AC 模组规格书
AC Module Specification

产品描述

Features

直接连接 AC 电压，无需驱动

带有集成式元器件的模组。

经济型整块解决方案。

高效率，高功率因数低谐波失真。

Connected directly to AC voltage without driver;

A module with integrated components;

Economical one-piece solution;

High efficiency, high power factor and low harmonic distortion;

1.认证信息

1. Certification Information

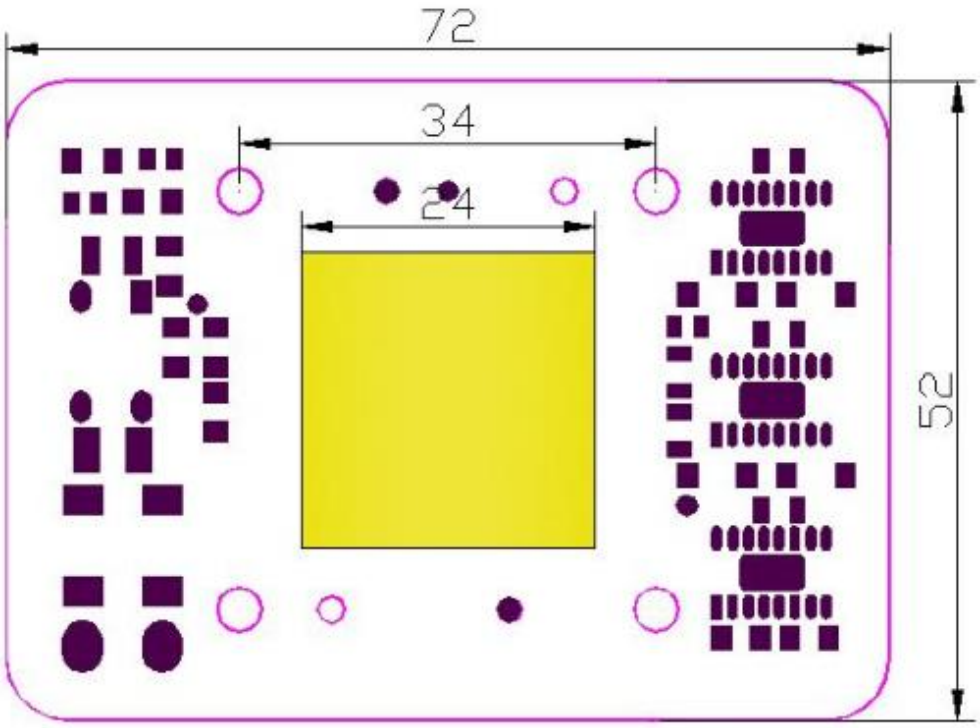
表 1：

Table 1:

符合标准 Compliance Standard	安全标准 Safety standard	EN 62031 EN 62471
	电磁兼容 Electromagnetic compatibility	EN55015 EN 61000-3-2 EN 61547

2.结构尺寸图

2. Diagram on Structure Size



3.1 电性参数

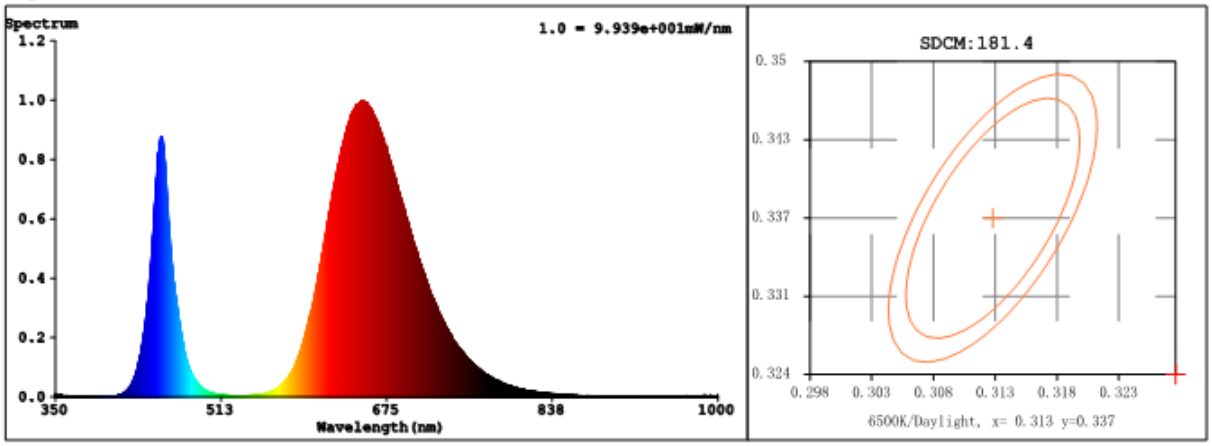
3.1 Electrical Parameters

特征 Features	参数描述 Parameter description
	LKL
输入电压 Input Voltage	交流 220-240Vac　极限电压 200-264Vac AC 220-240Vac Limit voltage 200-264Vac
输入电流 Input Current	215.8mA
频率 Frequency	50Hz
输入功率 Input Power	50W ±5% (@230V)
总谐波失真 Total Harmonic Distortion (THD)	＜20%
功率因数 Power Factor	>0.98
浪涌 Surge	L-N=1.5KV L/N-PE=2KV
电气强度 Electronic Strength	1.5KV
环境温度 Ambient Temperature	-25-45°℃
Tc 温度 Tc Temperature	t<85°℃
频闪 Reduced Flicker	100%
调光 Dimming	NO

3.2 光参数特性

3.2 Optical Parameter Characteristics

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: x = 0.4160 y = 0.1811 / u' = 0.3833 v' = 0.3754 (duv=-1.09e-01) Du,Dv:-0.0064,-0.1087

CCT= 1291K Prcp WL: Ld=-518.5nm Purity=30.6%

Peak WL: Lp=651nm FWHM: =90.9nm Ratio:R=71.9% G=20.0% B=8.1%

Render Index: Ra = 19.1 Rt = 40.75% AvgR = 23.2 TM30:Rf=0 Rg=231

R1 =64.9 R2 =0.0 R3 =0.0 R4 =21.7 R5 =23.8 R6 =0.0 R7 =0.0

R8 =42.3 R9 =66.3 R10=0.0 R11=38.4 R12=0.0 R13=26.2 R14=3.0 R15=61.8

Photometric & Radiometric Parameters

Flux = 1101.8 lm Eff. : 22.57 lm/W Fe = 12.305 W

Scotopic:2133.1 S/P:1.936

Photons1:6.364e+001 umol/s(380~800nm) Photons2:6.439e+001 umol/s(350~1000nm)

PPF:51.865umol/s PPF Efficiency:1.06236umol/s/W PRF WATT:10248mW(400-700nm)

Electrical parameters

V = 230.0 V I = 0.2153 A P = 48.82 W PF = 0.9857

Freq=49.99 Hz

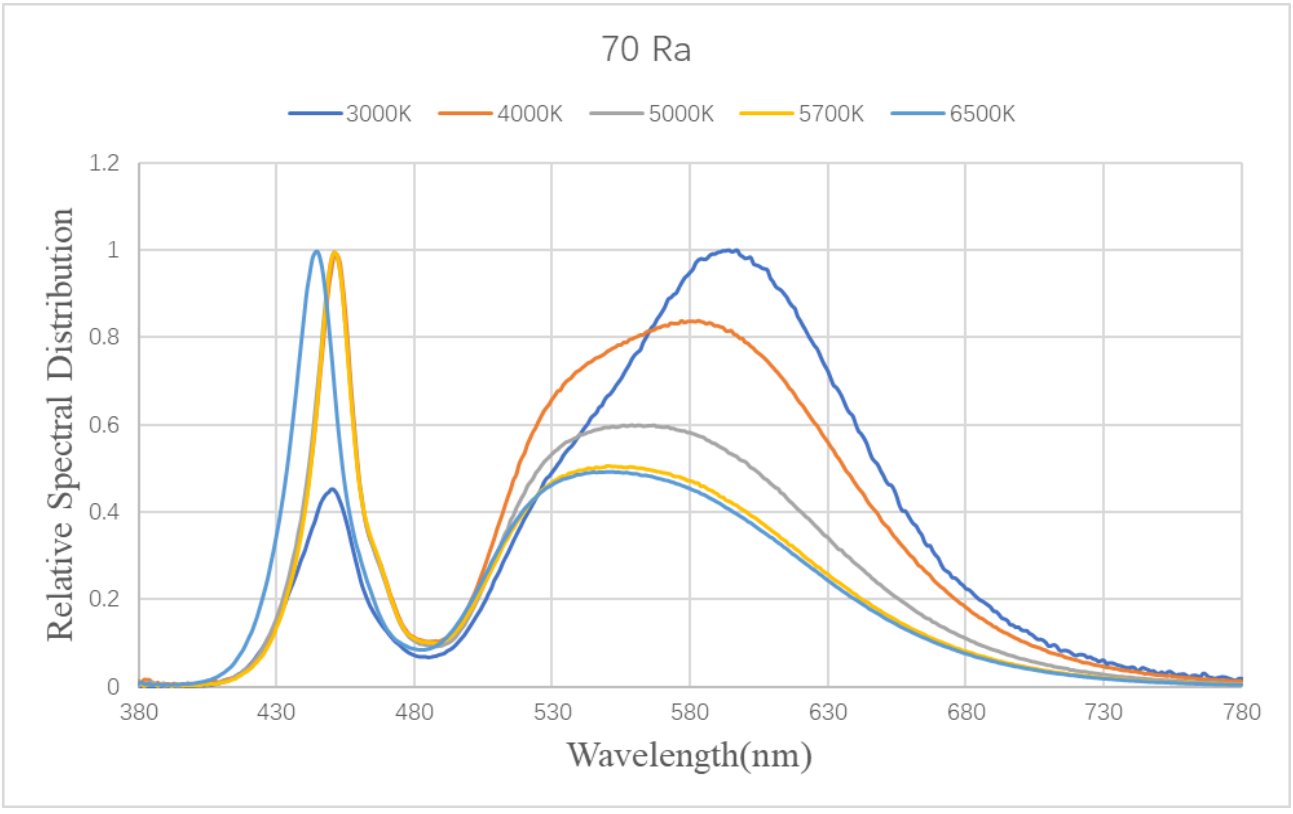
3.2.1 CIE 颜色区域划分

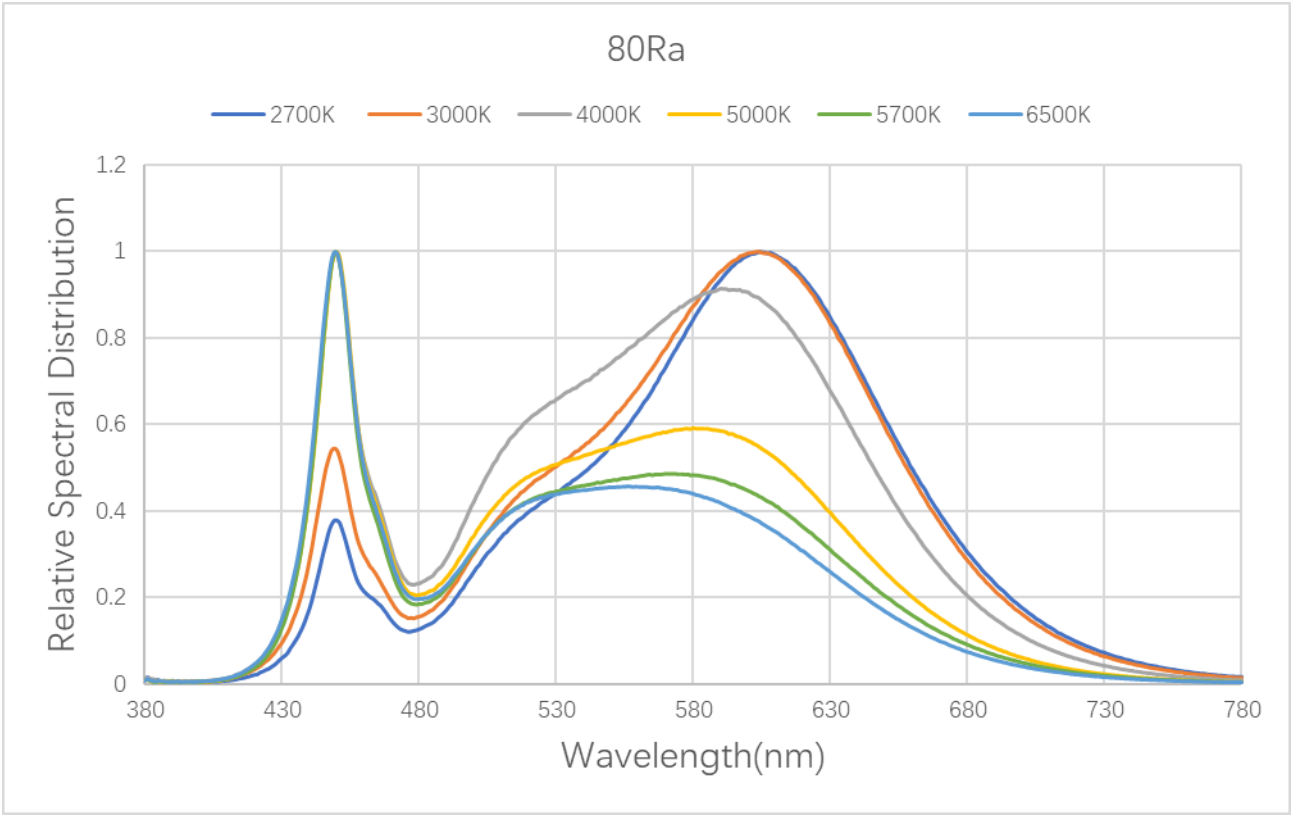
3.2.1 CIE Color Zoning

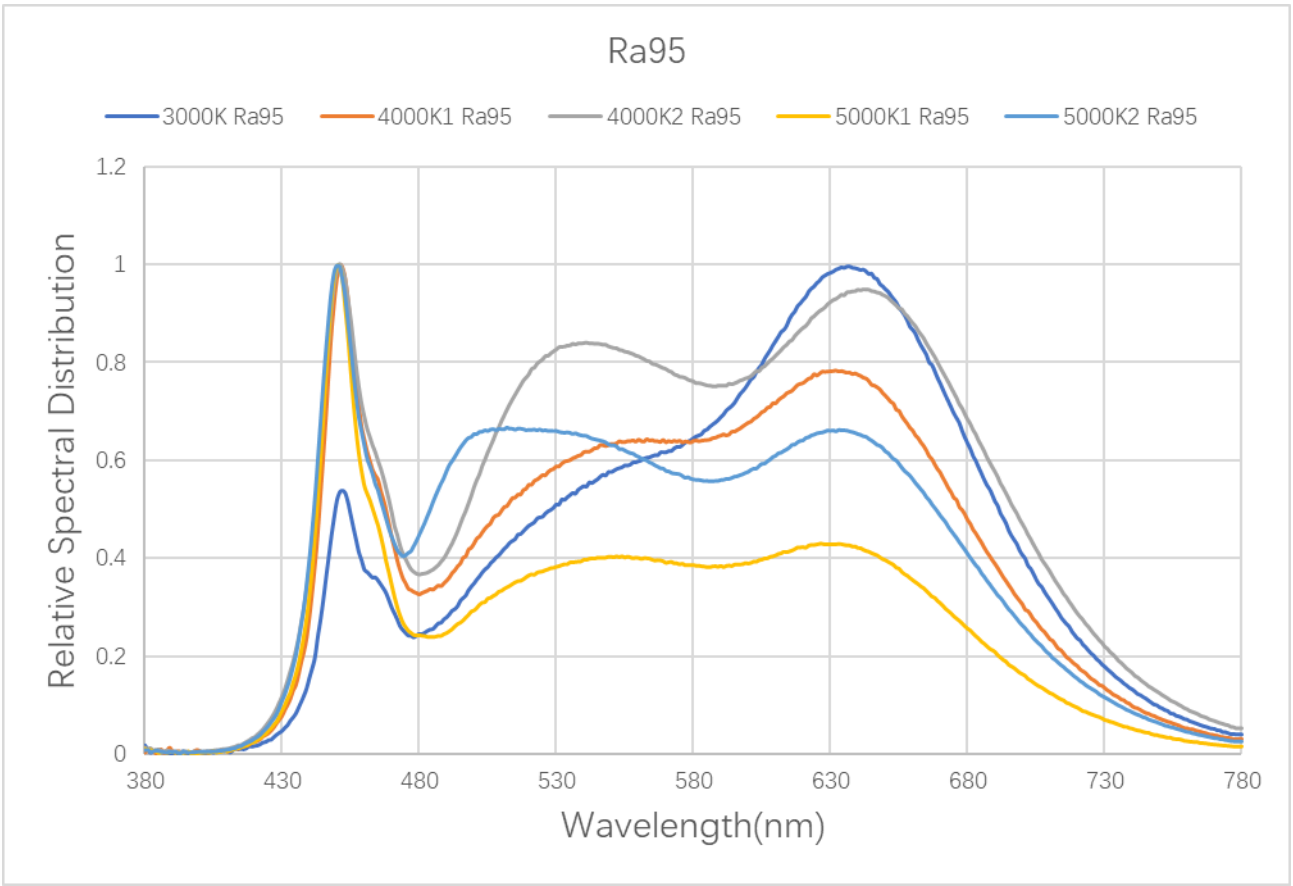
Nominal CCT	Center Point		MAJOR AXIS (a , b)			Ellipse Rotation Angel,θ
	X	Y	2-Step	3-Step	5-Step	
2200K	0.5018	0.4153	(0.0058, 0.0027)	(0.0086, 0.0040)	(0.0144, 0.0066)	49.27
2500K	0.4806	0.4141	(0.0050, 0.0027)	(0.0075, 0.0040)	(0.0125, 0.0067)	52.42
2700K	0.4578	0.4101	(0.0054, 0.0028)	(0.0081, 0.0042)	(0.0135, 0.0070)	53.70
3000K	0.4338	0.4030	(0.0056, 0.0027)	(0.0083, 0.0041)	(0.0139, 0.0068)	53.22
3500K	0.4073	0.3917	(0.0063, 0.0028)	(0.0095, 0.0042)	(0.0159, 0.0070)	52.97
4000K	0.3818	0.3797	(0.0063, 0.0027)	(0.0094, 0.0040)	(0.0157, 0.0067)	53.72
5000K	0.3447	0.3553	(0.0055, 0.0024)	(0.0082, 0.0035)	(0.0137, 0.0059)	59.62
5700K	0.3287	0.3417	(0.0050, 0.0021)	(0.0075, 0.0032)	(0.0125, 0.0054)	59.09
6500K	0.3123	0.3283	(0.0045, 0.0019)	(0.0067, 0.0029)	(0.0112, 0.0048)	58.57

3.2.2 光谱曲线

3.2.2 Spectral Curve

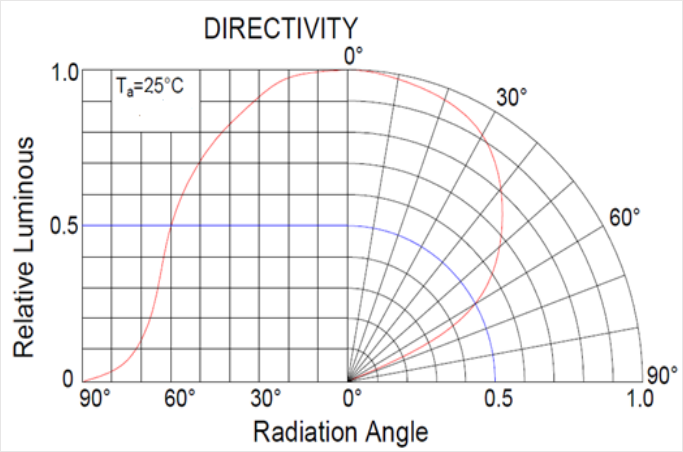



80Ra
2700K
3000K
4000K
5000K
5700K
6500K
Relative Spectral Distribution
1.2
1
0.8
0.6
0.4
0.2
0
380
430
480
530
580
630
680
730
780
Wavelength(nm)


Ra95
3000K Ra95
4000K1 Ra95
4000K2 Ra95
5000K1 Ra95
5000K2 Ra95
Relative Spectral Distribution
1.2
1
0.8
0.6
0.4
0.2
0
380
430
480
530
580
630
680
730
780
Wavelength(nm)

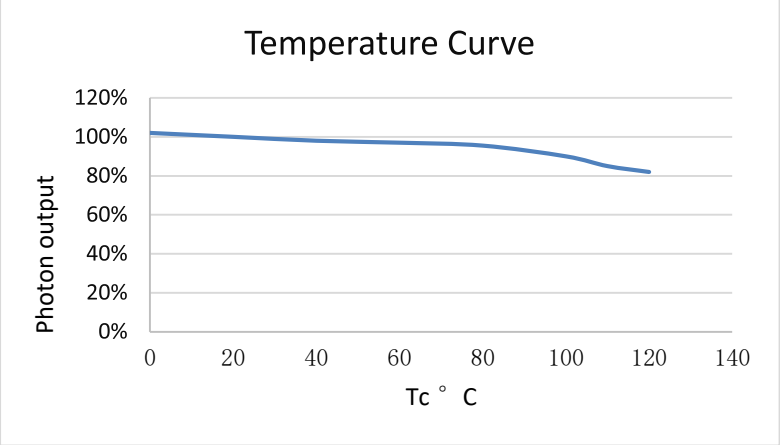
3.2.3 发光角度

3.2.3 Radiation Angle



3.2.4 光输出温度变化曲线

3.2.4 Photon Output-Temperature Curve



5.使用说明

5. Instructions for Use

5.1）本产品不需驱动电源，可直接接市电（参照表 2）使用，在使用、测试时需配备散热器，并确保灯板 Tc 点温度不超过 85℃。

5.1) This product does not require a driving power supply. It can be directly connected to the mains supply (see Table 2) for use. It is necessary to provide a heat radiator for its use and testing. Also, it shall be ensured that the temperature at the Tc point of the lamp panel does not exceed 85 ° C.

5.2）本产品可用螺丝固定在散热器的安装面上，散热器安装表面需平整光滑，表面并均匀涂覆导热膏，确保光源板底部与安装平面完全接触。（请勿采用劣质导热硅脂或其他黏结物质如万能胶水等，不但起不到导热作用，反而形成隔热层。散热不良使用会降低本产品使用寿命，严重时会造成死灯）。

5.2) This product can be fixed on the mounting surface of the heat radiator with screws. The mounting surface of the heat radiator must be flat and smooth and evenly coated with thermal conductive paste, to ensure that the bottom of the light source board is completely in contact with the mounting plane. (Do not use inferior thermally conductive silicone grease or other bonding materials like all-purpose adhesive, which can not provide heat conduction, but form a thermal insulation layer. Poor heat dissipation will reduce the service life of the product and may cause LED damage in severe cases).

5.3）在焊接市电输入引线时，请严格按灯板上标识焊接零线和火线，请勿反接。

5.3) When welding the mains supply input lead, please strictly follow the identification on the lamp panel to weld zero line and live line, and do not make reverse connection.

5.4）本产品为高压直驱方案，在使用时需做好安全防护措施，以防触电。

5.4) This product provides a high-voltage direct drive solution. Safety protection measures must be taken during use to prevent electric shock.

5.5）本产品抗浪涌能力为最大 2000V，用在户外灯具上或浪涌多发环境使用时，必须增加防雷及防浪涌保护装置，以提高产品的安全可靠性能。

5.5) The surge handling capability of this product is a maximum of 2000V. When it is used in outdoor lamps or surge-prone environments, lightning and surge protection devices must be added to improve the safety and reliability of the product.

5.6）防硫化、氯化、溴化等处理：在密闭、高温的环境中，灯具内可能含硫/氯/溴等物质，这些硫、氯和溴元素会挥发成气体并腐蚀 LED 光源。因为 LED 封密硅胶具有多孔性结构，与光源镀银层发生硫化反应。LED 光源出现硫化反应后，产品功能区会黑化，光通量会逐渐下降直至微亮，色温出现明显漂移，LED 光源最终会失效。建议您进行灯具排硫测试，确保 LED 光源在无硫/氯/溴等物质环境进行工作。

5.6) Treatments like sulfurization, chlorination and bromination prevention: In a closed, high-temperature environment, the lamp may contain sulfur/chlorine/bromine and other substances. These sulfur, chlorine and bromine elements will volatilize into gas and corrode the LED light source. Because the LED sealed silica gel has a porous structure, it reacts

with the silver plating layer of the light source. After the sulfurization reaction of the LED light source occurs, the functional area of the product will be blackened, the luminous flux will gradually decrease until it is slightly bright, the color temperature will obviously drift, and the LED light source will eventually fail. It is recommended that you perform a sulfur emission test on the lamp to ensure that the LED light source works in a sulfur/chlorine/bromine-free environment.

6.注意事项

6. Precautions

在下列情况使用本产品，本公司不承担任何损失和责任

The company will not bear any loss and responsibility for using this product in the following conditions.

6.1）在通电情况下，不能直接用手触摸本产品任意零件的焊盘裸露区，建议带电测试本产品时，测试员需配戴绝缘手套。

6.1) When the power is on, do not directly touch the exposed area of the bonding pad of any part of the product with your hands. It is recommended that the tester shall wear insulating gloves when testing the product under live conditions.

6.2）本产品不能在含 Cl2,H2S、NH3、SOx、NOx 等腐蚀性气体环境下使用。

6.2) This product cannot be used in the environment containing corrosive gas such as Cl2, H2S, NH3, Sox, NOx.

6.3）本产品不能暴露在有大量粉尘、酒精、油等可燃物质环境下使用。

6.3) This product should not be used in the environment exposed to a large amount of dust, alcohol, oil and other flammable substances.

6.4）本产品不适合直接在潮湿的环境下储存、使用。

6.4) This product is not suitable for direct storage and use in a humid environment.

6.5）请勿直接用手或重物压到光源和灯板上其它电子器件。

6.5) Do not directly press the light source and other electronic components on the lamp panel with your hands or heavy objects.