

## Features

- Adopt RGB in one 2830 LED
- Good color-mixing effect and stability
- Special lens with 170° beam angle, suitable for thin light box
- Create rich color changing effect via controller
- Adopt standard terminals for easy usage

## Application

- Suitable for RGB lightbox with thickness above 7cm etc.

## Installation

- Prefix with self adhesive tape and fix with screws

## Optical & Electrical Parameters

Model No.	Light Color	Color Temperature/Wavelength(nm/k)	Beam Angle	Ra	Typical Luminous Flux(lm/pcs)	Efficacy (lm/w)	Voltage (DC V)	Power (W/pcs)
BQ5-A	R	620	170°	--	48	30.0	24	1.92
	G	540			77	48.2		1.92
	B	470			25	15.7		1.92
	RGB*	100000			142	29.6		5.76

## Other Parameters

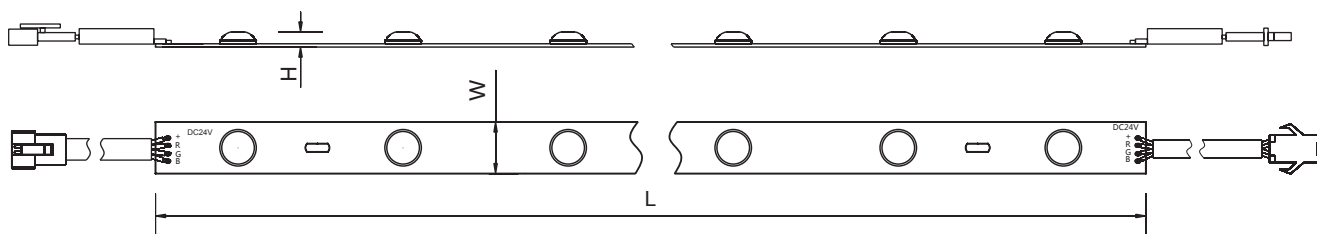
Model No.	LED Quantity (pcs)	Product Size L*W*H(mm)	Standard Series Connection (pcs)	Max Run (pcs)	Working Temperature	Storage Temperature
BQ5-A	6	480*25*7.3	3	3	-20~+60°C	-20~+70°C

**Note:**

- Test environment temperature : 25±2°C.
- The above data is typical values. The actual data of each single product may differ from the typical values. The data is subject to change without notice.
- The luminous flux is tested with single light on.
- Different color temperature will make luminous flux different.
- The data of RGB is tested with RGB three lights on.

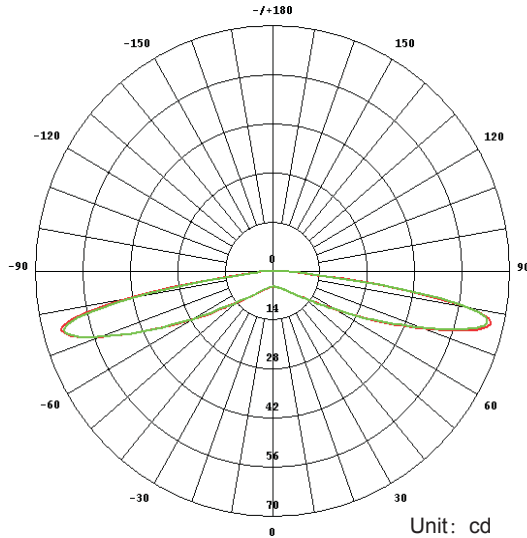
## Profile Drawings

Unit:mm



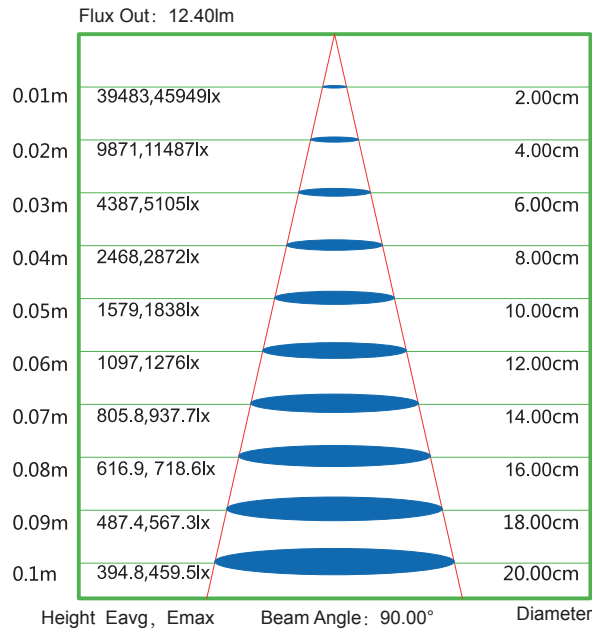
**Note:**Please ask the sales for detail drawing

Luminous Intensity Distribution Diagram



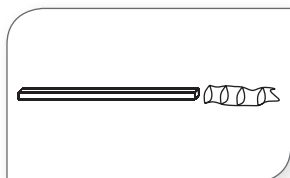
Unit: cd  
 — C0/180, 187.7°  
 — C90/270, 187.6°  
 AVERAGE BEAM ANGLE(50%): 187.7°

Average Illumination

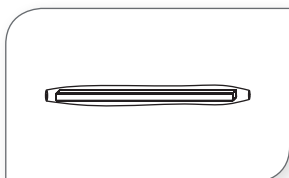


Average Illumination(with RGB light on)

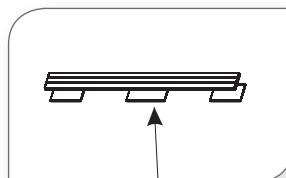
## Packaging Information



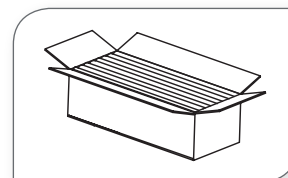
Put the product into PE bag.



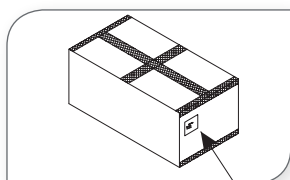
Seal the bag in two ends and label it.



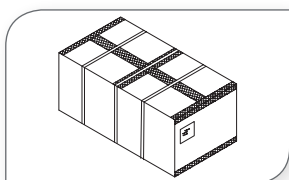
Separate the product layer by layer with foam.



Put the product and accessories bag into carton box.



Seal and label the box.



Use packing belt to pack. Add edge protectors if necessary.

### Packaging information

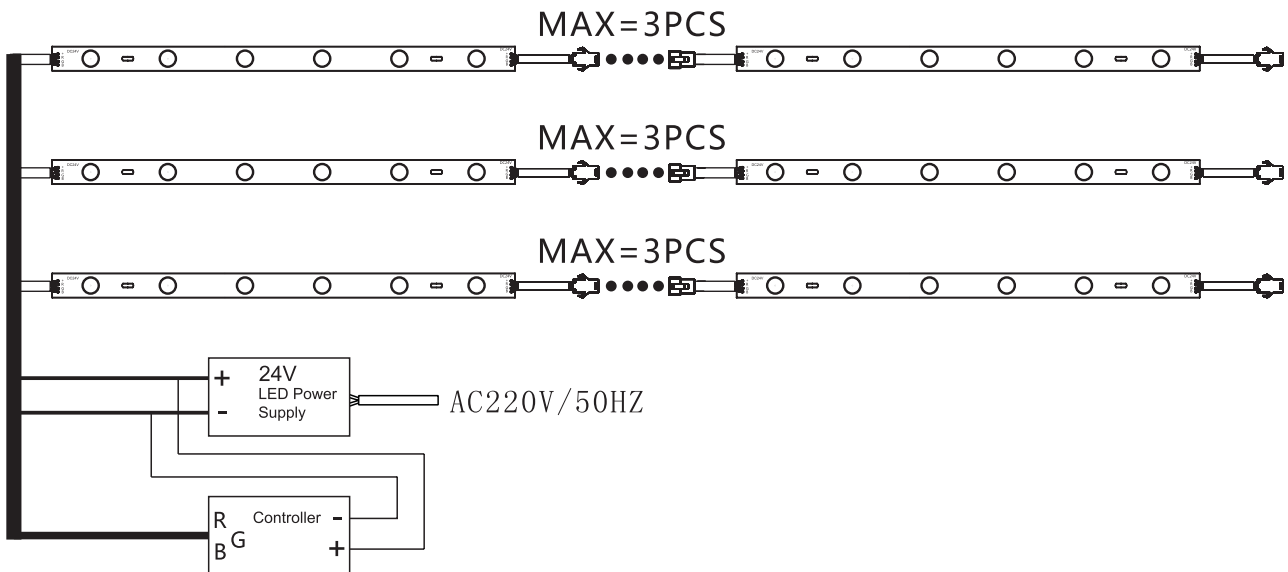
Model No.	Product Size(mm)	Carton Size(mm)	Total Quantity(pcs)	Net Weight(kg)	Gross Weight(kg)
BQ5-A	480*25*7.3	550*400*340	216	15.34(1±10%)	16.65(1±10%)

#### Note:

- Shipping materials: PE bags and 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

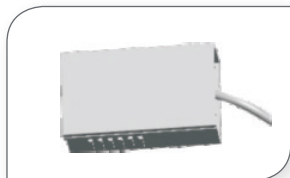
Model No	Bottom Color of Light Box	Surface Material	Thickness H(cm)	Brightness (cd/ m <sup>2</sup> )	Density (pcs/ m <sup>2</sup> )	Spacing Y(cm)	Visual effects
BQ5-A	White	White Soft Film	7	255	24	8	OK
			8	231			
			9	210			
			10	190			



#### Note:

- The colored light is tested with brightness(cd/m), and here is the data with RGB three lights normally on.
- BQ5-A is 0.5m per bar, please pay attention to the installation density.
- Spacing, see upper left;
- Please ask the sales for data of other depth or colors.

## 2. Accessories & Tools



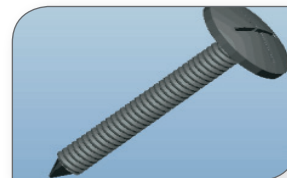
LED power supply



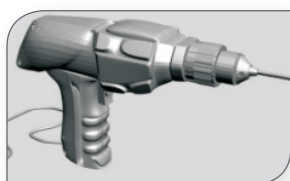
Tools: Diagonal pliers



Mounting gaskets



M3 Self-tapping screw



Electric batch and electric drill



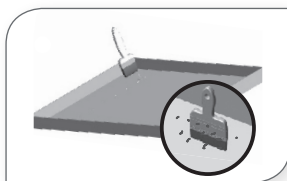
Clip bar



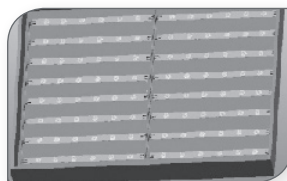
Connection terminal

## 3. Installation steps

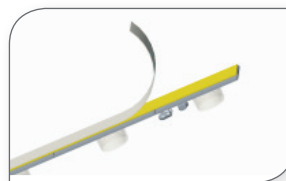
### 1. Method one: fix by double-sided foam tape and screws



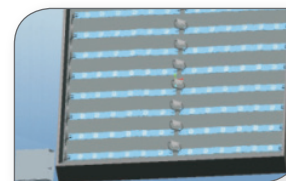
Clean the mounting surface.



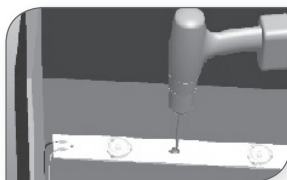
Arrange the mounting space.



Peel away the self adhesive tape on the rear of product and evenly mounting the product with appropriate space.



Connect the DC output end of power supply with product and connect the controller. Treat the thread with insulation, waterproof, and anti-corrosion arrangement as it cannot pull out by hands.

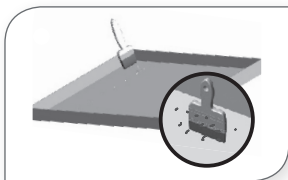


Check and ensure correct installation, and fix the product with screws, then power on for self-test.

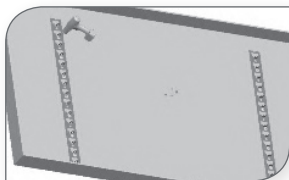
#### Note:

- Screw to avoid welding plate, avoiding short circuit
- When fastening the screw, make sure to add plastic gaskets to insulate the screw from the LED panel.

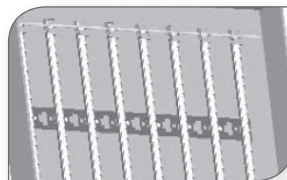
## 2.Method two: fix by clip bar



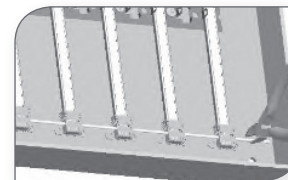
Clean the mounting surface.



Evenly mounting the clip bars with appropriate space and fix with screws.



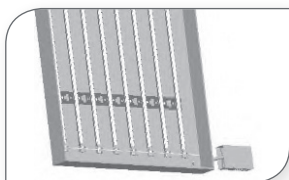
Fix the product one by one with clips on the bar.



Cut off the excess rigid bar.  
Note: Cut in the middle of the wire.



Please fix by at least two terminals if the product need to be connected, and treat the thread with insulation,waterproof, and anti-corrosion arrangement as it cannot pull out by hands.



Install the power supply and treat the thread.

Note: make sure the metal clip bar without reach any live part to avoid short circuit.

## Attentions

- 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 led module 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.	Fix the short circuit problem.
	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.