

Product Specification

Neon Flex Horizontal Bending Multi-Color Series (Type TA)

WW-FLS103T55FX084TA-24(WCP)-HR-V-1018-XX
&
WW-FLS103T55FX084TA-24(WCP)-HR-V-1018-XX-EP
(Removal Light Source)

Apply to ERP Regulation (EU) 2019/2020



HK Office :

Unit 1901, 19th Floor, NanYang Plaza, No. 57 Hung To Road
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China Factory :

Zhiyang Science and Technology Park, 10 Zhiyang Road, Zhangge,
Fucheng Street, Longhua District, Shenzhen, Guangdong, China

Tel : (852) 3152 3059 (10 lines)

Fax : (852) 3152 3039



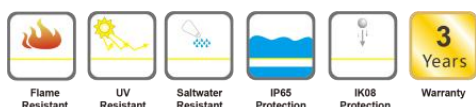
Tel : (86) 755 8601 9190



Fax : (86) 755 8601 9197

Product Features

- High quality FPC
- Dilux self-encapsulated LED
- Light source lifetime:50K hours
- Light source removable
- Meet (EU) 2019/2020 ERP regulations
- Horizontal bending
- High quality silicone material
- IP65 waterproof
- Min.Bending Diameter:Φ100mm
- Single-ended power supply maximum length: 6m



Technology info

- Lighting Technology: LED
- DLS or NDLS: NDLS
- MLS or NMLS: NMLS
- Type of light source: SMD5050
- Energy consumption KW/1000h/0.5M:7.8
- 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°C.
- Test while turning on.

Neon Flex									
Neon Flex Model No.	CRI (Ra)	Rf	Rg	Typ. Power (W/M)	Max. Power (W/M)	Color	Neon Flex Color Temp.(K) Wavelength(nm)	Typ. Luminous Flux LM/M(39.37in)	Rated voltage
WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	15.6	17.16	Red	620-630nm	25	DC24V
						Green	515-525nm	58	
						Blue	465-475nm	12	
						Warm White	2600-2900K	80	
						RGB+WW	/	175	
WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	15.6	17.16	Red	620-630nm	25	DC24V
						Green	515-525nm	58	
						Blue	465-475nm	12	
						Warm White	2900-3200K	80	
						RGB+WW	/	175	
WW-FLS103T55FN084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FN084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	15.6	17.16	Red	620-630nm	25	DC24V
						Green	515-525nm	58	
						Blue	465-475nm	12	
						Natural White	3700-4250K	85	
						RGB+NW	/	180	
WW-FLS103T55FS084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FS084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	15.6	17.16	Red	620-630nm	25	DC24V
						Green	515-525nm	58	
						Blue	465-475nm	12	
						Standard White	5700-6500K	85	
						RGB+SW	/	180	

- SDCM for light source: ≤6 (alternative ≤3).
- The typ. Luminous flux tolerance range is ±10% (subject to the manufacturer's instrument test).

Parameters for Removal Light Source

Test condition:

- Surrounding temperature: 26 °C.
- Test after 10 mins turned on.

Removal of Light Source											
Neon Flex Model No.	CRI (Ra)	Rf	Rg	Typical Power (W/M)	Max. Power (W/M)	Color	LED Color Temp.(K) Wavelength(nm)*	Typ. Luminous Flux LM/M(39.37in)	Lumen/watt	Energy Efficiency class	Rated voltage
WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	4.2	4.6	Red	620-630nm	110	25	/	DC24V
				3.9	4.3	Green	515-525nm	284	72	/	
				3.8	4.2	Blue	465-475nm	66	17	/	
				4.5	4.9	Warm White	2600-2900K	457	102	F	
				16.4	18.0	RGB+WW	/	917	55	/	
WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	4.2	4.6	Red	620-630nm	110	25	/	DC24V
				3.9	4.3	Green	515-525nm	284	72	/	
				3.8	4.2	Blue	465-475nm	66	17	/	
				4.5	4.9	Warm White	2900-3200K	425	95	F	
				16.4	18.0	RGB+WW	/	885	53	/	
WW-FLS103T55FN084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FN084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	4.2	4.6	Red	620-630nm	110	25	/	DC24V
				3.9	4.3	Green	515-525nm	284	72	/	
				3.8	4.2	Blue	465-475nm	66	17	/	
				4.5	4.9	Natural White	3700-4250K	431	97	F	
				16.4	18.0	RGB+NW	/	891	54	/	
WW-FLS103T55FS084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FS084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	4.2	4.6	Red	620-630nm	110	25	/	DC24V
				3.9	4.3	Green	515-525nm	284	72	/	
				3.8	4.2	Blue	465-475nm	66	17	/	
				4.5	4.9	Standard White	5700-6500K	438	98	F	
				16.4	18.0	RGB+SW	/	898	54	/	

Remarks:

- *The above color temperature is the color temperature of LED source.
- The typ. Luminous flux tolerance range is ±10% (subject to the manufacturer's instrument test).

ErP Note:

- Measured power ≤ Pon +5% ;
- Measured lumen ≥Useful luminous flux -10%;
- Measured CRI ≥ Declared CRI-2
- The above technical data, including typical power are based on the test of 0.5m.

Parameters for Removal Light Source

Test condition:

- Surrounding temperature: 26°C.
- Test while turning on.

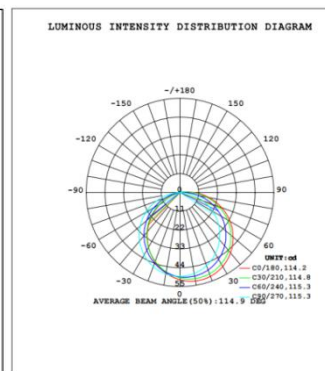
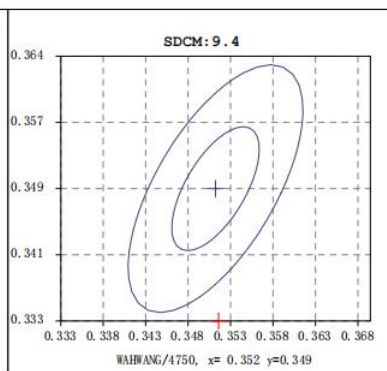
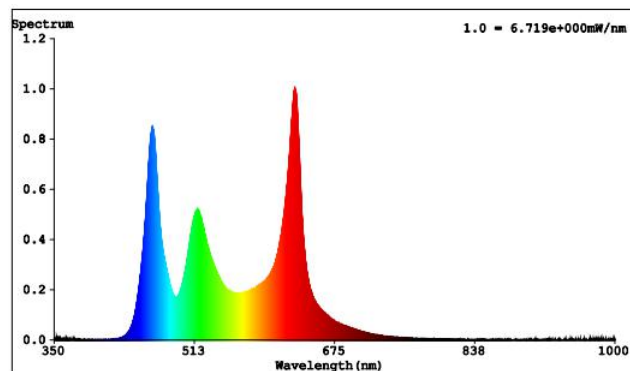
Removal of Light Source									
Neon Flex Model No.	CRI (Ra)	Rf	Rg	Typical Power (W/M)	Max. Power (W/M)	Color	Range of LED Color Temp.(K) Wavelength(nm)*	Typ. Luminous Flux LM/M(39.3 7in)	Rated voltage
WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	15.6	17.16	Red	620-630nm	105	DC24V
						Green	515-525nm	270	
						Blue	465-475nm	63	
						Warm White	2600-2900K	434	
						RGB+WW	/	871	
WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FW084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	15.6	17.16	Red	620-630nm	105	DC24V
						Green	515-525nm	270	
						Blue	465-475nm	63	
						Warm White	2900-3200K	403	
						RGB+WW	/	840	
WW-FLS103T55FN084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FN084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	15.6	17.16	Red	620-630nm	105	DC24V
						Green	515-525nm	270	
						Blue	465-475nm	63	
						Natural White	3700-4250K	409	
						RGB+NW	/	846	
WW-FLS103T55FS084TA-24(WCP)-HR-V-1018-XX WW-FLS103T55FS084TA-24(WCP)-HR-V-1018-XX-EP	≥80	82	96	15.6	17.16	Red	620-630nm	105	DC24V
						Green	515-525nm	270	
						Blue	465-475nm	63	
						Standard White	5700-6500K	416	
						RGB+SW	/	853	

Remarks:

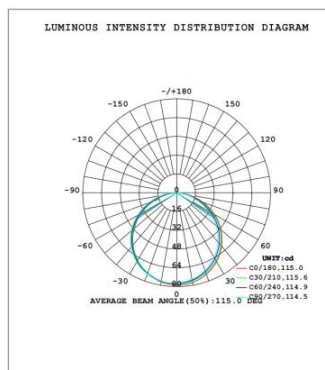
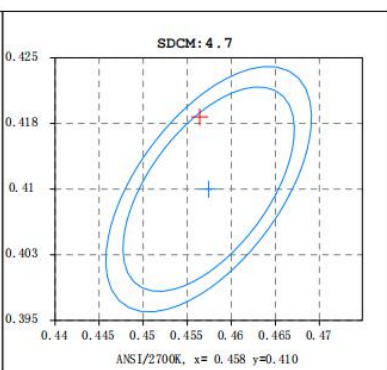
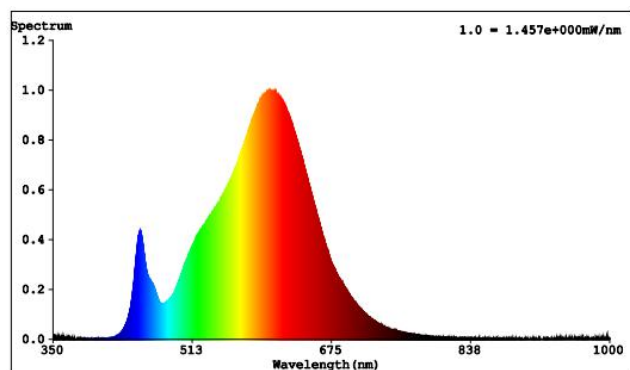
- * The above color temperature is the color temperature of LED source.
- SDCM for light source: ≤6 (alternative ≤3).
- The typ. Luminous flux tolerance range is ±10% (subject to the manufacturer's instrument test).

Optical Test Diagram

Neon Flex

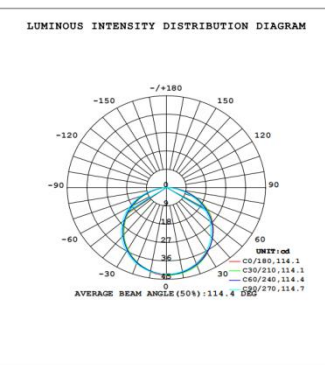
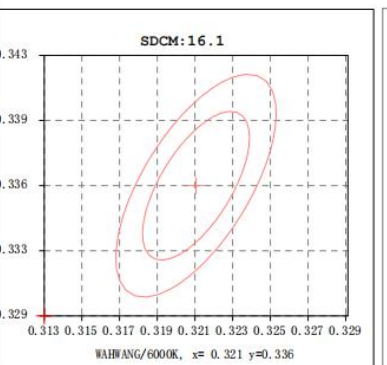
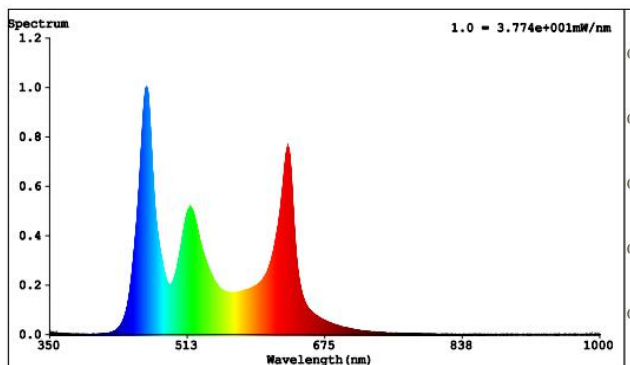


RGBW

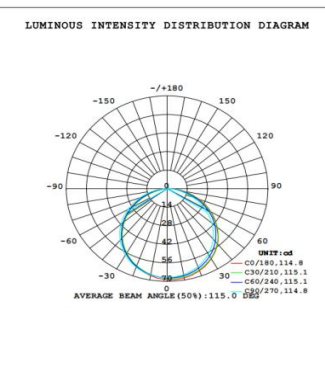
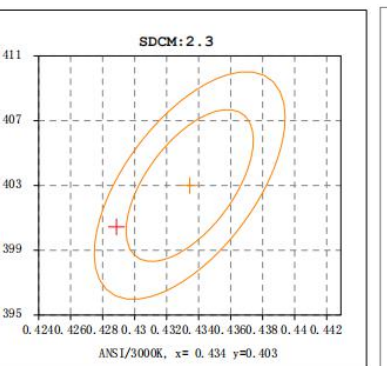
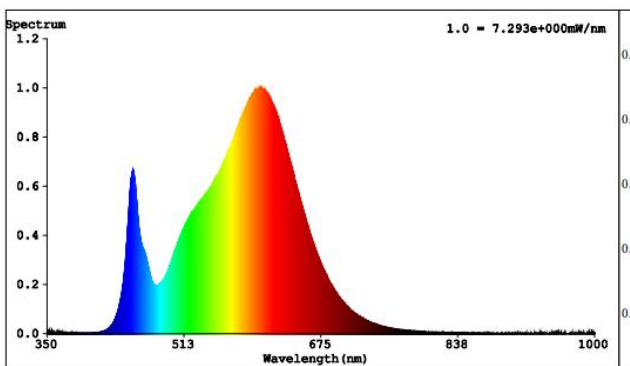


Only W

Removal of Light Source

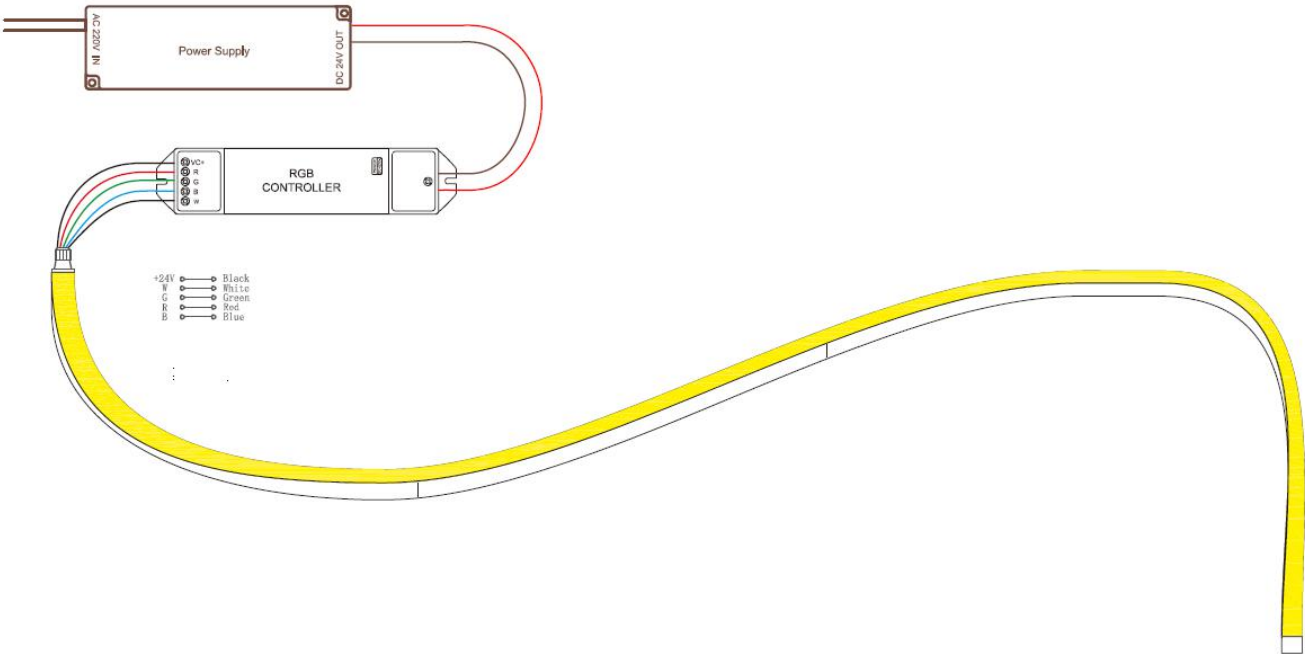


RGBW



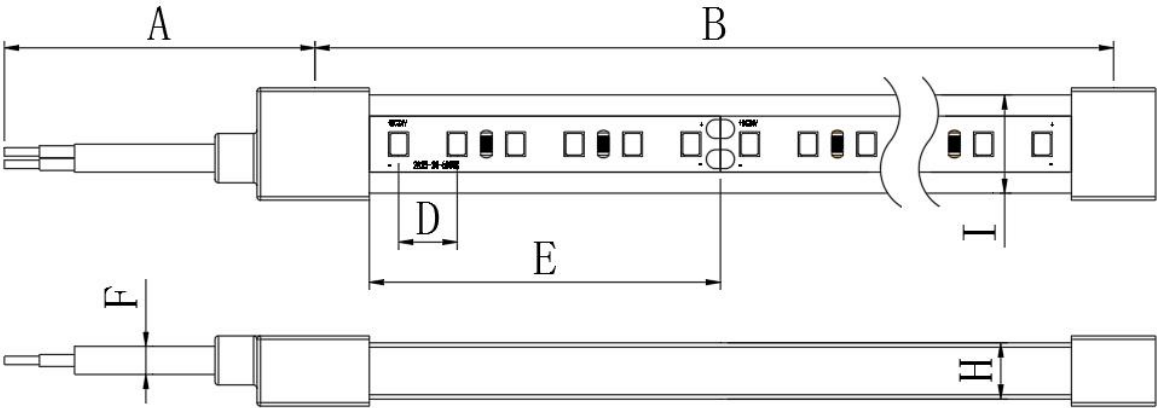
Only W

Circuit Diagram



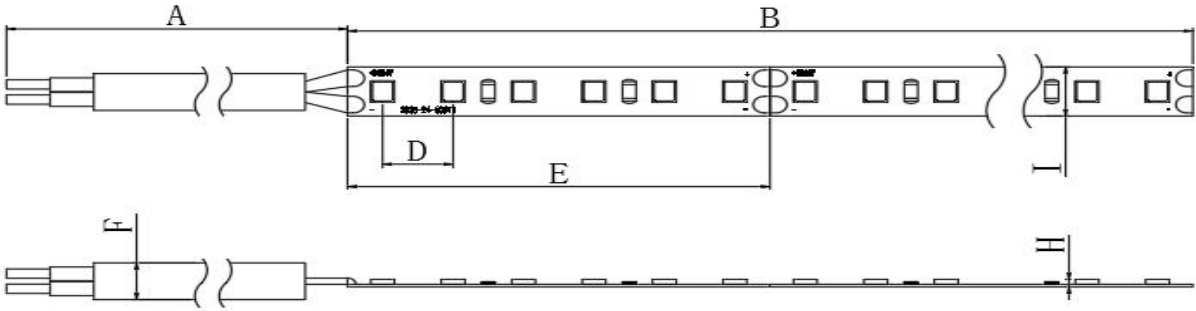
Dimension Drawing

Neon Flex



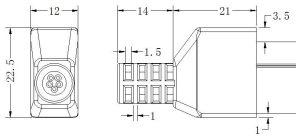
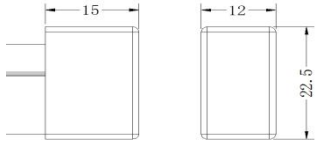
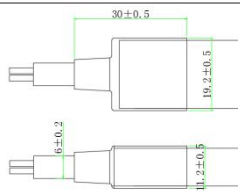
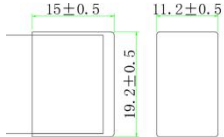
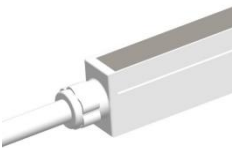
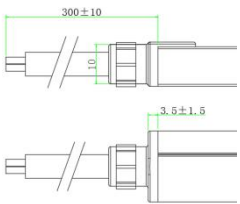
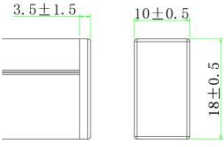
A	B	D	E	F	H	I
Cable Length	Strip length	Distance of LEDs	Cutting unit	Cable diameter	Strip thickness	Strip width
300±10mm	5000±50mm	11.9±0.2mm	71.4±0.2mm	6.0±0.2mm	10±0.5mm	18±0.5mm

Removal of Light Source



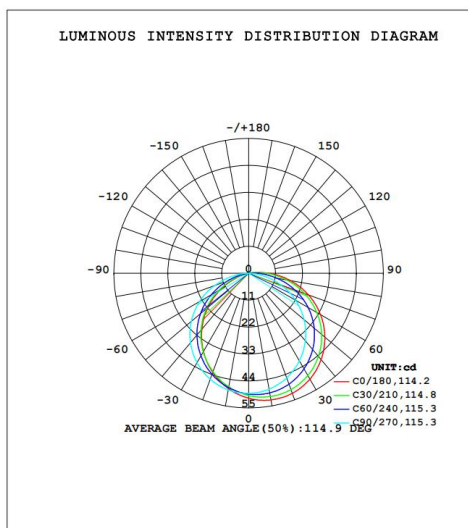
A	B	D	E	F	H	I
Cable Length	Strip length	Distance of LEDs	Cutting unit	Cable diameter	Strip thickness	Strip width
300±10mm	5000±50mm	11.9±0.2mm	71.4±0.2mm	6.0±0.2mm	1.5±0.2mm	12±0.2mm

Front & end caps

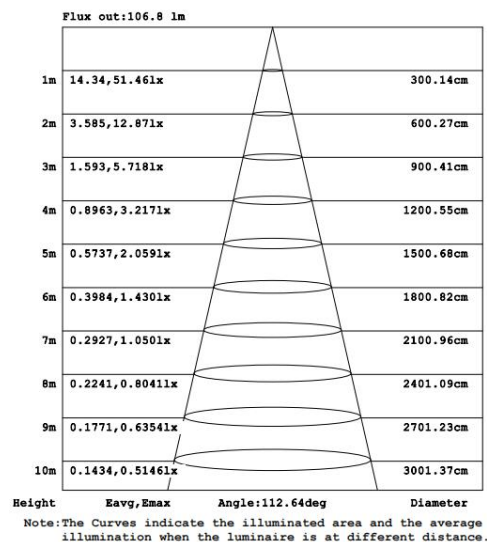
Cable Types	Model No.	Image	Dimension	IP Rating
Double Injection	TA10X18-TS			IP67
				
Same Width	TA10X18-TT2			IP65
				
Double Injection	TA10X18-TS2			IP65
				

Optical Parameters

Distribution Curve Flux

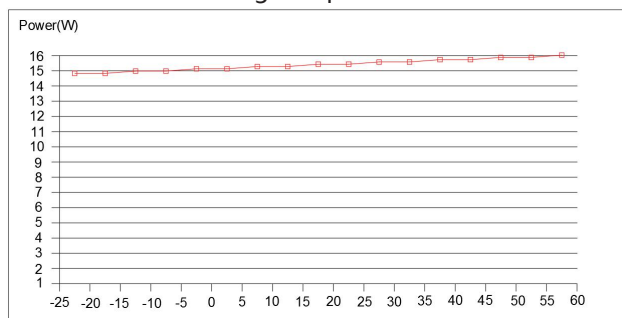


Illuminance

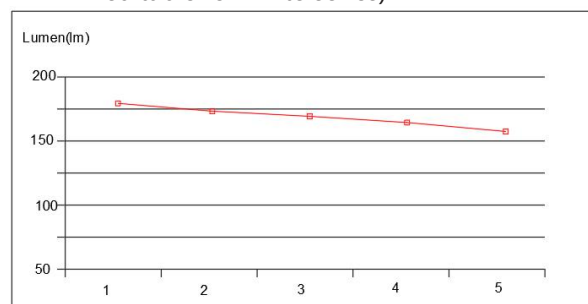


Figures of typical characteristics

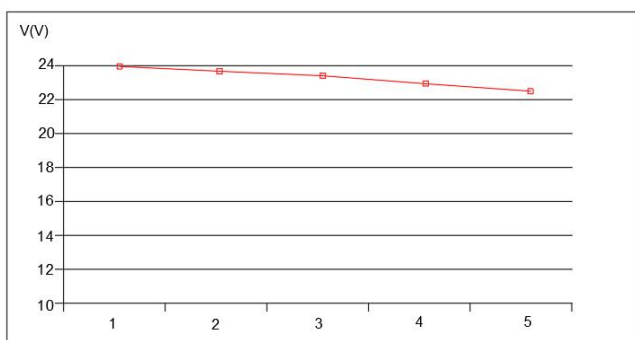
Relation of Working Temperature and Power



Relation of luminous flux and strip length (Only suitable for white series)



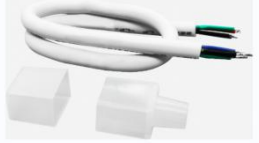
Relation of operating voltage and strip length



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(10mm)-TT2(RGBW)	Cutting accessories set (Front & end cap, power cord)

Packaging

Solution 1:

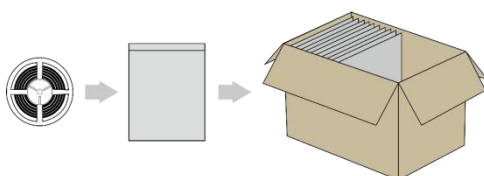
For Product Length≤5M



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	10	10.14 KG ±10%	13.55KG ±10%	0.04576M³
	/	/	/	17.32*15.748 *10.236 in	10	22.36 Lbs ±10%	29.87Lbs ±10%	1.616ft³

Solution 2:

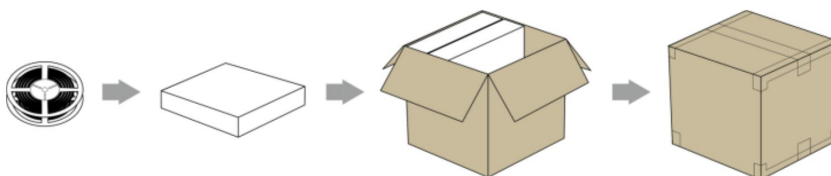
For Product Length=5M



Ingress protection rating	Bag size	Inner carton		Outer carton		N.W	G.W	Outer carton volume
		Size	Reel/ctn	Size	Reel/ctn			
IP65/67	470*420*0.14mm	/	/	440*400 *260mm	7	7.10KG ±10%	10.54KG ±10%	0.0457M³
	18.50*16.53*0.005in	/	/	17.32*15.75 *10.236 in	7	15.65 Lbs ±10%	23.23 Lbs ±10%	1.616ft³

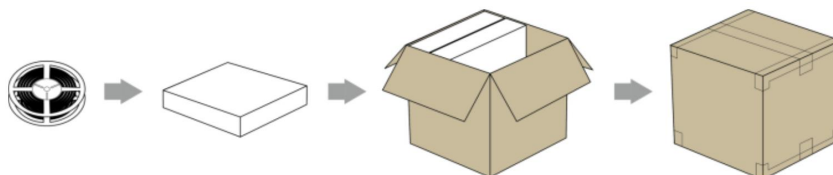
Solution 3:

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	8.11KG ±10%	12.04KG ±10%	0.0335m3
	12.99*1.96in	13.58*12.99*2.4in	1	14.25*10.43*13.77in	4	17.88Lbs ±10%	26.55Lbs ±10%	1.185ft3

For Product Length=20M

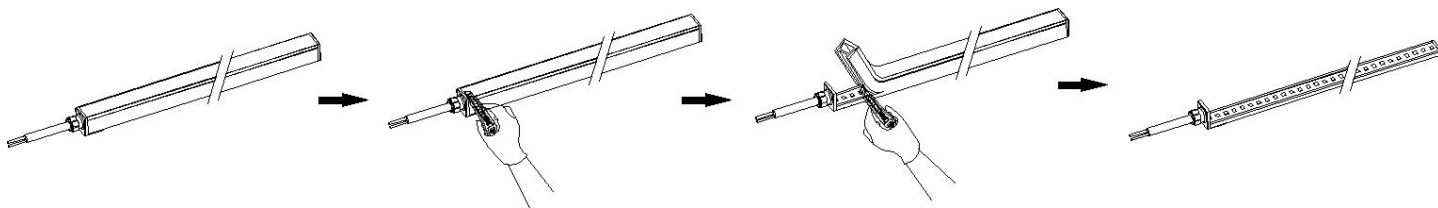


Ingress protection rating	Bag size	Inner carton		Outer carton		N.W	G.W	Outer carton volume
		Size	Reel/ctn	Size	Reel/ctn			
IP65/IP67	330*50mm	345*330*122mm	1	362*265*350mm	2	7.70KG ±10%	11.43KG ±10%	0.0335m3
	12.99*1.96in	13.58*12.99*4.8in	1	14.25*10.43*13.77in	2	16.98Lbs ±10%	25.21Lbs ±10%	1.185ft3

Remarks :

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

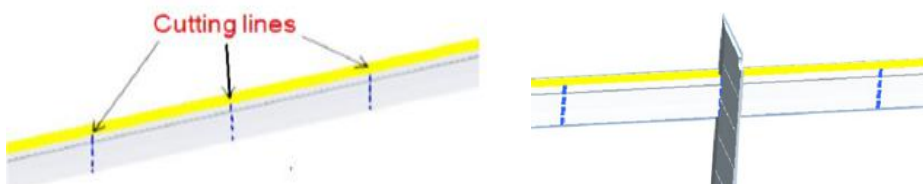
Instruction of Removal Light Source



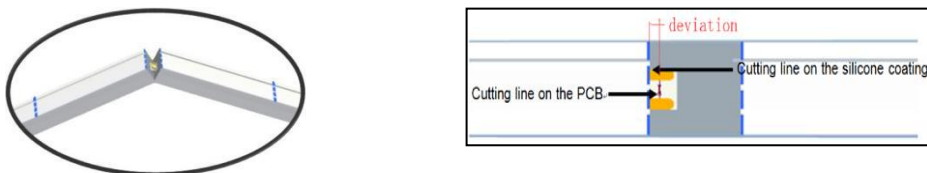
Cutting Instruction

- 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.



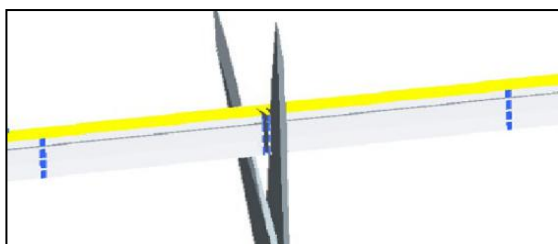
Step 2: Split the broken silicone coating and observe the deviation between "Cutting line on the PCB" and "Cutting line on the silicone coating side"



Step 3: Find the cutting line on the PCB, adjust to the exact cutting location and slice the silicone coating again.

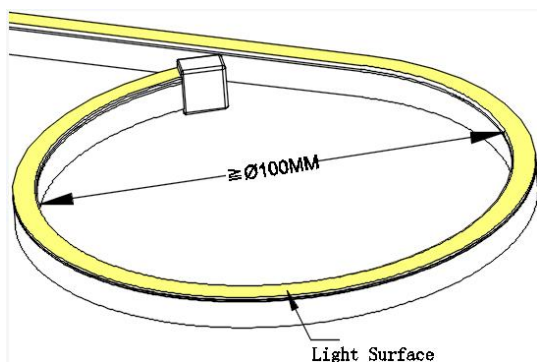


Step 4: Finally, use scissor to separate the Neon Flex along the cutting line on the PCB.

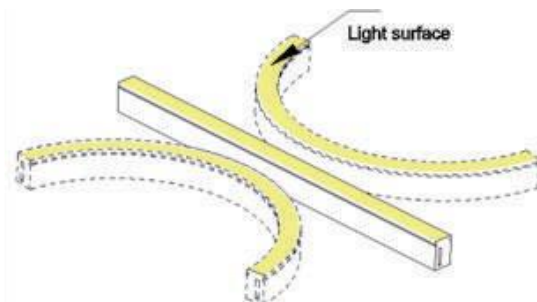


Installation Guidance

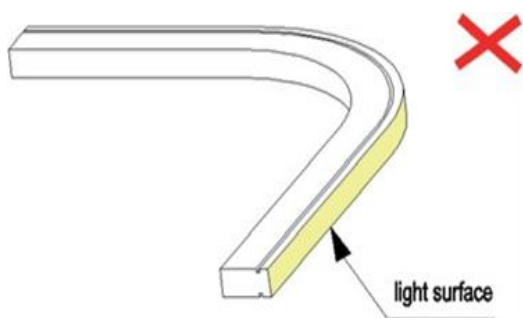
1. Do not bend smaller than allowed minimum bending diameter



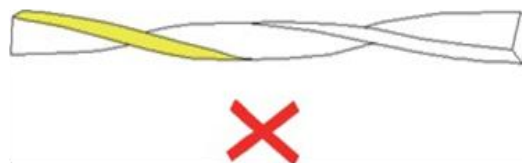
2. The neon strip can only be bent laterally (Along the FPC inside).



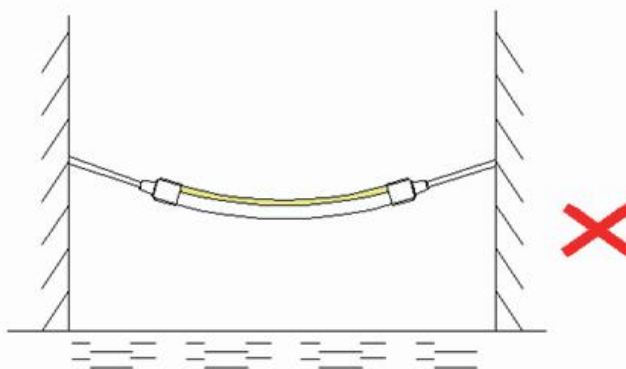
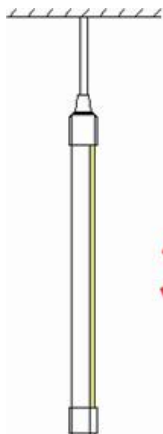
3. Don't bend the LED strip vertically, it will damage the circuit inside and cause product function failure.



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.



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



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



 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	-40°~+65° (-40°F~+149°F)	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 minimum 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.