



MINGXUE
LIGHTING

Production Specification

Top view 3D 16*16mm

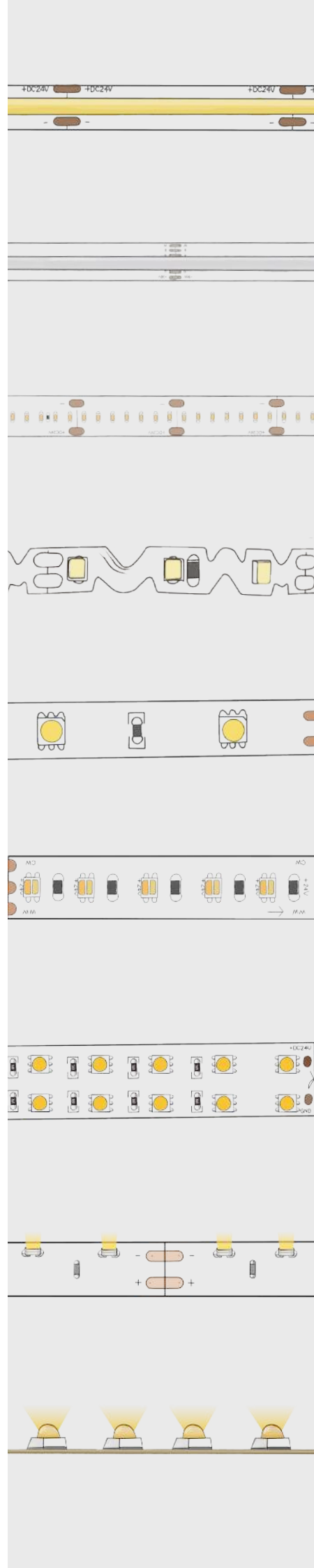


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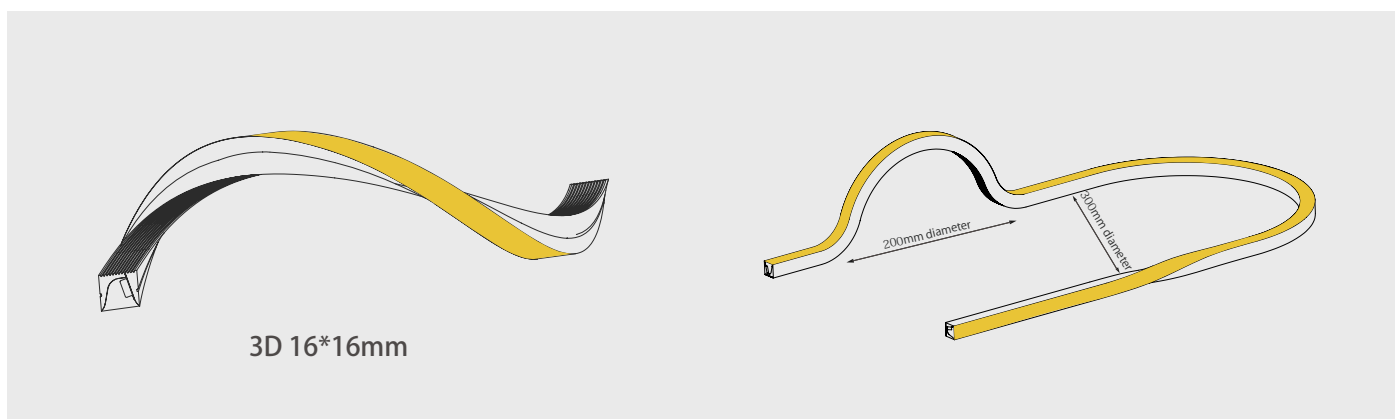
Factory: Building 9 & 10, WanYang park ,baoyong industry road No 8 ,
west area baoyong industry zone, longjiang town, Shunde District, Foshan city.





3D 16*16mm

- It can be bent vertically and horizontally, supporting a variety of shapes;
- Light source: High luminous efficiency, LM80 proved;
- High light transmittance, environmental silicone material, integrated extrusion molding technology, IP67;
- Unique optical light distribution structure design, uniform lighting surface and no shadow;
- Resistance to saline solutions, acids & alkali, corrosive gases and UV;
- Single color/RGB/ RGB SPI version to choose



STRUCTURE

Item Code	Cutting Length (Min.)	Input voltage	Watt/m	CCT/K	Color Rendering Index	Lm/m	Lm/ft	LM/w	IP Rate	Max.run length
MN328V120Q90-D027M6A10106N-1616ZE	50mm	24V	12W	2700K $^{+200}_{-100}$	>90	588	182	49	IP67	5m
MN328V120Q90-D030M6A10106N-1616ZE	50mm	24V	12W	3000K $^{+300}_{-200}$	>90	612	192	51	IP67	5m
MN328W120Q90-D040M6A10106N-1616ZE	50mm	24V	12W	4000K $^{+300}_{-200}$	>90	646	202	53	IP67	5m
MN328W120Q90-D050M6A10106N-1616ZE	50mm	24V	12W	5000K $^{+400}_{-300}$	>90	648	203	54	IP67	5m
MN328W120Q90-D065M6A10106N-1616ZE	50mm	24V	12W	5500K $^{+400}_{-300}$	>90	660	207	55	IP67	5m
MN350A192Q00-D000N6A10106N-1616ZE	50mm	24V	12W	RGB	N/A	N/A	N/A	N/A	IP67	5m

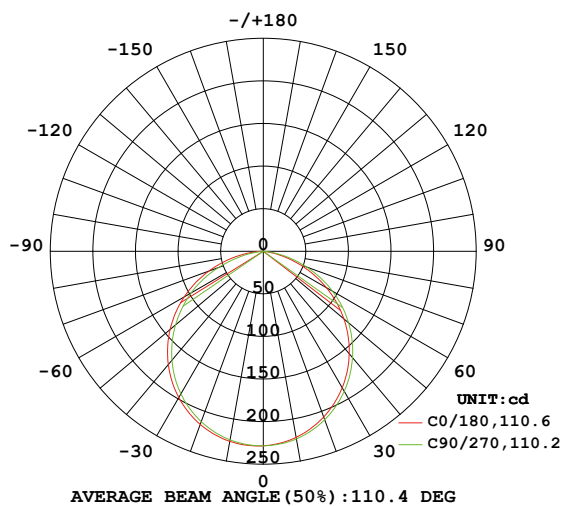
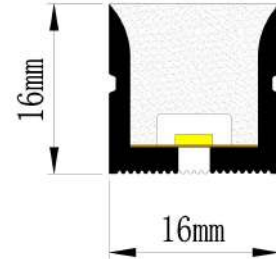
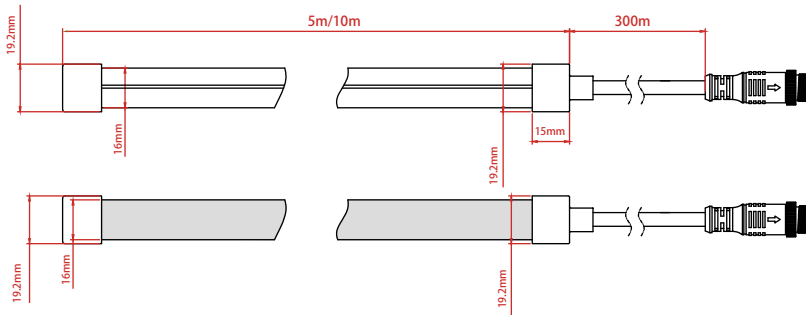
Optical parameter

LED Type:	SMD2835
Color Rendering Index:	>90
CCT Range:	2700K~5500K/RGB
Irritation Angle:	120°
Light Efficiency:	49~55Lm/w
Lumen Output/meter:	588~661Lm/m (179~202Lm/ft)
Energy Grade:	N/A

Electric parameter

Input Current/m:	0.5(max)A/m(0.15A/ft)
Input Voltage:	DC24V
Power/M:	12W/m(3.7W/ft)
Static Electricity:	1000V (ESD)
LEDs/Meter:	120LEDs/m
Size of Section:	50mm
LEDs of Section	6 LEDs

DRAWING



Flux out: 468.4 lm

Height	Eavg, Emax	Angle: 110.00deg	Diameter
1m	67.83, 229.21x		285.65cm
2m	16.96, 57.301x		571.30cm
3m	7.537, 25.471x		856.94cm
4m	4.239, 14.321x		1142.59cm
5m	2.713, 9.1671x		1428.24cm
6m	1.884, 6.3661x		1713.89cm
7m	1.384, 4.6771x		1999.53cm
8m	1.060, 3.5811x		2285.18cm
9m	0.8374, 2.8291x		2570.83cm
10m	0.6783, 2.2921x		2856.48cm

Photometric of 1M strip

※Max.length data is based on 10% voltage drop

※Warranty is based on indoor use

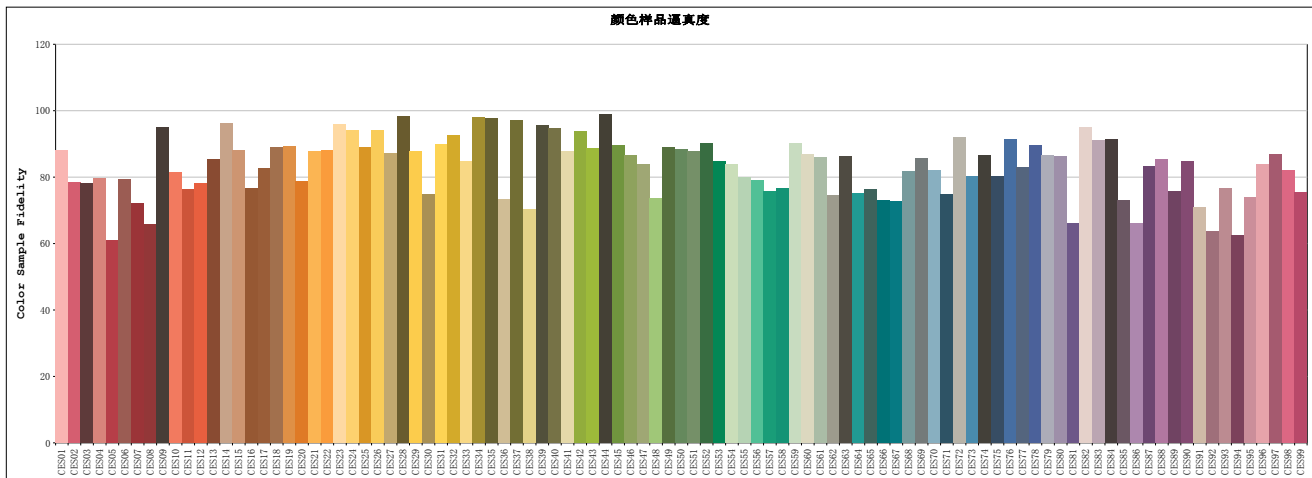
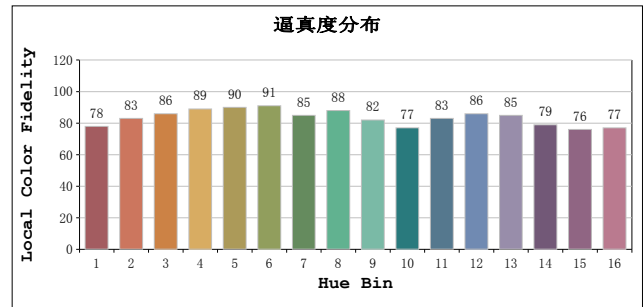
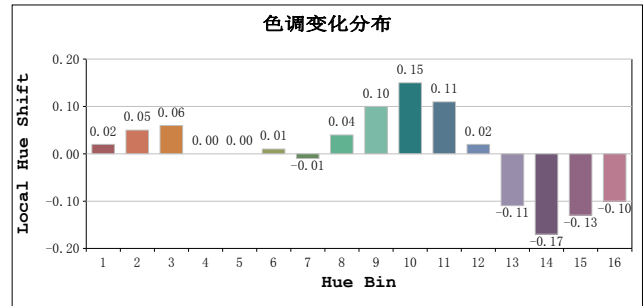
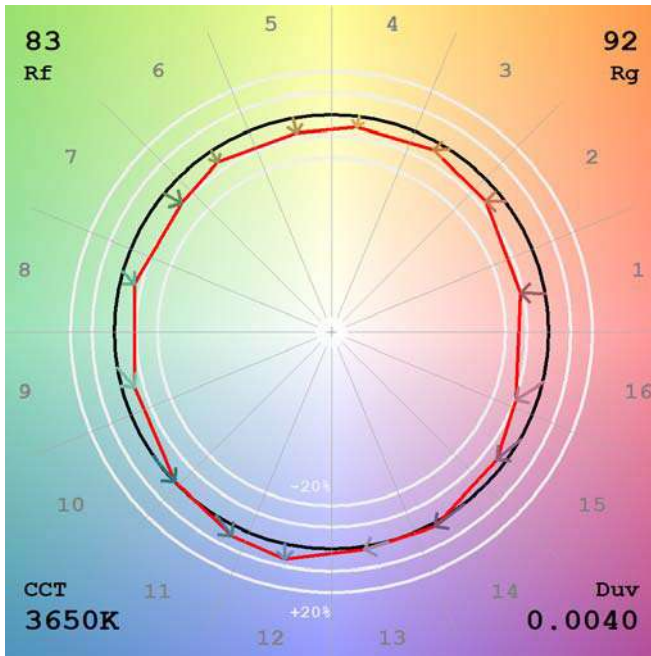
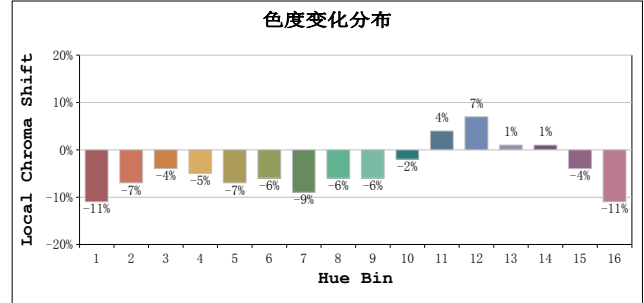
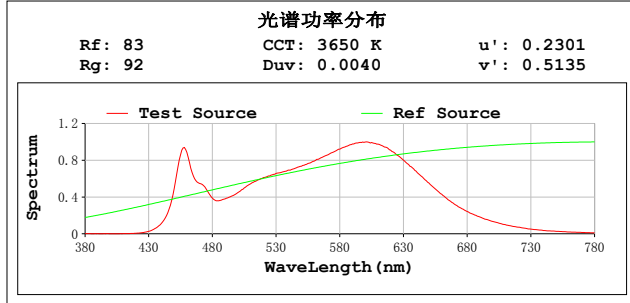
ELECTRICAL WIRING COLOR CODES

○ MONOCOLOR	Red: V+ Black: GND	Red Black
○ CCT	Red: V+ White: C Yellow: W	Yellow Red White
○ RGB	Black: V+ Red: R Green: G Blue: B	Black Green Red Blue
○ RGBW	Black: V+ Red: R Green: G Blue: B White: W	Black Green Red Blue White
○ SPI	Red: V+ Yellow: DAT White: GND	Yellow Red White
○ DMX	Black: GND White: P+/PO Blue: A Green: B Red: V+	Black Green Red Blue White
○ RGBCT	Black: V+ Red: R Green: G Blue: B White: C Yellow: W	Black Green Red Blue White

AAI Figure

Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

TM30 TEST REPORT



Accessories



Clips
MX-01-002238
30*18.9*17.6mm(L x W x H)



Aluminum channel
MX-01-002361
1000x18.9x17.6mm(L x W x H)



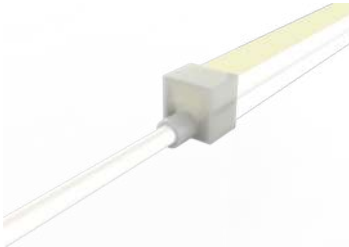
Note: There is a transparent window at the back ,you can see the cutting mark.



S shape Aluminum profile
MX-01-002293
1000x17.6x16.4mm(L x W x H)

|| Outlet wire way and cap

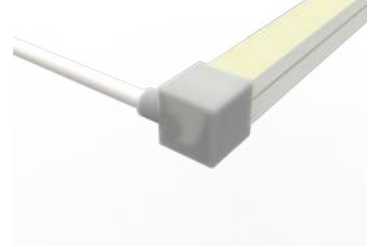
Note: Only show the outlet wire way and cap



Linear Outlet
Plug Fit Silicone Cap



Right Outlet
Plug Fit Silicone Cap



Left Outlet
Plug Fit Silicone Cap



Bottom Outlet
Plug Fit Silicone Cap



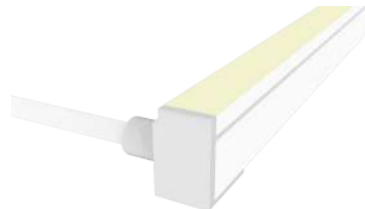
End cap
Plug Fit Silicone Cap



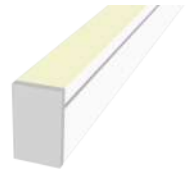
Linear Outlet
Injection Molded



Right Outlet
Injection Molded



Left Outlet
Injection Molded

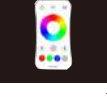


End Injection Molded



Bottom Injection Molded

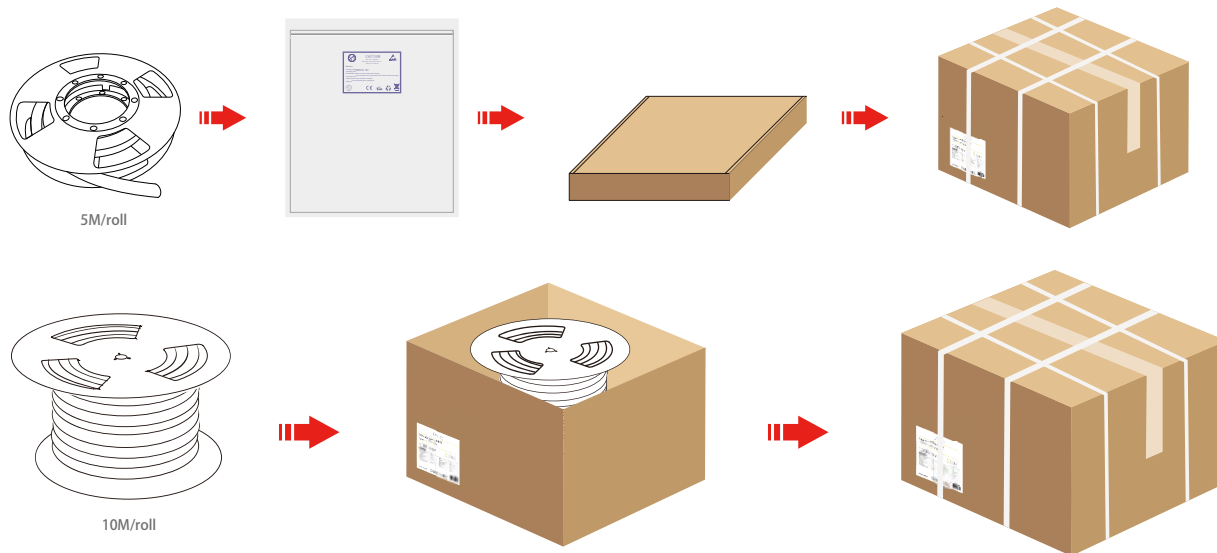
Controller

Picture	Item	Model	Spec	Match
	Monochrome remote	MX-03-030472	Output signal:RF(2.4GHz) Working voltage:3VDC(CR2032) Remote control distance:30m Working temperature:Ta:0-30°C~0+55°C	Use with Monochrome light strip
	Monotone light controller	MX-03-030322	Input voltage:12-48VDC Output current:15A@12/24V-10A@36/48V Output Power:180W@12V-360W@24V 360W@36V-480W@48V Working temperature:Ta:0-30°C~0+55°C	Use with Monochrome light strip
	CCT remote	MX-03-030466	Output signal:RF(2.4GHz) Working voltage:3VDC(CR2032) Remote control distance:30m Working temperature:Ta:0-30°C~0+55°C	Use with CCT light
	Color temperature controller	MX-03-030437	Input voltage :12-24VDC Output current :2CH,5A/CH Output Power :2x(120-240)W Working temperature:Ta:0-30°C~0+55°C	Use with CCT light
	RGB remote	MX-03-030469	Output signal :RF(2.4GHz) Working voltage :3VDC(CR2032) Remote control distance:30m Working temperature:Ta:0-30°C~0+55°C	Use with RGB light
	RGB Controller	MX-03-030467	Input voltage :12-24VDC Output current :3CH,4A/CH Output Power :144-288W Working temperature:Ta:0-30°C~0+55°C	Use with RGB light
	RGBW remote	MX-03-030454	output signal:RF(2.4GHz) Working voltage:3VDC(CR2032) Remote control distance:30m Working temperature:Ta:0-30°C~0+55°C	Use with RGBW strip
	RGBW Controller	MX-03-030458	Input voltage:5-24VDC Output current:8A Working temperature:Ta:0-30°C~0+55°C	Use with RGBW strip
	Monochrome controller	MX-03-030458	Input voltage:5-24VDC Output current:8A Working temperature:Ta:0-30°C~0+55°C	Use with Monochrome light
	4CH LED Controller RGB remote	MX-03-030455	(1)12-24 VDC 4A*4CH,Max 6A/CH 192W/384W(12V/24V) (2)Input Signal:RF 2.4GHz (3)1000PWM frequency (4)Dimming range:0-100%	Use with RGB light
	LTSA512 DMX Master Controller	DMX	Input Voltage:5V DC Power Consumption:<2W Connection way:Mini USB Internal Memory:6000 steps@512Chs Output Connector:XLR-3 Transmission Signal:DXM512 PC Software:LTECH LED player	Use with DMX512 strip light
	Monochrome controller	DS-L	(1)5-24VDC (2)Input Signal:DMX512/RDM+RF 2.4G Output signal:pixel signal (3)Control dots:1024 (4)Compatible with 37 kinds of Driving ICS;Numeric display (5)Reverse Polarity Protection.	DMX512 to SPI PIXEL Decoder

Reliability test of light

TEST TYPE	TESTING ITEM	TEST STANDARD	DESCRIPTION
PHOTOMETRIC TEST	Spectrum Analysis	LM 79	LM 79(lumen,CCT,CRI,XY,SDCM,wave length)
	Photometric Distribution	LM 79	LM 79(lumen intensity distribution&Lux diagram)
	Lumen Maintenance&Life Time	IES LM 80&IES TM28 GB/T24824-2009	LM 80&IES TM28
ELECTRICAL TEST	EMC Test	EMI & EMS	IEC 61547/GBT 18595 IEC 61000-3-2/GB 17625.1
MECHANICS & PHYSICE TESTING	Bending Test Vertical	Mingxue	Manufacturer-defined,100 cycles 3 times bending with 0.5m/s pulling speed
	Bending Test Horizontal	R2	Manufacturer-defined,100 cycles 3 times bending with 0.5m/s pulling speed
	Wrestling test	Mingxue	COB/CSP 500 / SMD 1000. cycles
	Swing Test	UL2388	UL2388,>750 cycles
	Tensile Test	IEC 60598-1; GB7000.1	Manufacture-defined,>the weight of light in maximum connection length whith both ends feed. With 30Nm if total cross section <0,75 or 60Nm force, pull wire 25 timesduring 1 sec. Mark displacement ≤ 2mm.
	Twist Test	Mingxue	Manufacturer-defined,>200 cycles in 720°
	Curl test	Mingxue	Back and forth 80-100 times
	IK06-08-10	IEC62262	IEC62262 The hammer spring Impact energy 0.7J
	Adhesion test	JB1256-77	3M 4229P hung on 2kg loads >7 hrs
	Drop test	IEC68-2-6	IEC68-2-6,GB/T2423/10/95
	Vibration test	ISTA-1A	bear up to 25,4mm amplitude in 14200 cycles
	Winding Test	IEC 60598-1; IEC 60598-2-21; GB-7000.1	φ 150mm cylinder, 60N pull, winding 10 times at (-25°C ±2°C) , and 10 times after(-15°C ±2°C, 16h).
	Electrical strength	IEC 60598-1; IEC 60598-2-21 GB-7000.1	500V
	Product accessories disassembly test	Mingxue	Product accessories are installed and adapted 5-10 times
ENVIRONMENT TESTING	Heating test	IEC 60598-1: 12.4	Sample to be tested under normal installation Under 1.06 times Rating Voltage After 30 minutes.
	Salt Spray Test	IEC 60068-2-11	5% salt solution concentration,5% salt water,35+/-2C for 72hrs
	High temperature and Humidity impact	IEC 60068-2-78 GB/T 2423.3	60+/-2° C for 168 hrs 60°C, 85%RH ,Test light decay data<3%
	Temperature Shock Test	IIEC60068	Manufacturer-defined,-40°C-60°C(typical temperature ange) 168H
	switch test	GB/T24824-2009	30s On, 30s Off, 15000 times;on/off every 30S, > 15000 cycles
	Lifetime aging test	Mingxue	Normal temperature 25°C
	Constant Temperature Test	Mingxue	Manufacturer-defined,60°C to -40° (typical temperature)
	Cold Bend Test	IEC 60598-1; IEC 60598-2-21 GB-7000.1	wound on mandrel,low-temperature (-15°C ±2°C, 16h), around the mandrel for two turns
	Cold Impact test	IEC 60598-1; IEC 60598-2-21 GB-7000.1	Low-temperature (-15°C ±5°C, 16h), hammer falls from a height of 100mm.
	UV Exposure Test	ASTMG154-06	ASTMG 154,ISO 4892-3, UVA@340nm ASTMG154-06, UVA-340 0.68W/m2 for 500 hrs
	IPX5 IPX6 IPX7 IPX8	IEC 60598-1; IEC 60598-2-21 GB-7000.1	IEC60529 IPX5/X6/ IPX7/X8

Packing



Safety Information

Application notes for led flexible strip

In order to drive LED flexible strip lights safely, it is absolutely necessary to operate them with an electronically stabilised power supply protecting against short circuits, overload and overheating.

To also ease the luminaire/installation approval, electronic control gear, power supply and all electronic accessories for LED or LED modules should carry "CE, or UL" mark and meet the latest safety standard.

- Please use 24VDC isolated power supply to drive the led strip, and the constant voltage source ripple less than 5%. Can't step-down the power by resistance-capacitance and non-isolated power supply driver led strip, etc.
- To ensure the longevity and reliability of the strips, please do not bend the arc diameter 60mm or less, do not fold to avoid damaging the lamp beads or broken.
- To ensure the life and environment of lights, in the use of force can not pull the power cord to avoid damage to prohibit collision LED lights.
- During the installation of positive and negative attention to the power cord, do not pick the wrong voltage power supply and the product are the same, so as to avoid damage to the product.
- LED lights should be stored in dry sealed environment, the proposed storage period should not be too long before using unpacking, the working temperature: $-20 \sim +45$, Storage temperature: $-0 \sim +60$, not waterproof lights band indoor use, relative humidity not higher than 70%.
- In practical applications, the power supply should leave 20% margin (recommend using only 80% of the power) in order to ensure a sufficient amount of voltage drive products
- Do not use any acidic, alkaline adhesive securement products (including not limited to glass, plastic, etc.)

