FUTURE LED CO.,LTD.

0.36W 0.72W 1.08W 1.20W

68LM 140LM 210LM 220LM

170°

IP66

High Light Efficacy **200LM/W**

**Injection molding plus ultrasonic welding technology.
Integrated transparent 170°optic lens.
Constant current.**

Features ›

- Powered by high output 2835 LED.
- Constant current.
- Integrated transparent 170°optic lens.
- 20 pcs per string.
- CE, RoHS,UL,TUV, BIS, CB and LM-80 certified.

Application ›

- Apply to 4-15 cm depth illuminate letter or light box at airports,metros, banks, buildings and shopping malls, etc.
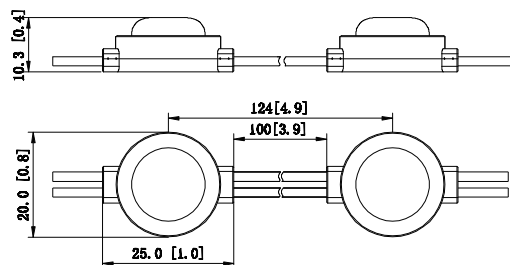
Parameters 〉

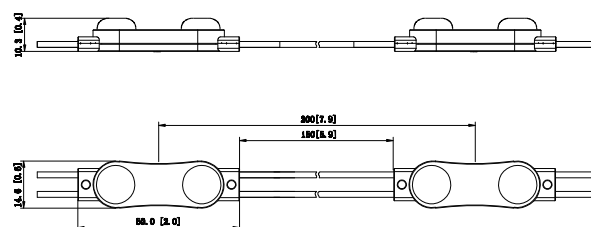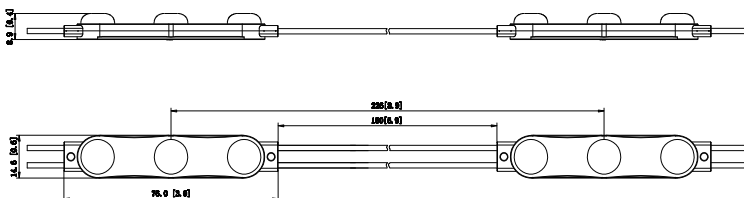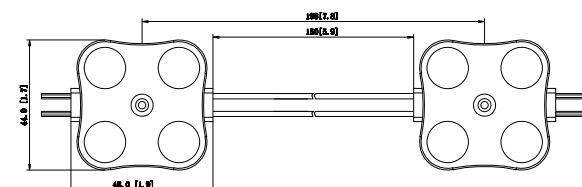| Items	Parameters			
Part Number	ZE01CB3	ZE02CB3	ZE03CB3	ZE04CB3
CCT（K）	6200-6800/Red/Blue/Green	6200-6800/Red/Blue/Green	6200-6800/Red/Blue/Green	6200-6800/Red/Blue/Green
Beaming Angle（°）	170	170	170	170
Voltage（V）	DC12V	DC12V	DC12V	DC12V
Power（W）	0.36	0.72	1.08	1.2
Luminous Flux（lm）	68	140	210	220
CRI（Ra）	≥70	≥70	≥70	≥70
Driving Method	constant current	constant current	constant current	constant current
Dimension（mm）	25*20*10.3	50*14.6*10.3	76*14.6*10.3	48*44*10.3
Maximum Connection(PCS)	20	20	20	20
Working Tem.（℃）	-25～+60	-25～+60	-25～+60	-25～+60
Storage Tem.（℃）	-25～+70	-25～+70	-25～+70	-25～+70
Protection Grade	IP66	IP66	IP66	IP66

Dimension 〉

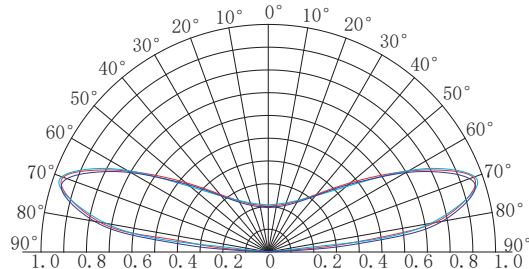Unit:mm
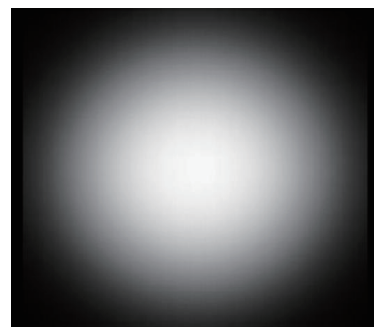
ZE01CB3

ZE02CB3

ZE03CB3

ZE04CB3

Beaming Angle

Beaming Angle 170°

Reference Scheme

ZE01CB3

Depth(mm)	Distance(mm)	Density(pcs/m²)	Illumination(lux)	Illumination Effect
Dz=40	Dx=80 Dy=70	179	3500	Uniform illumination
Dz=60	Dx=100 Dy=90	111	3100	Uniform illumination
Dz=80	Dx=110 Dy=100	91	2800	Uniform illumination
Dz=100	Dx=120 Dy=110	76	2300	Uniform illumination

ZE02CB3

Depth(mm)	Distance(mm)	Density(pcs/m²)	Illumination(lux)	Illumination Effect
Dz=60	Dx=100 Dy=90	111	6000	Uniform illumination
Dz=80	Dx=110 Dy=110	76	5500	Uniform illumination
Dz=100	Dx=120 Dy=130	55	4700	Uniform illumination
Dz=120	Dx=160 Dy=150	42	3100	Uniform illumination
Dz=140	Dx=160 Dy=150	42	2500	Uniform illumination

ZE03CB3

Depth(mm)	Distance(mm)	Density(pcs/m²)	Illumination(lux)	Illumination Effect
Dz=60	Dx=130 Dy=100	77	5300	Uniform illumination
Dz=80	Dx=150 Dy=130	51	4700	Uniform illumination
Dz=100	Dx=170 Dy=150	39	4200	Uniform illumination
Dz=120	Dx=190 Dy=170	31	3500	Uniform illumination
Dz=140	Dx=190 Dy=170	31	3000	Uniform illumination

ZE04CB3

Depth(mm)	Distance(mm)	Density(pcs/m²)	Illumination(lux)	Illumination Effect
Dz=60	Dx=130 Dy=130	59	6000	Uniform illumination
Dz=80	Dx=150 Dy=150	44	5800	Uniform illumination
Dz=100	Dx=170 Dy=170	35	4800	Uniform illumination
Dz=120	Dx=190 Dy=190	28	3900	Uniform illumination
Dz=140	Dx=190 Dy=190	28	3200	Uniform illumination

Remark：

- The transmittance of the Acrylic was 30%.
- The above data is for reference only.

Backboard
Module
Box face
Wires

Picture and Illustration ❯
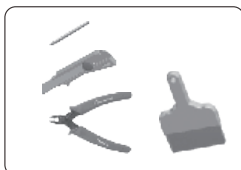
1. Module and Accessories
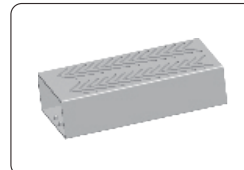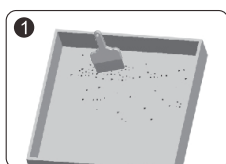
Modules

Wire Connector (Standard)

2.Recommended Tools

Dust brush, cutter, pencil,

wire stripper, and drill

Screw

Power Supply

Installation Guidance ❯
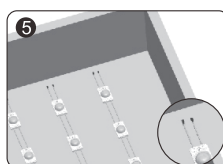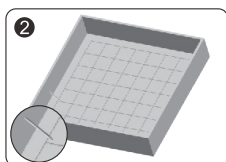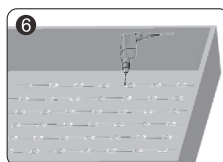
❶ ● Clean inside the light box.

❺ ● Strip the end wire for 10mm and cap with the wire connector. Waterproof and anti-corrosion must be done on the connectors.
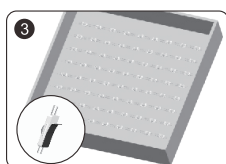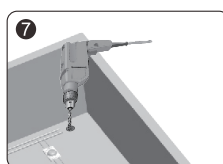
❷ ● Determine the appropriate layout.

❻ ● Adjust modules to the optimal position and secure with screws.

⚠ Note: Avoid breaking the module and wire when fixing with a drill.
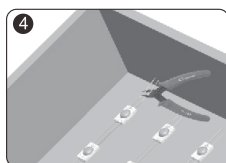
❸ ● Peel tape backing and stick modules into place.

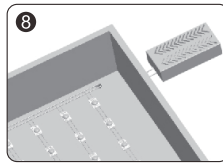❼ ● Drill a hole for connecting power cable. Fixation and protection for the cable must be done on the hole.

⚠ Note: Avoid breaking the light box in drilling the hole.

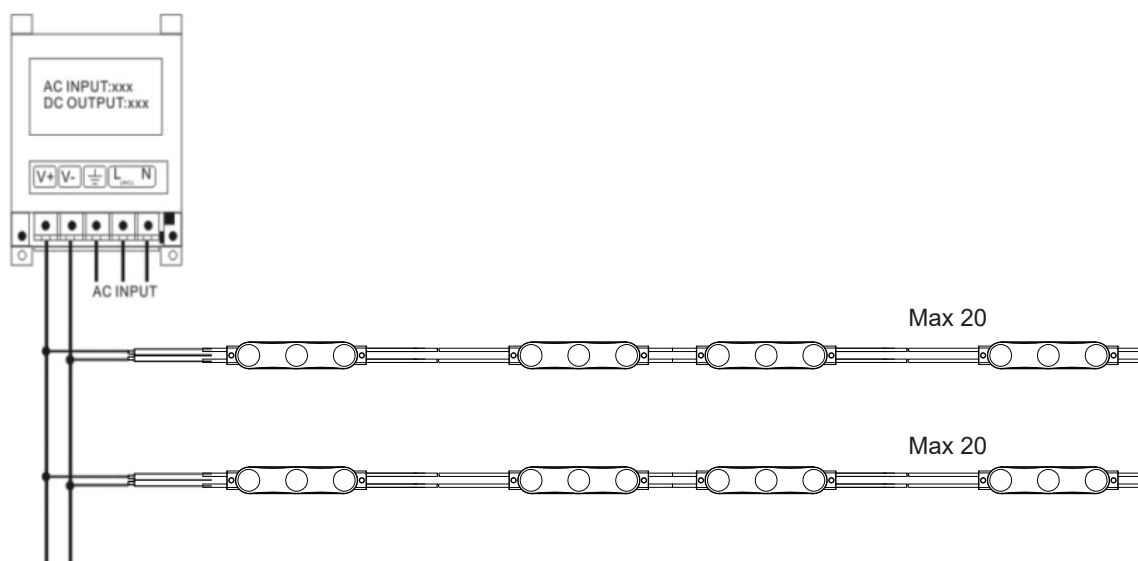❹ ● Remove the unneeded modules.

⚠ Note: Cut in the middle position of the wires between modules.

❽ ● Connect to the power cable and make sure that the polarity for connection is correct.

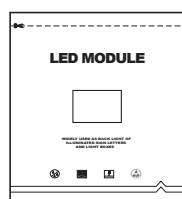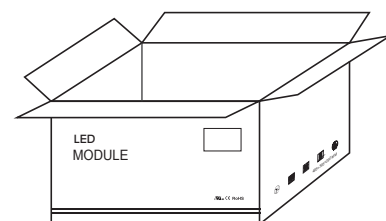⚠ Note: Red wire is positive and black wire is negative.

Wire Connection 〉


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AC INPUT:xxx
DC OUTPUT:xxx

V+ V- ⏚ L N

AC INPUT
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Max 20

Max 20

Packing 〉

LED Module: 20pcs per string

LED MODULE

Wrapped with anti-static bag

LED MODULE

Packed in a carton

Packing Specification 〉

● Antistatic bag adopted

● Packing information

Part Number	ZE01CB3	ZE02CB3	ZE03CB3	ZE04CB3
Carton dimension(mm)	490*450*220	490*450*220	490*450*220	490*450*220
Bags per carton	10	10	10	12
Quantity per bag (pcs)	200	120	100	80
Quantity per carton(pcs)	2000	1200	1000	960
Net Weight(kg)	10.2(1±10%)	8.1(1±10%)	10.6(1±10%)	15.2(1±10%)
Gross Weight(kg)	12.2(1±10%)	10.2(1±10%)	12.8(1±10%)	17.5(1±10%)

● Due to the packing manner difference, please subject to the original products in case of discrepancy found between the picture and actual product.

- Disassembling or modifying the product is forbidden.
- Installation with power on is forbidden.
- Any organic solvent chemical is forbidden.
- Acidic or alkaline adhesive is forbidden when install, neutral glass cement could be used for installation purpose, make it drying in open environment for four hours.
- Isolation and corrosion prevention on all wiring points and wire ends.
- Make sure the power wire is thick enough and ensure the voltage and connections are connected correctly before power on.
- This product should be used in a sign, do not expose it in opening site.
- Installation, maintaining should be done by professional staff.
- 20 pcs in a serial connection maximum.
- The power wire between power supply and module should be less than two meters to keep the same brightness on all parts.
- Initial location with 3M tape, then secure with screws.

Declaration ›

- Warranty: 5 years.
- In order to ensure the safety, the broken wires need to be replaced by the manufacturer or the service agent, or by the staff with the similar qualification.
- The given data in the specification was based on the laboratory testing, there may be discrepancy found in the actual products.
- The given drawings in the specification are only for reference, there may be discrepancy found in the actual products.
- The products are subject to change without prior notification.

c**UL**us E348340   CE   RoHS   TÜVRheinland   §   CB   LM-80

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