

# 1615 LED Neon Flex

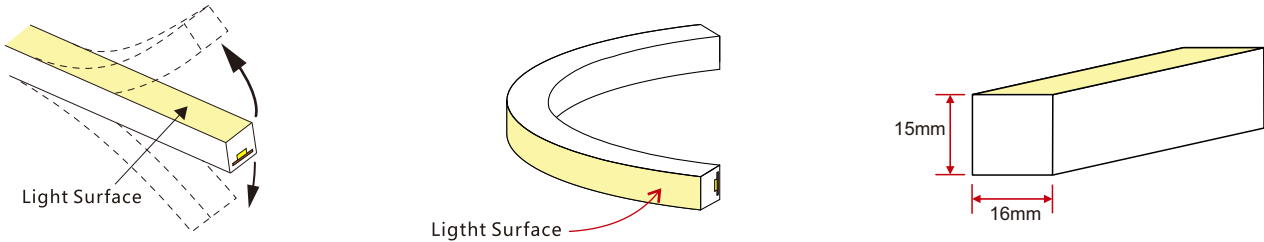
## Frontal-Emitting



## Specification & Parameters:

### Frontal-Emitting LED Neon Flex

#### 1.1 External Dimension



**Notice:**

Safety Input Voltage: DC 24V

Size of each section is 50mm (1.97" ), and cutting at "black line" place.

The dimension tolerance is  $\pm 0.2\%$ mm, width tolerance is  $\pm 0.3$ mm.



#### 1.2 Technical Parameters

Technical Data

Product Code	RD-N1615V24		
Colour	<u>W/WW/RGB/RGBW</u>		
Working Voltage	DC24V		
LED Qty/m	120LEDs		
LED Type	SMD 2835		
CRI	CRI > 90,	CRI > 80	
Rated Power/m	5W	10W	15W
Light Efficiency $\pm 10\%$	70Lm/w	65Lm/w	60Lm/w
LED Distance	8.33mm		
Min. Cutting LED	6LEDs		
Min. Cutting Length	50mm		
Weight/m	315g		
Storage Temperature	-20~60°C		
Environmental Working Temperature	-20~45°C		
IP Rating	IP67		

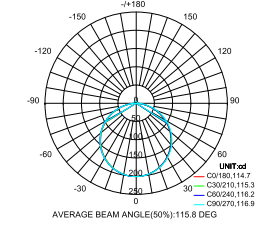


### 1.3 Optical Parameters

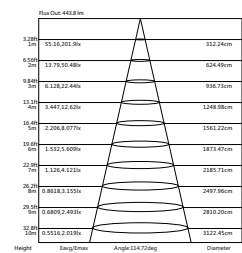
#### Optical Data

Product Code	MX-N1615V24		Lumen/m		
			Rated Power	5W/m	10W/m
Color	Wavelength	CCT			
Ultra WW	/	2000K±50K	268 lm/m	496 lm/m	674 lm/m
Super WW	/	2400K±50K	276 lm/m	525 lm/m	704 lm/m
Warm White	/	2725K±60K	317 lm/m	581 lm/m	766 lm/m
Warm White	/	3045K±70K	296 lm/m	561 lm/m	748 lm/m
Natural White	/	3500K / 4000K	384 lm/m	660 lm/m	900 lm/m
White	/	5000K/6000K	350 lm/m	680 lm/m	930 lm/m
WW+W	/	2000K....6000K	280 lm/m	550 lm/m	760 lm/m
RED	620-630nm	/	139 lm/m	279 lm/m	390 lm/m
GREEN	520-530nm	/	411 lm/m	696 lm/m	835 lm/m
BLUE	465-475nm	/	62 lm/m	113 lm/m	158 lm/m
AMBER	585-595nm	/	114 lm/m	242 lm/m	394 lm/m
RGB	/	/	141 lm/m	254 lm/m	337 lm/m
RGBW	/	/	188 lm/m	338 lm/m	449 lm/m

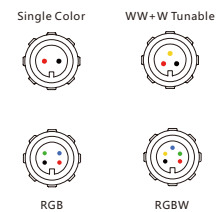
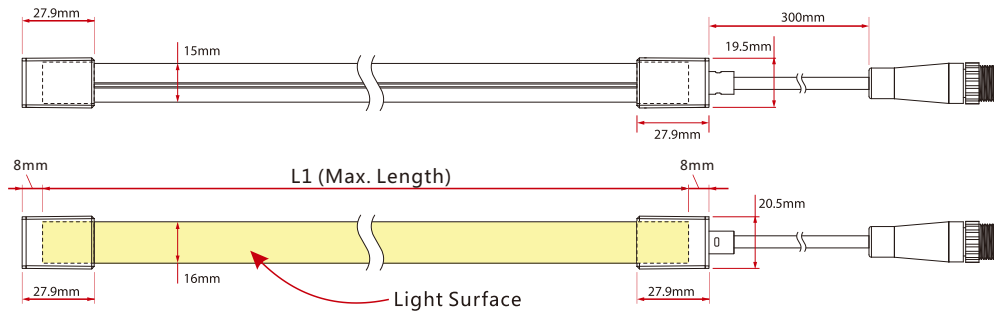
Luminous Intensity Distribution



illumination diagram



### 1.4 Loading Chart



#### Maximum Loading of Length

Energizing Way	5W/m		10W/m		15W/m	
	CCT	Max. Length	CCT	Max. Length	CCT	Max. Length
<b>Driven By One End</b> 	2200K-6000K	28m	2200K-6000K	18m	2200K-6000K	15m
	WW+W	5m	WW+W	5m	WW+W	5m
	RED	35m	RED	24m	RED	18m
	GREEN / BLUE	22m	GREEN / BLUE	15m	GREEN / BLUE	10m
	AMBER	35m	AMBER	24m	AMBER	18m
	PINK	28m	PINK	15m	PINK	10m
	RGB / RGBW	5m	RGB / RGBW	5m	RGB / RGBW	5m
<b>Driven By Two Ends</b> 	2200K-6000K	50m	2200K-6000K	30m	2200K-6000K	25m
	WW+W	10m	WW+W	10m	WW+W	10m
	RED	60m	RED	40m	RED	30m
	GREEN / BLUE	40m	GREEN / BLUE	25m	GREEN / BLUE	18m
	AMBER	60m	AMBER	40m	AMBER	30m
	PINK	40m	PINK	25m	PINK	18m
RGB / RGBW	10m	RGB / RGBW	10m	RGB / RGBW	10m	

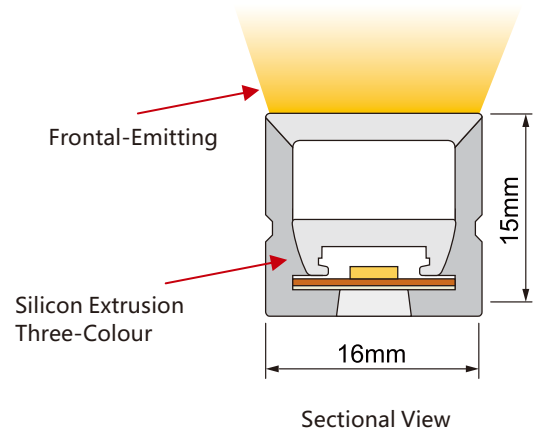
>> Note: The running length is base on Constant Current 24Vdc LED Strip.

## Feature & Operation

### Sectional View & Operation

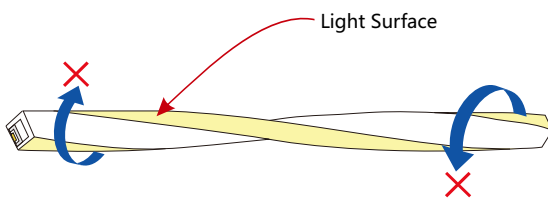
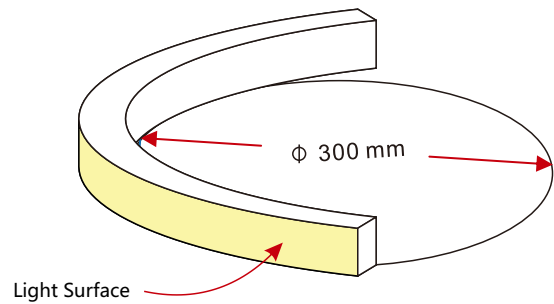
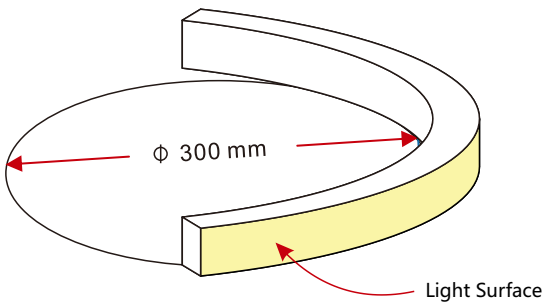
#### 2.1 Product Features

1. Customized different length available from 0.3m ~ 50m maximum;
2. High quality LED2835, pasted LM-80 report, reported L70 >36,000h;
3. UV & Flame resistant construction, and using high quality Silicon;
4. Perfect uniform & smooth Emitting affect, and invisible light dot;
5. Extremely Flat surface and profile and flush light emitting affect;
6. CRI>80 & CRI>90 & CRI>95 all available with high lumen output;
7. Ultra flexible with 300mm minimum bending diameter;
8. Easy installation and assembly with fast connector and end cap;
9. Extremely wide application for commercial lighting;
10. Enviromentally friendly & energy efficient;
11. Automated Production, high reliability & long life span;

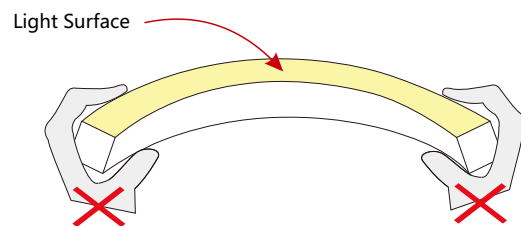


#### 2.2 Operation Guidance

The LED neon Flex can be only bend along the light surface, like the following drawing;  
Do not twist the light, and do not bend smaller than the allowed minimum 300mm bending diameter;



❌ Do not twist this LED Neon Flex! Otherwise LED & Resistor & internal circuit will be broken.

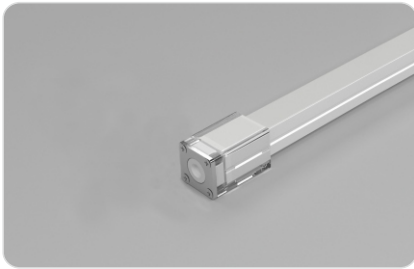


❌ Do not bending the LED Neon Flex horizontally Otherwise LED & Resistor will be broken.

## Accessory

### Connectors & Aluminum Profile

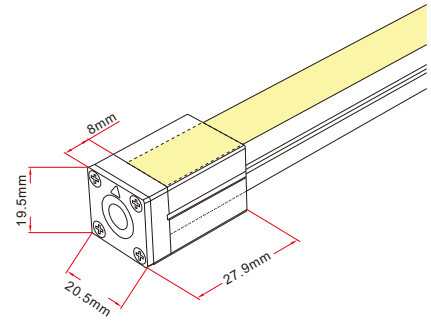
#### 3.1 Transparent PC Fast End Cap



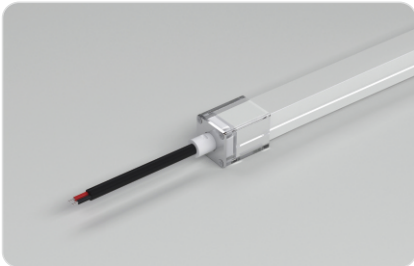
##### Fast End Cap

Termination Protection of the light, IP67 DIY connector

- Transparent PC Mounting piece \*1
- Transparent PC Stopper \*1
- Transparent PC Anti-skidding Clip \*1
- Waterproof Rubber Gasket \*1
- Transparent PC Pads \*1
- Metal Blank End \*1
- Screws \*4



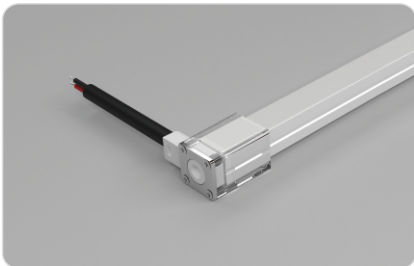
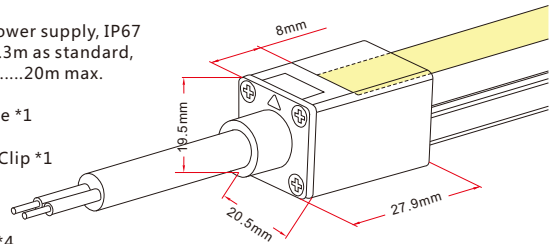
#### 3.2 Transparent PC Fast Connector



##### Fast Tail Connector

Connecting the neon flex to power supply, IP67 DIY connector, cable length: 0.3m as standard, Available Customized in 0.5m.....20m max.

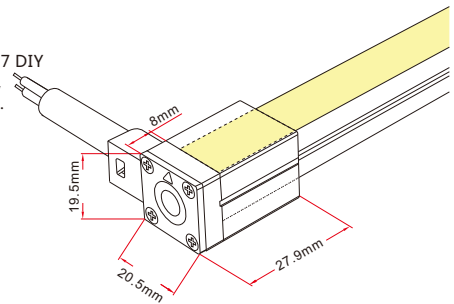
- Transparent PC Mounting piece \*1
- Transparent PC Stopper \*1
- Transparent PC Anti-skidding Clip \*1
- Waterproof Rubber Gasket \*1
- Transparent PC Pads \*1
- Metal Blank End \*1
- Tail Connector \*1
- Screws \*4



##### Fast Side-edge Connector

Connecting neon flex to power supply, IP67 DIY connector, cable length: 0.3m as standard, Available Customized in 0.5m.....20m max.

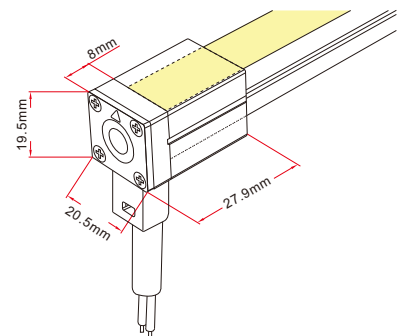
- Transparent PC Mounting piece \*1
- Transparent PC Stopper \*1
- Transparent PC Anti-skidding Clip \*1
- Waterproof Rubber Gasket \*1
- Transparent PC Pads \*1
- Metal Blank End \*1
- Side-edge Connector \*1
- Screws \*4



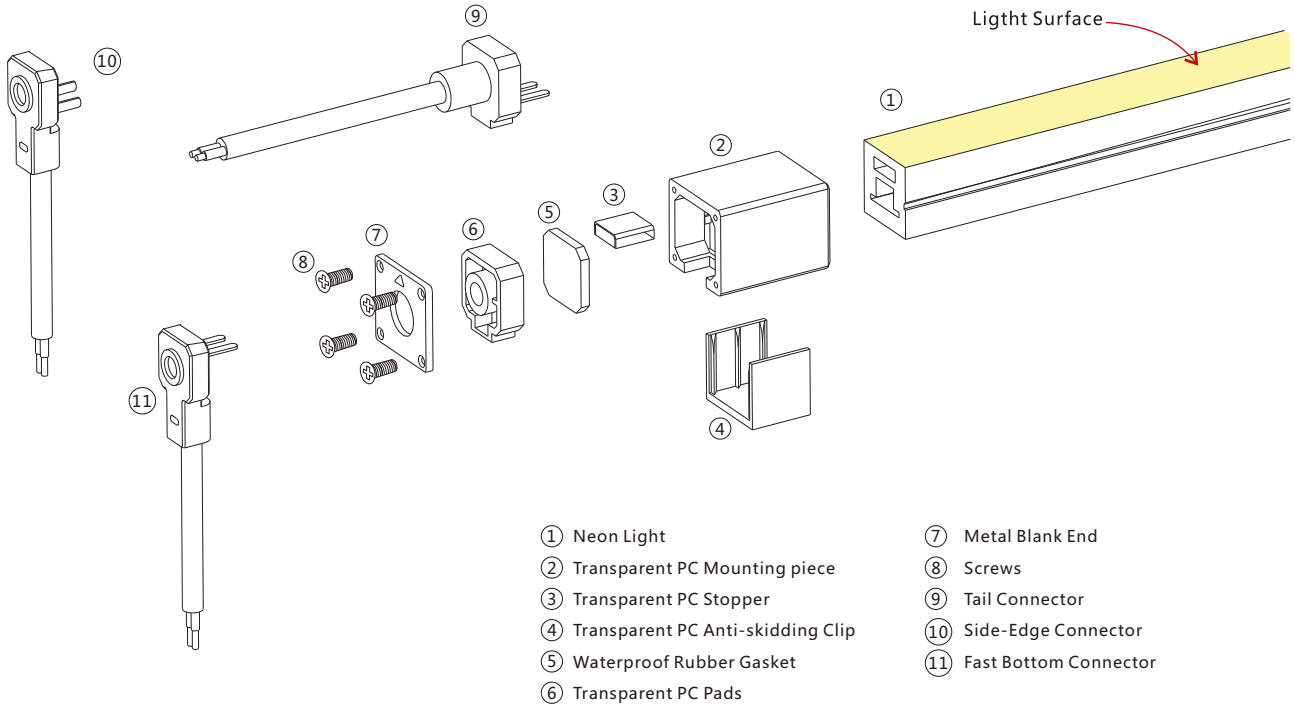
##### Fast Bottom Connector

Connecting neon flex to power supply, IP67 DIY connector, cable length: 0.3m as standard, Available Customized in 0.5m.....20m max.

- Transparent PC Mounting piece \*1
- Transparent PC Stopper \*1
- Transparent PC Anti-skidding Clip \*1
- Waterproof Rubber Gasket \*1
- Transparent PC Pads \*1
- Metal Blank End \*1
- Bottom Connector \*1
- Screws \*4

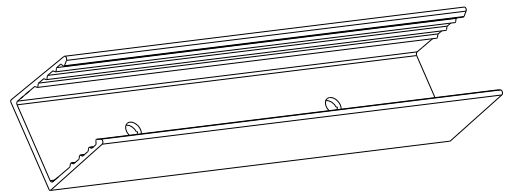
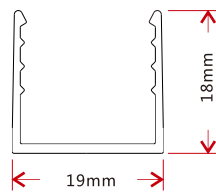


### 3.3 Exploded Drawing



- ① Neon Light
- ② Transparent PC Mounting piece
- ③ Transparent PC Stopper
- ④ Transparent PC Anti-skidding Clip
- ⑤ Waterproof Rubber Gasket
- ⑥ Transparent PC Pads
- ⑦ Metal Blank End
- ⑧ Screws
- ⑨ Tail Connector
- ⑩ Side-Edge Connector
- ⑪ Fast Bottom Connector

### 3.4 Aluminum Profile

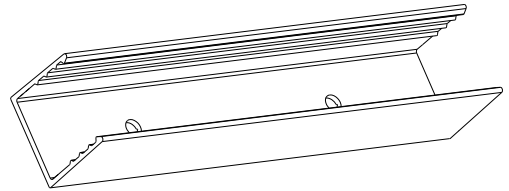
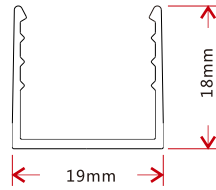
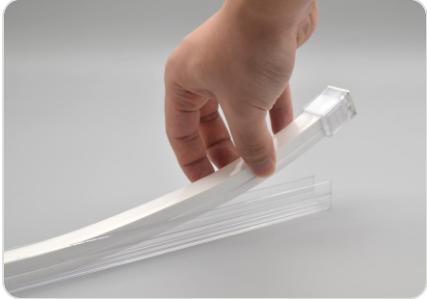


Code	W*H(mm)	Standard Length(mm)	Matching Neon Light Length(mm)	Screw Hole (mm)	Hole Number
MX-N1615-005	19*18	455	500	Φ3.5	2
		955	1000	Φ3.5	3
		1455	1500	Φ3.5	4
		1955	2000	Φ3.5	5

**Notes:**

1. Aluminum Profiles's raw material is 6063 AL, silvery colour and anodizing as stadard, white/black paint available;
2. These are the AL Profile recommended cutting length, in order to matching the different length of Neon Light;
3. Any customized Length available too, such as 1.2m or 1.4oy or 3.5m, and 5m length maximum;
4. Each 0.3m length with 1 hole and 1 screw, and installation referece to the user manual;

### 3.5 Trasparent PC Profile

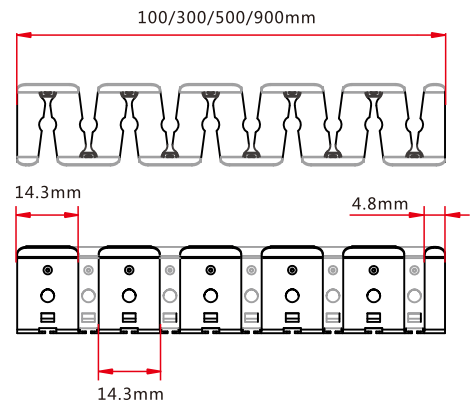
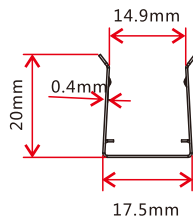
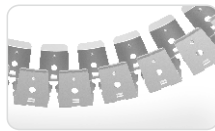
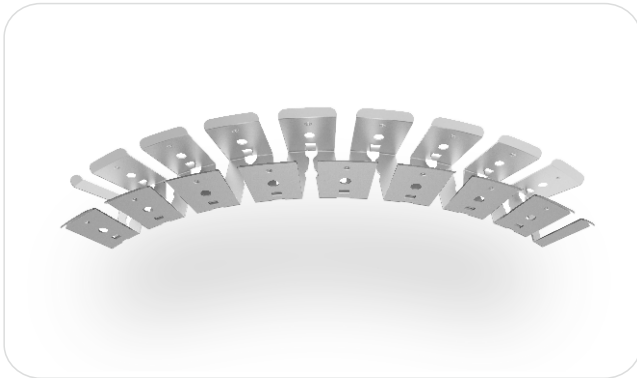


Code	W*H(mm)	Standard Length(mm)	Matching Neon Light Length(mm)	Screw Hole (mm)	Hole Number
MX-N1615-005	19*18	455	500	Φ3.5	2
		955	1000	Φ3.5	3
		1455	1500	Φ3.5	4
		1955	2000	Φ3.5	5

**Notes:**

1. This transparent Profiles's raw material is PC, and the customized milky color possible too;
2. These are the Profile recommended cutting length, in order to matching the different length of Neon Light;
3. Any customized Length available, installation referece to the user manual;

### 3.6 Curve Stainless Steel Profile



Model: MX-SQ-DW-CH

Note: Unless otherwise stated, the tolerance of the profile is ±0.5mm

### 4.1 Certificate & Report

ITEM	Testing Organization	Certificate Number	Report Reference
CE 2014/30/EU	TUV	AE 50435492 0001	50238615 001
EN 62471:2008	TUV	168108093	50235472
UL LISTED	UL	20190523-E473513	E473513-20150130

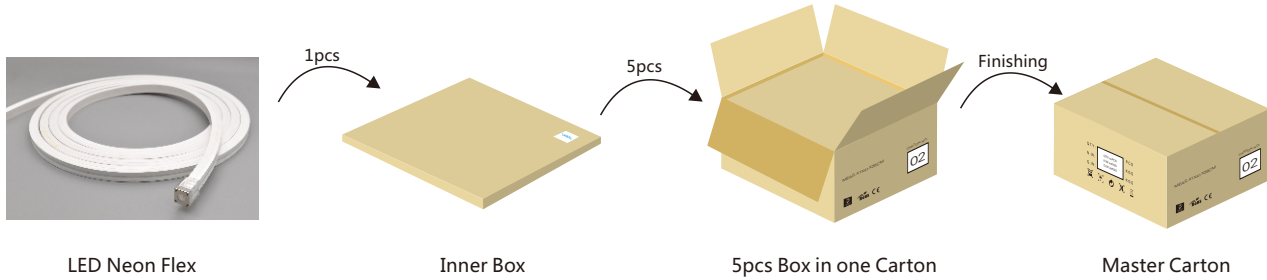
>> Note: The testing reports and certificates are available from the related official website.



## Packaging Information

### Packaging & Testing

#### 5.1 Packaging Method



Packaging Details	White Box Dimension (cm)	Carton Dimension (cm)	Numbers of White Box	Carton Weight (kg)
Light Length	Inner Box Dimension (cm)	Carton Dimension (cm)	Number of inner box	Carton Weight (kg)
<4.5m	40*40*6	44*44*26	4	<6.9
5-8m	52*52*6	56*56*26	4	7.6-11.6
10m	61*61*6	65*65*26	4	14.2
15m	68*68*6	71*71*15	2	10.9
20m	74*74*6	76*76*15	2	14.2

#### 6.1 Reliability Testing

TESTING ITEM	PERFORMANCE	STANDARD AND DESCRIPTION
PHOTOMETRIC TESTING	Spectrum Analysis	IES LM 79 (lumen, CCT, CRI, SDCM, wave length)
	Photometric Distribution	IES LM 79 (lumen intensity distribution & Lux Diagram)
	Lumen Maintenance & Life Time	IES LM84 & IES TM28
TEMPERATURE RISE TESTING	Normal Temperature Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
	Abnormal Operation Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
MECHANICS & PHYSICS TESTING	Bending Test	Manufacturer-defined, 500 cycles
	Swing Test	UL2388, >750 cycles
	Twist Test	Manufacturer-defined, 200 cycles
	Ball Impact	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
	IK Test	IEC62262
WEATHERING TESTING	Salt Spray Test	IEC68-2-11
	Seal Water Immersion Test	IEC60598-1, Salinity 4%
ENVIROMENT TESTING	Flame Resistant Test	UL94
	UV Exposure Test	ASTMG 154, ISO 4892-3, UVA@340nm
	IPX5, IPX6, IPX7	IEC60529
ENDURANCE & THERMAL TEST	Temperature Shock Test	Manufacturer-defined, -40°C -60°C
	Constant Temperature Test	Manufacturer-defined, 70°C
AGING TEST	Light Aging Test	Manufacturer-defined, >2000h
	2835 LED Source Aging Test	LM-80 NVLAP