SPECIFICATION
SIDE BEND NEON

NW-S1220-PU 24V IP68

5027545

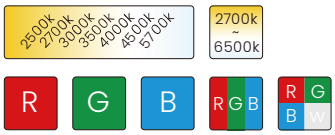
E540692

Version: A/01
www.ledyi.com sales@ledyi.com

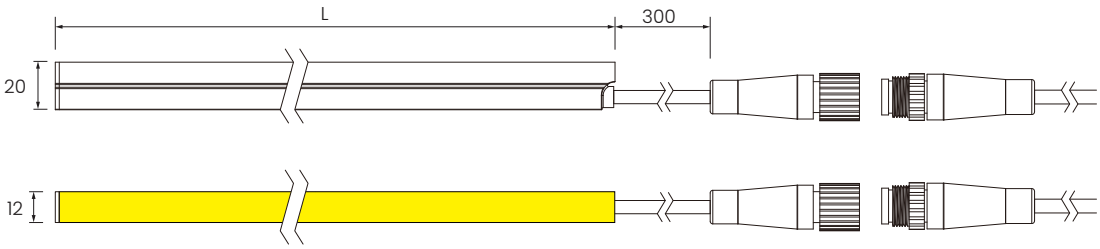
IP68 NEON NW-S1220-PU 24V SIDE BEND

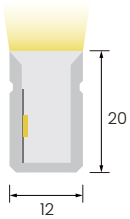
Features

- Single-ended cable outlet Double-ended cable outlet IP68 waterproof, suitable for long-term diving applications, suitable for underwater environments such as swimming pools and water features.
- Milky white light strip, beautiful appearance, soft, even light without light spots
- PU material, resistant to yellowing, salt liquid, weak acid and alkali corrosion, and effective protection against chlorine



Dimensions(Unit:mm)

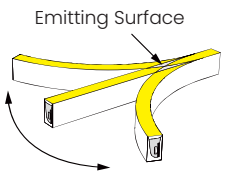




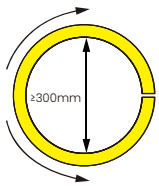
Cross section

General Parameters

Voltage	DC24V
LED Solder-Point Temperature	Max. 65°C
Storage Temperature	-25°C~ 60°C
Ambient Temperature	Min.-25°C, Max (Table below)
CRI	see parameter tables



Horizontal Bending



Min. Bending Diameter

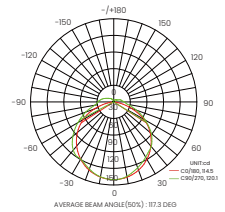
Power Ratings

Power(w/m)	5	10	15
Efficacy(lm/w)@4000K	46.2	46.2	46.1
Max Ambient Temperature	55°C	45°C	35°C

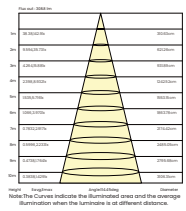
Due to the tolerance of the production and electrical components, output value and electrical power can vary up to 10%

Length Standard

Length Range (M)	Final Length(mm) Outlet from one end only	Outlet from both ends	Tolerance (mm)
0M<Neon Strip(L)≤1M	L+4	L+10	±11
1M<Neon Strip(L)≤2M	L+4	L+10	±13
2M<Neon Strip(L)≤3M	L+4	L+10	±15
3M<Neon Strip(L)≤4M	L+4	L+10	±17
4M<Neon Strip(L)≤5M	L+4	L+10	±19



Light Distribution Curve



Effective Average Illuminance

Note: The above data 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.

Single Color-CV : Model-NW-S1220V24IP68P-CCx

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2500K±150	≥90	DC24V	5	206	41.3	41.6	23	CC
			10	400	40.1	41.6	16	CC
			15	601	40.1	41.6	12	CC
2700K±150	≥90	DC24V	5	214	43.0	41.6	23	CC
			10	429	43.0	41.6	16	CC
			15	653	43.6	41.6	12	CC
3000K±150	≥90	DC24V	5	227	45.6	41.6	23	CC
			10	438	43.9	41.6	16	CC
			15	682	45.5	41.6	12	CC
3500K±200	≥90	DC24V	5	236	47.2	41.6	23	CC
			10	471	47.1	41.6	16	CC
			15	696	46.5	41.6	12	CC
4000K $^{+400}_{-200}$	≥90	DC24V	5	231	46.2	41.6	23	CC
			10	462	46.2	41.6	16	CC
			15	690	46.1	41.6	12	CC
4500K $^{+400}_{-200}$	≥90	DC24V	5	226	45.3	41.6	23	CC
			10	456	45.6	41.6	16	CC
			15	698	46.6	41.6	12	CC
5700K $^{+500}_{-300}$	≥90	DC24V	5	207	41.6	41.6	23	CC
			10	419	42.0	41.6	16	CC
			15	638	42.6	41.6	12	CC

Tunable White : Model-NW-S1220V24IP68P-Ca

CCT(K)	CRI	Voltage	Power(W/m)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
2700K±150	≥90	DC24V	7.5	272	36.3	50	5	CV
6500K±500	≥90	DC24V	7.5	289	38.6	50	5	CV
2700K+6500K	≥90	DC24V	15	547	36.5	50	5	CV

RGB : Model-NW-S1220V24IP68P-Crgb

CCT(K)	CRI	Voltage	Power(W/m)	Lumen (LM/M)	Efficiency (LM/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	5	74	15.0	71.4	5	CV
G	--	DC24V	5	164	32.9	71.4	5	CV
B	--	DC24V	5	33	6.6	71.4	5	CV
RGB	--	DC24V	15	258	17.2	71.4	5	CV

RGBW : Model-NW-S1220V24IP68P-Crgbwx

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	62	16.6	71.4	5	CV
G	--	DC24V	3.7	134	35.9	71.4	5	CV
B	--	DC24V	3.7	29	7.9	71.4	5	CV
W:2700K±200	>80	DC24V	3.7	155	41.3	71.4	5	CV
RGBW	--	DC24V	15	364	24.3	71.4	5	CV

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	62	16.6	71.4	5	CV
G	--	DC24V	3.7	134	35.9	71.4	5	CV
B	--	DC24V	3.7	29	7.9	71.4	5	CV
W:3000K±200	>80	DC24V	3.7	157	42.0	71.4	5	CV
RGBW	--	DC24V	15	366	24.4	71.4	5	CV

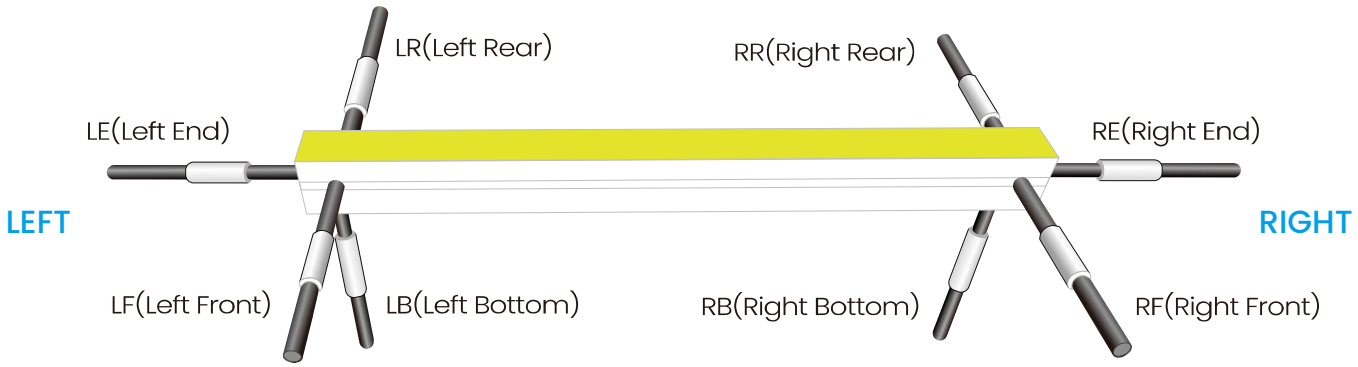
CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	62	16.6	71.4	5	CV
G	--	DC24V	3.7	134	35.9	71.4	5	CV
B	--	DC24V	3.7	29	7.9	71.4	5	CV
W:3500K±300	>80	DC24V	3.7	167	44.6	71.4	5	CV
RGBW	--	DC24V	15	367	24.5	71.4	5	CV

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	62	16.6	71.4	5	CV
G	--	DC24V	3.7	134	35.9	71.4	5	CV
B	--	DC24V	3.7	29	7.9	71.4	5	CV
W:5000K±500	>80	DC24V	3.7	162	43.4	71.4	5	CV
RGBW	--	DC24V	15	358	23.9	71.4	5	CV

CCT(K)	CRI	Voltage	Power(W/m)	Luminous Flux (lm/m)	Efficacy (lm/W)	Unit Length (mm)	Max. Run Length (M)	CC/CV
R	--	DC24V	3.7	62	16.6	71.4	5	CV
G	--	DC24V	3.7	134	35.9	71.4	5	CV
B	--	DC24V	3.7	29	7.9	71.4	5	CV
W:5700K±500	>80	DC24V	3.7	152	40.7	71.4	5	CV
RGBW	--	DC24V	15	360	24.1	71.4	5	CV

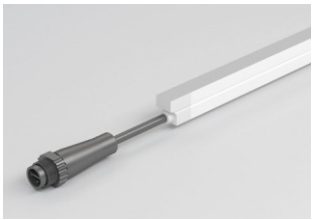
- Maximum run length refers to the maximum length powered from one end using the standard 30 cm cable.
- The specified color temperature refers to the finished product.
- The values shown are typical. Due to production and component tolerances, light output and electrical power may vary by up to ±10%.
- All products can be dimmed; The dimmer voltage must match the rated voltage of the LED strip.
- 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 customzied 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.

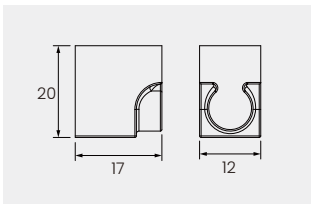
Cable Entry Directions



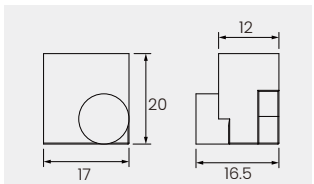
Cable Lead Options (Unit: mm)

Integral End Cap (IP68)

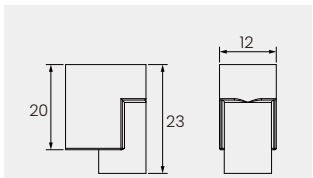




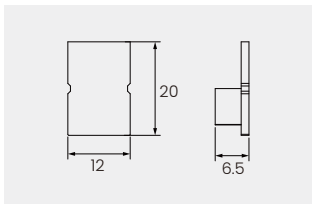
Front Cable Entry



Side Cable Entry

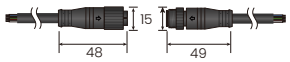


Bottom Cable Entry



Closed End cap

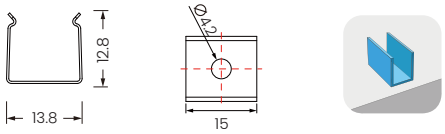
Cables and Connectors

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
TPU Cable		OD: 5.0 mm / Inner core: 20AWG	●●	Red V+/Black V-
		OD: 5.0 mm / Inner core: 20AWG	●○●	Brown V+/White W/Yellow WW
		OD: 5.0mm / Inner core: 20AWG	●●●●	Black V+/Blue B/Green G/Red R
		OD: 6.0 mm / Inner core: 22AWG	●○●●●	Black V+/White W/Blue B/Green G/Red R
Waterproof Connector with TPU Cable		OD: 5.0 mm / Inner core: 20AWG M12 Male/Female Connector	●●	Red V+/Black V-
		OD: 5.0 mm / Inner core: 20AWG M12 Male/Female Connector	●○●	Brown V+/White W/Yellow WW
		OD: 5.0 mm / Inner core: 20AWG M12 Male/Female Connector	●●●●	Black V+/Blue B/Green G/Red R
		OD: 6.0 mm / Inner core: 22AWG M12 Male/Female Connector	●○●●●	Black V+/White W/Blue B/Green G/Red R

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

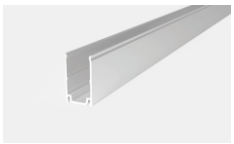
Installation Accessories

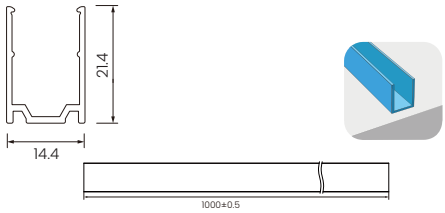
Mounting Clips



Name	Mounting Clips
Dimension:	15x13.8x12.8mm
Accessories:	M3 × 16 mm (SUS304)

Aluminum Profile

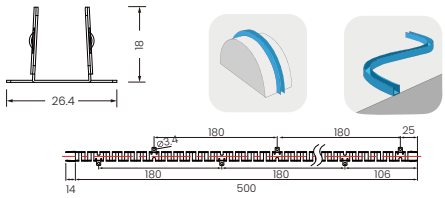




Name	Aluminum Profile
Dimension:	1000(±0.5)x14.4x21.4mm
Accessories:	M3 × 16 mm (SUS304)

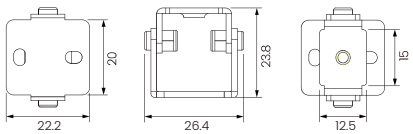
⚠ Aluminum profiles cannot be used in swimming pools.

Curved Profile



Name	Curved Profile
Dimension:	514x26.4x18mm
Accessories:	M3 × 16 mm (SUS304)

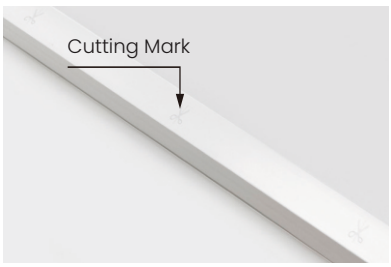
Adjustable Angle Clip
(use with aluminum clips or profile)



Dimension: 22.2x26.4x23.8mm

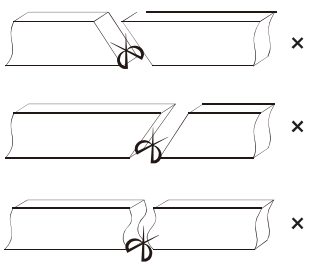
Accessories: Screw M3x25mm(SUS304)/Screw M3.5x8mm(SUS304)

Cutting Mark



Note:
The black marker is the cutting position

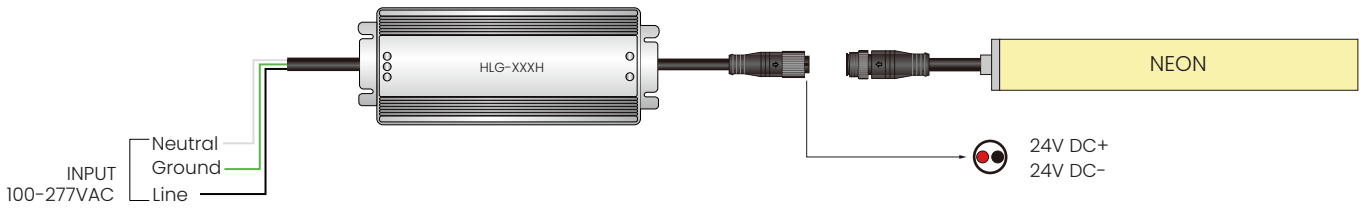
Use a professional cutting tool to cut vertically at the cutting mark.



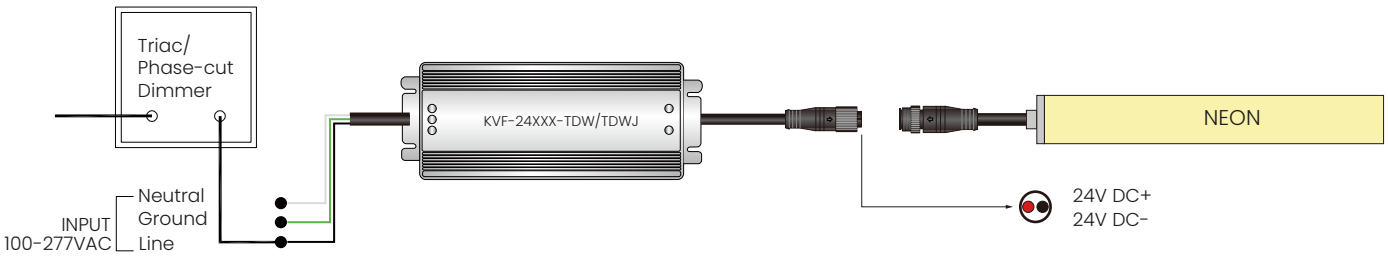
Please don't be feel free to cut and cut into an oblique angle or cambered section.

Single Color Connection Diagram

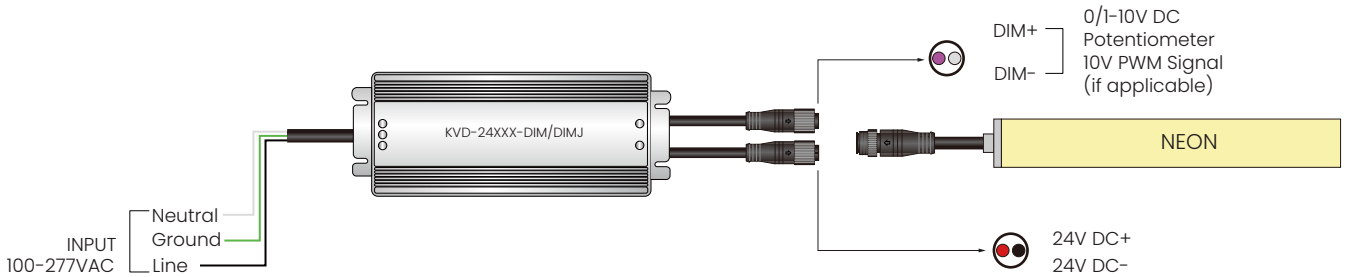
Non-dimmable



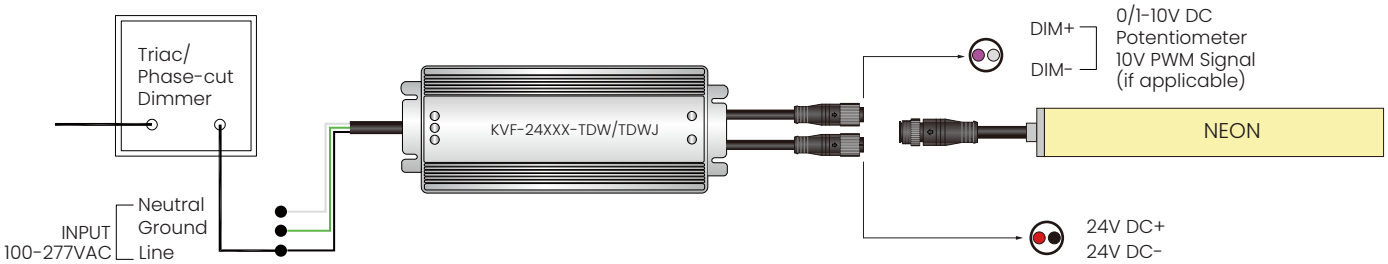
Phase-Cut / TRIAC Dimming



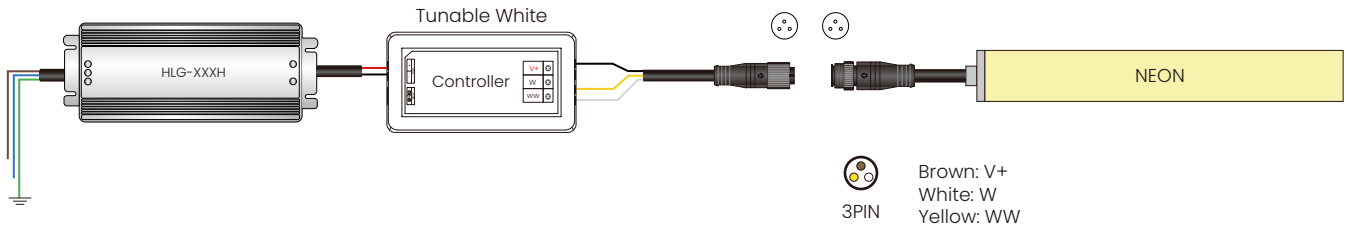
4-in-1 Dimming(0-10V/1-10V/Potentiometer/10V PWM)



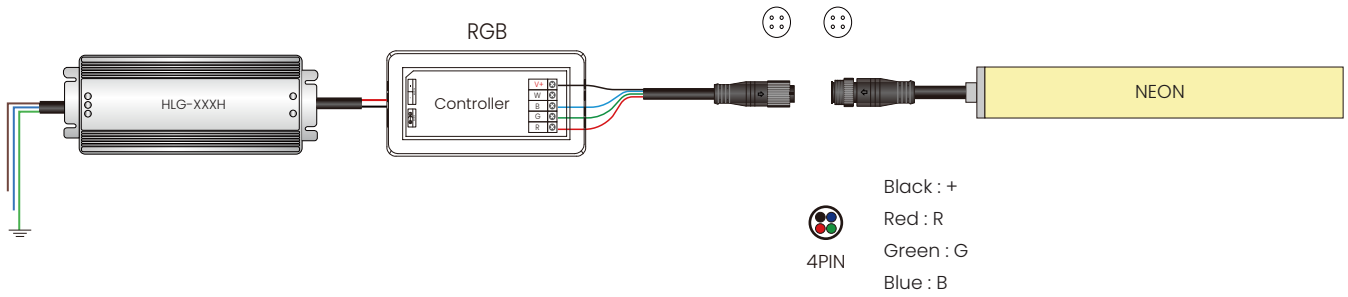
5-in-1 Dimming (Triac/0-10V/1-10V/Potentiometer/10V PWM)



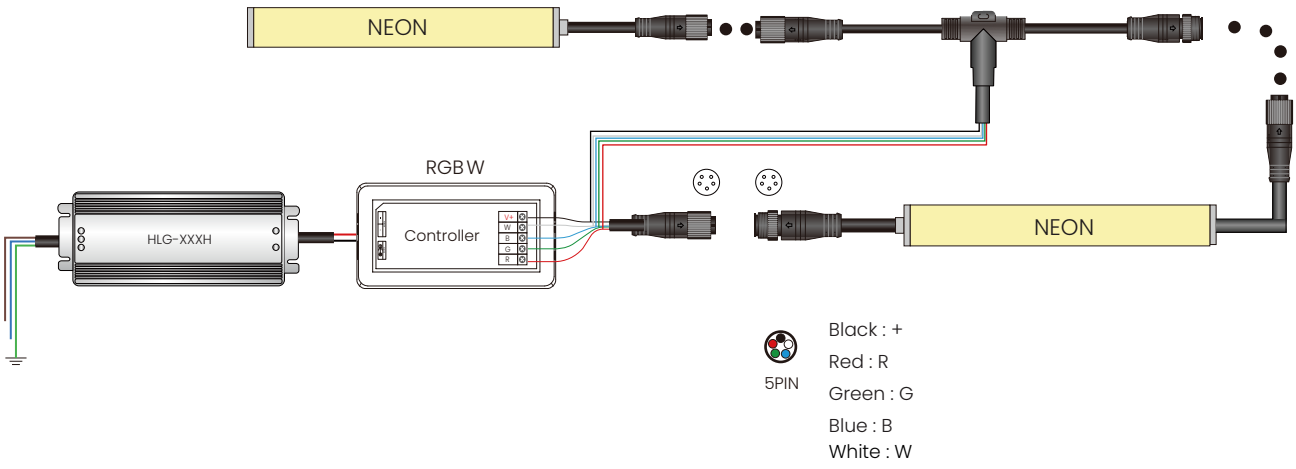
Tunable White Connection Diagram



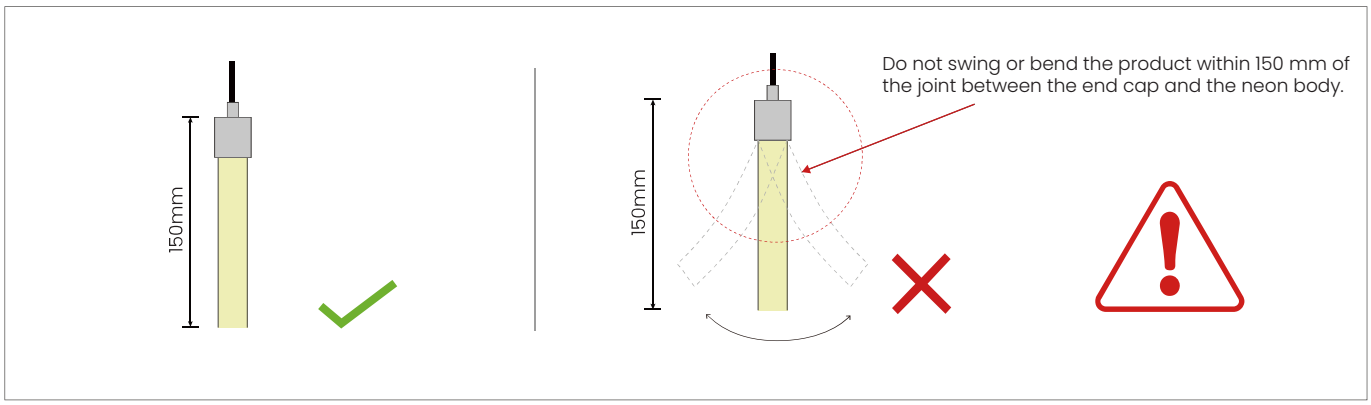
RGB Connection Diagram

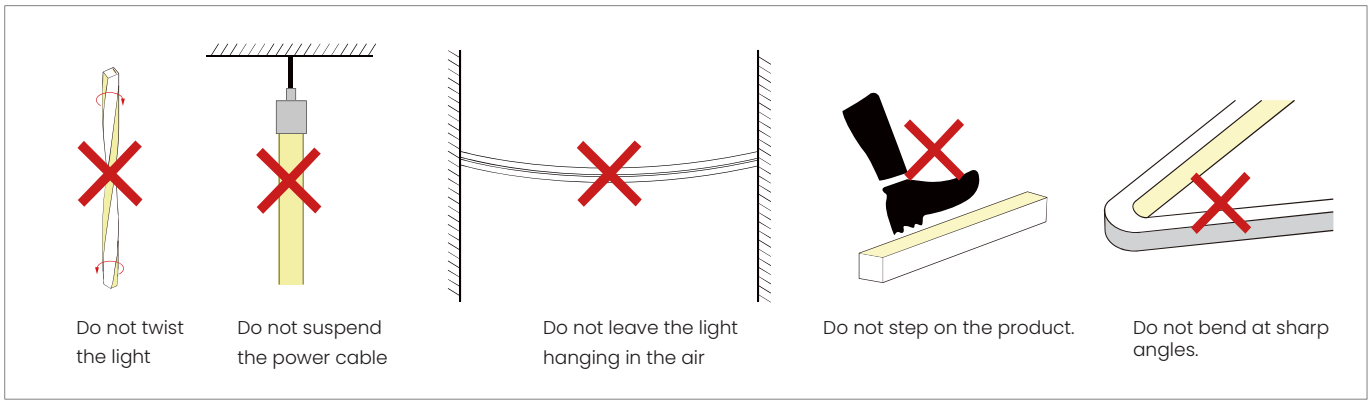


RGBW Connection Diagram



Installation Precautions





Do not twist the light

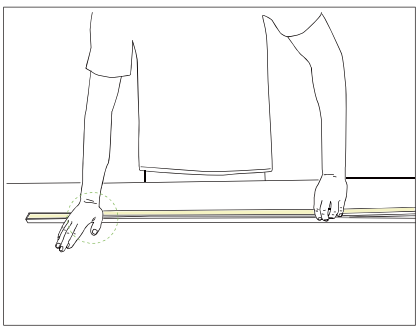
Do not suspend the power cable

Do not leave the light hanging in the air

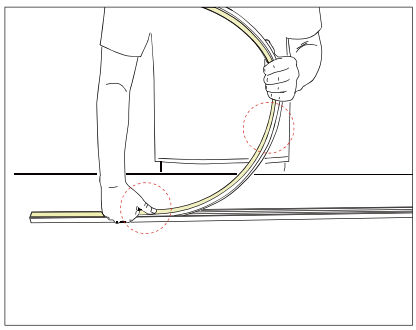
Do not step on the product.

Do not bend at sharp angles.

Insert into the Profile

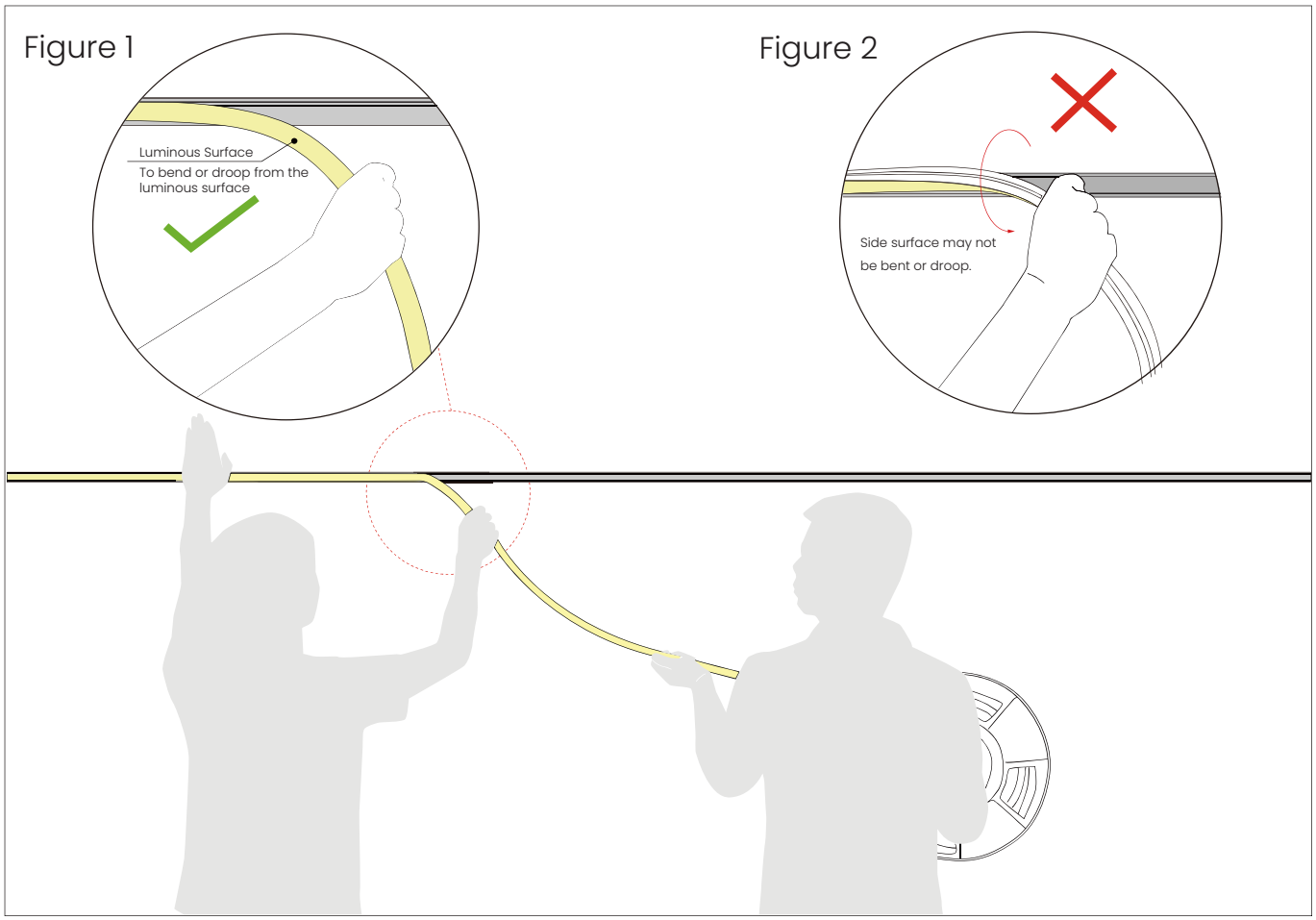


- Use your palm to slowly press the LED strip into the channel, then gently straighten it along the channel.
- Try to keep the led strip in a flat state during the installation process.



-Do not press the LED strip with one finger; this may damage internal components.
-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 people must work together to install it.)



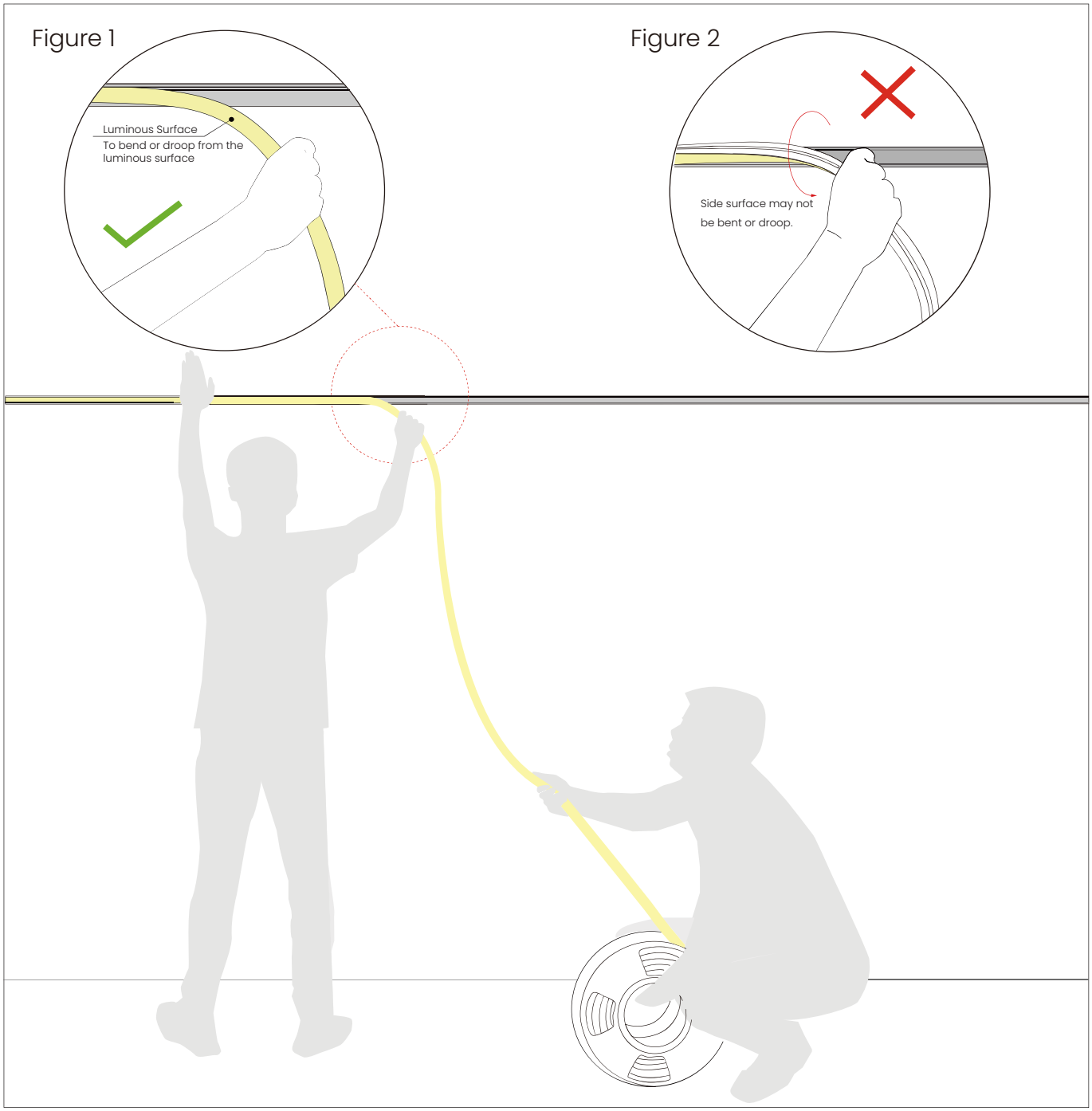
1. Installer:

- 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 people must work together to install it.)



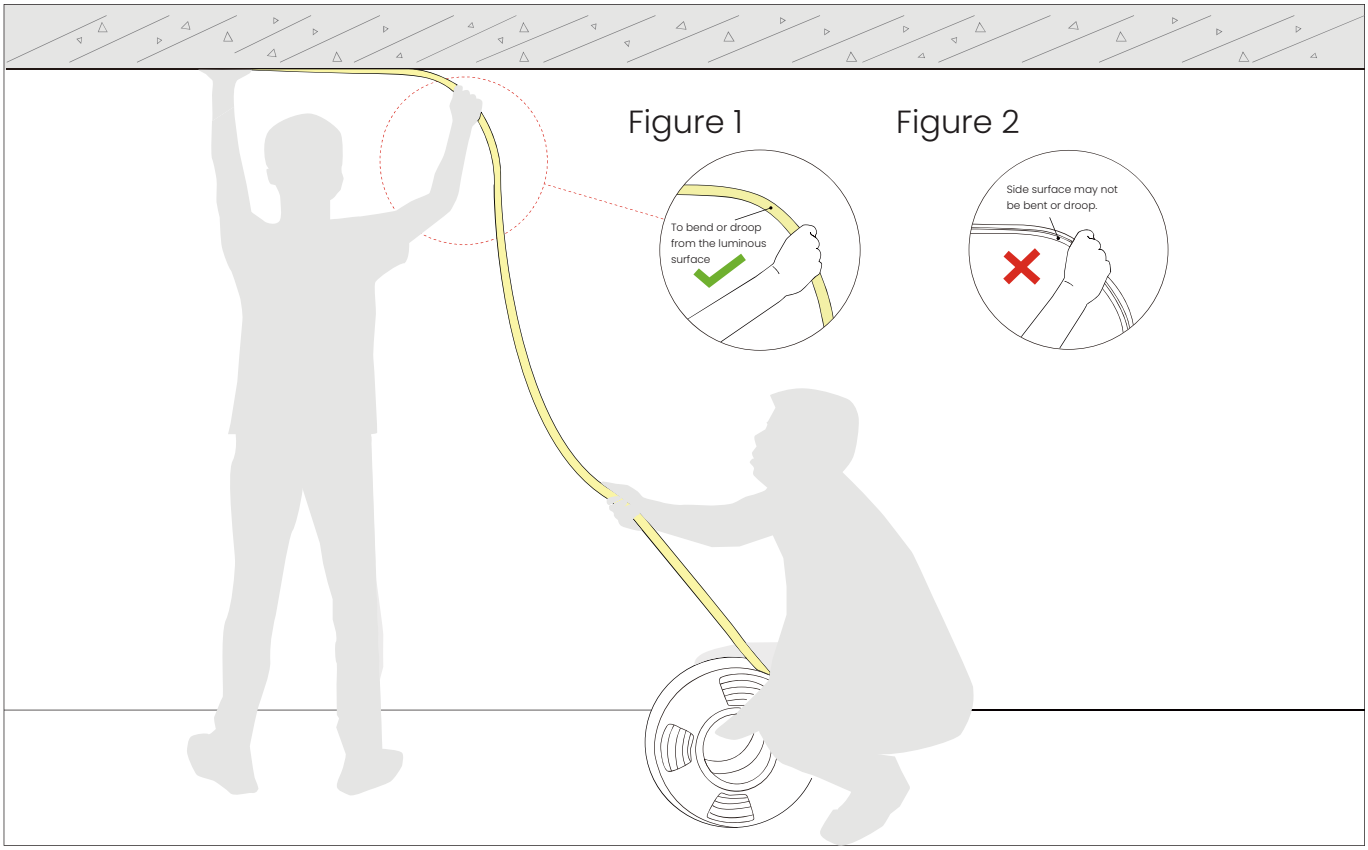
1. Installer:

- 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 people 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.

Packaging Information

Standard Packaging: White carton with paper reel inside.

Model	Qty/Roll(m)	Rolls/Carton	Carton Size	Net Weight	Gross Weight
NW-S1220-PU 24V IP68	5m	8	41 x 41 x 26 cm	10.8 kg/carton	12.2 kg/carton

For reference only. Final packing information shall be subject to actual shipment.

Notes

Cable size at the power-supply output depends on the total load current and cable length. Select the cable according to the table below.

Light Current	Cable Specification								
	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.
※ Use a 24 V DC isolated constant-voltage power supply with ripple below 5%. Using other types of power supply may damage the light or cause other safety risks.
※ In practical application, Reserve at least 20% power-supply headroom.
※ 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 reverse polarity, 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 may cause overload, overheating, 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.
※ Installation, disassembly, and maintenance must be performed by qualified personnel only.
※ Do not use any acidic 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 versions are factory-customized only. User cutting or processing may compromise IP68 protection.
※ Because of the difference in structure, even if the same color temperature value, products of different sizes may appear slightly different in color.

Tests showed that formaldehyde and benzene compounds can cause yellowing of silicone. In newly decorated interiors, epoxy floor paint, wall paint, wallpaper adhesive, decoration materials, and new furniture may release formaldehyde and benzene compounds.
It is recommended to remove these substances first, or ventilate the area for a period before installing the silicone neon light, to avoid affecting the silicone body.