

RoHS

Specification

Client Name:

客户名称: _____

Client P/N.:

客户品号: _____

Product Name:

品 名: AC220V6W 瓦楞灯

Product P/N.:

产品型号: XY1-45CXXX-XXXA6-2

Sending Date:

送样日期: _____

客户签名栏		新月光电审核栏		
Approval	Audit	Approval	Audit	Confirmation
核准	确认	核准	确认	制作
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- 注: 1. 此规格书以中英文方式书写,若有冲突以中文版本为准文本。
 2. 此规格书的最终解释权归新月光电(深圳)股份有限公司。
 3. 此规格书的有效期限为两年,自盖章或签字之日起计算,期满时双方可以续签协议,但应采用书面形式。

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Under Development	
Mass production	●

1、Part code 产品型号命名原则

XY1-45C X XX-XXX B 6-2
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- | | | |
|---|-----------------------|--------|
| ① | Product line | 产品类别 |
| ② | Substrate Type | 支架种类 |
| ③ | Chip Code | 芯片品牌 |
| ④ | Chip Size | 芯片尺寸 |
| ⑤ | CCT | 发光颜色代码 |
| ⑥ | CRI | 显色指数代码 |
| ⑦ | Power Code | 功率代码 |
| ⑧ | VOL | 使用电压代码 |



2、Features 特点

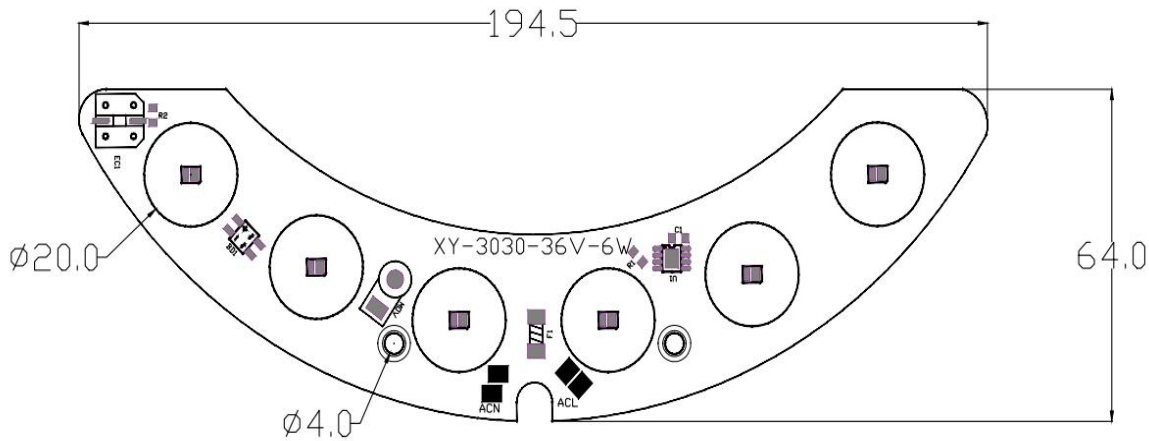
- Dimension :195mm×64mm×1.0mm
尺寸: 195mm×64mm×1.0mm
- Integration and AC technology
集成和 AC 技术的组合
- Long lifetime 寿命长
- PF>0.90 THD<25%
功率因素>0.90 谐波<25%
- CE/EMC+CE/LVD
通过 CE 认证电磁兼容指令及低电压指令
- RoHS compliant
符合 RoHS 标准
- Hipot Test >3750V
耐压测试大于 3750V



ATTENTION注意
 OBSERVE PRECAUTIONS
 FOR HANDLING
 ELECTROSTATIC
 DISCHARGE
 SENSITIVE
 DEVICES
 请勿裸手接触器件

- **Applications 应用**
indoor lighting 室外亮化照明

4、Package Dimensions 封装尺寸:



5、产品光电参数 (Tc=25°C): (Electrical-Optical Characteristics)

Power 功率 (W)	Product Code 产品型号	CCT 色温 (K)	Chip 芯片	Voltage 电压 (V)	Current 电流 (Ma)	Efficacy 光效 (lm/w)	CRI 显指
6W	XY1-45CC0C-30KA6-2	3000±150	XY 1830	AC200-240	/	70-80	≥60
	XY1-45CC0C-20TA6-2	1950±100				65-75	≥60

Notes for Table

(1) The capacity of heat sink : $T_{j-IC} < 125^{\circ}\text{C}$
 $T_{j-IC} = T_p + PIC * RIC$ (PIC=2.5W RIC=9°C/W T_p : surface temperature of IC)
 散热器散热能力: $T_{j-IC} < 125^{\circ}\text{C}$ 为要求
 $T_{j-IC} = T_p + PIC * RIC$ 其中 PIC=2.5W RIC=9°C/W T_p =IC 表面温度

(2) All extreme conditions need to be satisfied.
 所有极限条件需同时满足。

项目 Item	符号 Symbol	最大额定值 Absolute Maximum Ratic	单位 Unit
交流电压 Voltage	Vf(AC)	220	mA
峰值电压 Pulse Forward Current	VFP	240	mA
反向电压 Rcverse Voltage	VR	禁止反向驱动	V
功率消耗 Power Dissipation	PD	6	W
工作温度 Operating Temperature	Topr	-35℃ TO +80℃	℃
贮藏温度 Storage Temperature	Tstf	-40℃ TO +100℃	℃
焊接温度 Soldering Temperature	Tsld	Hand Soldering:350℃/5S	/

6、最大限度值(Absolute Maximum Raticgs)TA=25±5℃

Notes for Table

①.Operating Voltage doesn't indicate the maximum voltage which customers use but means tolerable voltage according to each country's voltage variation rate.

客户不能在最大电压下正常使用，最大电压定义为不同国家的电压波动情况。

②.Color bins are defined at transient operation

该产品通过瞬态点亮测试，分光分色。

③.The tolerance of measurement at our tester is $\Phi v \pm 10\%$ and $Ra \pm 2$.

测试仪测量的公差 流明 $\pm 10\%$ 和显指 ± 2 。

④.Tolerance of ± 0.005 on x,y coordinates.

色坐标的测量误差允许在 ± 0.005 。

⑤.Tolerance of $\pm 5\%$ on Power dissipation.

功率的测试误差允许在 $\pm 10\%$

⑥. Φv is the total luminous flux output measured with an integrated sphere.

总光通量在积分球内测量。

⑦.Surge is defined as damage that may occur when an electronic device is subjected to a voltage that is beyond the maximum specification limits of the device.

Refer to the note 3 .

当启动电压干扰尖峰超过最大电压时，会对模组造成损坏。

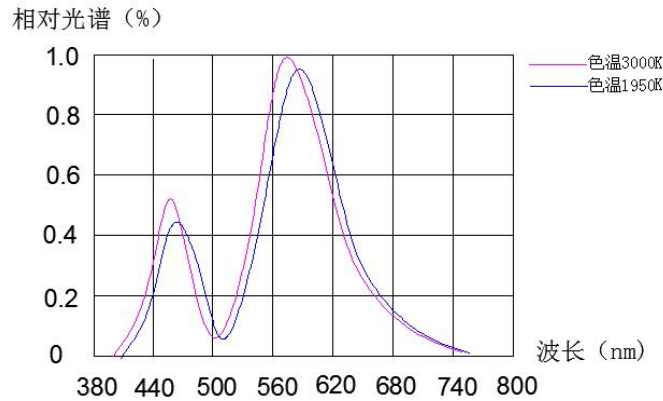
参考注意事项 3。

⑧. Base Board: 1.0mm aluminum substrate, Thermal resistance 1 W/(m.K)

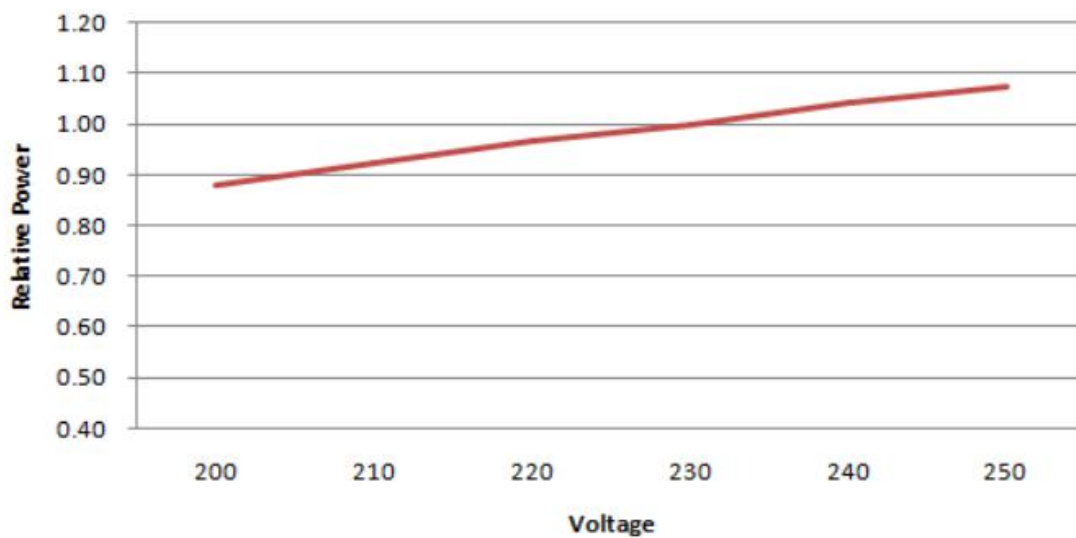
基板材质: 1.0mm 厚度铝基板, 导热系数 1 W/(m.K)

7、光电特性曲线图：

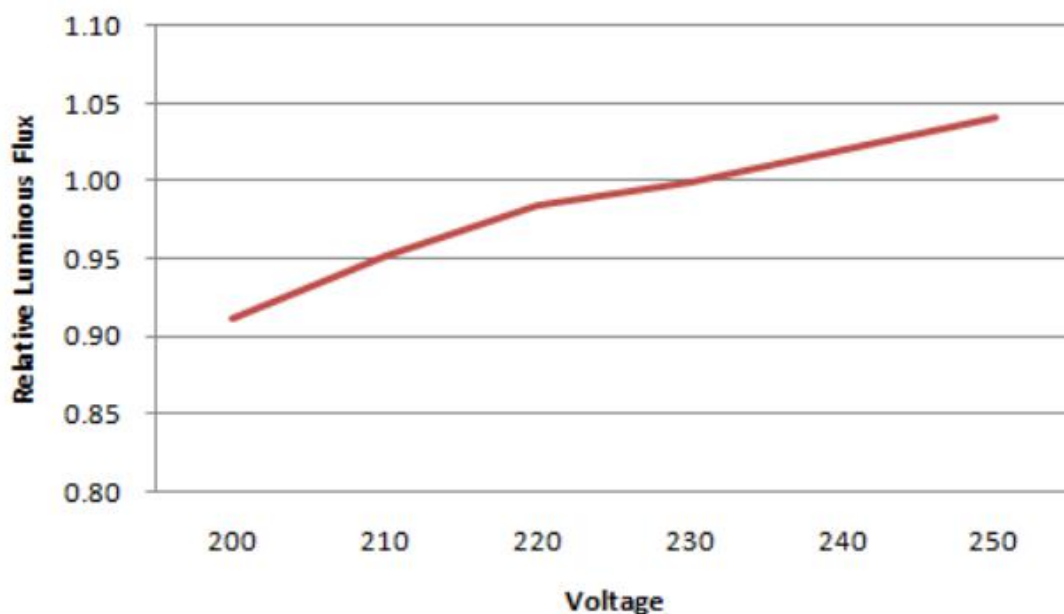
7.1、Relative Spectral Distribution



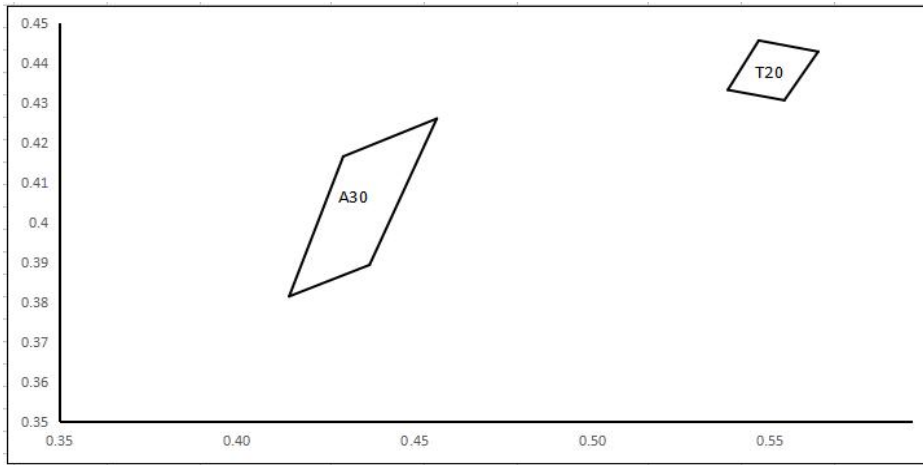
7.2、Relative Power Distribution vs. Voltage at Ta=25°C



7.3、Relative Luminous flux vs. Voltage at Ta=25°C



8、Product bins 产品分级



色温	1950±100K		色温	3000±150K	
色区	T20		色区	A30	
	X	Y		X	Y
1	0.5384	0.4397	1	0.4592	0.426
2	0.5462	0.4384	2	0.4329	0.4165
3	0.5508	0.4444	3	0.4177	0.3814
4	0.5426	0.4458	4	0.4403	0.3892


9、可靠性实验

Serial No. 序号	Test Item 项目	Test Condition 测试条件	Test Cycle 测试周期	Test Qty. 样本 数量	Ac/Re
1	Continuous Operation Test 光通亮维持率	Tc:28-30°C VF= AC220V	1000H	10	0/1
2	Low/High Temperature Storage Test 冷热冲击实验	-40°C 30min ↓↑ 5sec 100°C 30min	200 Cycles	10	0/1
3	High Temperature Operation Test 高温测试	TC:105 度点亮	1000H	10	0/1
4	Moisture-proof Test 高温高湿测试	TC:85°C RH:85%	1000H	10	0/1
5	ESD Test 抗静电测试	2000V HBM	1min	10	0/1
6	Surge Test 浪涌测试	L-N:±2000V 0度, 90 度, 180度, 270度	10Sec	10	0/1
7	Insulation withstand Test 绝缘	3750V	1min	10	0/1

耐压测试

10、包装规格

10.1、内箱标签格式 & 外箱标签格式

 新月光电(深圳)股份有限公司 Shenzhen Crescent Optoelectronic co.,LTD			RoHS
XY-PN			
XY-TYPE			
VF(V)		IF(mA)	
Φ(lm)		Ra	
CCT (K)		BIN	
QC		QTY(PCS)	

Φ: Luminous Flux rank 光通亮档次典型值

CCT: Color temperature 色温

VF: Conditions of voltage 条件电压

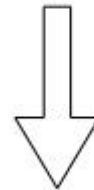
10.2、Packing figure 包装示意图



Antistatic bubble wrap



Label per roll



Label per carton



Vertical placement, protection upgrade;

11、Precautions (注意事项)

11.1. Storage 储存

■ To avoid moisture, we recommend storage conditions for the unopened LED +5 ~ +30 ° C, relative humidity <60%.

为避免受潮的影响，我司建议产品在未开包装前储存条件为 5-30° C，相对湿度小于 60%。

11.2. The soldering precautions 组装注意事项

■ The assembly method of this product is as follows (FIG. 1, FIG. 2). When welding wire, it should be aligned to the outlet groove (FIG. 2).

Note that the wire must not have copper contact with the edge of the PCB or the case.

本产品装配方式如下图（图 1，图 2），焊接线材时应对准出线槽（如图 2）；

注意线材不能有铜丝接触到 PCB 板边或者外壳。

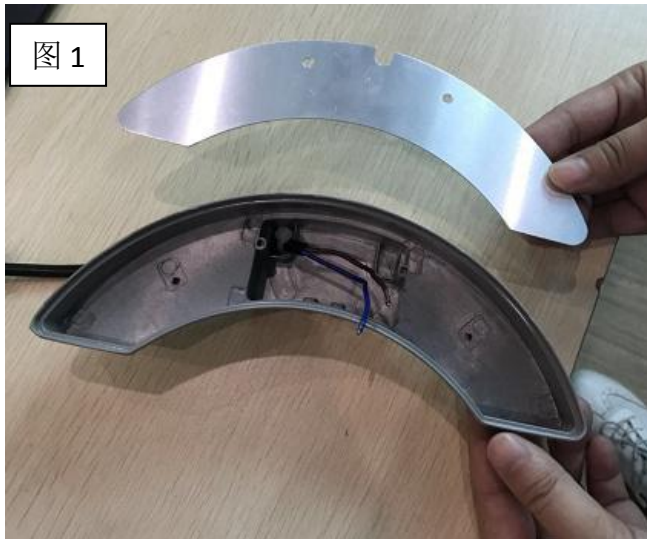


图 1



图 2

Please make sure of not getting short during the welding process.

焊接完毕后，请确保无短路现象，以免烧毁器件。

Due to connecting high voltage, pay attention to safety when installing and/or testing.

由于该产品接高压，因此在该产品安装调试时请务必注意安全。

Do not touch the module without any reasonable ESD protection while circuit is active.

当电源工作时，不要触碰模组任何地方，如 PCB 板，器件等。

Hot-plug test is not recommended.

不建议做热插拔测试。

11.3、Cautions for use 使用注意事项

■ This module is suitable for outdoor lighting. Please pay attention to waterproof protection during installation;

该模组适用于室外照明。安装时请注意做防水保护；

■ Faults, lightning, or switching transients can cause voltage surges in excess of the normal ratings.

故障，闪电或者开关短路可能引起电压瞬态升高，超过额定值。

■ Internal component failure can cause excessive voltages.

内部元器件失效有可能导致电压超高。

■ Electrical Over-Stress (EOS) is defined as damage that may occur when an electronic device is subjected to a current or voltage that is beyond the maximum specification limits of the device.

EOS 损坏发生在电流或电压超过最大限制。

11.4、 Anti-Static Measures 防静电措施:

■ Please take adequate measures to prevent electrostatic generation, such as wearing electrostatic ring or anti-static fingerstall etc; any relative products like plant equipment, machinery, carrier and transportation units shall be connected to discharging unit/ ground. The ESD sensitivity of this product is > 1000V, after assembly the final lamp, please make sure to discharge Static Electricity by proper ESD equipment.

请采取足够的措施来防止静电产生，比如带静电环或防静电手指套等；每个制造厂关于产品（工厂、设备、机器、载波机和运输单位）应当连接到底面，请避免产品电气带电；本产品的防静电敏感度超过 1000V，装配后的最终灯具产品（S）建议检查是否损坏 LED（漏电现象）。

11.5. Temperature Control 温度控制:

■ Recommended temperature conditions for enhanced product life: Be sure to Tp point (The top of IC) controlled below 100 °C;LED recommendation solder surface temperature control ≤90 °C.

保证散热前提条件为：请务必将 Tp 点（IC 顶部）控制在 100°C 以下；建议 LED 焊点表面温度控制 ≤90°C。

11.6. Other 其他:

■ Product is not suitable to use in following conditions

本产品不可在以下条件下使用，如果产品在以下条件下使用，评估其使用效果和风险是有必要的：

Touch the Led colloidal surface area with sharp objects such as pincett (tweezers).
用尖锐的物体，如钳子（镊子）接触 Led 胶状表面区域。。

Excessive force more than 3000gf on the silicone lens.
胶体上按压大于等于 3000gf 的力。

Cover the Led colloidal surface area with any other resins such as epoxy, urthane, etc
用其它树脂材料，如环氧树脂、聚氨酯等覆盖在 LED 胶体表面。

Assemble/use in conditions of high moisture and/or strong oxidizing gas such as Cl, H₂S, NH₃, SO₂, NO_x, etc.

在高湿或者强氧化气体，如 Cl, H₂S, NH₃, SO₂, NO_x 的环境下使用。

Use with substance containing sulfur.

与含硫元素物质一起使用。

Long time exposure to sunlight or UV can cause silicone discolored.

长时间暴露在太阳或 UV 底下，会使胶发生变色。

Exposed to dust, liquids or oils.

被暴露于粉尘、液体或油