Product Specification

Neon Flex

Horizontal Bending Multi-Color Series

(Type TA)

WW-FLS201T50FC084TA-24(WCP)-SE-100-XX-IC

CE ETL Intertek $c\,\text{UL}\,us$ RoHS GS UKCA LM80

|	
HK Office :	China Factory :
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Kwun Tong, Kowloon, Hong Kong	Fucheng Street, Longhua District, Shenzhen, Guangdong, China
Tel : (852) 3152 3059 (10 lines)	Tel : (86) 755 8601 9190
Fax : (852) 3152 3039	Fax : (86) 755 8601 9197

Product Features

- High quality FPC
- Dilux self-encapsulated LED
- Light source lifetime:50K hours
- Horizontal bending
- High quality silicone material
- IP67&IP65 waterproof
- Min.Bending Diameter:Φ100mm
- Single-ended power supply maximum length：5m

Flame Resistant | UV Resistant | Saltwater Resistant | IP67 | IK08 | 3 Years Warranty
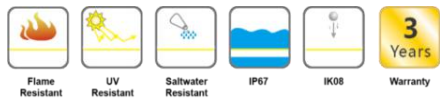
Technology info

- Lighting Technology: LED
- DLS or NDLS: NDLS
- MLS or NMLS: NMLS
- Type of light source: SMD5050
- Energy consumption KW/1000h/0.5M:8.4
- Beam angle：120°
- Survival factor（Annex V/EU2019-2020）:90%

Harmonised Standards
EMC

- EN55015:2013+A1
- EN61547:2009
- EN60598-1:2015
- EN60598-2-20:2015
- EN62493:2015
- EN62471:2008

Parameters

Test condition:
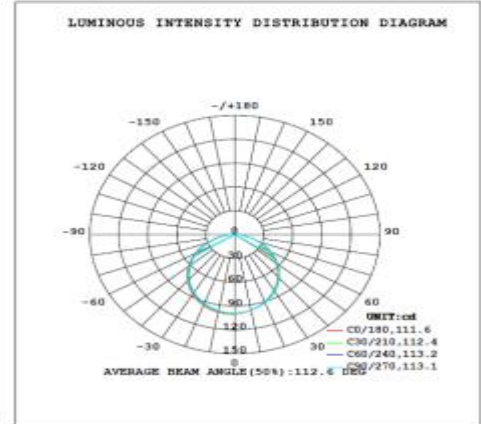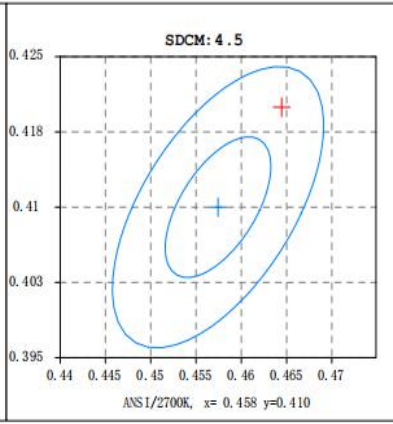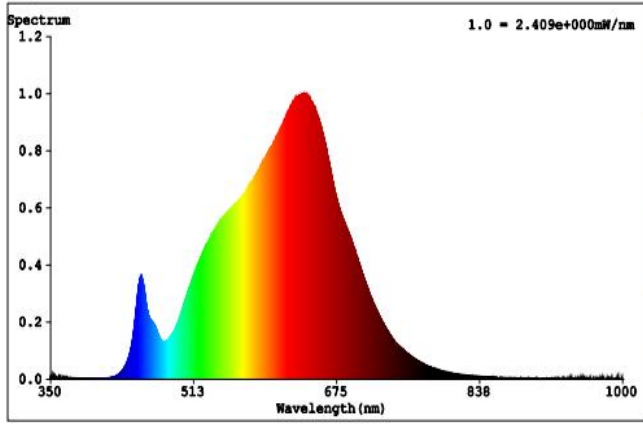- Surrounding temperature: 26℃.
- Test while turning on.

Model no.	CRI (Ra)	Rf	Rg	Typ. Power (W/M)	Max. Power (W/M)	Neon Strip Color Temp.	Neon Strip Color Temp.Range**	Typ.Luminous Flux LM / M(39.37in)	Rated voltage
WW-FLS201T50FC084TA-24(WCP)-SE-100-XX-IC	/	/	/	16.8	18.48	Red	620-630	35	24V
						Green	515-525	110	
						Blue	465-475	25	

Remark：
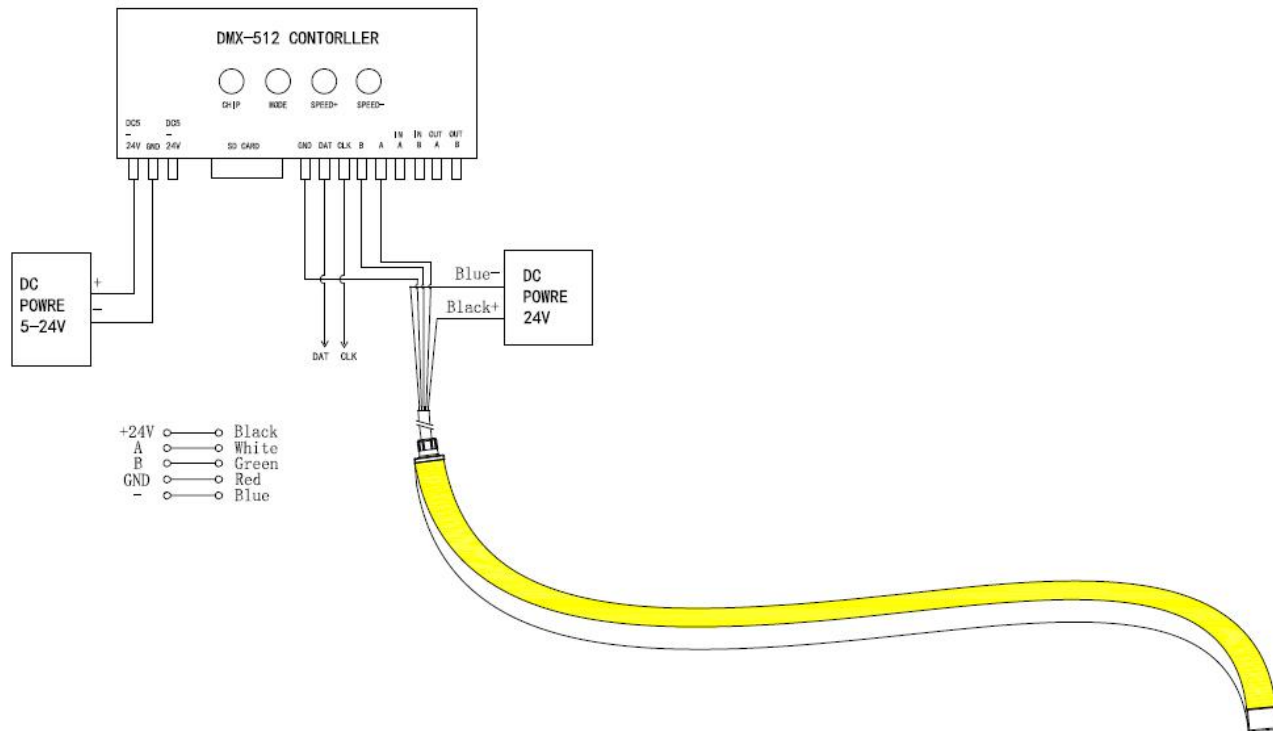- **The above color temperature represents the color temperature range of Neon strip;
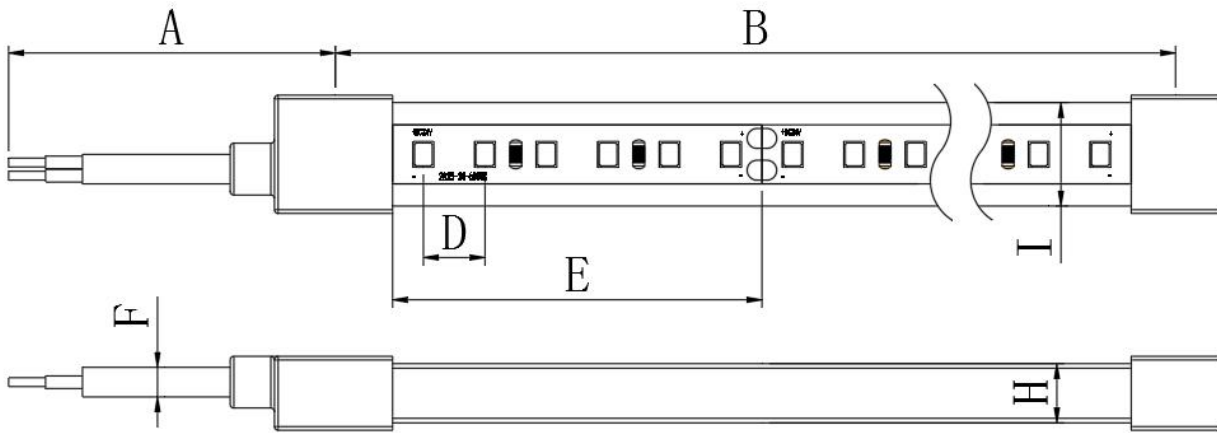- The lumen value tolerance range is ±20% (subject to the manufacturer's instrument test);

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Optical Test Diagram

Neon Flex

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Circuit Diagram

DMX-512 CONTORLLER

CHIP   MODE   SPEED+   SPEED-

DC5   DC5
－   －
24V GND 24V   SD CARD   GND DAT CLK B A IN IN OUT OUT
                                                 A B A B

DC
POWRE
5-24V

DAT   CLK

Blue－   DC
POWRE
Black+   24V

+24V ○——○ Black
A   ○——○ White
B   ○——○ Green
GND ○——○ Red
－   ○——○ Blue

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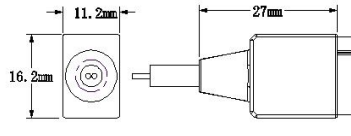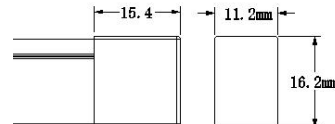Innovate the world. Light up your imagination **V2.0**
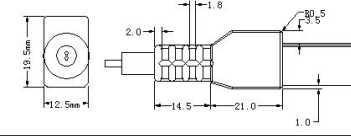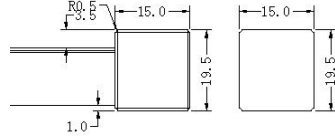
Dimension Drawing

A Cable Length	B Strip length	D Distance of LEDS	E Cutting unit	F Cable diameter	H Strip thickness	I Strip width
300±10mm	5000±50mm	11.9±0.2mm	83.3±0.2mm	6.0±0.2mm	10±0.5mm	15±0.5mm

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Front & end caps

Cable Types	Model No.	Image	Dimension	IP Rating
Double Injection	TA10X15-TS			IP67
Same Width	TA10X15-TT2			IP65

Optical Parameters

Distribution Curve Flux

```
              -/+180
      -150            150
  -120                    120

-90                          90
            0
           30
           60
           90
          120        60
         150      30
          0
                            UNIT:cd
                            ─── C0/180,111.8
                            ─── C30/210,112.7
                            ─── C60/240,114.1
                            ─── C90/270,114.6
 AVERAGE BEAM ANGLE(50%):113.3 DEG
```

Illuminance

Height	Eavg,Emax	Angle:112.60deg	Diameter
1m	14.74,52.271x		299.88cm
2m	3.684,13.071x		599.77cm
3m	1.637,5.8071x		899.65cm
4m	0.9210,3.2671x		1199.53cm
5m	0.5894,2.0911x		1499.42cm
6m	0.4093,1.4521x		1799.30cm
7m	0.3007,1.0671x		2099.18cm
8m	0.2302,0.81671x		2399.07cm
9m	0.1819,0.64531x		2698.95cm
10m	0.1474,0.52271x		2998.83cm

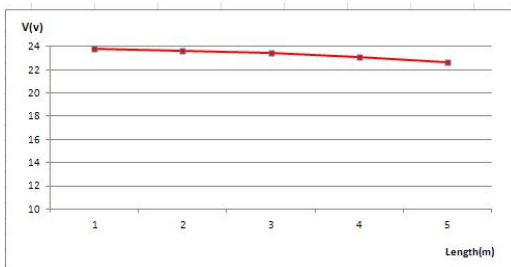# Figures of typical characteristics

Relation of Working Temperature and Power
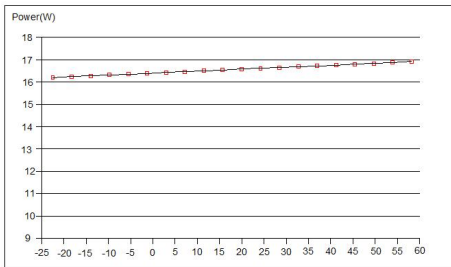
Relation of luminous flux and strip length
(Only suitable for white series)
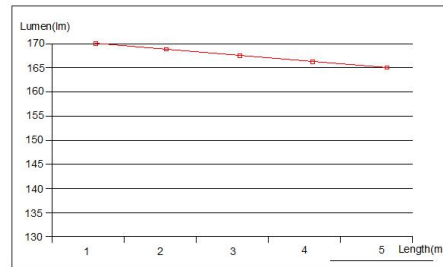
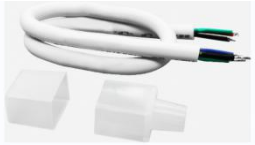### Relation of operating voltage and strip length

Standard Accessories

Image	Part No.	Description
	WW-T0912-0025(1000S)	Installation accessories set (Stainless steel mounting buckle, screws)

Optional Accessories

| Image	Part No.	Description
	WW-AP1712-200	Aluminum Profile: L2000*W11.6*H17mm
	WW-FLS103TA-CW(10*15mm)-TT2(RGB)	Cutting accessories set (Front & end cap, power cord)

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Packaging

Solution 1：
For Product Length≤5M

Ingress protection rating	Bag size	Inner carton		Outer carton		N.W	G.W	Outer carton volume
		Size	Reel/ctn	Size	Reel/ctn			
IP65/IP67	/	/	/	440*400 *260mm	12	10.26 KG ±10%	11.88 KG ±10%	0.04576M³
	/	/	/	17.32*15.748 *10.236 in	12	22.61 Lbs ±10%	26.18 Lbs ±10%	1.616ft³

Solution 2：
For Product Length=5M
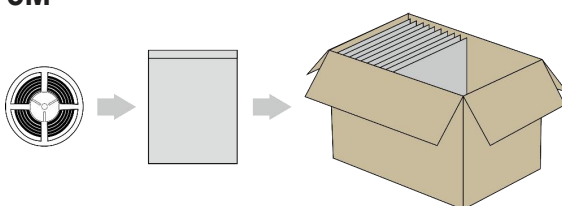
Ingress protection rating	Bag size	Inner carton		Outer carton		N.W	G.W	Outer carton volume
		Size	Reel/ctn	Size	Reel/ctn			
IP65/IP67	450*420*0.14MM	/	/	440*400 *260mm	7	5.99KG ±10%	8.66KG ±10%	0.04576M³
	17.716*16.535*0.005in	/	/	17.32*15.748 *10.236 in	7	13.2Lbs ±10%	19.09Lbs ±10%	1.616ft³

Solution 3：
For Product Length=10M
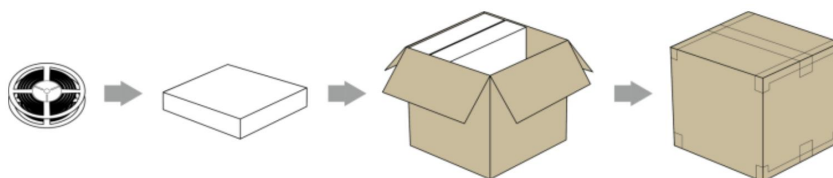
Ingress protection rating	Bag size	Inner carton		Outer carton		N.W	G.W	Outer carton volume
		Size	Reel/ctn	Size	Reel/ctn			
IP65/IP67	330*50mm	345*330*61mm	1	362*265*350mm	4	6.84KG ±10%	9.90KG ±10%	0.0335m3
	12.99*1.96in	13.58*12.99*2.4in	1	14.25*10.43*13.77in	4	15.07Lbs ±10%	21.81Lbs ±10%	1.185ft3

For Product Length=20M
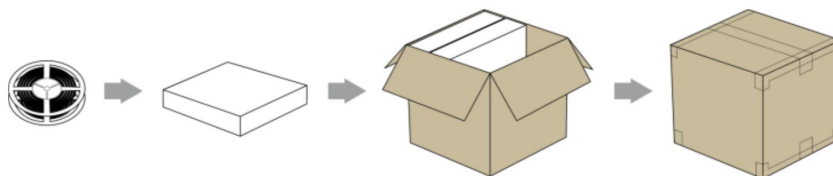
Ingress protection rating	Bag size	Inner carton		Outer carton		N.W	G.W	Outer carton volume
		Size	Reel/ctn	Size	Reel/ctn			
IP65/IP67	330*50mm	345*330*122mm	1	362*265*350mm	2	6.49KG ±10%	11.65KG ±10%	0.0335m3
	12.99*1.96in	13.58*12.99*4.8in	1	14.25*10.43*13.77in	2	14.30Lbs ±10%	25.69Lbs ±10%	1.185ft3

Remarks :

● Please contact our sales manager for customized package (color box, blister etc.)

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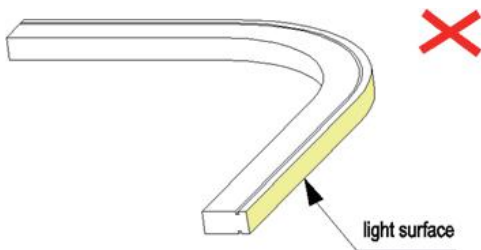
Instruction of Removal Light Source

1.Do not bend smaller than allowed minimum bending diameter
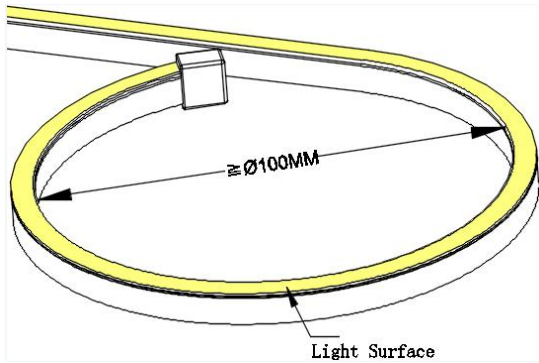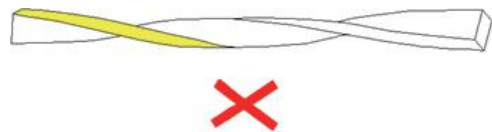

**2.The neon strip can only be bent laterally (Along the FPC inside).**
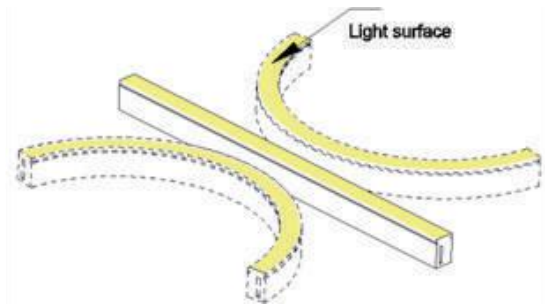
3.Don't bend the LED strip vertically, it will damage the circuit inside and cause product function failure.

4.Don't twist the LED strip, it will damage the circuit inside and cause product function failure.

5、 Do not hang or suspend the Neon strip in the air.

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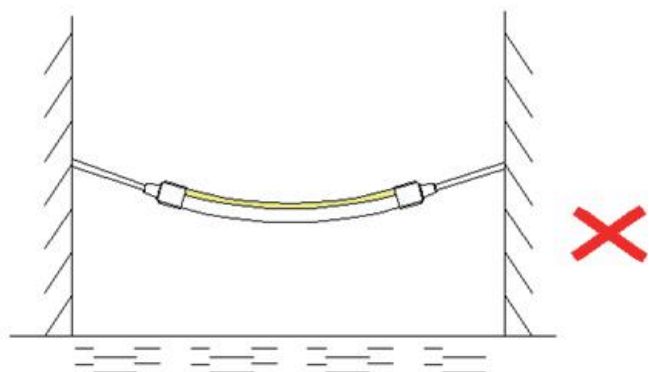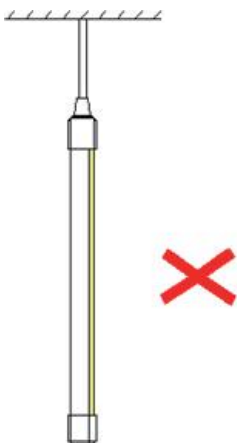
6、   **Press the neon flex into mounted aluminum profile in one direction (Angle between strip and aluminum<15 degrees).**

Alumimum profile   <15° ✔
Install and remove at angles less than 15°

7、 **Incorrect installation like below pictures could lead to product function failure.**

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Cutting Instruction

- The cutting line logo on the Neon strip marked by calculated dimension, it has a little bit deviation between internal cutting line marked on the PCB surface;
- Please follow the cutting guidance as below:

Step 1: Fine the cutting line on the silicone coating, slice the silicone coating vertically by knife along the cutting line, but do not hurt the PCB inside.
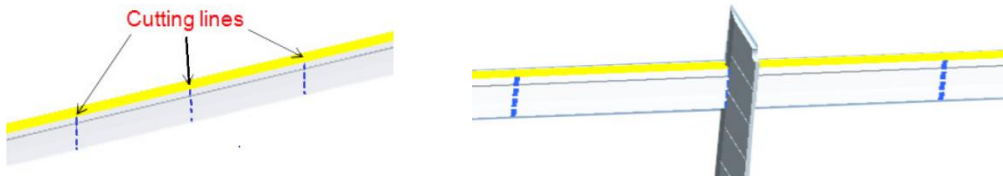
Step 2: Split the broken silicone coating and observe the deviation between "Cutting line on the PCB" and "Cutting line on the silicone coating side"
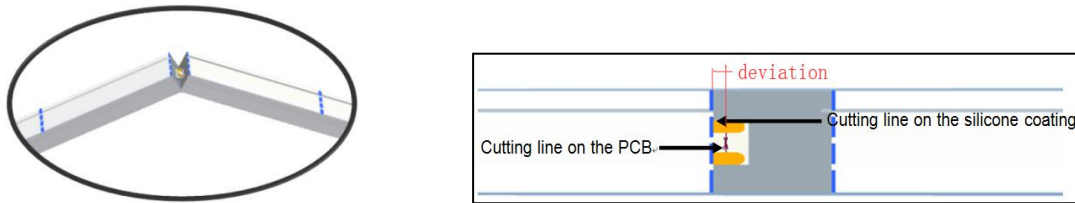
Step 3: Find the cutting line on the PCB, adjust to the exact cutting location and slice the silicone coating again.
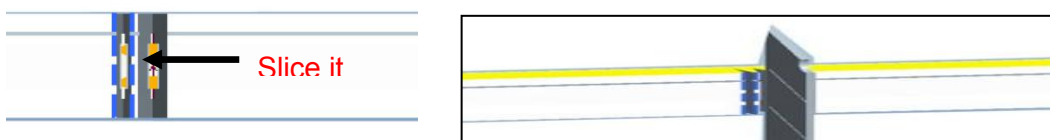
Step 4：Finally, use scissor to separate the Neon Flex along the cutting line on the PC

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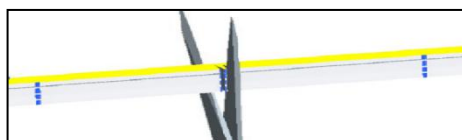
⚠ Cautions

IP20	IP54	IP65	IP67	IP68
Do not press the surface of LED	Pay attention to high temperature environment	Do not use in strong water waves environment	Resist strong water waves impact	Can apply to underwater do not deeper than 1m
Pay attention to damp-proof and dustproof	Do not apply to rainy environment	Can be applied to rainy environment	Do not apply to underwater environment for a long time	No direct sunlight

Do not tie a knot	Do not winding	Do not twist	Do not cut when it is working	Recommended the continuous working time do not exceed 12 hours daily	Operating temperature -40°~+65° (-40°F~+149°F)	Storage temperature 0°C~+60°C (32°F~+140°F)	Operated by professionals

Pay attention to the application environment	IP Level will change after cutting	Do not pull and crash	Connected to power supply every 5 meters	Power supply must be connected to ground(GND)	The minumum bending diameter > 60mm	Power supply retain > 20%	Note the positive and negative poles

For cutting LED strip operation, it is necessary to use the standard accessories provided by Dilux (e.g. DC wire, end-cap, front-cap, adhesive, etc.), and according to the correct cutting and connecting method for the installation.

For avoiding LED get vulcanized, LED strip should be installed in the environment where does not has oil and corrosive substances. Such as these substances which contain Sulphur、Bromine、Iodine and Chlorine. Some other chemical elements which will cause Aromatic hydrocarbons releasing(such as: methylbenzene、xylene、methyl acetoacetate Ethyl acetate etc.).The environment in which includes strong acid and strong base.

During the warranty period, only defective products are acceptable to be replaced by the factory. Factory is not responsible for other expenses because of replacement, such as transportation fee, installation fee, etc..

** If you do not follow the above "Cautions" to operate and result in damaging the product, the factory will not accept maintenance and return.
**The right of final interpretation is owned by Dilux.