



Color:

## Features

- 1.High quality 1818 LEDs SMD.
- 2.Two beam angle lens 6\*90 and 10\*45 available.
- 3.adopt DC/DC voltage-drop constant current design,make module current stable and brightness
- 4.Injection module with UV resistance and fire-retardant,IP65 waterproof
- 5.Extra heat dissipation plate at module for long life span.
- 6.Single module cuttable,

## Application

Suitable for advertising board lighting and light box etc.

## Installation

Fix by adhesive tape and screws



## Optical & Electrical Parameters

Model No.	Color Temperature(K)	Beam Angle	Typical Luminous Flux value(lm/pcs)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
Z19 2.0-12/24V	4000-8000	10*45°	285	70+	≥95	12/24	3

## Other Parameters

Model No.	Product Size L*W (mm)	Standard Packing Quantity (pcs)	Max Run (single feed)(pcs)	Working Temperature	Storage Temperature
Z19 2.0-12V	66*42	15	15	-20~+60°C	-20~+70°C
Z19 2.0-24V	66*42	30	30	-20~+60°C	-20~+70°C

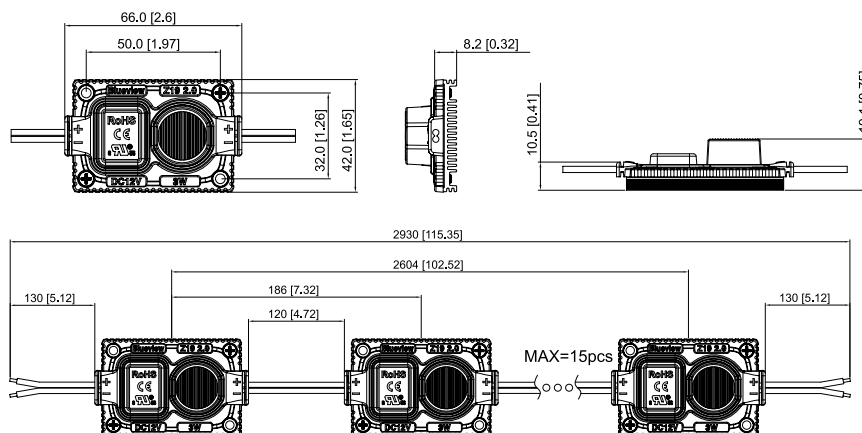
**NOTE:**

- Test environment temperature : 25±2°C.
- Figures above are typical figures. Actual figures could be different with typical figures, and the data is subject to change without notice.
- Different color temperature will make luminous flux different.
- Power tolerance within ±10%.

## Profile Drawings

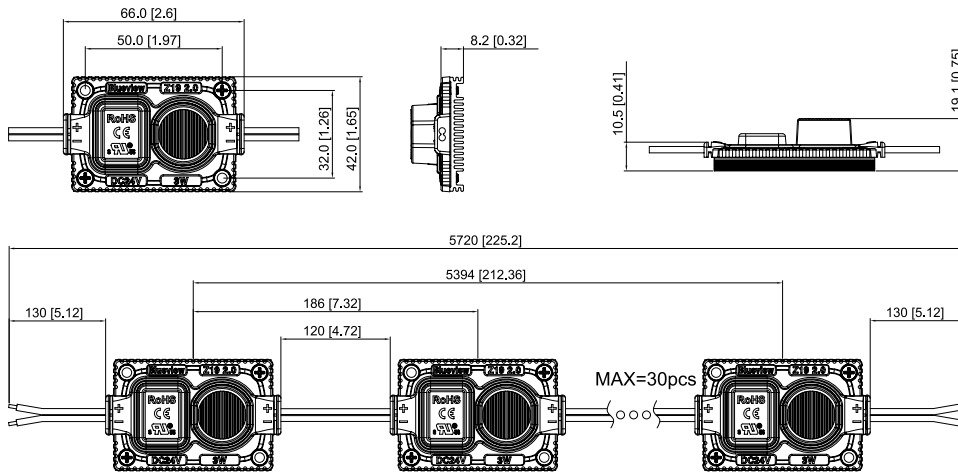
Unit:mm[inch]

Z19 2.0-12V



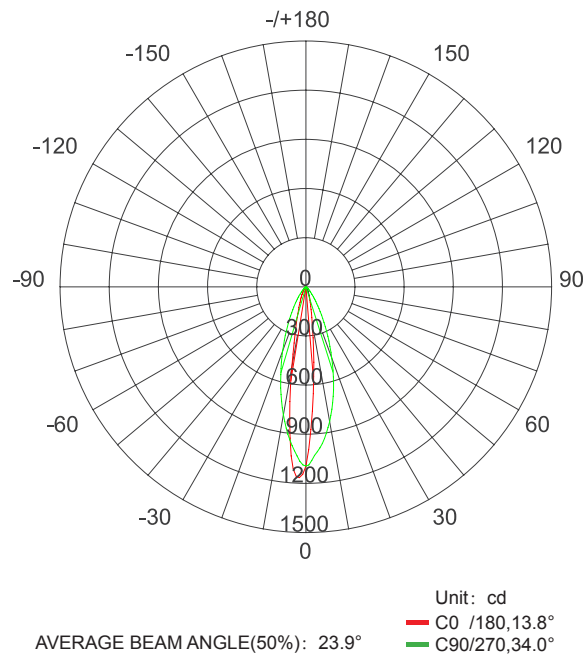


Z19 2.0-24V



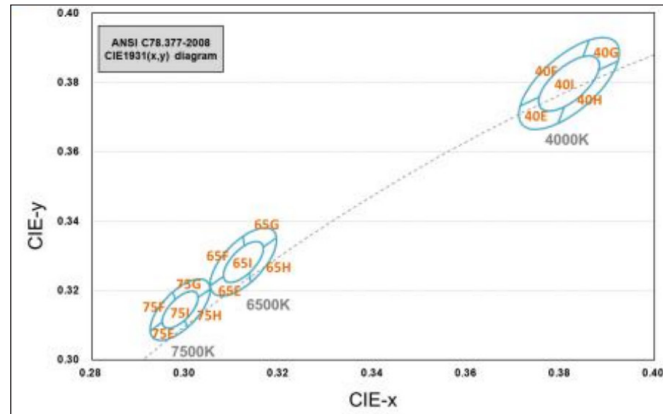
Note: For detail drawing, please consult sale rep.

## Luminous Intensity Distribution Diagram

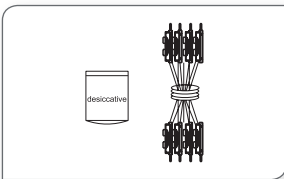




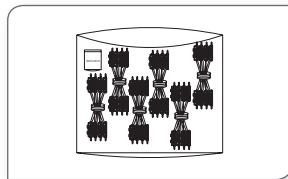
## Color Temperature Distribution Diagram



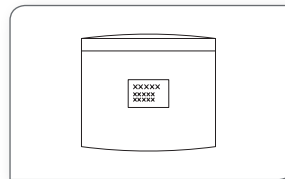
## packing



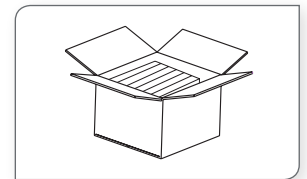
Prepare the desiccant and bind the product.



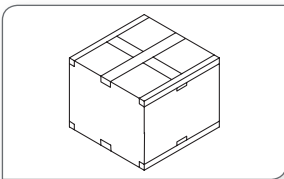
Put the product and desiccant into static shielding bag.



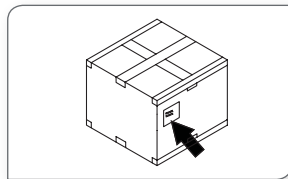
Seal and label the static shielding bag.



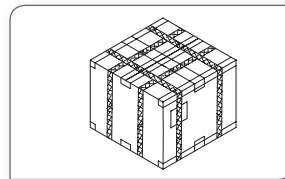
Put the static shielding bag side by side into carton box.



Seal the box.



Label the box;



Use packing belt to pack after adding the edge protectors.

### Packaging information

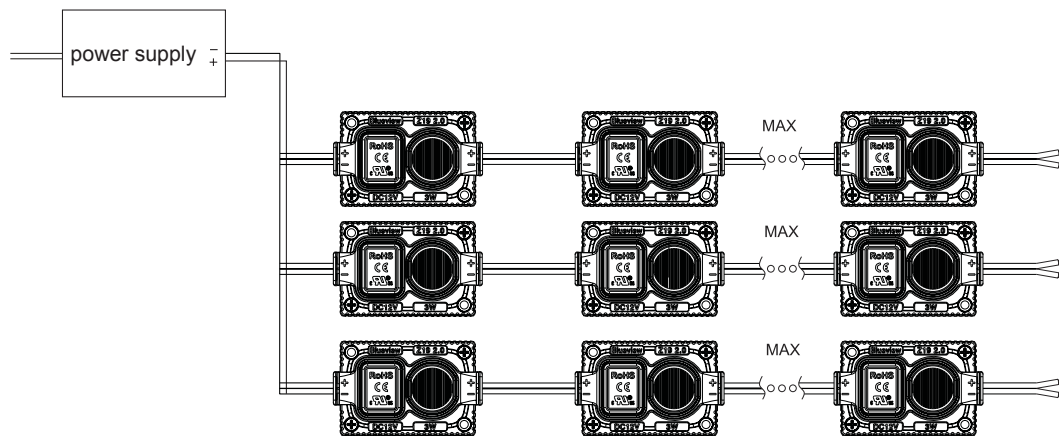
Model No.	Product Size L*W(mm)	Carton Size(mm)	Total Amount(pcs)	Net Weight(kg)	Gross Weight(kg)
Z19 2.0	66*42	550*400*340	600	27.5(1±10%)	29.0(1±10%)

#### NOTE:

- Packing materials: static shielding bag and carton box.
- 30pcs modules in one static shielding bag, 20 pcs static shielding bags in one carton box
- The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.

## Installation

### 1.Connection Diagram



### 2.Installation Reference

Model No	Surface Material	Lighting Mode	Width (m)	Depth H(cm)	Illumination (lux)	Evenness	Spacing Y(cm)	Density (pcs/m <sup>2</sup> )	Watt Density (W/m <sup>2</sup> )	Visual Effects
Z19 2.0	White non weaving canvas	Double Side	1.5	10	1063-2350	0.45	8	12*2	36	OK
			2	10	644-2290	0.28	8	12*2	36	
			1.5	12	889-1523	0.58	10	10*2	30	
			2	12	603-1402	0.43	10	10*2	30	
			1.5	15	895-1335	0.67	12	8*2	24	
			2	15	627-1140	0.55	12	8*2	24	



## Attentions before installation

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have insulation, waterproof and anti-corrosive treatment.

## Common Faults and Troubleshoot

Quick Guide		
Problems	Reasons	Solutions
All LEDs can not light on.	No electric supply.	Power on
	Automatic power protection from the open or short circuit in output of the power supply.	Fix the short circuit problem.
	Wrong connection of power supply.	
LEDs can not light on partly.	Some switching mode power supplies are not powered.	Check the power supply system to fix it.
	Power supply line error.	
	Mistaken wire connection of some of products	Correctly connection
Brightness of LED is inconsistent for insufficient.	Power overloaded.	Replace with more powerful power
	Power supply circuit excessive consumption.	Make sure the working voltage of the product within $\pm 5\%$ of standard voltage, or keep balance by circuit power consumption.
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement.
LED flicker.	Connection point fault.	Remove bad connection point.
	Switching power supply failure.	Replace a new power supply.
	Wrong Installation or use of products	Please follow the instructions

### **Warning**

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation, especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation, waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm<sup>2</sup> cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters. Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

## Statements and Recycling

### Statements:

Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged.  
The parameters given in this manual are typical values and for reference only.  
All illustrations and drawings in this manual are for reference.  
This product is subject to change without notice.

### Recycling:

LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.