

Version: A1.3

Features

1. Edge-lit module with high cost-performance
2. Half-encapsulated injection molding design
3. Aluminum PCB with excellent heat dissipation
4. Support PWM, 0-10V, DALI, DMX dimming
5. Single module cuttable and support customization

Application

Edge-lit for 10-15cm double sided light box

Installation

Fixed by self adhesive tape and screws



Specification

Model No.	Light Color	Color Temperature(K)	Beam Angle	Luminous Flux (lm/pcs)	CRI	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
Z18 4.0	W	6000-7000	19°28°	187	80+	104	12	1.8

Other Parameters

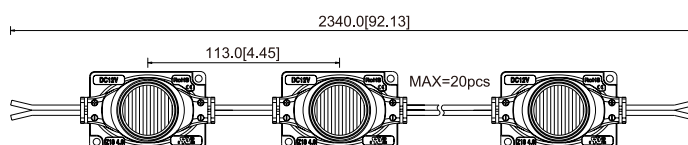
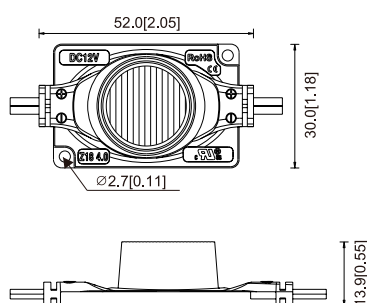
Model No.	Quantity (LED Qty/pc)	Product Size L*W*H(mm)	Standard Run (pcs)	Max Run(single feed) (pcs)	Working Temperature	Storage Temperature
Z18 4.0	1	52*30*13.4	20	20	-20~+60°C	-20~+70°C

NOTE:

1. Test environment temperature : 25±2°C.
2. Figures above are typical figures. Actual figures could be different with typical figures, and the data is subject to change without notice.
3. Different color temperature will make luminous flux different.
4. Power tolerance within ±10%.
5. The "Quantity"above means the LED quantity of single module

Profile Drawings

Unit:mm[inch]

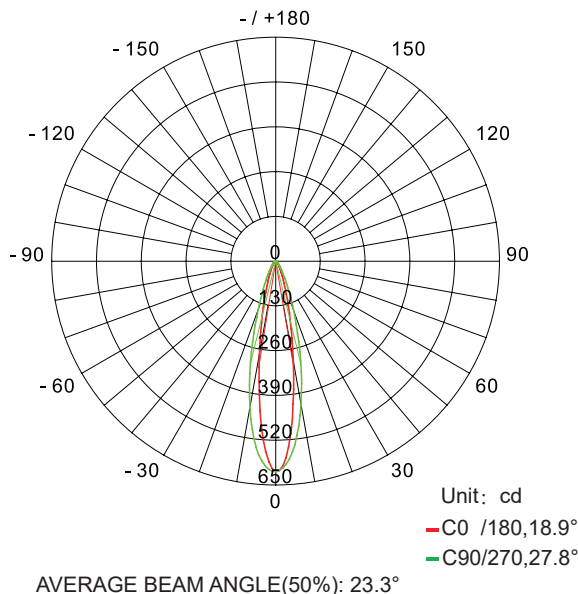


Note:

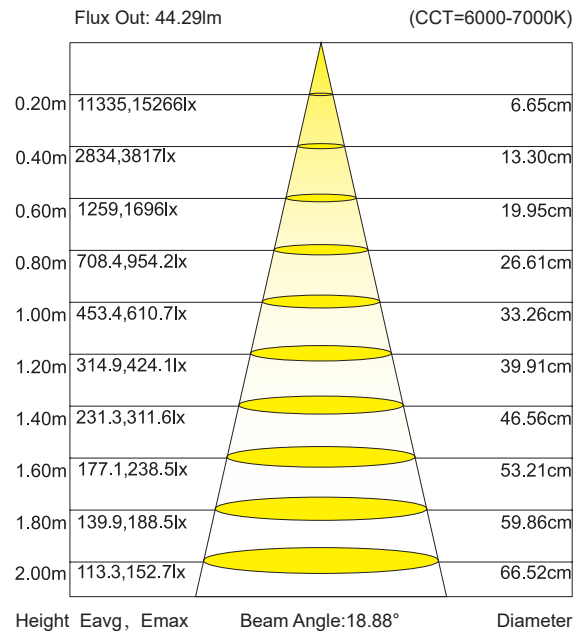
Dimension tolerance: length ±0.2mm; width ±0.2mm; height ±0.2mm.
For detail drawing, please consult sales rep.



Luminous Intensity Distribution Diagram



Average Illumination

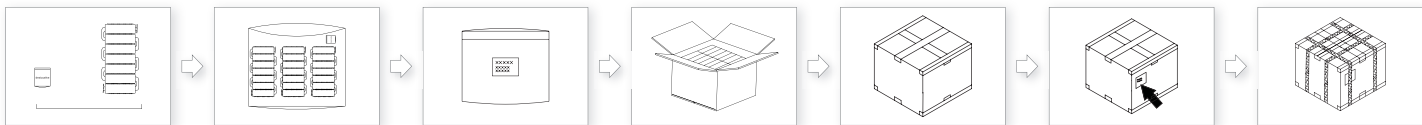


Reliability Test

Type	Name	Standard	Condition	Result
Environmental test	PTC test	Blueview standard	TH=-40~+60°C/2h, dwell 15min, transfer time 45min.	Pass
	High temperature and humidity test		TA=85°C/RH=85%°C,continue power on	
	High temperature resistance test		TH=60/80°C,continuous power on	
	Anti-UV test		TH=50°C,UVB:315~400nm	
	Salt corrosion test		TH=35°C, concentration 5%, volume 1~2ml/h/80cm ²	
	Waterproof test		Water spray diameter: 6.3mm, water flow: 0.75m ³ /h, pressure 0.02MPa, test duration: 3min	IP65
	Flame retardant test		Placed the sample vertically in the needle flame tester, the flame lasted for 10s and then observe the self-extinguishing time of the sample.	Pass



packing



1. Prepare the desiccant and bind the product.

2. Put the product and desiccant into static shielding bag.

3. Seal and label the static shielding bag.

4. Put the static shielding bag side by side into carton box.
5. Seal the box.

6. Label the box;

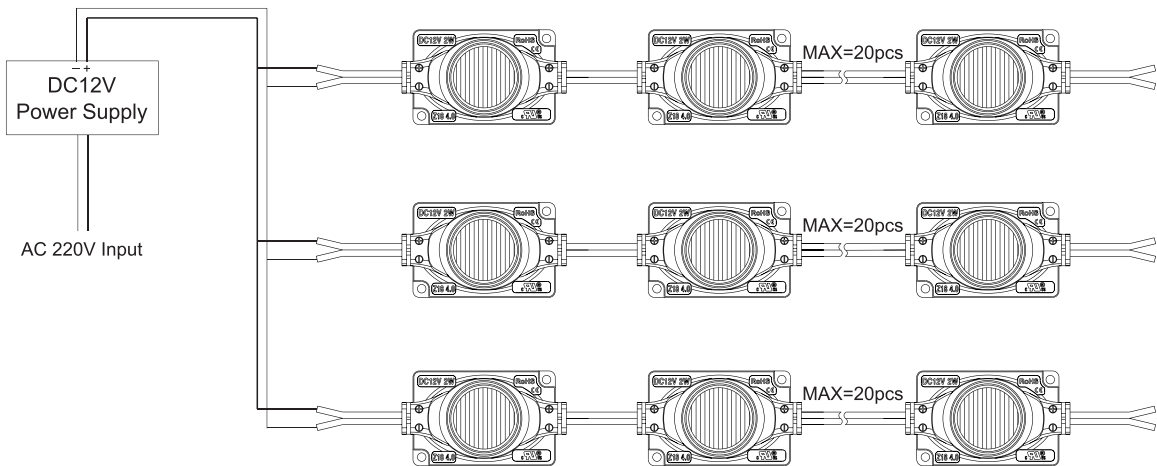
7. Use packing belt to pack after adding the edge protectors.

Packaging information

Model No.	Product Size L*W(mm)	Carton Size(mm)	String / Bag	Bag / Carton box	Net Weight(kg)	Gross Weight(kg)
Z18 4.0	52*30*13.4	380*380*345	3	18	15.00(1±10%)	17.00(1±10%)

Note:
Packing materials: static shielding bag 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.

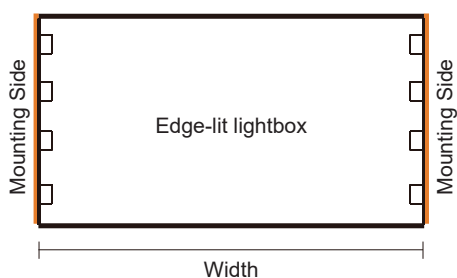
Installation





Installation Reference

Model No	Surface Material	Width(m)	Depth(cm)	Illumination(lux)	Evenness	Density (pcs/2m)	Spacing (X*Y)cm	Power Density (W/m ²)	Visual Effects
Z18 4.0	White Soft Film	0.3	10	1372-1730	0.79	16*2	6	29	OK
		0.5		1048-1730	0.61			29	
		0.5		3020-3430	0.88			58	
		1.0		1798-2330	0.77			58	
		1.3		1377-2150	0.64			58	
Z18 4.0	White Soft Film	0.3	12	1097-1450	0.76	16*2	6	29	OK
		0.5		895-1450	0.62			29	
		0.5		2759-2986	0.92			58	
		1.0		1459-2013	0.72			58	
		1.5		1115-1801	0.62			58	
Z18 4.0	White Soft Film	0.3	15	1003-1058	0.95	16*2	6	29	OK
		0.5		783-1058	0.74			29	
		0.5		2478-2705	0.92			58	
		1.0		1322-1689	0.78			58	
		1.5		855-1306	0.65			58	
		1.8		574-1079	0.53			58	



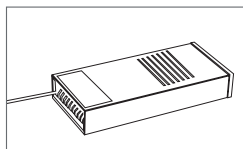
Note:

The density refers to product quantities installed on the mounting side, and "1*2" refers to 1 mounting side and each side with 2pcs products .

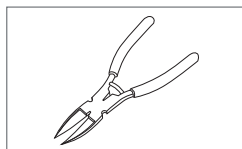
The spacing means centre spacing of the product, see the left.

The above products use porcelain whiteboard.

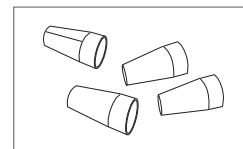
Accessories & Tools



LED power supply



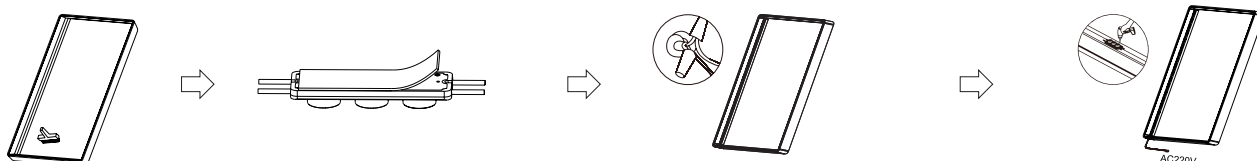
Diagonal pliers



Connection terminal



Installation steps



1. Clean the mounting surface.
2. Peel away the self adhesive tape on the back of product and mount it onto the lightbox.
3. Prefix the product and make sure it is flat and evenly arranged.
4. Fix the product with screws.

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.
- **After installation, the fabric light box must be covered with cloth within 48 hours. Please avoid leaving the light box idle for a long time.**

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.	
	Wrong connection of power supply.	
LEDs can not light on partly.	Some switching mode power supplies are not powered.	Correctly connection.
	Power supply line error.	
	Mistaken wire connection of some of products	
Brightness of LED is inconsistent tor 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 24 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 (0.75mm² 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.

Version	Content	Date
A1.3	Update: profile drawings, basic parameters, installation reference	2023-10-18