SPECIFICATION

ALS570.17.09 2835 CT11

Customer part number Par tnumber:	
Product model Part No.:	**LLN-8E17-XXXX-S-0303-2835-18-7470-A**
product description Description:	Down panel light bar
edition Version:	**A0**

Supplier (seal)			Client (seal)
lay down	examine and verify	ratify	examine and verify
Li Zhidan			

Note: After confirming OK, please sign and seal the letter of recognition; the letter of recognition shall be based on the latest signing date, and the original old version of the letter of recognition will automatically become invalid after the version upgrade.

Supplier name: Nanchang Yimei Optoelectronic Technology Co., LTD
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Update your resume

edition	Describe the change	date
A0	First edition	**2025-07-02**

Document resume

Drafted/revise by	Modify the content summary	Version/edition	Revise page numbers	Revision date
Li Zhidan	initial issue	A		2025-07-02

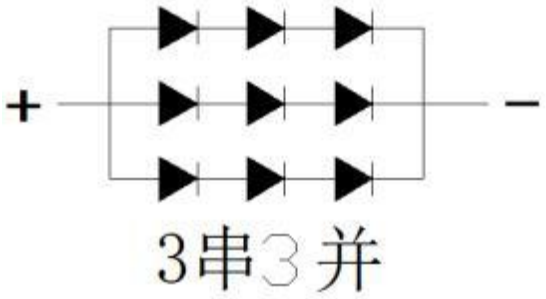
catalogue

1. Light bar size diagram

(unit： mm)

encoding	project	representative value	common difference
1	PCB length	570	±0.2
2	PCB width	17	±0.15
3	PCB thickness	1.6	±0.1

2. Light bar circuit diagram



3. Light bar characteristics table

Light bar main material

project	quantity (pcs)	content
basilar plate	1	M08-XX-DCL-28-0303-N-7470-A FR4,1.6T,1OZ
LED	9	2835A06-XXS10-2S2P-CT11-LX
lens	9	PMMA material φ13.5mm lens

Maximum limit value

project	content
storage temperature	-20~+70°C
High temperature and high humidity storage	Max.90 % @ Ta 60°C
working temperature	-20~+60°C
High temperature and humidity work	Max.90 % @Ta 50°C
PCB current-carrying	≤3200mA
PCB copper thickness (finished product)	≥30um
LENS push-pull effort	The thrust parallel to the long side is greater than or equal to 8kg/f
	The tensile force perpendicular to the PCB surface is greater than or equal to 4kg/f

electrical characteristics

project	least value	representative value	crest value	unit
working current	_	450	_	mA
Working voltage (If =450mA)	16.2	17.6	18.6	V

Note: In order to ensure the performance of L/B, it is recommended that the operating current be controlled within the typical value

Light parameters: working current 450mA

CCT	CCT Range(K)	Color bin	Center		Flux(lm)			Ra	R9	SDCM
			CIE-x	CIE-y	Min	Typ	Max			
4000K	3763-4228	A40	0.3818	0.3797	1260	1350	1440	≥90	>50	≤3
5000K	4738-5343	A50	0.3447	0.3553	1260	1350	1440	≥90	>50	≤3

4. Light bar packaging specifications

(1) Packaging information

Each piece is counted (PCS)	Number of floors (PCS)	total quantity (PCS)	total weight (Kg)	carton size (mm)		
				long	wide	tall
10	10	240	6.2	600	180	180

(2). Packaging diagram:

1. Lay the 1 panel (10pcs) flat on a piece of foam; 2. Lay it one layer at a time according to step 1;

3. A total of 12 panels are packed in a bundle (one layer of foam is added on the top layer), and wrapped with winding.
4. Each box contains 2 bundles, and each box contains 240PCS; the film is wound and fixed;

5. Wrap the box with transparent tape 6. Paste the label on the outer box marking area, and fill in the label content according to the actual quantity, weight and BIN

(3) Example of label format:

Material shipping label	
Customer product model	
Customer product order number	
Shineon product model	
Bin code	
quantity （Pcs）	
Date	
OQC judge	

5. LED characteristics

Light flux Φ (tolerance: ±5%):

Color Bin color area	Light flux @150mA	
	Φ Min.（lm）	Φ Max.（lm）
A40	135	145
A50	135	145

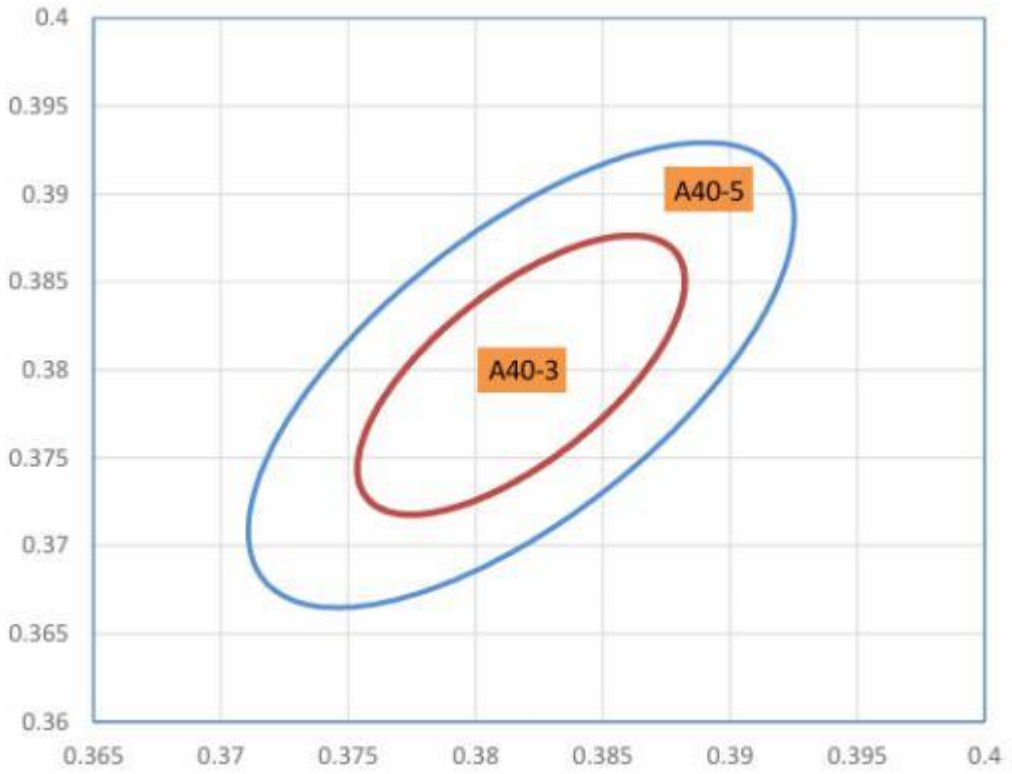
Lamp voltage bin

Voltage BIN code	**150mA**	
	Min.（v）	**Max.（v）**
C7	**5.4**	**5.6**
C8	**5.6**	**5.8**

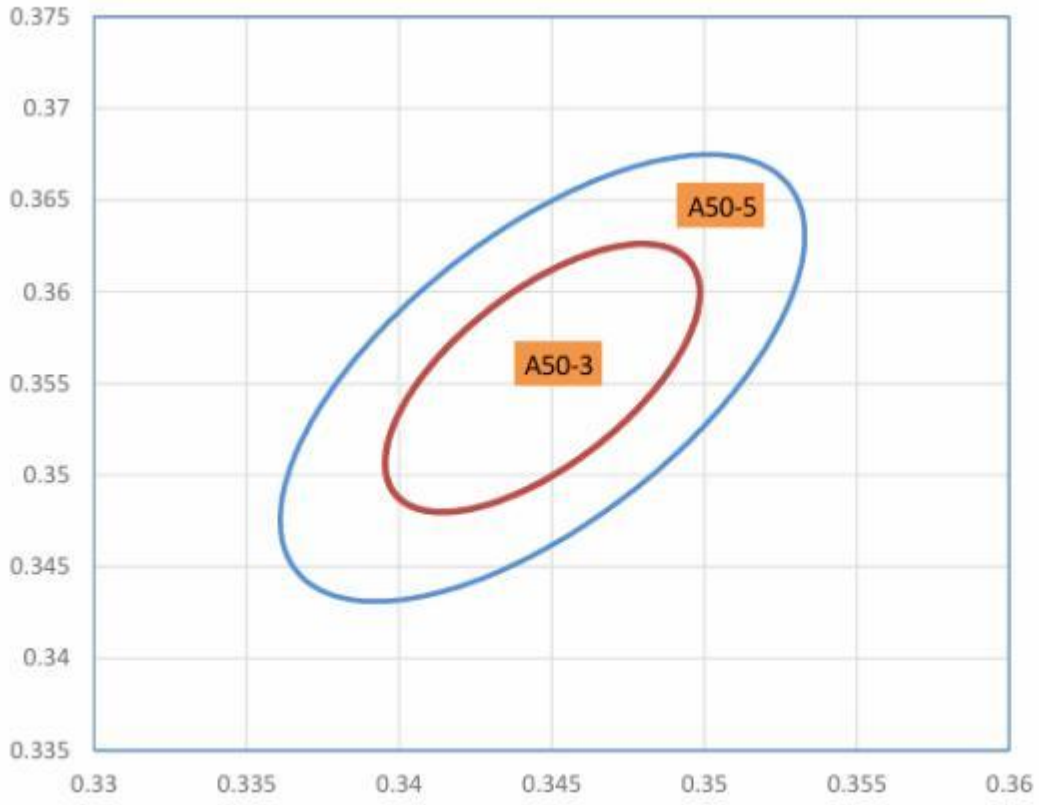
Forward voltage VF (tolerance: ±0.03V)

CIE1931(X,Y)

Part Number 品名	2835A06-40S10-2S2P-CT11-LX			CCT 色温	4000K
Bin Code 等级代码	Color Coordinates色坐标 (x,y)				
	x	y	a	b	Theta°
A40-5	0.3818	0.3797	0.01565	0.00670	53.716
A40-3	0.3818	0.3797	0.00939	0.00402	53.716



Part Number 品名	2835A06-50S10-2S2P-CT11-LX			CCT 色温	5000K
Bin Code 等级代码	Color Coordinates色坐标 (x,y)				
	x	y	a	b	Theta°
A50-5	0.3447	0.3553	0.01370	0.00590	59.617
A50-3	0.3447	0.3553	0.00822	0.00354	59.617



6. Maximum limit value of LED (environmental temperature = 25℃):

ABSOLUTE MAXIMUM RATINGS 最大限定参数 (Ta=25℃)

Parameter 项目名称	Symbol 符号	Value 规格	Unit 单位
Forward current 正向电流	IF	150	mA
Peak Forward Current 正向脉冲电流	IFP	200	mA
Reverse Voltage 反向电压	VR	10	V
Power Dissipation 消耗功率	Pd	1000	mW
Operating Temperature 工作温度	Topr	-40~+85	℃
Storage Temperature 储存温度	Tstg	-40~+100	℃
Soldering Temperature 焊接温度	Tsld	Reflow Soldering: 260℃ for 10 seconds	
Pin temperature 管脚温度	T_s	105	℃
LED Junction Temperature 结温	Tj	125	℃
ESD Sensitivity (HBM) 抗静电能力	--	2000	V

*IFP condition: pulse width ≤ 0.1msec, period ≤ 1/10

7. LED photoelectric characteristic parameters (ambient temperature = 25℃)

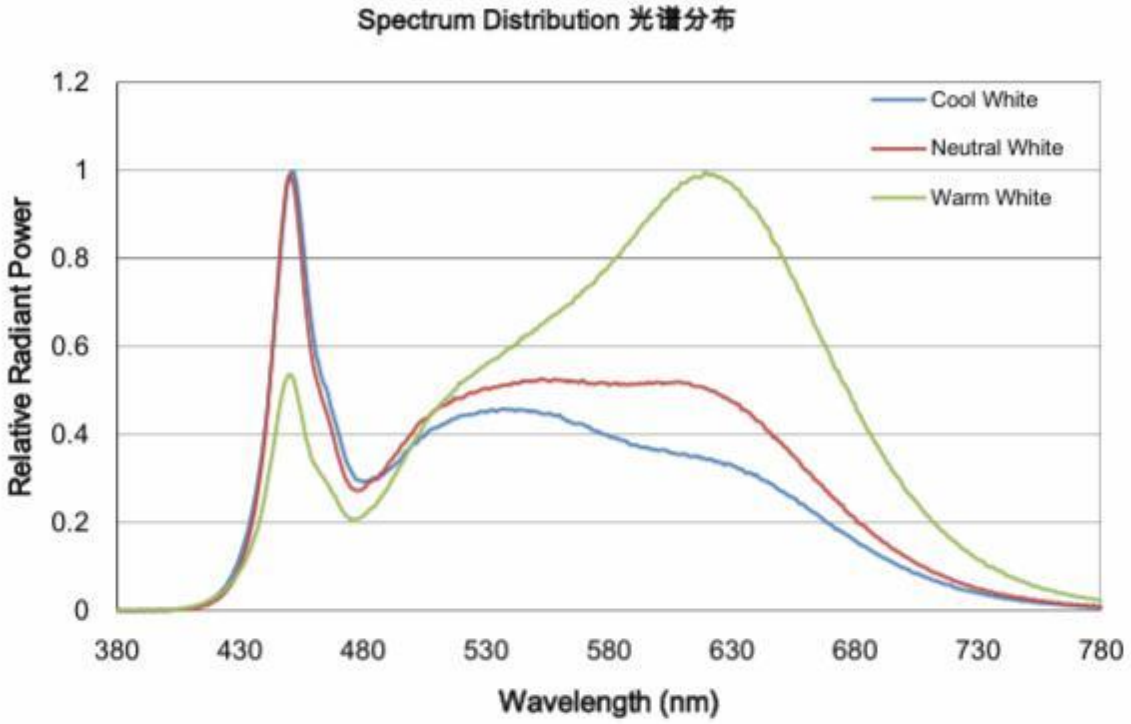
Parameter 项目名称	Symbol 符号	Test Condition 测试条件	Min 最小值	Typ 典型值	Max 最大值	Unit 单位
Forward Voltage 正向电压	V_F	IF=150mA	5.4	5.8	6.0	V
Viewing Angle 发光角度	$2\theta_{1/2}$	IF=150mA	--	120	--	deg.
Luminous Flux 光通量	Φv	IF=150mA	115	--	145	lm
Color Rendering Index 显色指数	CRI	IF=150mA	90	--	--	--
Color Temperature 色温	CCT	IF=150mA	2600	--	7000	K
Thermal Resistance 热阻	$R_{th\text{-}js}$	IF=150mA	--	13	--	℃/W

Notes 注:

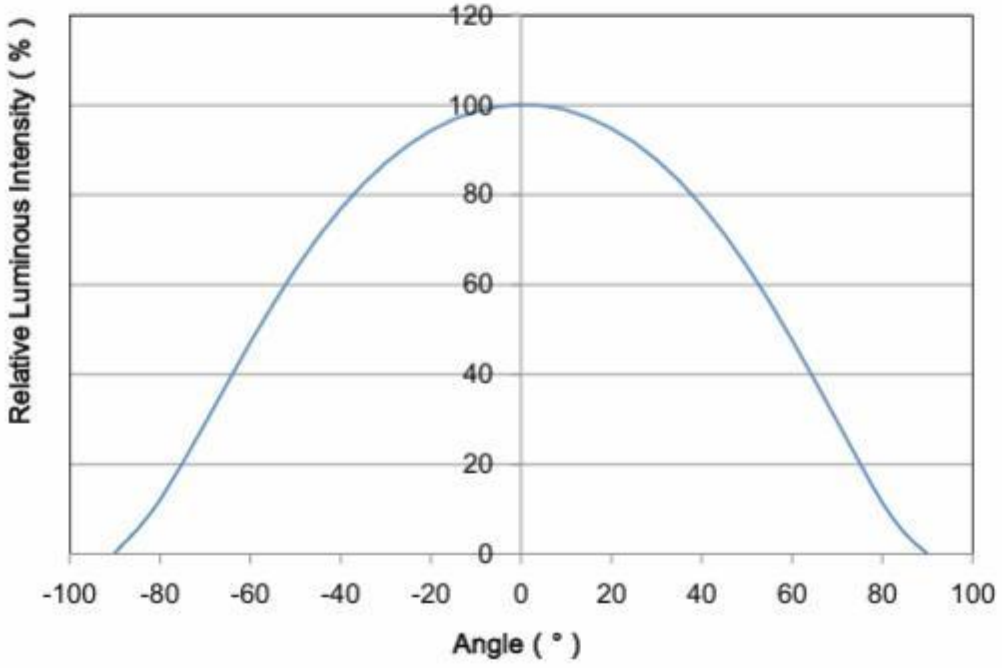
1. Luminous flux is measured with an accuracy of ± 5%. 光通量的测量精度为± 5%。
2. Chromaticity coordinate bins are measured with an accuracy of ± 0.01. 色度坐标相对测量精度为± 0.01
3. CRI is measured with an accuracy of ± 2. 显色指数测量精度为± 2
4. Some color and CRI bins may have limited availability, please contact us before ordering.
   部分颜色和显指可能有限制，请在订购前与我们联系
5. All measurements were made under the standardized environment of Shineon
   所有的测量都是在易美的标准环境下进行的

8. Typical photoelectric parameter curve of LED

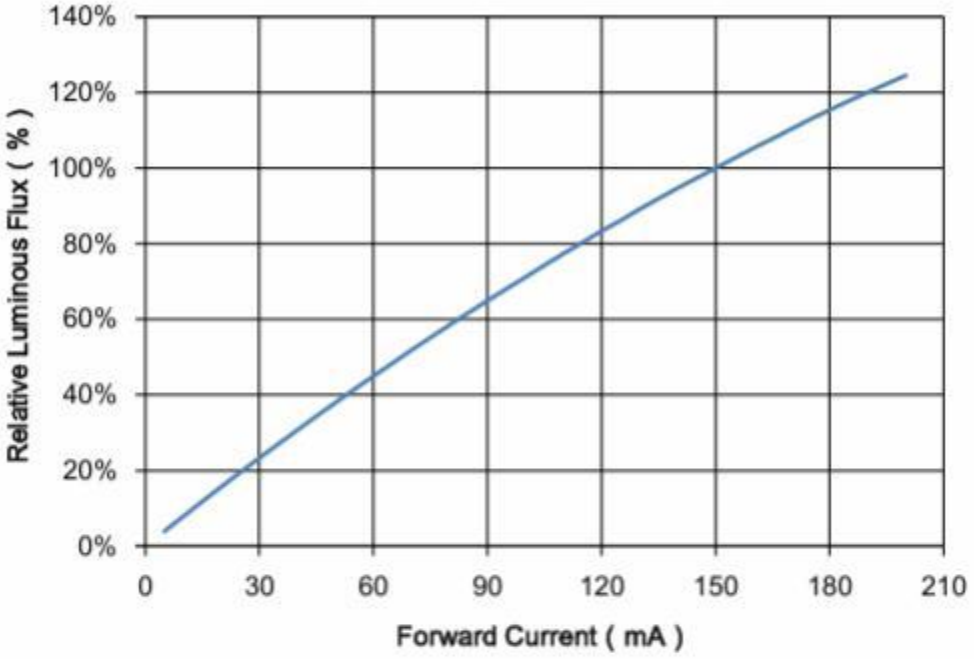
RELATIVE SPECTRAL POWER DISTRIBUTION 相对光谱功率分布 (T_j=25℃)



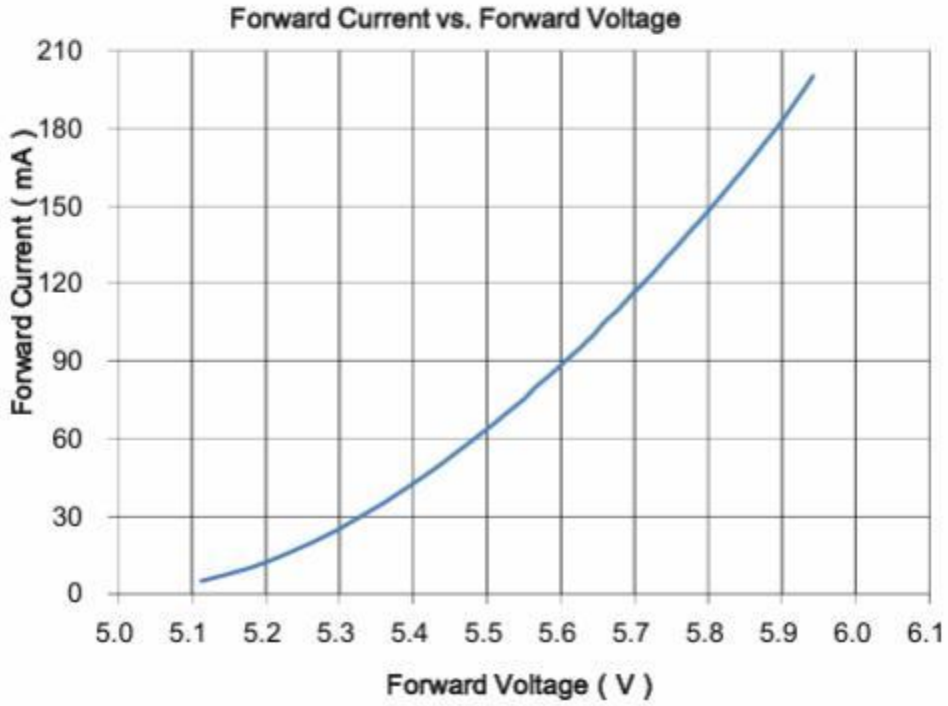
TYPICAL SPATIAL DISTRIBUTION 典型配光分布



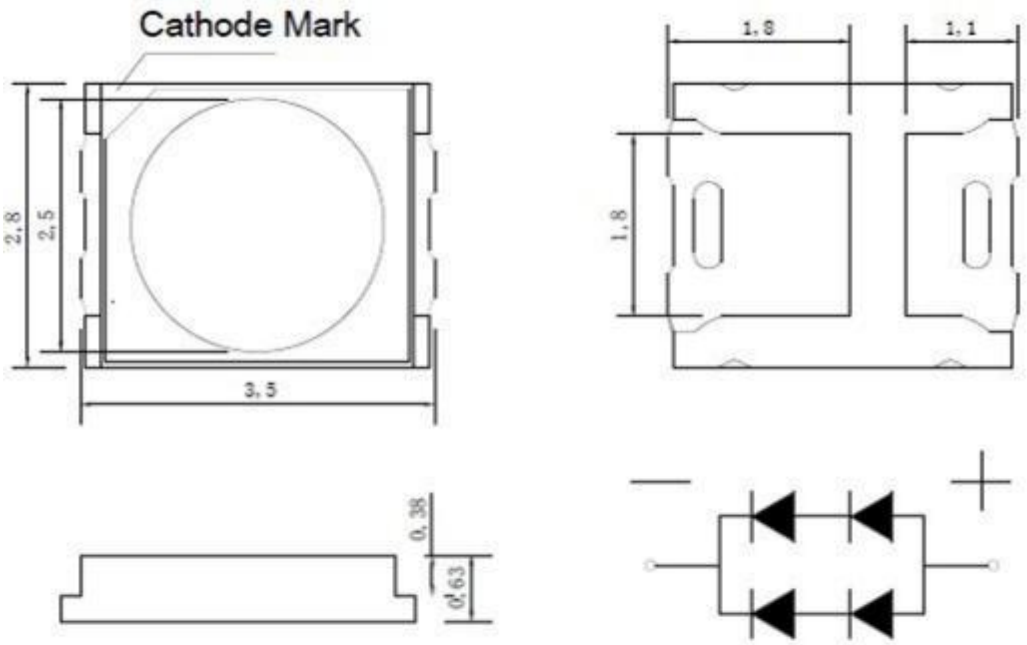
RELATIVE LUMINOUS FLUX VS. CURRENT相对光通量VS电流 (T_j=25℃)



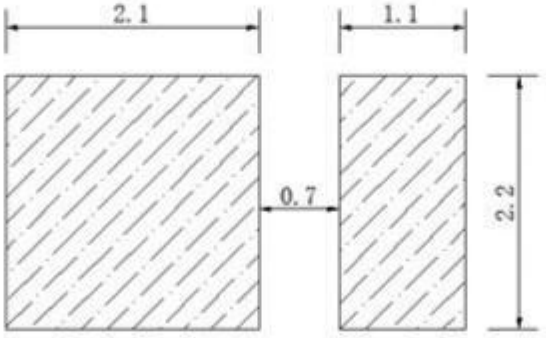
ELECTRICAL CHARACTERISTICS电特性 (Tj=25℃)



9. LED, structural size diagram



Recommended Solder Pad Design 推荐焊盘设计



Notes/ 注:

1. All dimensions in millimeters.所有尺寸单位为mm
2. Thickness tolerance of copper plate is ±0.02mm. 铜材料片厚度公差为±0.02mm
3. Thickness tolerance of product is ±0.05mm. 产品厚度公差为±0.05mm
4. Tolerance is ±0.1mm unless otherwise noted. 如未特别注明，默认公差为±0.1mm

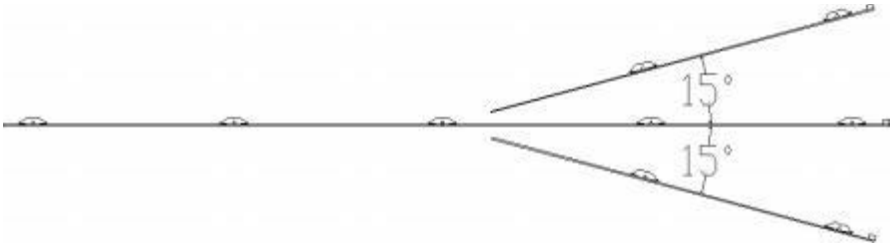
10. Application precautions

1) The LED strip should be stored in an environment of 20-30℃, relative humidity of 60% or less. Avoid direct sunlight, and the longest storage time should not exceed 6 months.

2) Wear gloves when taking and putting the lamp bar, and install it correctly on the customer's product. The LED lamp bar should not be bent.

Bending may cause the LED to come loose or the line to break.

If the PCB bends more than 15 °, the lens will fall off.



3) The LED strip is correctly connected to the circuit and avoids mechanical impact to avoid damage to the strip.

4) When using LED light bar, the heat generation must be taken into account in the overall design. The light bar should not be suspended and should be in close contact with the housing to prevent the LED from being burned out when the temperature is too high.

5) When using LED light bar, resistance or drive protection must be applied, otherwise large current and high voltage will cause LED damage and wavelength shift.

6) Manual repair of LED light bar may cause damage to the chip, so it is recommended to use a heating platform and the temperature should be controlled at 230-260 degrees for 5 seconds.

7) The damaged LED will show abnormal characteristics such as significant increase in leakage current, low forward voltage and the LED is not lit by small current.

8) Warning: Do not look directly at the LED lighting as it may hurt your eyes