

Version: A1.3

Features

1. Adopts single-sided FPC with good flexibility;
2. Long run length with no brightness drop;
3. A single group (8 LEDs) can be cut;
4. Support PWM, DMX, 0-10V, DALI and other dimming methods;
5. Multiple specifications, support customization;

Application

Suitable for 3D luminous letters, signs, advertising light boxes, stairs, etc

Installation

Fix by 3M adhesive tape and screws

Specification

Model No.	Light Color	Color Temperature	Beam Angle	Luminous Flux (lm/pcs)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
H150-W(eco)-FN-H2835-200-24	W	2600-2800K	120°	2700	80+	150	24	18
		2800-3200K		2790		155		
		3300-3700K		2826		157		
		3800-4300K		2880		160		
		4800-5400K		2844		158		
		6500-7200K		2844		158		
H150-W(eco)-FN-H2835-288-24	W	2600-2800K	120°	3888	80+	150	24	25.92
		2800-3200K		4108		155		
		3300-3700K		4069		157		
		3800-4300K		4147		160		
		4800-5400K		4095		158		
		6500-7200K		4095		158		

Model No.	Light Color	Color Temperature	Beam Angle	Luminous Flux (lm/pcs)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
H150-W(eco)-FN-H2835T-200-24	W	2050-2300K	120°	2160	90+	120	24	18
		2400-2600K		2286		127		
		2600-2800K		2376		132		
		2800-3200K		2430		135		
		3300-3700K		2466		137		
		3800-4300K		2628		146		
		4700-5300K		2574		143		
		5700-6600K		2574		143		
H150-W(eco)-FN-H2835T-288-24	W	2050-2300K	120°	3110	90+	120	24	25.92
		2400-2600K		3292		127		
		2600-2800K		3421		132		
		2800-3200K		3499		135		
		3300-3700K		3551		137		
		3800-4300K		3784		146		
		4700-5300K		3707		143		
		5700-6600K		3707		143		

Specification

Model No.	Light Color	Color Temperature	Beam Angle	Luminous Flux (lm/pcs)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
H150-W(eco)-FN-H2835T-200-24	W	2050-2300K	120°	1656	95+	92	24	18
		2400-2600K		1764		98		
		2600-2800K		1980		110		
		2800-3200K		2016		112		
		3300-3700K		2124		118		
		3800-4300K		2124		118		
		4700-5300K		2250		125		
		5700-6600K		2286		127		
H150-W(eco)-FN-H2835T-288-24	W	2050-2300K	120°	2385	95+	92	24	25.92
		2400-2600K		2540		98		
		2600-2800K		2903		110		
		2800-3200K		2903		112		
		3300-3700K		3059		118		
		3800-4300K		3059		118		
		4700-5300K		3240		125		
		5700-6600K		3292		127		

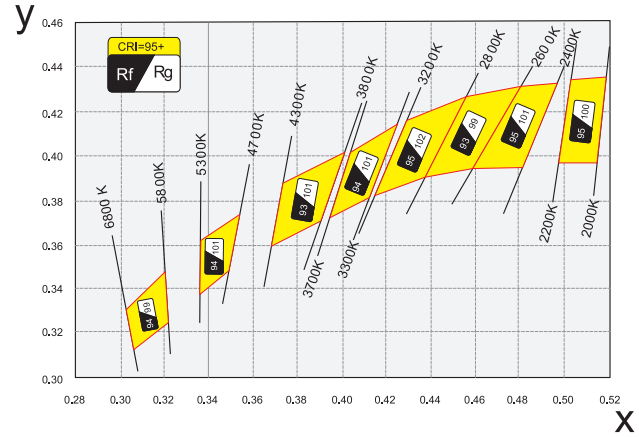
Other Parameters

Model No.	Quantity (LED Qty/pc)	Product Size L*W*H(mm)	Max Run (pcs)	Min Cuttable Unit(mm)	Working Temperature	Storage Temperature
H150-W(eco)-FN-H2835/T-200-24	200	480*240*8	4	96*48	-20~+60℃	-20~+70℃
H150-W(eco)-FN-H2835/T-288-24	288	610*305*8	3	101.6*50.8		

NOTE:

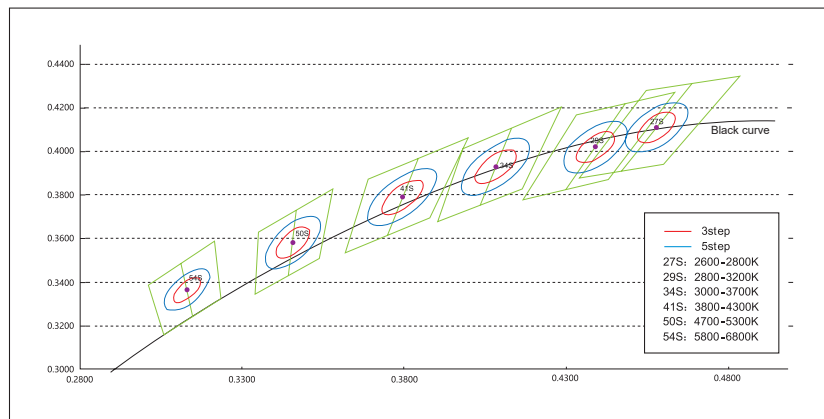
1. Test environment temperature : 25±2℃.
2. Figures above are typical figures. Actual figures could be different with typical figures, and the data is subject to change without notice.
3. Different color temperature will make luminous flux different.
4. Power tolerance within ±10%.
5. Max run quantity is based on one end power feed.

TM-30



Note: The Rf and Rg values above are measured by the corresponding lamp beads.

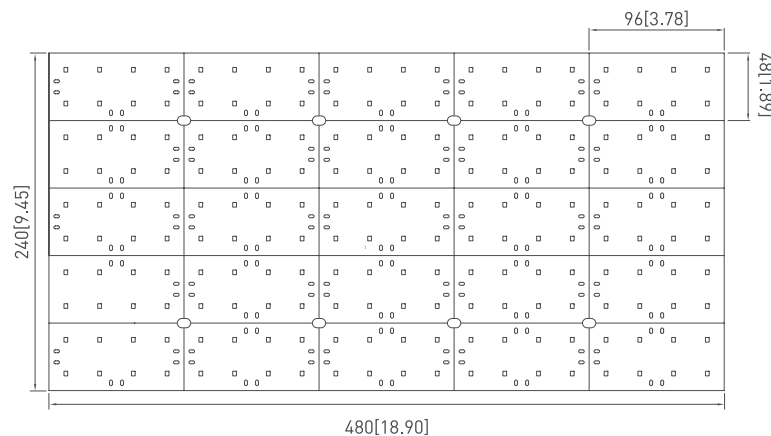
1931 chromaticity diagram



Profile Drawings

H150-W(eco)-FN-H2835/T-200-24

Unit:mm[inch]



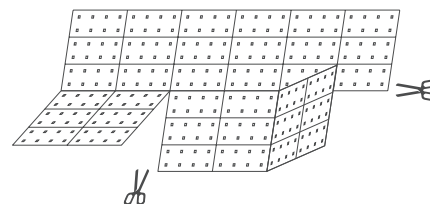
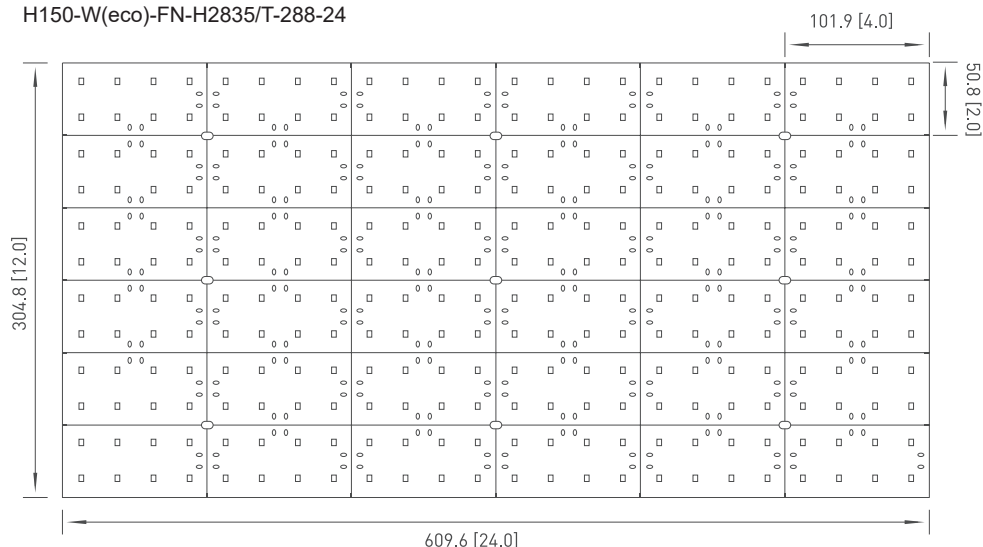
Note:

Dimension tolerance: length $\pm 6\text{mm}$ [0.24inch]; width $\pm 0.2\text{mm}$ [0.008inch]; thickness $\pm 0.2\text{mm}$ [0.008inch].
More info, please consult sales rep.

Profile Drawings

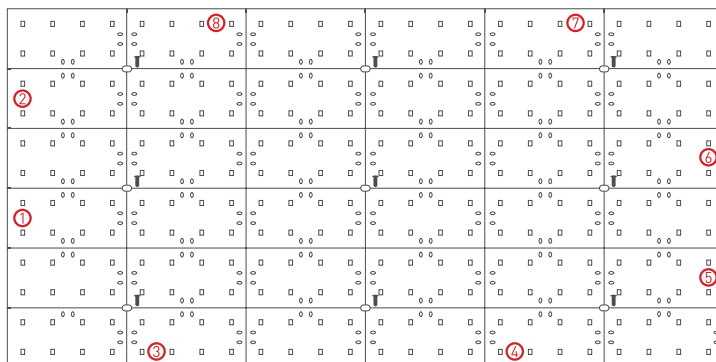
Unit:mm[inch]

H150-W(eco)-FN-H2835/T-288-24



Note:

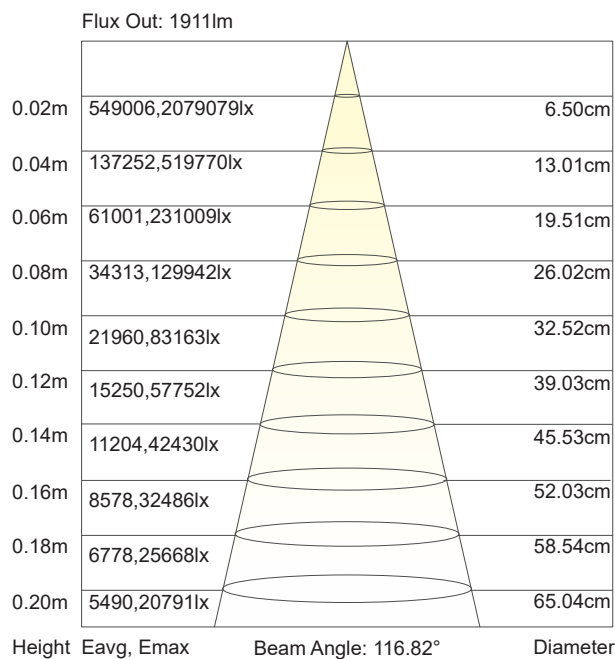
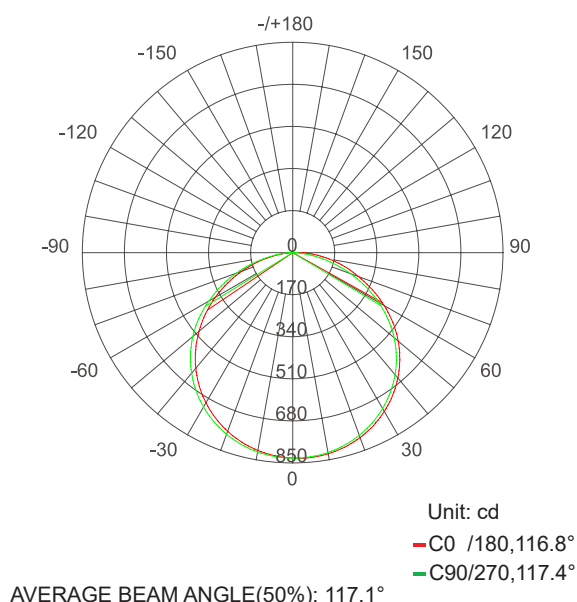
Dimension tolerance: length $\pm 6\text{mm}$ [0.24inch; width $\pm 0.2\text{mm}$ [0.008inch; thickness $\pm 0.2\text{mm}$ [0.008inch].
More info, please consult sales rep.



Port location	Port name	Port type	Effect	Note
①②③④	Power input	2pin	Internal control board's power input	INPUT
⑤⑥⑦⑧	Output	2pin	Output between panels	OUTPUT

Luminous Intensity Distribution Diagram

Average Illumination



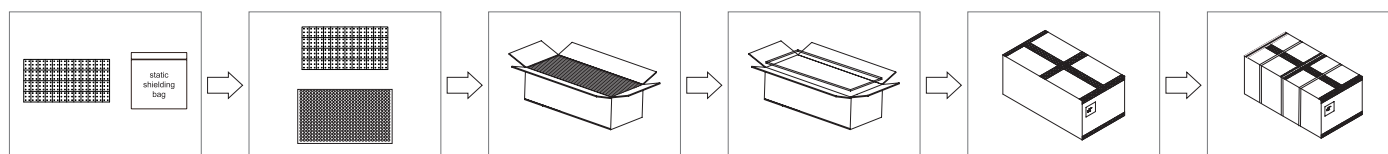
Note: The data is the test result of H150-W(eco)-FN-H2835-288-24.for other data, please consult sales rep.

Recommended power supply upon working length

H150-W(eco)-FN-H2835T-200-24	Product Qty in Single Feed(pcs)				
Parameters	1	2	3	4	5
Operating Voltage(DC V)	24.0				
Total Current(A)	0.74	1.43	2.04	2.52	2.91
Total Power(W)	17.88	34.49	48.96	60.48	69.84
Head voltage(V)	23.94	23.89	23.85	23.76	23.76
Tail voltage (V)	23.90	23.74	23.50	23.26	22.99
Head Current(mA)	29.60	29.03	28.42	28.03	27.81
Tail Current(mA)	29.47	27.68	25.32	22.77	20.37
Head-to-tail Voltage Drop Rate(%)	0.04-0.13	0.15-0.63	0.35-1.47	0.50-2.10	0.77-3.24
Head-to-tail Current Drop Rate(%)	0.13-0.44	1.35-4.65	3.10-10.91	5.26-18.77	7.44-26.75
Run a cable back to the driver needed	NO	NO	NO	NO	YES

H150-W(eco)-FN-H2835T-288-24	Product Qty in Single Feed(pcs)			
Parameters	1	2	3	4
Operating Voltage(DC V)	24.0			
Total Current(A)	1.12	2.16	2.88	3.47
Total Power(W)	26.98	51.86	69.16	83.28
Head voltage(V)	23.96	23.89	23.83	23.78
Tail voltage (V)	23.91	23.67	23.36	23.04
Head Current(mA)	31.51	30.54	29.77	29.00
Tail Current(mA)	31.48	28.64	24.95	22.11
Head-to-tail Voltage Drop Rate(%)	0.05-0.21	0.22-0.92	0.47-1.97	0.74-3.11
Head-to-tail Current Drop Rate(%)	0.03-0.10	1.90-6.22	4.82-16.19	6.89-23.76
Run a cable back to the driver needed	NO	NO	NO	YES

packing



1. Put the product and accessories on the table;
2. Put one PCB into a bag, or two back-to-back into a bubble bag;
3. Pack the product or accessory bag into the carton;
4. Fill the gaps with foam pads or pearl cotton pads;
5. Label the carton;
6. Use packing belt to pack. Add edge protectors if necessary.

Packaging information

Model No.	Product Size L*W*H(mm)	Carton Size(mm)	PCS/Bag	Bag/Carton	Net Weight(kg)	Gross Weight(kg)
H150-W(eco)-FN-H2835/T-200-24	480*240*8	555*295*275	2	50	8.64(1±10%)	10.35(1±10%)
H150-W(eco)-FN-H2835/T-288-24	610*304.8*8	610*355*380	2	40	12.9(1±10%)	14.80(1±10%)

Note:

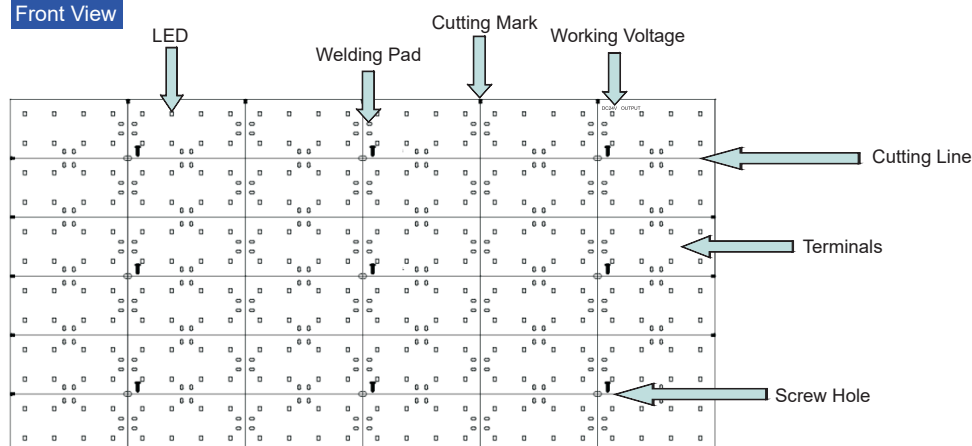
Every 2pcs back to back packed in an anti-static bubble bag.

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.

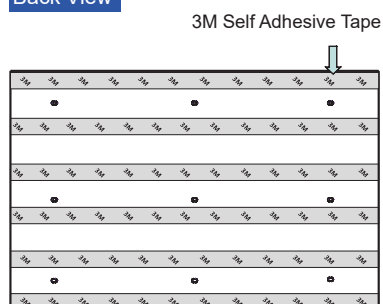
Installation

1.The Product

Front View



Back View



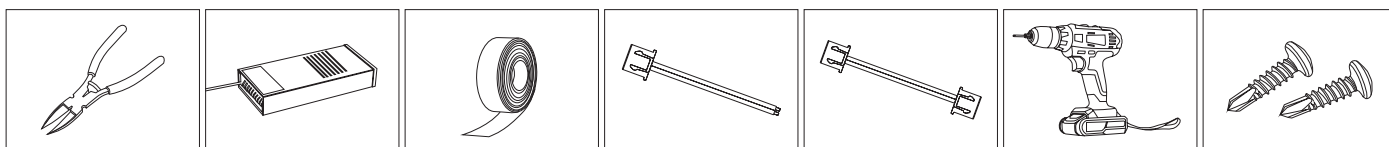
	Application	Quantity	Position	Note
Screw mounting hole	Fix the product	8/9	--	Runway-type Hole
Cutting line	Cutting position	--	With scissors mark	--
Terminal	Electrical connection	6/8	--	2Pin terminal
		--	--	3Pin terminal
Welding pad	For welding use	--	--	--
3M self adhesive tape	Pre-fix	3/6	--	--
Basic information	--	--	--	See figure below

Basic information

2037	-	41S	-	9	-	1422	-	30mA
------	---	-----	---	---	---	------	---	------

Production date(Year/Week) Color temperature/Light color Ra Production batch number Single LED working current

Products and Tools



Diagonal pliers

LED power supply

Insulation Tape

XH-2Y connector

XH-2Y connector

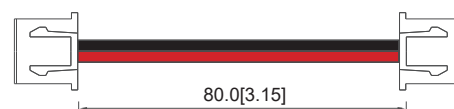
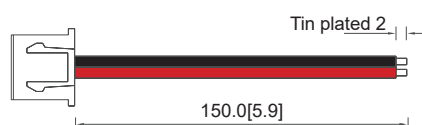
Electric drill

Self-tapping screw

Unit: mm[inch]

XH-2Y Connector

XH-2Y Connector



Note:

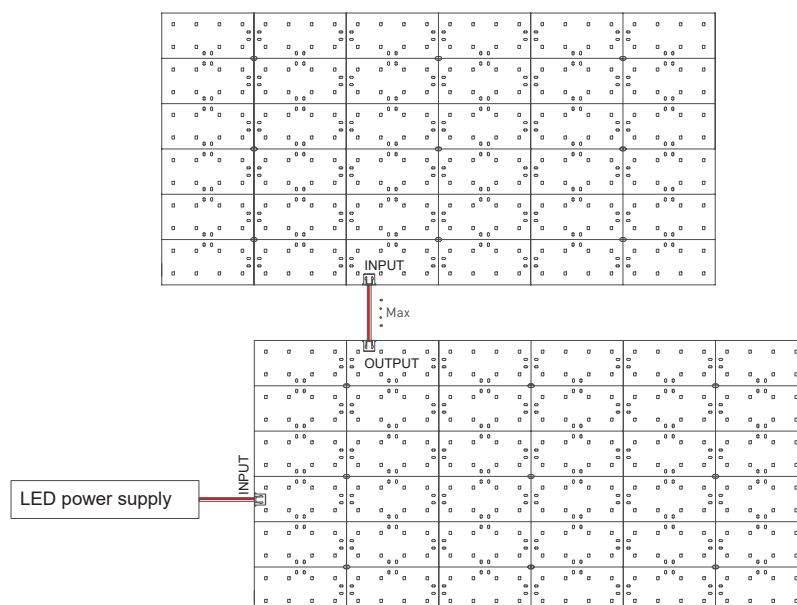
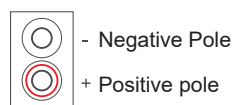
Please avoid reversed connection;

Adopt 20AWG standard wire;

Please use two wires to connect the panels if only one end power feed;

Wiring Diagram

Wire Sequence



Remarks:

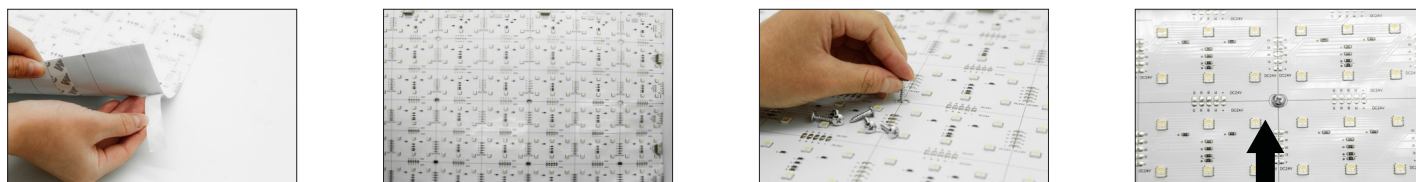
1. When connecting the control board, the insertion direction cannot be reversed;
2. The connectors connect two panels' input and output, and the mounting direction of the panels should be the same;

Gluing process (if needed)



1. The external terminal was not treated with waterproofing when shipped.
2. Prepare glue, syringes and other materials.
3. Apply glue to fully cover the terminal, and make sure no bubbles or gaps. The glue should not cover the LEDs, resistors and other components;
4. Power on when the glue is completely dry.

Installation Steps



■ Illuminating side

■ Lightbox frame

■ Flexible panel

■ Lightbox bottom

Note:

"+" connect to white-red wire.

The above pictures are only for reference.

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.	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 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 (0.75mm² 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.

Appendix: Illustration of single-sided lightbox

