Tel: +8675527390189 Fax: +8675527397337 Web: www.grilite.com Contact: sale@grilight.com

PRODUCT SPECIFICATION

# SIDE BEND NEON STRIP

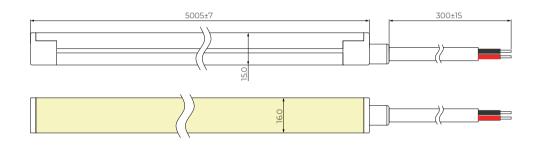
Side Bend

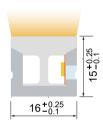




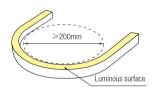
- It is made of Dow Chemical SILASTIC™ ET-7021 silicone rubber, which provides high transparency and high strength.
- Environmental protection grade silicone material, integrated extrusion molding process.
- Unique optical light distribution structure design, uniform lighting surface and no shadow.
- IP67 protection level, salt solution resistance, acids & alkalis and UV resistance.
- Excellent toughness, simple and stylish appearance, delicate and unique.
- =5 years warranty, long-life LED ≥50000 hrs.

#### Dimension structure (Unit: mm)





Cross section



Min bending diameter

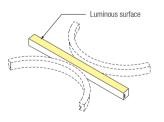
#### Electrical Parameter

Voltage	LED PIN Temperature	Storage Temperature	Ambient Temperature
DC24V	Max. 65 ℃	-25°C ~ 60°C	Min25°C Max(Table below)

#### Specification

Power	Efficacy	Max Ambient
( w/m )	(Im/w) @4000K	Temperature
10	56.3	45°C

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

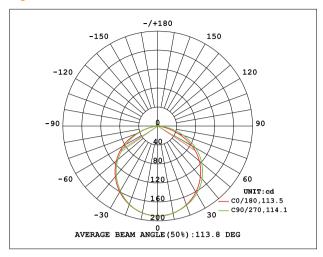


Bend horizontal only

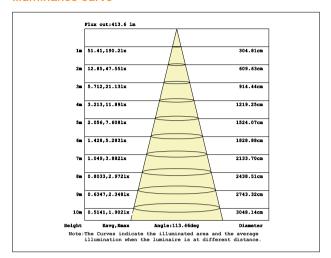
## Length Standard

	Final Leng	gth ( mm )	Tolerance
Length Range (M)	Integral end cap	Silicone end cap	( mm )
0 <neon strip(l)≤5<="" td=""><td>L+5</td><td>L+5.5</td><td>±7</td></neon>	L+5	L+5.5	±7
5 <neon strip(l)≤10<="" td=""><td>L+5</td><td>L+5.5</td><td>±10</td></neon>	L+5	L+5.5	±10
10 <neon strip(l)≤15<="" td=""><td>L+5</td><td>L+5.5</td><td>±13</td></neon>	L+5	L+5.5	±13
15 <neon strip(l)≤20<="" td=""><td>L+5</td><td>L+5.5</td><td>±16</td></neon>	L+5	L+5.5	±16

#### **Light Distribution Curve**



#### Illuminance curve



Note: The above date is based on 24V ,10W/M,single colour with 4000k colour temperature. If you need IES files for other types. Please contact our sales department.

#### Parameter Table



- The maximum series length refers to the maximum length of the light strip with single-end power supply in series under the standard 30CM cable.
- 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.

#### Single color

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700±150	≥90	DC24V	10	534	53.4	50	17(CC)	CC/CV
3000±150	≥90	DC24V	10	530	53.0	50	17(CC)	CC/CV
3500±200	≥90	DC24V	10	569	56.9	50	17(CC)	CC/CV
4000 +400 -200	≥90	DC24V	10	563	56.3	50	17(CC)	CC/CV
5000 <sup>+500</sup> <sub>-300</sub>	≥90	DC24V	10	588	58.8	50	17(CC)	CC/CV
6500±500	≥90	DC24V	10	576	57.6	50	17(CC)	CC/CV
Red		DC24V	10	260	26.0	50	18(CC)	CC/CV
Green		DC24V	10	540	54.0	50	17(CC)	CC/CV
Blue		DC24V	10	110	11.0	50	17(CC)	CC/CV
Yellow		DC24V	10	260	26.0	50	18(CC)	CC/CV
Orange		DC24V	10	240	24.0	50	18(CC)	CC/CV
Pink		DC24V	10	430	43.0	50	17(CC)	CC/CV

#### Single color: Free Cut

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700±150	≥90	DC24V	10	512	51.2	8.3	5	CV
3000±150	≥90	DC24V	10	552	55.2	8.3	5	CV
3500±200	≥90	DC24V	10	552	55.2	8.3	5	CV
4000 +400 -200	≥90	DC24V	10	573	57.3	8.3	5	CV
5000 <sup>+500</sup> -300	≥90	DC24V	10	647	64.7	8.3	5	CV
6500±500	≥90	DC24V	10	546	54.6	8.3	5	CV

#### CCT Tunable (SMD3014)

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700±150	≥90	DC24V	7.5	398	53.1	50	5	CV
6500±500	≥90	DC24V	7.5	416	55.5	50	5	CV
2700+6500	≥90	DC24V	15	806	53.7	50	5	CV







Resistant













- 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.

#### CCT Tunable (SMD2835)

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700±150	≥90	DC24V	7.5	398	53.1	62.5	5	CV
6500±500	≥90	DC24V	7.5	422	56.3	62.5	5	CV
2700+6500	≥90	DC24V	15	813	54.2	62.5	5	CV

#### RGB

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R		DC24V	5	92	18.4	62.5	5	CV
G		DC24V	5	221	44.1	62.5	5	CV
В		DC24V	5	52	10.5	62.5	5	CV
RGB		DC24V	15	366	24.4	62.5	5	CV

#### RGBW

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R		DC24V	3.7	70	18.7	83.3	5	CV
G		DC24V	3.7	240	63.9	83.3	5	CV
В		DC24V	3.7	47	12.5	83.3	5	CV
W: 2700±150	≥90	DC24V	3.7	226	60.2	83.3	5	CV
RGBW		DC24V	15	577	38.5	83.3	5	CV

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R		DC24V	3.7	70	18.7	83.3	5	CV
G		DC24V	3.7	240	63.9	83.3	5	CV
В		DC24V	3.7	47	12.5	83.3	5	CV
W: 3000±150	≥90	DC24V	3.7	224	59.8	83.3	5	CV
RGBW		DC24V	15	575	38.3	83.3	5	CV

CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R		DC24V	3.7	70	18.7	83.3	5	CV
G		DC24V	3.7	240	63.9	83.3	5	CV
В		DC24V	3.7	47	12.5	83.3	5	CV
W: 3500±200	≥90	DC24V	3.7	240	63.9	83.3	5	CV
RGBW		DC24V	15	596	39.7	83.3	5	CV

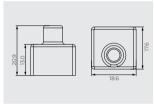
CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R		DC24V	3.7	70	18.7	83.3	5	CV
G		DC24V	3.7	240	63.9	83.3	5	CV
В		DC24V	3.7	47	12.5	83.3	5	CV
W: 4000 <sup>+400</sup> <sub>-200</sub>	≥90	DC24V	3.7	235	62.8	83.3	5	CV
RGBW		DC24V	15	590	39.3	83.3	5	CV

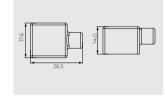
CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R		DC24V	3.7	70	18.7	83.3	5	CV
G		DC24V	3.7	240	63.9	83.3	5	CV
В		DC24V	3.7	47	12.5	83.3	5	CV
W: 5000 <sup>+500</sup> <sub>-200</sub>	≥90	DC24V	3.7	244	65.0	83.3	5	CV
RGBW		DC24V	15	593	39.5	83.3	5	CV

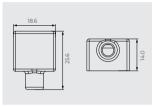
CCT(K)	RA	Voltage	Power(W)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R		DC24V	3.7	70	18.7	83.3	5	CV
G		DC24V	3.7	240	63.9	83.3	5	CV
В		DC24V	3.7	47	12.5	83.3	5	CV
W: 6500±500	≥90	DC24V	3.7	238	63.4	83.3	5	CV
RGBW		DC24V	15	593	39.5	83.3	5	CV

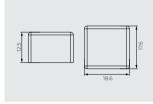
## Cable Lead Option (Unit: mm)

#### Silicone end cap (IP67)

















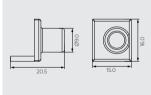
Front Cable Entry

Side Cable Entry

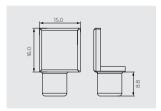
Bottom Cable Entry

Closed End cap

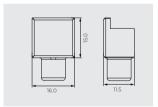
#### Integral end cap (IP67)



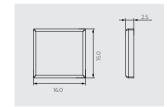














Front Cable Entry

Side Cable Entry

Bottom Cable Entry

Closed End cap

#### Cable

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
PVC Cable		OD: 5.0mm / Inner core: 20AWG	••	Red V+、Black V-
	<b>=</b>	OD: 5.0mm / Inner core: 20AWG	•0•	Brown V+, White W, Yellow WW
		OD: 5.5mm/Inner core: 20AWG	•••	Black V+, Blue B, Green G, Red R
		OD: 5.5mm/Inner core: 22AWG	•0•••	Black V+, White W, Blue B, Green G, Red R
		OD: 5.0mm / Inner core: 20AWG M12Male / Female connecto	••	Red V+、Black V-
Waterproof  Connector with		OD: 5.0mm /Inner core: 20AWG M12Male / Female connecto	•0•	Brown V+、White W、Yellow WW
PVC Cable		OD: 5.5mm /Inner core: 20AWG M12Male / Female connecto	•••	Black V+, Blue B, Green G, Red R
	15 40	OD: 5.5mm /Inner core: 22AWG M12Male / Female connecto	••••	Black V+, White W, Blue B, Green G, Red R
		OD: 6.0mm / Inner core: 20AWG	• •	Red V+\Black V-
Silicone Cable		OD: 6.0mm / Inner core: 20AWG	• • •	Black V+、White W、Yellow WW
Silicone Gable		OD: 6.0mm / Inner core: 20AWG	••••	Black V+ \ Blue B \ Green G \ Red R
		OD: 6.4mm / Inner core: Red/Black20AWG Green/Blue/White22AWG	•••	Black V+、White W、Blue B、Green G、Red R
		OD: 6.0mm /Inner core: 20AWG M12Male / Female connecto	• •	Red V+、Black V-
Waterproof Connector with Silicone Cable		OD: 6.0mm /Inner core: 20AWG M12Male / Female connecto	• • •	Black V+、White W、Yellow WW
		OD: 6.0mm /Inner core: 20AWG M12Male / Female connecto	••••	Black V+ \ Blue B \ Green G \ Red R
	15 15 45	OD: 6.4mm / Inner core: Red/Black20AWG Green/Blue/White22AWG M12Male / Fernale connecto	••••	Black V+、White W、Blue B、Green G、Red R

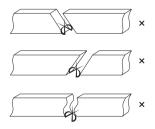
## **Cutting Mark**



Remark:
The bottom of the led strip has transparent window, the black marker is the cutting position



Use professional scissors to cut vertically at the cutting mark



Please don't be feel free to cut and cut into an oblique angle or cambered section.

## Accessories (Unit: mm)

#### Mounting Clips

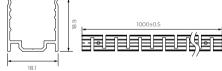




Dimension: 20x12.6x16.8 Accessories: Screw M3x16 ( SUS304 )

#### Curved profile





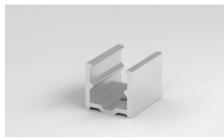
Dimension: 1000x18.1x18.9 Accessories: Screw M3x16 ( SUS304 )

#### Suspension Installation



• Use with the profile

#### Aluminium Mounting clips





Dimension: 20x20.5x17.6 Accessories: Screw M3x16 ( SUS304 )

#### Curved profile





Dimension: 1000x16.6x17.5 Accessories: Screw M3x16 ( SUS304 )

#### Aluminium Profile





Dimension: 1000(±5)x18.1x18.9 Accessories: Screw M3x16 (SUS304)

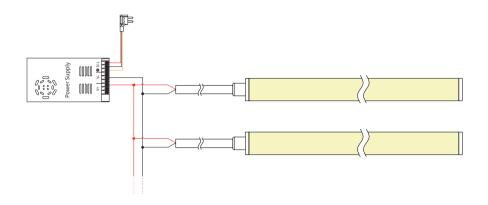
#### PC Profile



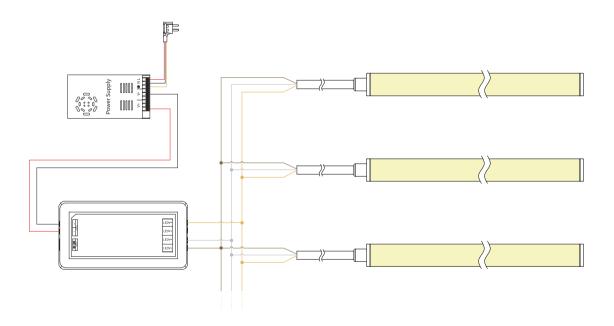


Dimension: 1000(±5)x19.5x19.8 Accessories: Screw M3x16 (SUS304)

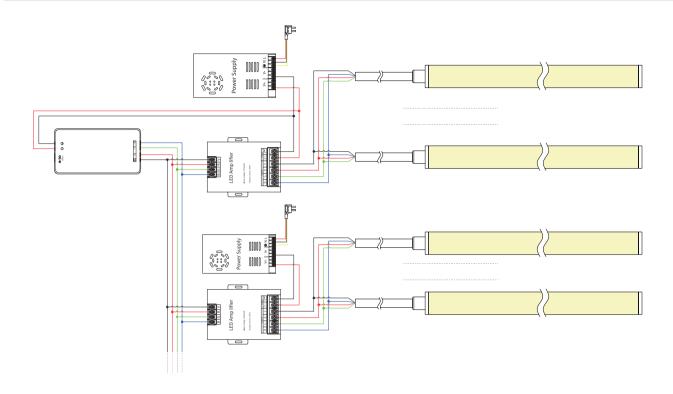
## Single Color Connection Diagram



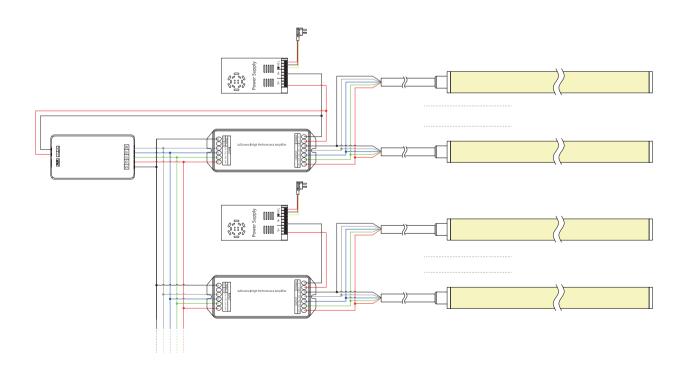
## Tunable white Connection Diagram



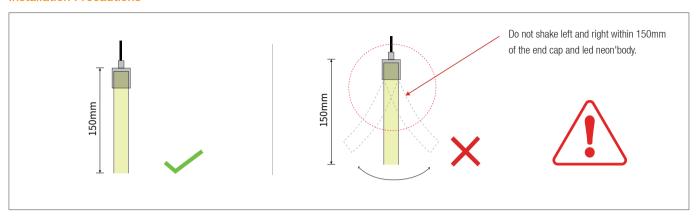
## RGB Connection Diagram

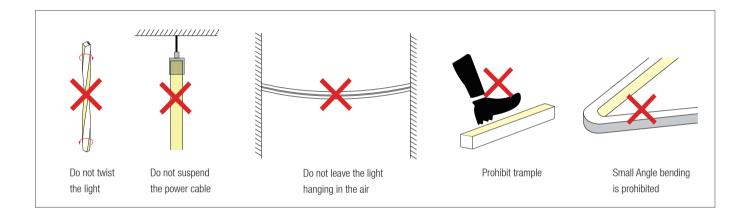


## RGBW Connection Diagram

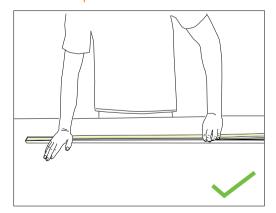


#### **Installation Precautions**

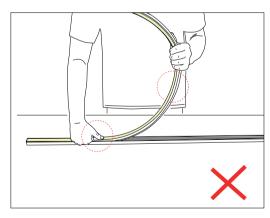




## Put it in the profile



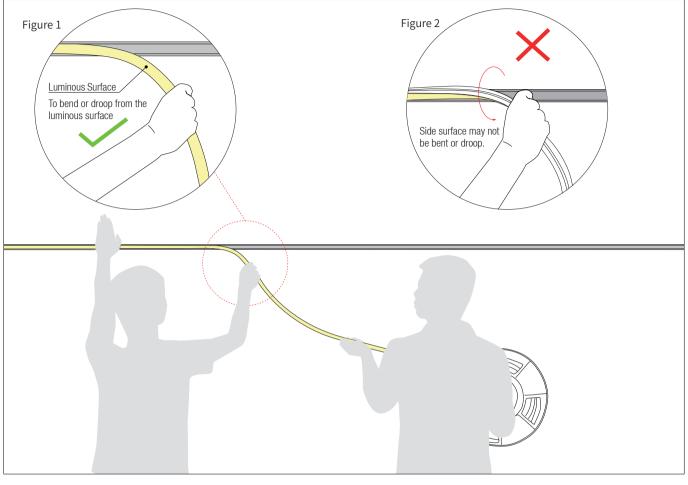
- Please press the led strip with your palm to slowly insert the led strip into the groove, and gently straighten the led strip above the groove with your right hand.
- $\mbox{-}\mbox{Try}$  to keep the led strip in a flat state during the  $% \mbox{-}\mbox{installation}$  process.



- 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:

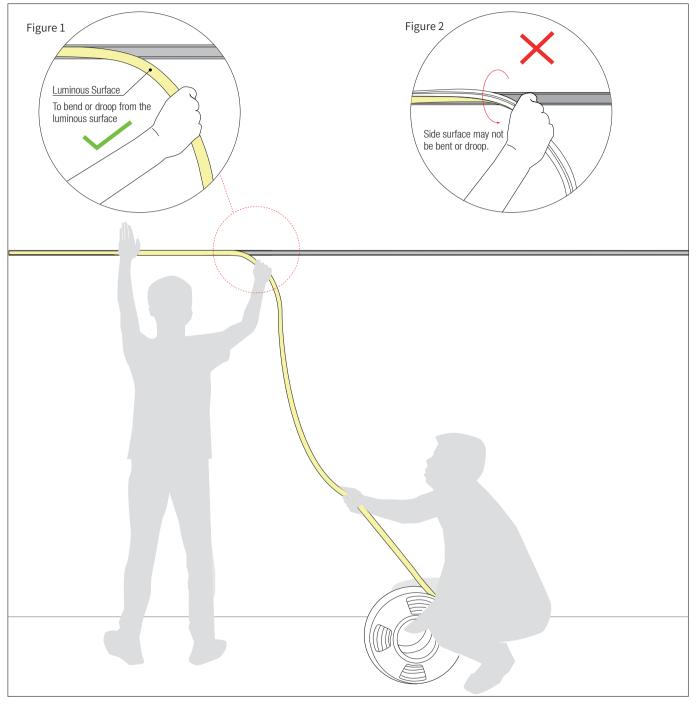
- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand so that it droop it in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop , See Figure 2.

#### 2. Assistant:

-Cooperate with the installer to 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:

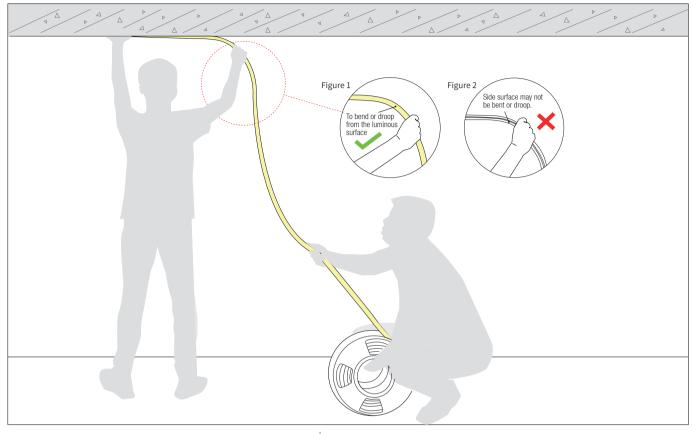
- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand so that it droop it in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop , See Figure 2.

#### 2.Assistant:

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

#### Installation Precautions — Top 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, hold it and rotate it 90° to 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:

			5				5	5		
Current	Specifications of the cable									
of the light	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	
	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	

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.

<sup>\*</sup>The unused light should be sealed with the packaging bag to avoid prolonged exposure.

<sup>\*\*</sup> 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.

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

\*\*Elease 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

<sup>---</sup>damaged after long-term operation.

<sup>\*</sup> 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.

During installation, please do not scratch, twist, or bend the light irregularly. Utherwise, the light may be damaged beyond repair.
 To ensure the life and reliability of the light, please do not over bend the light with 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.)
 IP67 products are not suitable for long-term immersion in water; 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

<sup>\*\*</sup> 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.

## BE A TRUSTED LED STRIP MANUFACTURER