

Specification

Prepared	Checked	Approved	Accepted	Confirmed	Approved

UL

CE

RoHS

3030
SMD

4
LEDS

Injection
Lens

DC
12V

IP
65

5
years

Model : M8C4QB-1

4pcs 3030 SMD LEDs, 55*53*8mm, transparent PVC shell, equipped with optical device, injection series, constant current, 12Vdc, LED module

Figure :



Features :

- Unique appearance, high-end product;
- Unique secondary optical design, applicable to thin sign lighting;
- Using high luminous efficiency 3030 SMD LED, long life, low attenuation, 170lm/W;
- Standard cascading qty up to 25pcs;
- Beam angle: 170°;
- Can be cut between every unit.
- UL, CE, RoHS compliant.

Applications :

- Optimal for 6~12cm [2.36~4.72 in] depth channel letter.

Warranty :

- 5years or 22,000 hours, whichever comes first

Optical and Electrical Parameters :

P/N	LED Color	CCT (K)	CRI	SDCM	Beam Angle (°)	Luminous Flux (lm)	Luminous Efficacy (lm/W)	Working voltage (VDC)	Working current (mA)	Power (W/piece)
M8C4QB-1	Pure White	7000K	≥70	--	170	340	170	12	166	2
M8C4QB-1	Pure White	10000K	≥70	--	170	334	167	12	166	2

Others :

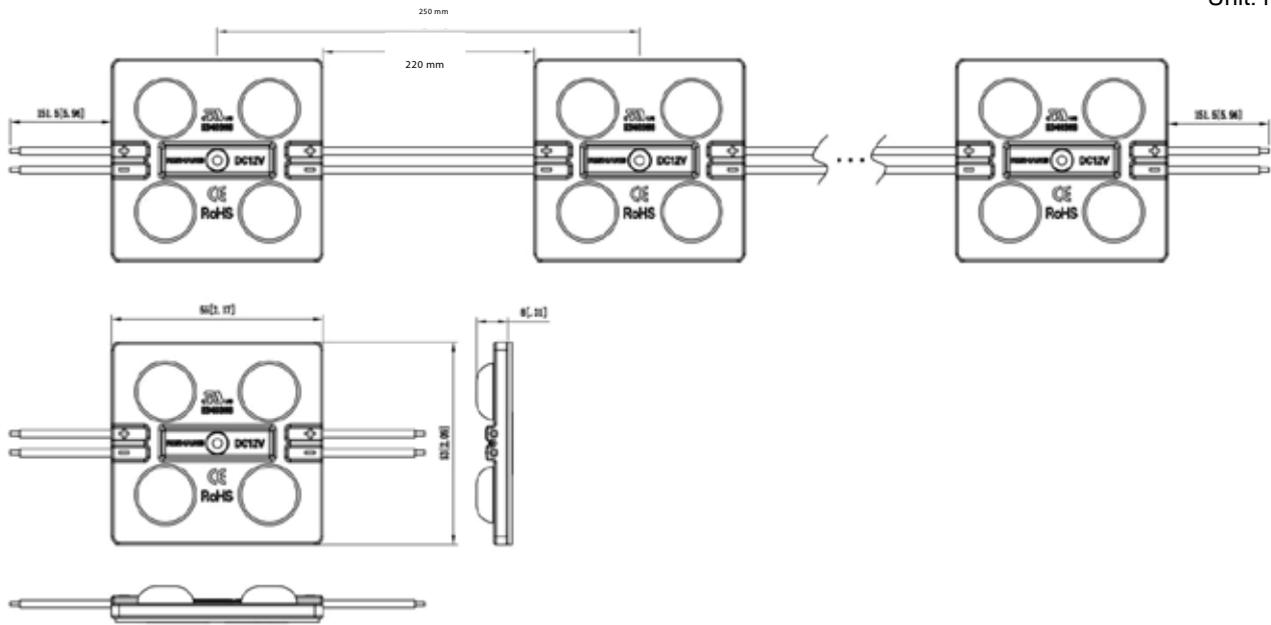
P/N	IP Grade	Operating Temp		Storage Temp		Standard cascading qty (pcs)	Single-ended max. cascading qty (pcs)	Double-ended max. cascading qty (pcs)	Weight	
		(°C)	(°C)	(°C)	(°C)				(g/piece)	(lb/piece)
M8C4QB-1	IP65	-25~+60	-13~+140	-25~+70	-13~+158	25	25	50	25	0.046

Notes:

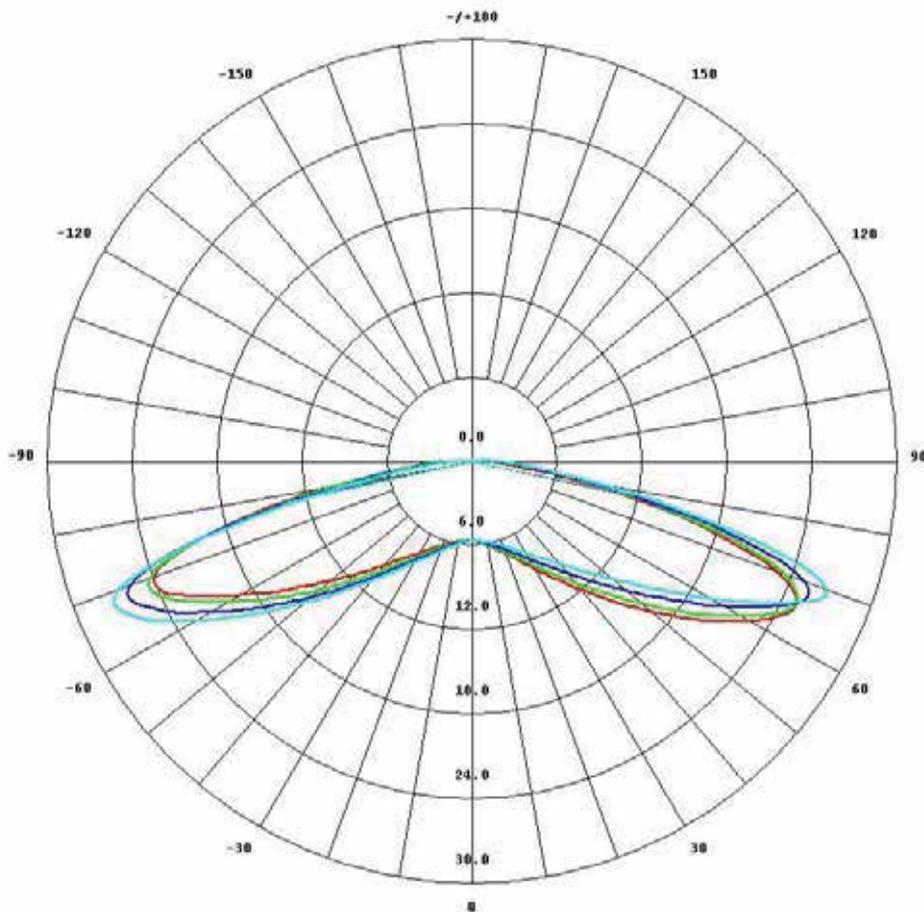
- ① Testing environment temperature: 25±2 [77±3.6];
- ② The actual data of each single product may differ from above typical data which are subject to change without prior notice;
- ③ The above "--" means the parameters are not required temporarily.

Profile Drawings:

Unit: mm [inch]



Light Distribution :

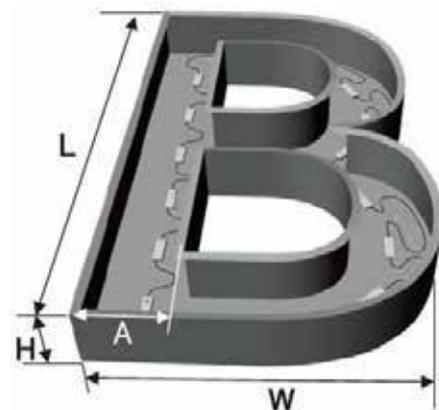


Layout Data :

Channel Letter				LED Module			Surface illuminance range (lux)
Main stroke width A (mm)	Net depth H (mm)	Size L*W (mm)	Area (m ²)	Max. arrangement spacing (mm)	Total qty (pcs)	Installing density (pcs/m ²)	
65	60	470*230	0.11	180	7	64	10000-14000
85	80	650*320	0.21	280	8	38	6000-8000
115	100	850*420	0.36	350	9	25	5000-6000
140	120	1025*505	0.52	420	10	20	4000-4500

Notes:

1. The above data is tested from the modules with color temperature of 7,000K
2. The above light box uses acrylic white board with 3mm thickness and 54.4% light transmittance
3. The above illuminance is the minimum value tested on the even surface.
4. The above data is for reference only.

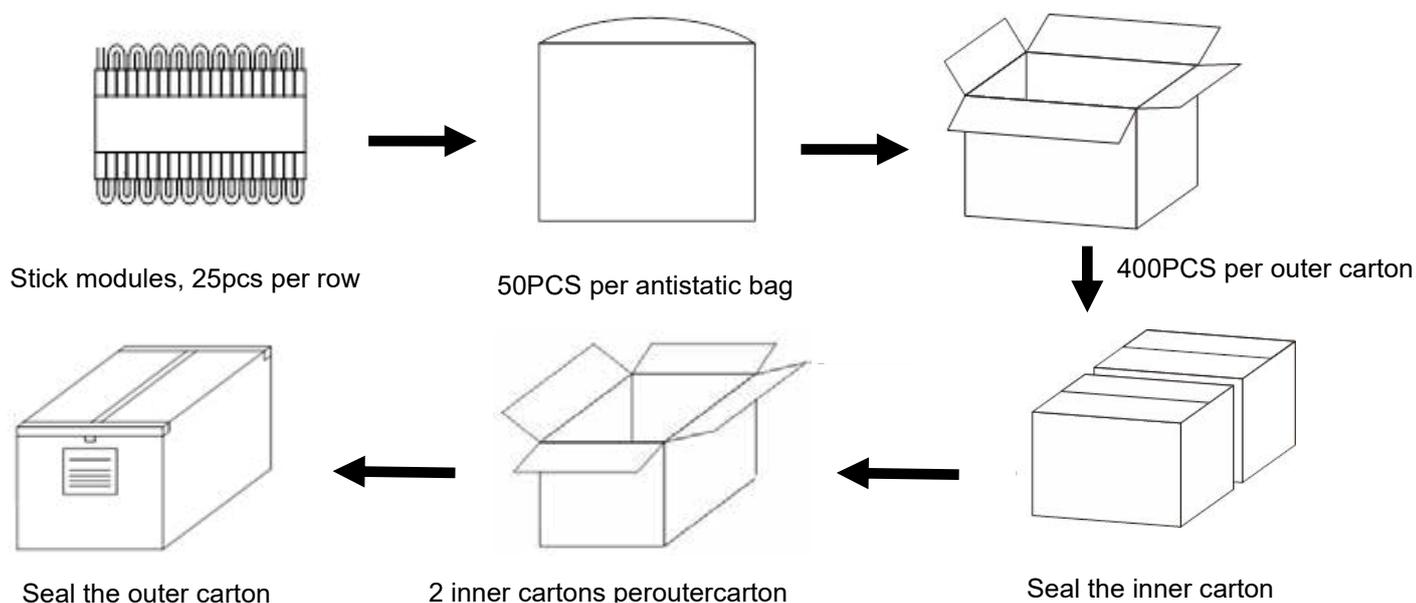


Packaging Information:

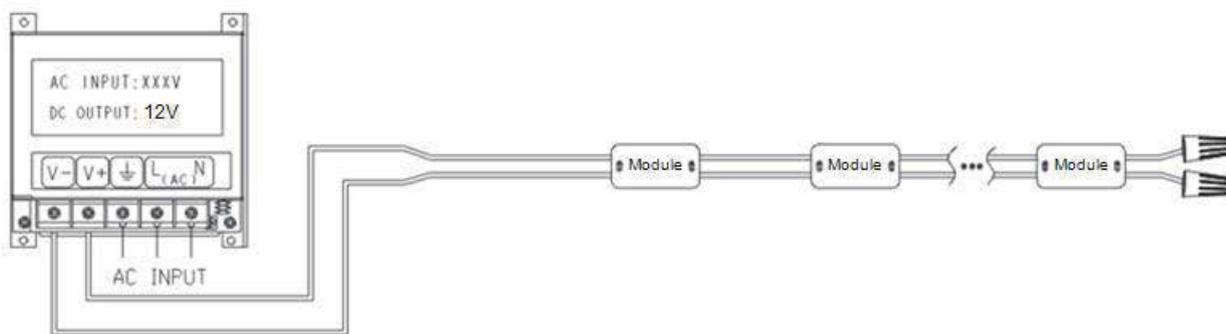
P/N	Qty (pcs/bag)	Qty (bag/carton)	Total Qty (pcs)	Total weight		Outer carton					
				(Kg)	(lb)	length		Width		Height	
						(mm)	(inch)	(mm)	(inch)	(mm)	(inch)
M8C4QB -1	50	8	800	22	56.11	528	20.78	376	14.80	272	10.70

Notes: Above qty and weight of packing is only for the packing shown in the picture, which might be different from other packing modes, thus for actual qty and weight please refer to actual samples.

Packaging Diagram:



Connection Instruction:



(Note: Please connect the '+' and '-' of modules to those of power supply output correctly.)

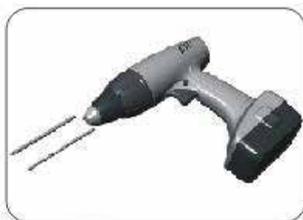
Parts & Tools:

☒ Product Spare Parts



Module

☒ Self-provided Tools



Cutting nipper, Electrical Drill & Drilling bits



Screw

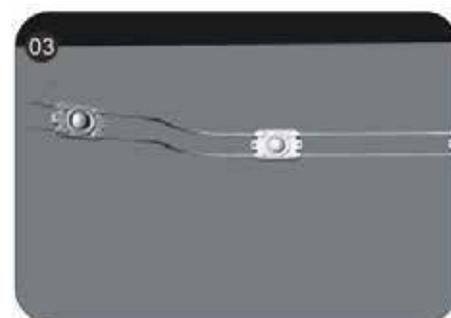
Installation Steps:



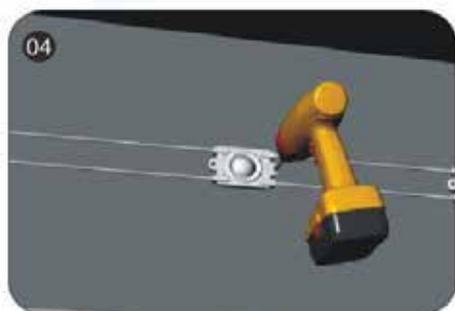
Clean the mounting surface.



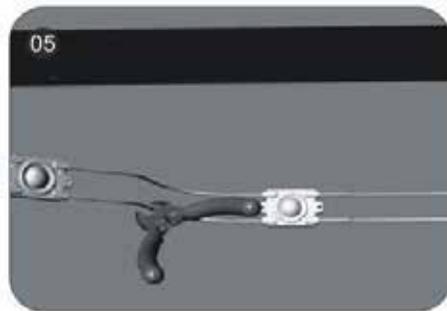
Determine the installing position for modules and the needed qty. Make sure to install it in the middle.



Peel off the release paper of double-sided adhesive tapes, then, stick modules on the installing surface for preliminary mounting.

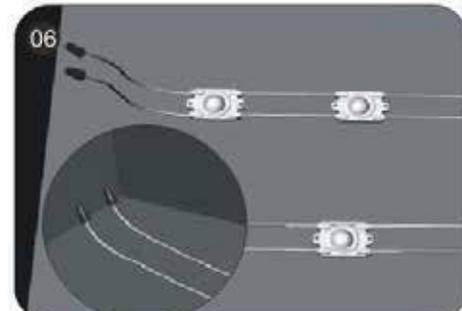


Adjust the modules to the best position, press the double-sided tape tightly and then fix by screws.

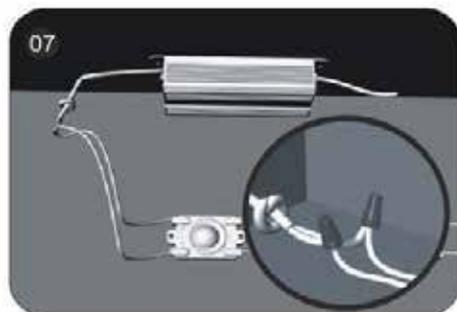


Cut off the modules to the desired qty, and peel off the insulation skin of wires about 10mm.

Note: Please cut from the middle of



When the wires exposed in the last module, please peel off the insulation skin of wires about 10mm each, then, screw in terminals respectively, and dispose with waterproof, insulation protection.



Please ensure that the “+” & “-” of the wires of modules are connected with those of power supply correctly, and dispose with waterproof, insulation, anti-circuit and anti-corrosion protection.

Troubleshooting:

Malfunctions	Possible Causes	Solutions
All LEDs don't work	1. The power supply did not connect to power grid.	Power on
	2. No electricity due to short-circuit of external power supply	Remove the malfunction caused by short-circuit, power on again
	3. The wires of module connect to power supply output reversely.	Check the connecting and ensure the wires are connected correctly.
Part of LEDs don't work	1. Part of power supplies do not have output.	Check the power supply system.
	2. Part of module wires have malfunction.	

	3. Particular module connected reversely.	Correct connection
Brightness of LEDs is weak or uneven	1. Overloaded power supply	Replace it with higher power supply
	2. The power loss of power circuit is huge or the power loss of each circuit existing big difference	Ensure working voltage of modules is within $\pm 5\%V$ of rated voltage. (1. Shorten the length of wires between the first module and power supply or replaced with wires with bigger diameter; 2. Ensure the cascading qty of string is less than or equal to the allowed maximum cascading qty, and each module cascading qty is well-balanced.)
	3. Exceed in qty of modules in series.	Lessen the cascading qty for module and ensure the qty for each electrical circuit is within the maximum cascading qty.
LEDs are blinking	1. Poor contacted in the joints.	Find out and tackle malfunction immediately.
	2. Failures in power supply.	Replace power supply.

Declaration:

If the external flexible cable of light box is damaged, please replace it by its manufacturer or its service agent or qualified person to avoid a hazard.

The specific installation and cautions please refer to the user manual.

The given data in this specification is based on our standard product. There may be existed slight difference compared with actual products.

All Illustrations in this specification are for reference only.

This product is subject to change or modify without prior notice.

RISHANG OPTOELECTRONICS CO., LTD. reserves the right of final explanation for this specification.

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