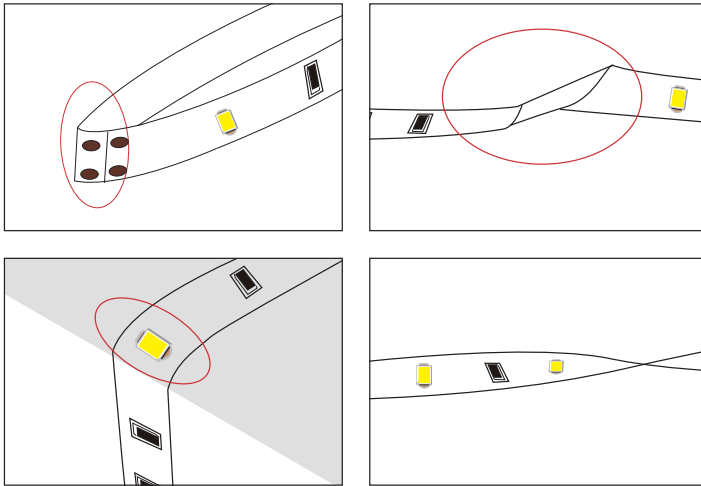
CIE Chromaticity Diagram



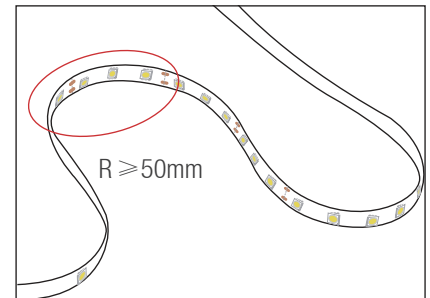
SMD2835 STRIP

Cautions

When install the led strip,please note the installation technique.The led strip can be bent,but not distorted,as shown below.



Distortion(Wrong)

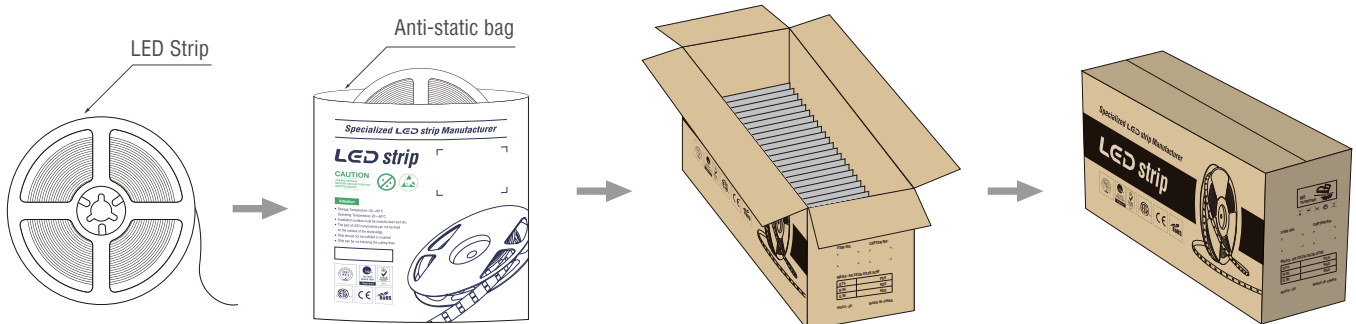


Bend(Right)

➤ LED strips are low votage products,you must use the power supply(transformer).Please don,t connect the led strip directly to the AC 110v or AC 220v,otherwise it will burn out the LED strips.

➤ Clean up the installation surface,it will ensure the reliability of the adhesive,The electrical connection process must be operated by a professional person.

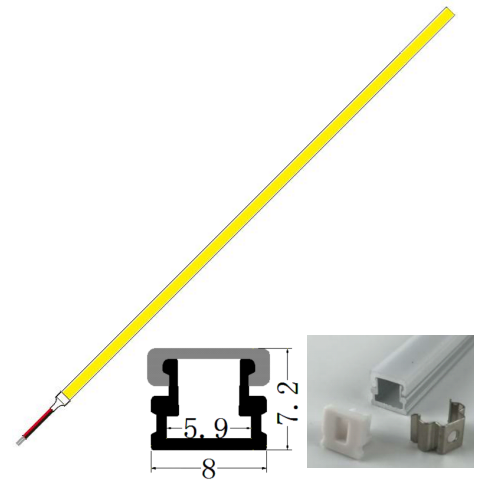
Package



COB constant voltage Led strips

480 leds/9w/DC24V/IP20/5mm

- Dot Free, Pixel Free, Spot Free
- 180deg Beam Angle
- Chip on Board
- New Cutting Edge Technology
- Higher Efficiency, Higher Brightness
- Lighting Trend Which Replace 2110 2216, 3014, 1919, 4040
- No Flicker, No Glare, Eye Protection
- Longer life span with 3 years warranty
- IP grade: IP20/IP65/IP66/IP67/IP68 available
- CE/ ROHS certification



Application:

Widely used in hotels, shopping malls, furniture, cabinets, shelf, as decoration lighting, direct lighting or indirect lighting

Installation:

3M Adhesive

Warranty:

5 years



Product Model	Color	CCT (K)	Ra	angle (°)	Lumen (lm/m)	Efficiency (lm/W)	Voltage (V)	Current (mA/m)	Power (w/m)
45.09.24.20.27	WW	2700	≥90	180	810	90	24	375	9
45.09.24.20.30	WW	3000	≥90	180	900	100	24	375	9
45.09.24.20.40	NW	4000	≥90	180	900	100	24	375	9
45.09.24.20.60	CW	6000	≥90	180	990	110	24	375	9

COB constant voltage Led strips

480 leds/9w/DC24V/IP20/5mm

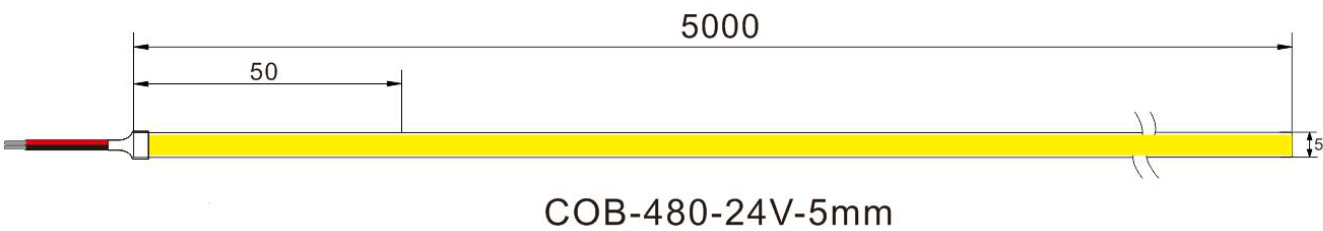
Other features:

Product Model	IP grade	Working environment (°C)	Storage environment (°C)	Length (m)	Max connection Length (m)	LED Qty (pcs/m)	N.W (g/Roll)
45.09.24.20.40	IP20	-25~+45	-30~+80	5	5	480	132

Notes:

- Testing environment temperature: 25±2℃;
- Above data confirmed on the basis of 1M sample, 4000k, IP20.
- Different IP grade with different Data.
- Mark"—"means no testing requirement.

Dimensions:



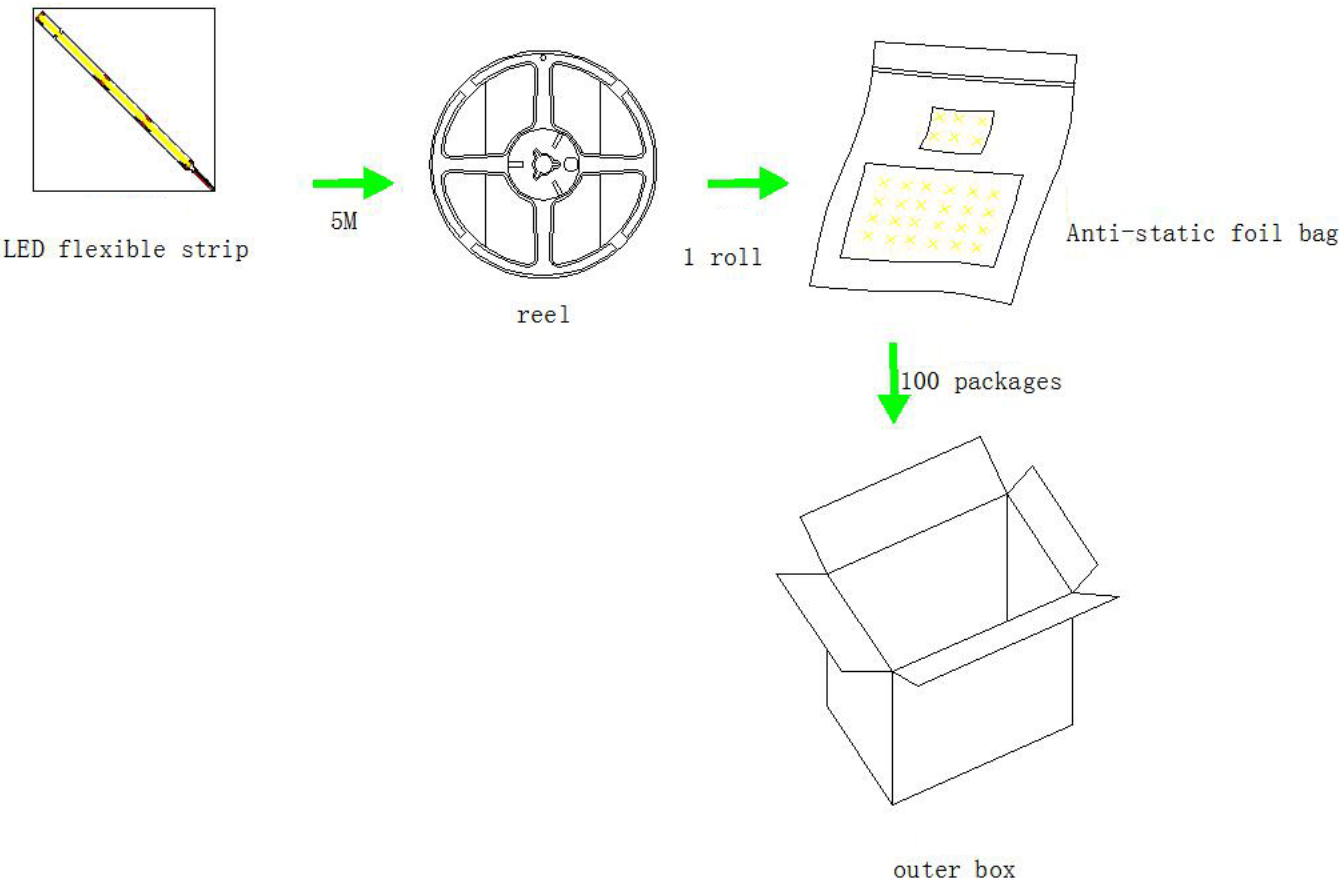
COB constant voltage Led strips

480 leds/9w/DC24V/IP20/5mm

Package details:

Model	carton	Qty/Roll(m)	Qty/Carton(m)	Total Qty(m)	G.W(Kg)	size(mm)
45.09.24.20.XX	outer box	5	500	500	13.5	L720*W280*H410

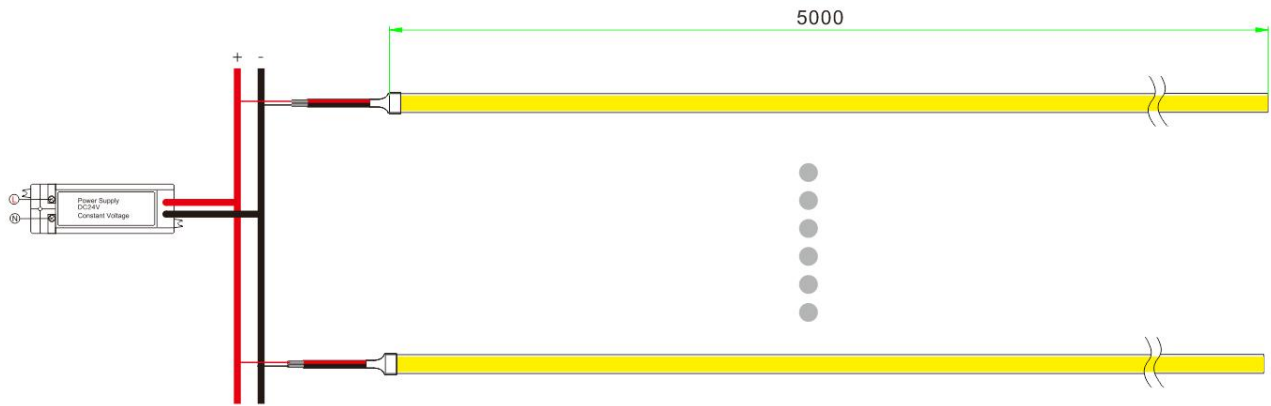
Package:



COB constant voltage Led strips

480 leds/9w/DC24V/IP20/5mm

Schematic:

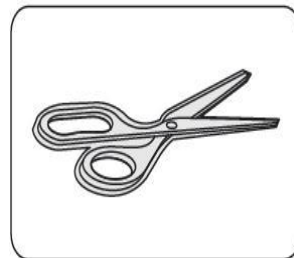


(PS: Strip positive connect to the driver positive,
Strip negative connect to driver negative)

Product and needed tools:



Product
Led strip

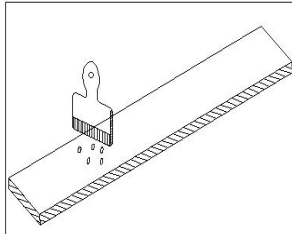


Needed tools
scissor

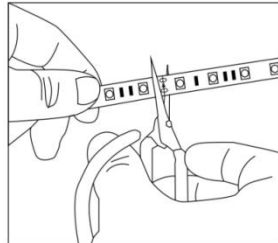
COB constant voltage Led strips

480 leds/9w/DC24V/IP20/5mm

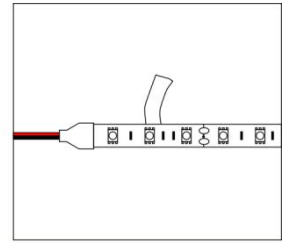
Installation steps:



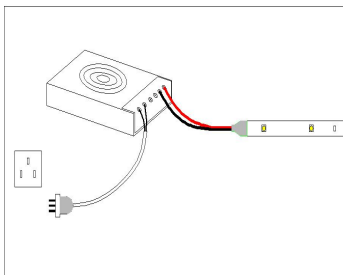
- Clean the installation surface



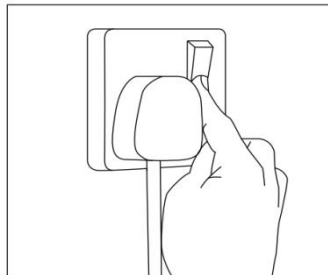
- Measure the length you need to install, cut at the nearest scissor mark line.
- For the left led strip, weld at the next scissor mark to connect with other connection wire.



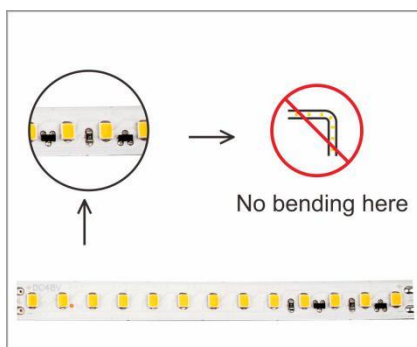
- Do not pull the whole led strip from the back release paper by one time. No press on the leds.



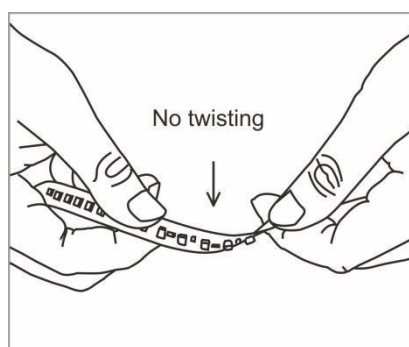
- Connect the led strip wire to the driver output side (Positive to positive, negative to negative.)
- Connect the driver input side to power-supply.



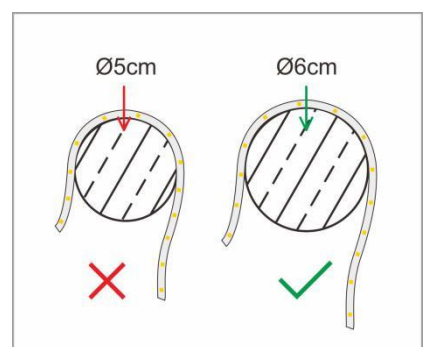
- Switch on and enjoy.



- No bending at the point of leds



- No contortion of the led strip.



- No bending with Diameter < 6cm

COB constant voltage Led strips

480 leds/9w/DC24V/IP20/5mm

Usual problem with solutions:

Problem	Possible reasons	solution
All fail	<ul style="list-style-type: none">● No power supply	Give power supply.
	<ul style="list-style-type: none">● Automatic switch-off because of the open circuit and short circuit	Solve the problem, switch on again.
	<ul style="list-style-type: none">● Wrong connection (positive connect with negative)	Check and get right connection.
Part fail	<ul style="list-style-type: none">● Part power-supply fail	Check and make sure the power supply well.
	<ul style="list-style-type: none">● Part circuit error	
	<ul style="list-style-type: none">● Part wrong connection(positive connect negative)	Check and get right connection.
Inconsistent brightness or insuffiscent brightness	<ul style="list-style-type: none">● overload of the driver	Use higher-power driver.
	<ul style="list-style-type: none">● Too big power consumption of the switch, or unbalanced power consumption from different strip series.	Keep the strip working voltage is more or less 5% than the Rated voltage. 1.shorten the connection cable length, or change to thicker cable. 2.Make sure the strip quantity is less than the allowed connection quantity.Keep the led strip quantity of each series similar).
	<ul style="list-style-type: none">● Too many Led strips connection	Adjust the led strip quantity, make sure sufficient power supply.
LED flash	<ul style="list-style-type: none">● Poor welding connection of wires	Check,find and solve it.
	<ul style="list-style-type: none">● switch problem	Change to right switch.

COB constant voltage Led strips

480 leds/9w/DC24V/IP20/5mm

Statements :

- For safety, the product wire should be moved and replaced by the manufacturer, agent or other authorized person.
- Please refer to the product manual before installation.
- Above-refered data is from our standard product. Please subject to your actual product data if there is difference.
- Above-refered schematic diagrams are from our standard product. Please subject to your actual product data if there is difference.
- In actual use,we suggest 80% consumption of the driver. Keep 20% as power to start the led strip.
- For safety, no touch the AC terminal.
- Any acidic or alkaline substance is forbidden.
- No notice for updated of this product.

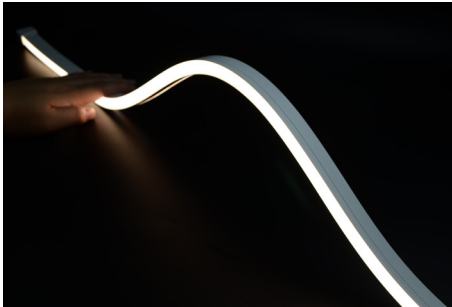


SILICONE NEON STRIP

PRODUCT SPECIFICATION

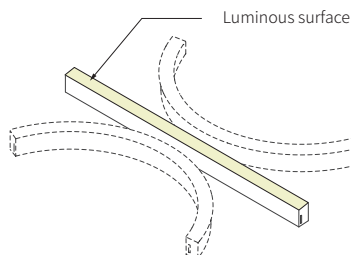
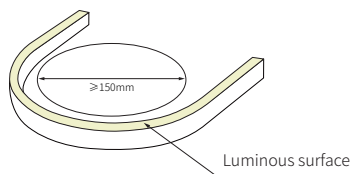
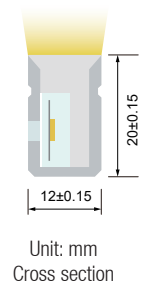
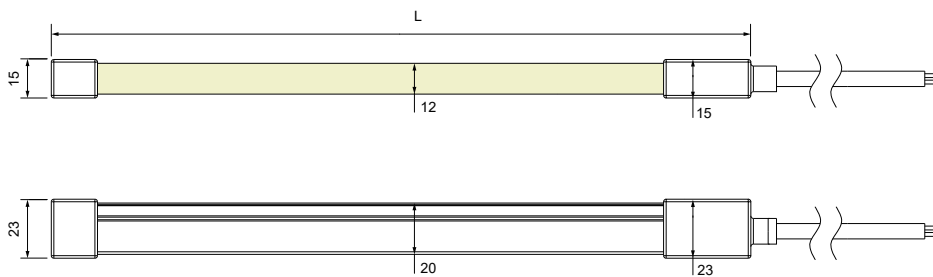
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Side Bend



- It is made of Dow Chemical SILASTIC™ ET-7021 silicone rubber, which provides high transparency and high strength.
- Environmental protection grade silicone material, integrated extrusion molding process.
- Unique optical light distribution structure design, uniform lighting surface and no shadow.
- IP68 protection level, salt solution resistance, acids & alkalis and UV resistance.
- Chlorination resistant, it can be used in underwater environment, such as swimming pool;
- Excellent toughness, simple and stylish appearance, delicate and unique
- 3 years warranty, working life ≥ 30000 hours;

Dimension structure



Electrical Parameter

Voltage	LED Pin Temperature	Storage Temperature	Ambient Temperature	CRI
DC24V	Max. 65°C	-25°C ~ 60°C	Min. -25°C Max (Table below)	≥ 90

Specification

Power(w/m)	Efficacy(lm/w)@4000K	Max Ambient Temperature
10 w/m	27.2 lm/w	45°C

Due to the tolerance of the production and electrical components, output value and electrical power can vary up to 10%

Length Standard

Length Range (M)	Final Length		Tolerance (mm)
	Outlet from one end only	Outlet from both ends	
0M < Neon Strip(L) \leq 5M	L+19	L+30	± 9
5M < Neon Strip(L) \leq 10M	L+19	L+30	± 13



Horizontal Bending



Vertical Bending



Only One Bin



Resistant Saltwater



UV Protection



Resistant to solvents

- The maximum series length refers to the maximum single end power supply length of the constant current strip under the condition of standard 3M wire.
- The given color temperature is the temperature of finished product.
- The given data are typical values due to the tolerances of the production process and the electrical components, values for light output and electrical power can vary up to 10%.

All products can be dimmed; the dimmer's voltage should conform to the rated voltage of the led light.

The output frequency of the dimmer of the constant-current led light should be less than 2K Hz, and the output PWM can control the led light.

- This product is limited to complete the customized length by the factory. It is not recommended for users to cut and use. After self-cutting and processing, it will not reach the IP68 protection level, and there is a risk of water damage when applied to the water bottom.
- The custom length must be an integral multiple of the unit length.

Single color (Lm/m)

CCT(K)	CRI	Voltage	Power (W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max Run Length (M)	CC/CV
2400K±150	≥90	DC24V	10	290	29	50	15 (CC)	CC/CV
2600K±150	≥90	DC24V	10	242	24.2	50	15 (CC)	CC/CV
3000K±150	≥90	DC24V	10	285	28.5	50	15 (CC)	CC/CV
4200K±300	≥90	DC24V	10	272	27.2	50	15 (CC)	CC/CV
6000K±400	≥90	DC24V	10	281	28.1	50	15 (CC)	CC/CV
Red	--	DC24V	10	139	13.9	50	15 (CC)	CC/CV
Green	--	DC24V	10	275	27.5	50	15 (CC)	CC/CV
Blue	--	DC24V	10	53.5	5.4	50	15 (CC)	CC/CV
Yellow	--	DC24V	10	113	11.3	50	15 (CC)	CC/CV
Orange	--	DC24V	10	122	12.2	50	15 (CC)	CC/CV
Pink	--	DC24V	10	242	24.2	50	15 (CC)	CC/CV

*Remarks: the maximum production length is 10m/pcs.

CCT Tunable (Lm/m)

CCT(K)	CRI	Voltage	Power (W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max Run Length (M)	CC/CV
2600K±150	≥90	DC24V	5	140	28	62.5	5	CV
6000K±400	≥90	DC24V	5	145	29	62.5	5	CV
3900K±300	≥90	DC24V	10	285	28.5	62.5	5	CV

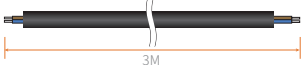

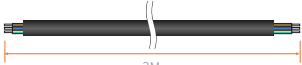

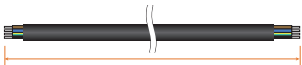

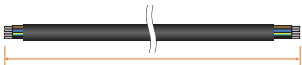

RGB (Lm/m)

CCT(K)	CRI	Voltage	Power (W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max Run Length (M)	CC/CV
R	--	DC24V	3.3	36	11	83.33	5	CV
G	--	DC24V	3.3	130	39.3	83.33	5	CV
B	--	DC24V	3.3	24	7.4	83.33	5	CV
RGB	--	DC24V	10	190	19	83.33	5	CV

Digital RGB

Voltage	Power(W)	CCT(K)	Lumen (LM/M)	Efficiency (LM/W)	Pixel (PCS)	Signal Type	IC Model	Unit Length (mm)
DC24V	4.8	R	22	4.57	8	SPI	UCS1903	125
	4.8	G	70	14.9				
	4.8	B	12	2.6				
	11.5	RGB	99	8.9				

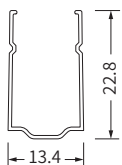
Cable Type

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
Rubber Cables		OD: 6.3mm		Brown V+, Blue V-
		OD: 6.8mm		Dual-White: Brown V+, Blue W, Yellow-Green WW
		OD: 6.8mm		Digital RGB: Brown V+, Blue V-, Yellow-Green DI/DO
		OD: 7.5mm		Brown V+, Blue B, Yellow-Green G, Black R

⚠ Do not immerse the power cable connection in water. Otherwise, there is a risk of short circuit !

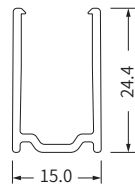
Mounting Way

Mounting Clips



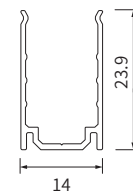
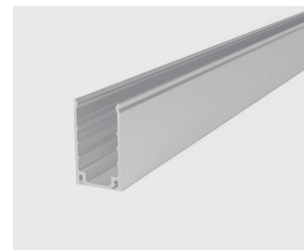
Dimension:
20x13.4x22.84mm
Accessories:
Screw M3x15mm

PC Profile



Dimension:
1000(±5)x15.0x24.4mm
Accessories:
Screw M3x15mm

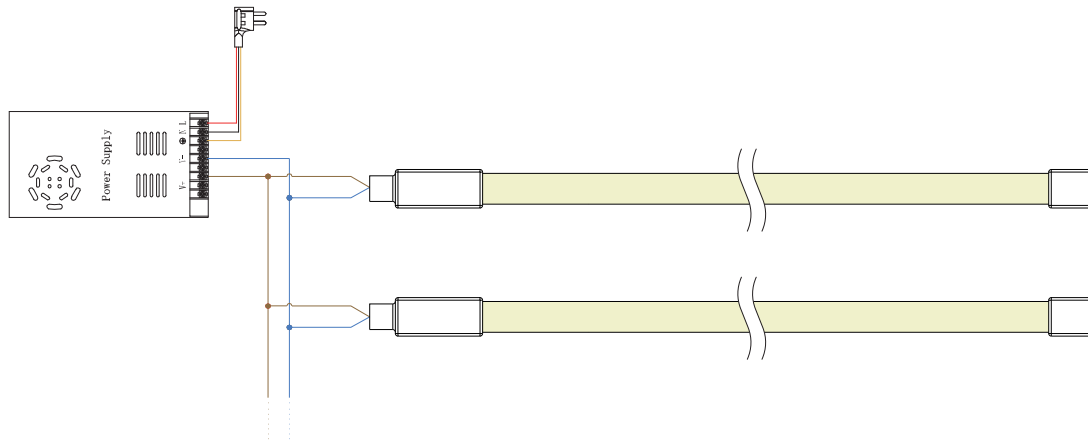
Aluminium Profile



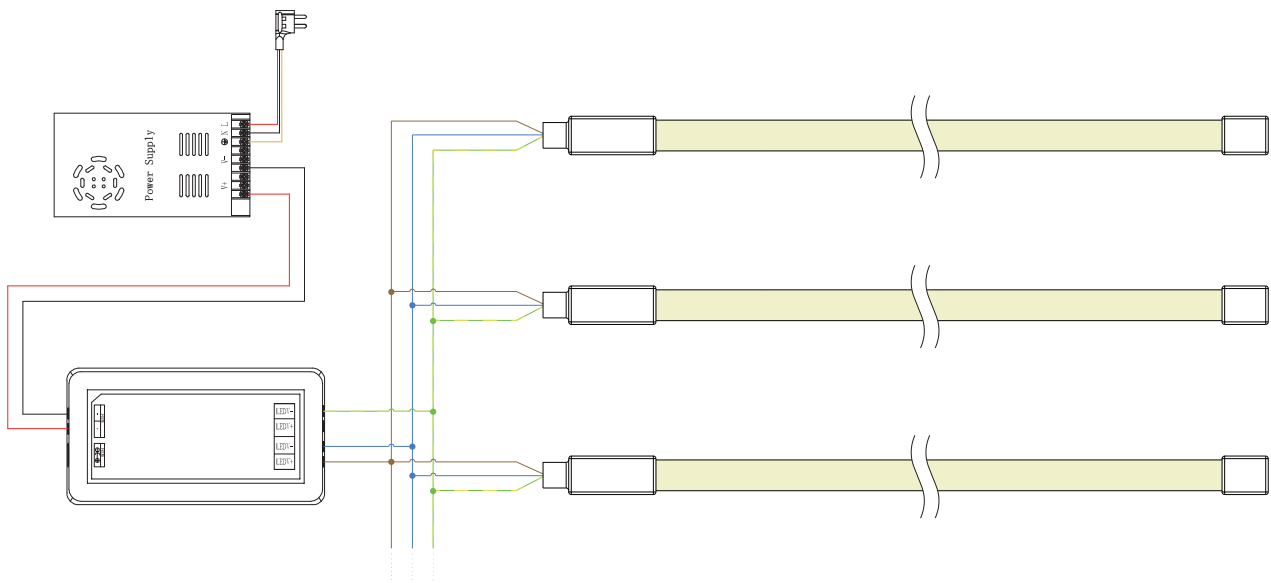
Dimension:
1000(±5)x14x23.9mm
Accessories:
Screw M3x15mm

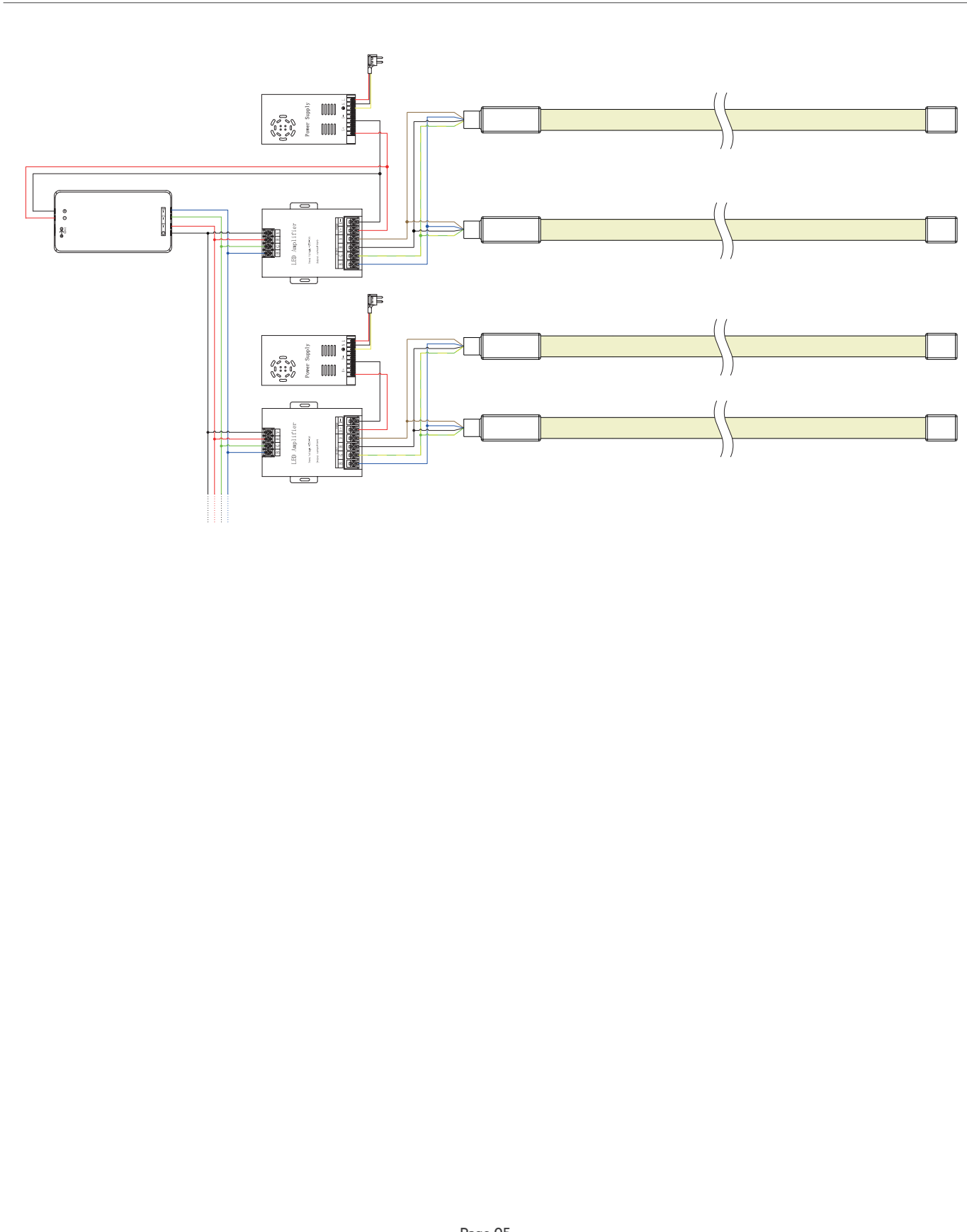
⚠ Aluminum profiles cannot be used in swimming pools.

Single Color Connection Diagram

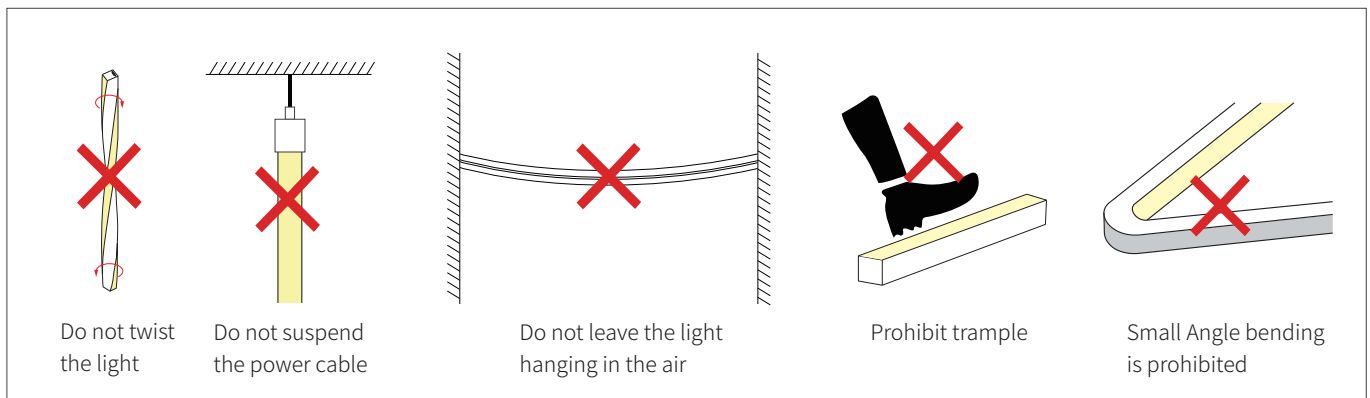
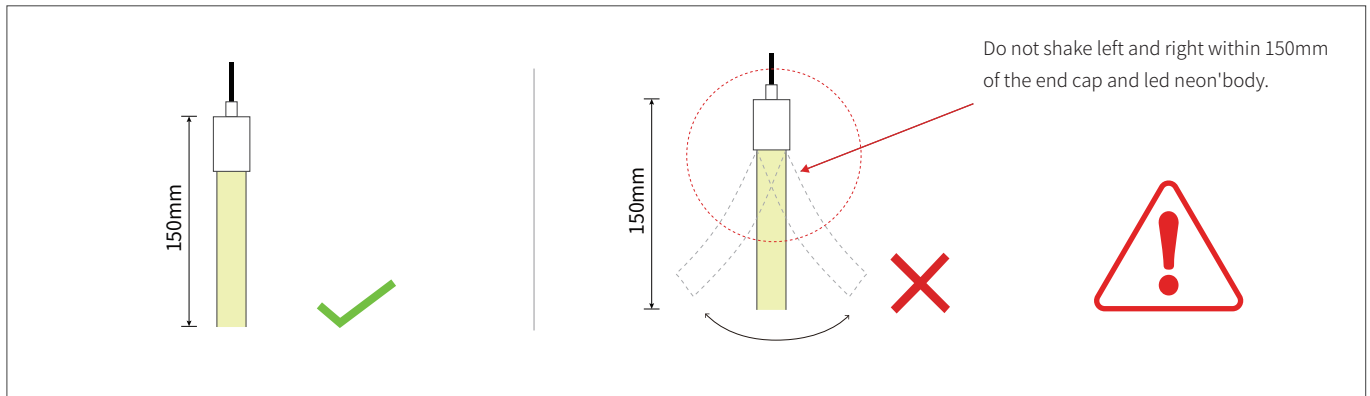


Tunable white Connection Diagram

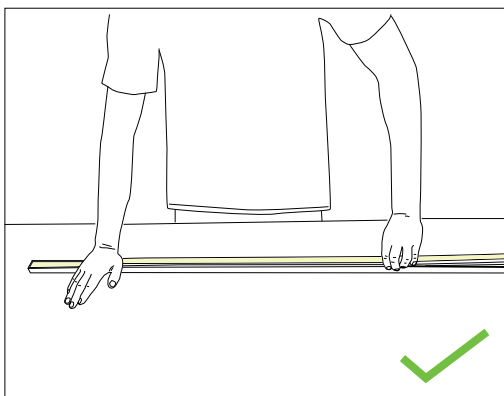




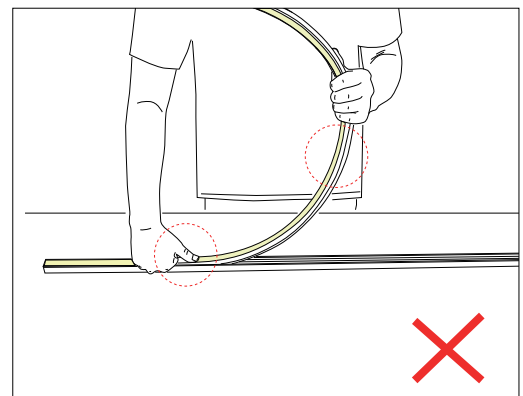
Installation Precautions



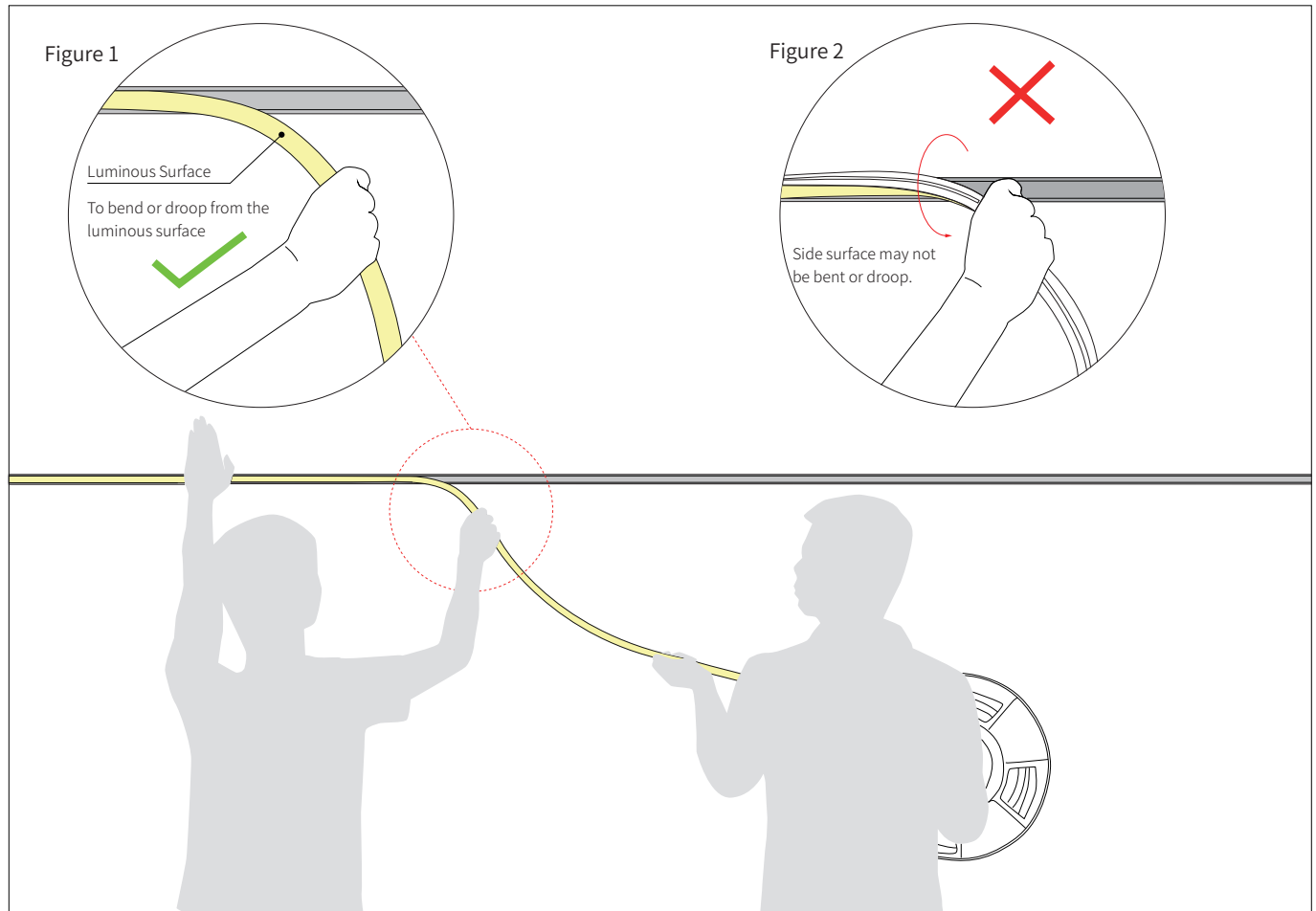
Put it in the profile



- Please press the led strip with your palm to slowly insert the led strip into the groove, and gently straighten the led strip above the groove with your right hand.
- Try to keep the led strip in a flat state during the installation process.



- Do not press the led strip with a single finger, it is easy to damage the internal parts of the led strip.
- The bent arc of the led strip should not be too large during installation.

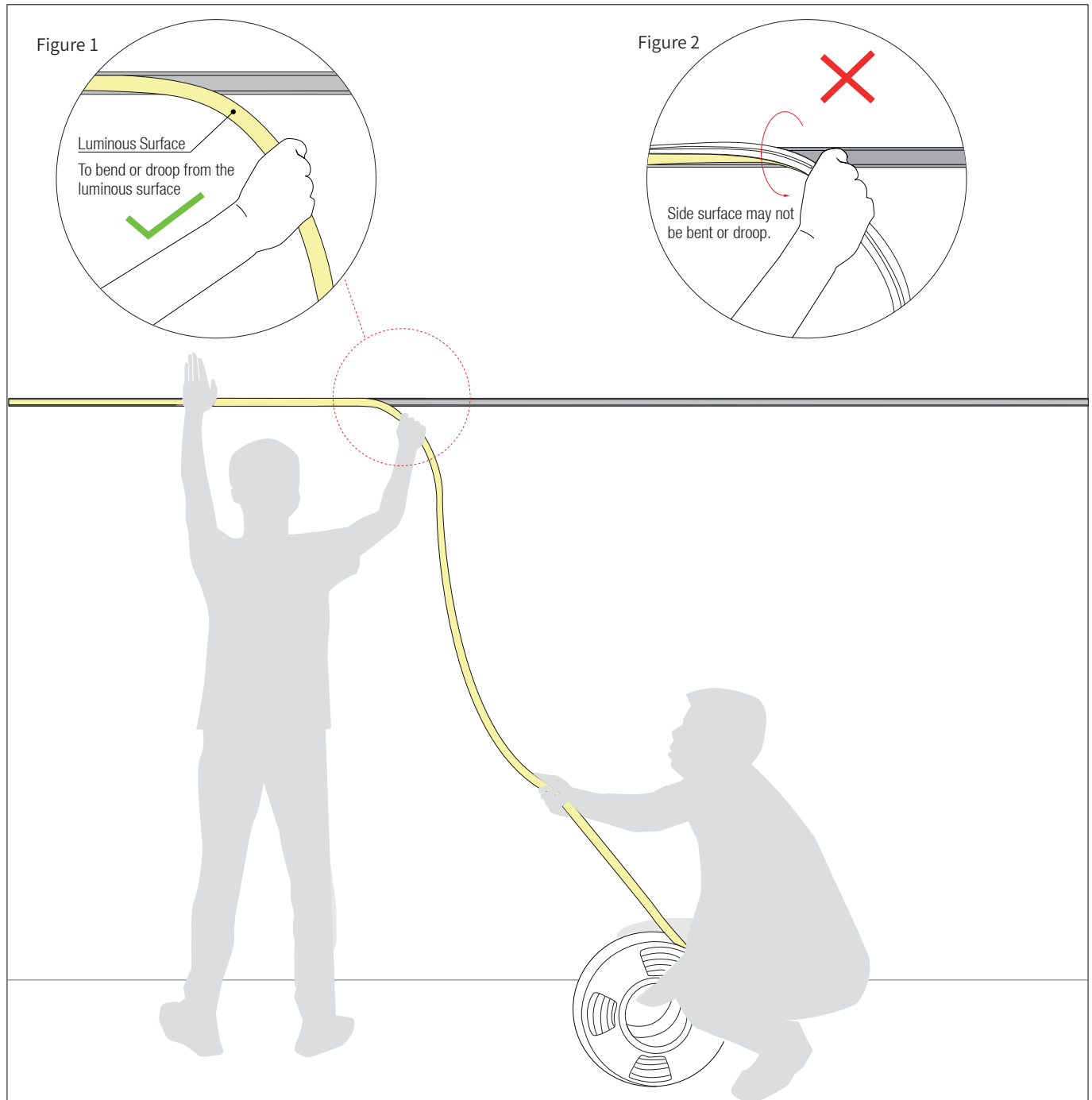
Installation Precautions -- Side Mounted (If the length of the light is more than 2 meters, two persons must work together to install it.)**1. Installer:**

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand so that it droop in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop, See Figure 2.

2. Assistant:

- Cooperate with the installer to lift the reel of the light, and then slowly deliver the light to installer. Do not pull or twist the light during the installation.

Installation Precautions -- Side Mounted (If the length of the light is more than 5 meters, two persons must work together to install it.)



1.Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand so that it droop it in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop, See Figure 2.

2.Assistant:

- Cooperate with the installer to slowly deliver the light to installer. Do not pull or twist the light during the installation.

Notes

The selection of the cable specification at the output end of the power supply, it depends on the total current of the load and the length of the cable. It is recommended to select according to the following table:

Current of the light	Specifications of the cable								
	L=1M	L=2M	L=4M	L=6M	L=8M	L=10M	L=12M	L=14M	L=16M
1A	AWG26	AWG23	AWG21	AWG18	AWG18	AWG17	AWG16	AWG15	AWG15
2A	AWG23	AWG21	AWG18	AWG16	AWG15	AWG14	AWG13	AWG12	AWG12
3A	AWG22	AWG18	AWG16	AWG14	AWG13	AWG12	AWG11	AWG11	AWG10
4A	AWG21	AWG18	AWG15	AWG13	AWG12	AWG11	AWG10	AWG9	AWG9
5A	AWG20	AWG17	AWG14	AWG12	AWG11	AWG10	AWG9	AWG9	AWG8
6A	AWG18	AWG16	AWG13	AWG11	AWG10	AWG9	AWG8	AWG8	AWG7
7A	AWG18	AWG15	AWG12	AWG11	AWG9	AWG8	AWG8	AWG7	AWG6
8A	AWG17	AWG15	AWG12	AWG10	AWG9	AWG8	AWG7	AWG7	AWG6
9A	AWG17	AWG14	AWG11	AWG10	AWG8	AWG7	AWG7	AWG6	AWG5
10A	AWG16	AWG14	AWG11	AWG9	AWG8	AWG7	AWG6	AWG6	AWG5

※ The unused light should be sealed with the packaging bag to avoid prolonged exposure.

※ Please use DC24V isolated constant voltage power supply with ripple voltage less than 5%. Using other types of power supply may damage the light or cause other safety risks.

※ In practical application, 20% allowance should be reserved for power supply to ensure the stability of power supply.

※ It is recommended that professionals connect the power supply. Do not connect the power supply with live power to avoid electric shock.

※ Please confirm whether the voltage of the power supply is consistent with the voltage of the light; Pay attention to the positive and negative poles of the power cord, do not connect wrong, so as not to cause product damage;

※ When multiple power supplies are used, ensure that the positive poles of the power supply are not connected in parallel. Otherwise, the power supply system may be unstable or damaged after long-term operation.

※ If the actual application length exceeds the specified length, it will lead to overload, heating and uneven brightness of the light.

※ During installation, please do not scratch, twist, or bend the light irregularly. Otherwise, the light may be damaged beyond repair.

※ To ensure the life and reliability of the light, please do not over bend the light, which will damage the product itself.

※ To protect your eyes, please avoid staring at the glowing surface of the light for a long time.

※ Non-professionals are forbidden to install, disassemble and maintain the product.

※ Do not use any acid or alkaline adhesive to fix the light (including but not limited to glass glue, etc.)

※ IP68 products are only customized by the factory. After cutting and processing by users themselves, there is a risk that IP68 protection level cannot be reached

※ Because of the difference in structure, even if the same color temperature value, different sizes of light will look slightly different colors.

Please confirm it before use.

Tests showed that methanol and benzenes will have yellowing effects on silicone.

In the newly decorated interior environment, epoxy floor paint, wall paint, wallpaper adhesive, various decoration materials or new furniture, they are likely to release of methanol and benzenes.

It is recommended to remove methanol and benzenes first, or ventilate for a period of time in the newly decorated interior environment before install the silicone neon light, to avoid affecting the silicone body.