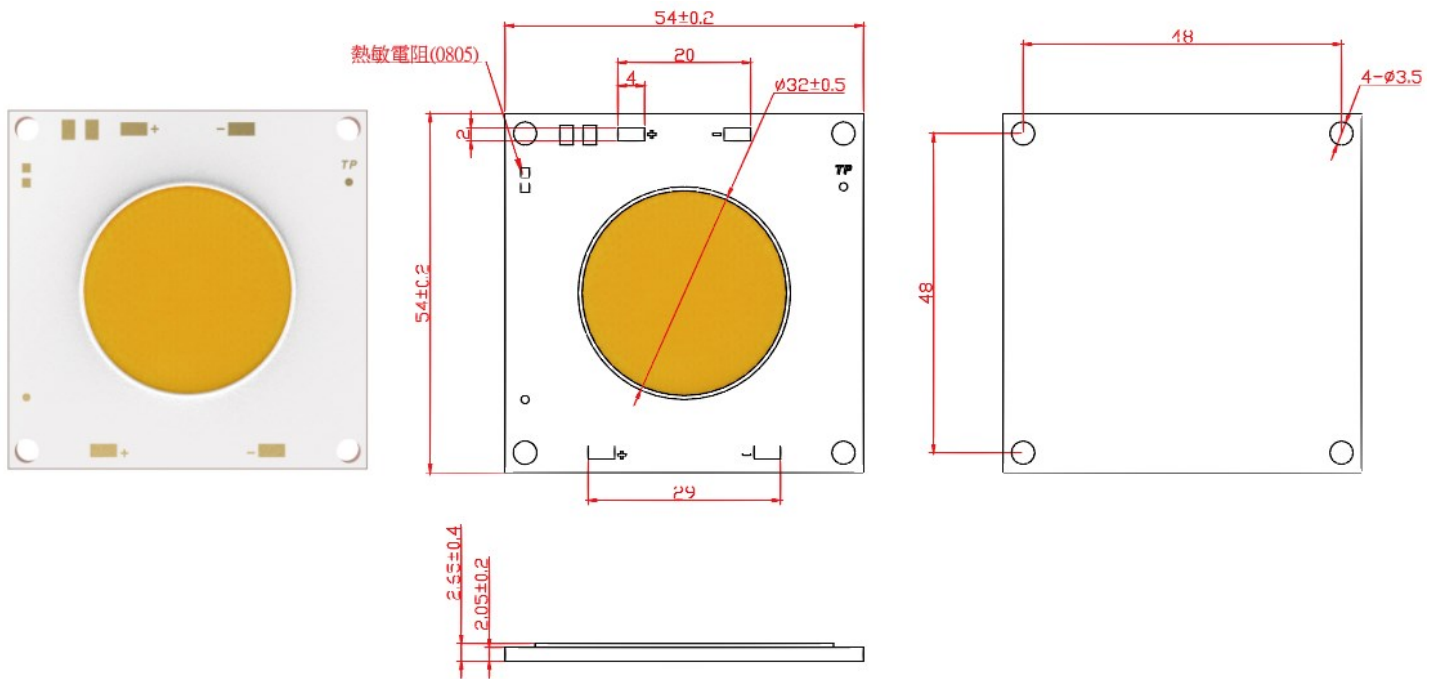


# LTHX1831-150-004



## 產品簡介 PRODUCT DESCRIPTION

恆日光源為一結合高導熱(銅基板)、高信賴性、寬可視角、COB 多晶封裝、易組裝、無暗區所設計之高效能模組。

Lighten's emitter is a high-performance LED module and design with high thermal conductivity、high reliability、wide view angle、multichip COB package、easy to assemble、eliminates dark area in flooding light、streetlight or high Bay, etc., and other surface light applications

## 特徵 FEATURES

- 可視角 View Angle:  $120^\circ$
- 芯片直接與銅基板鍵結 Die direct bonding to copper
- 高導熱 High thermal conductivity:  $401 \text{ W}/(\text{m} \cdot \text{K})$
- 溫度量測點 Thermocouple attach point
- 通過十項重金屬檢驗 RoHS2.0 compliant

## 電性 CHARACTERISTIC

特性 Characteristics	最小值 Minimum	額定值 Typical	最大值 Maximum	單位 Unit
輸入電流 DC Forward Current	-	2600	2860	mA
逆電流 Reverse Current	-	-	0.1	mA
輸入電壓 Forward Voltage	48.6	54	59.4	V
結溫 LED Junction Temperature	-	-	120	°C

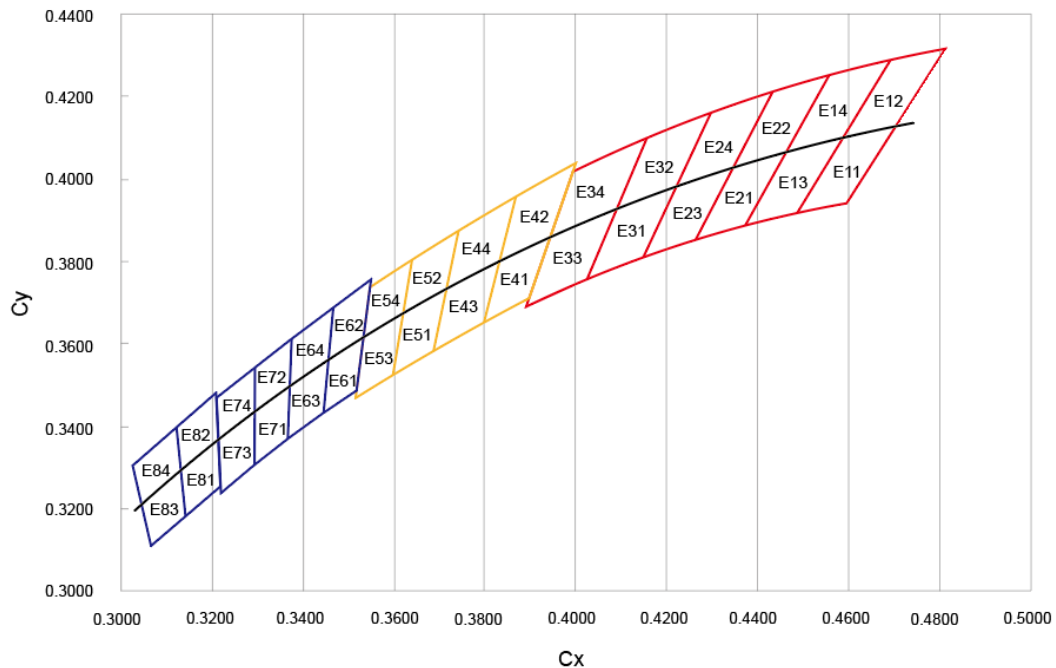
## 光通量特性 FLUX CHARACTERISTICS

CCT (K)	CRI	Output Flux (lm) Ta=25°C, @2600mA	
		最小值 Minimum	額定值 Typical
3000±100	80	18810	19800
4000±200	80	19098	20103
5700±200	70	21192	22308

### 注意事項

- 恆日維持光通量之量測誤差為±7%,色彩飽和度量測誤差為±2.  
Lighten maintains a tolerance of ±7% on flux and power measurements and a tolerance of ±2 on CRI measurements.
- 色溫及演色性為恆日標準規格，可依客戶需求調整  
Above CCT and CRI spec for Lighten Standard product, different CCT and CRI are available upon customer's request.

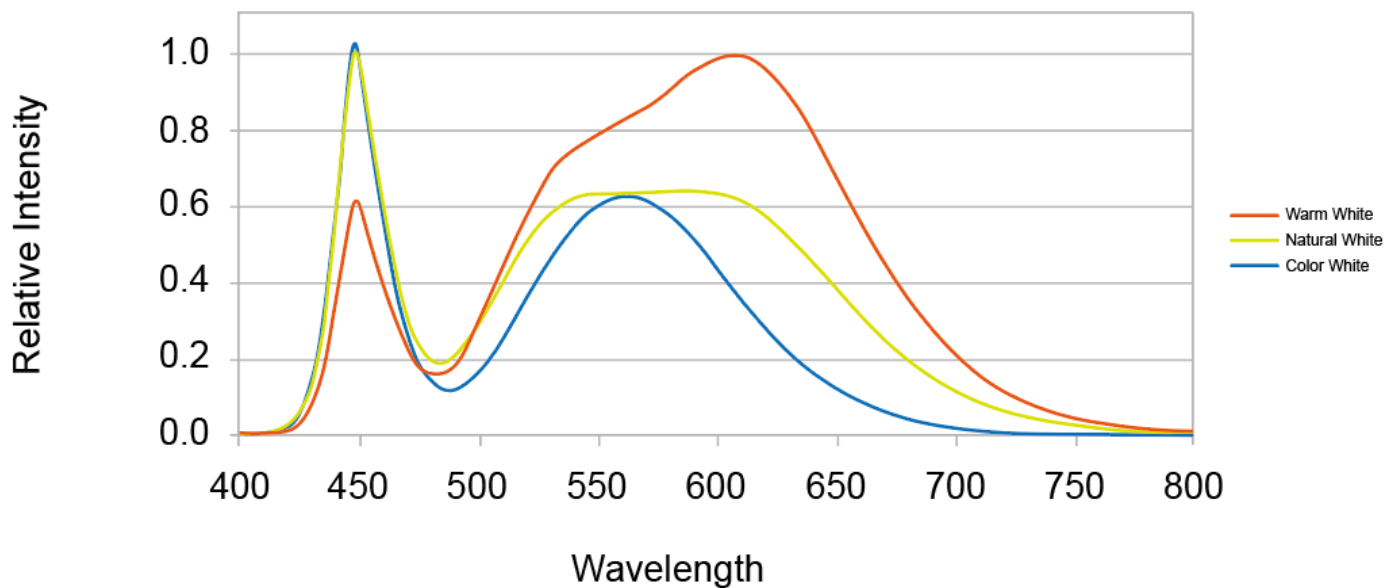
色碼在色座標的位置 BINS PLOTTED ON THE 1931 CIE COLOR SPACE( $T_a=25^{\circ}\text{C}$ )



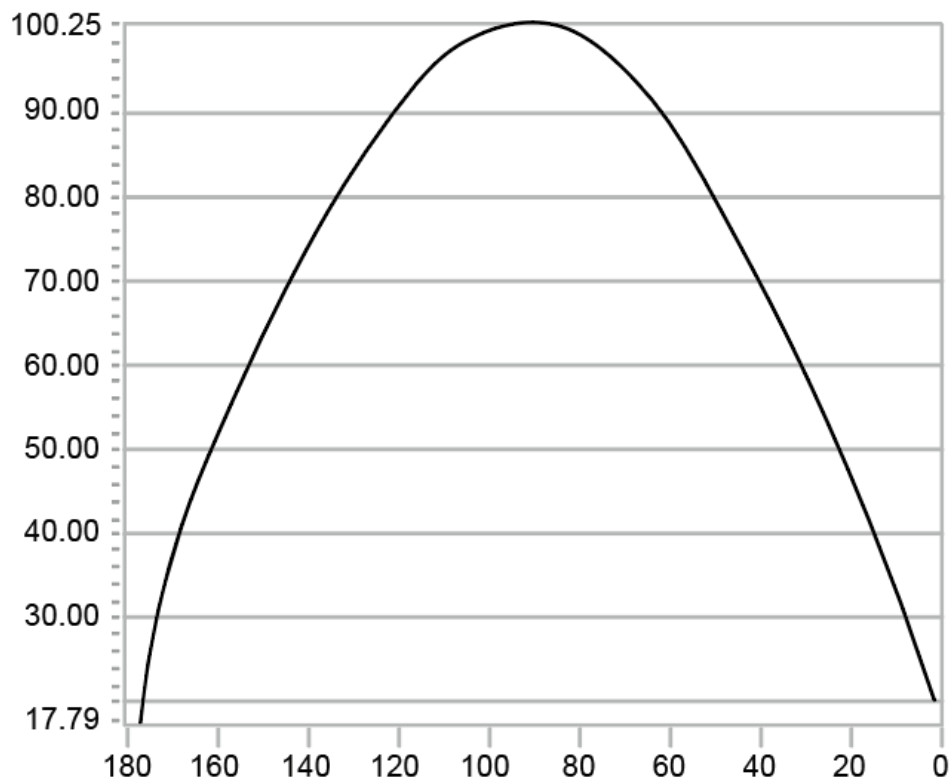
注意事項

- ANSI BIN 為恆日標準規格，可依客戶需求調整其色溫座標  
ANSI BIN for Lighten Standard product, different CCT and CRI are available upon customer's request.

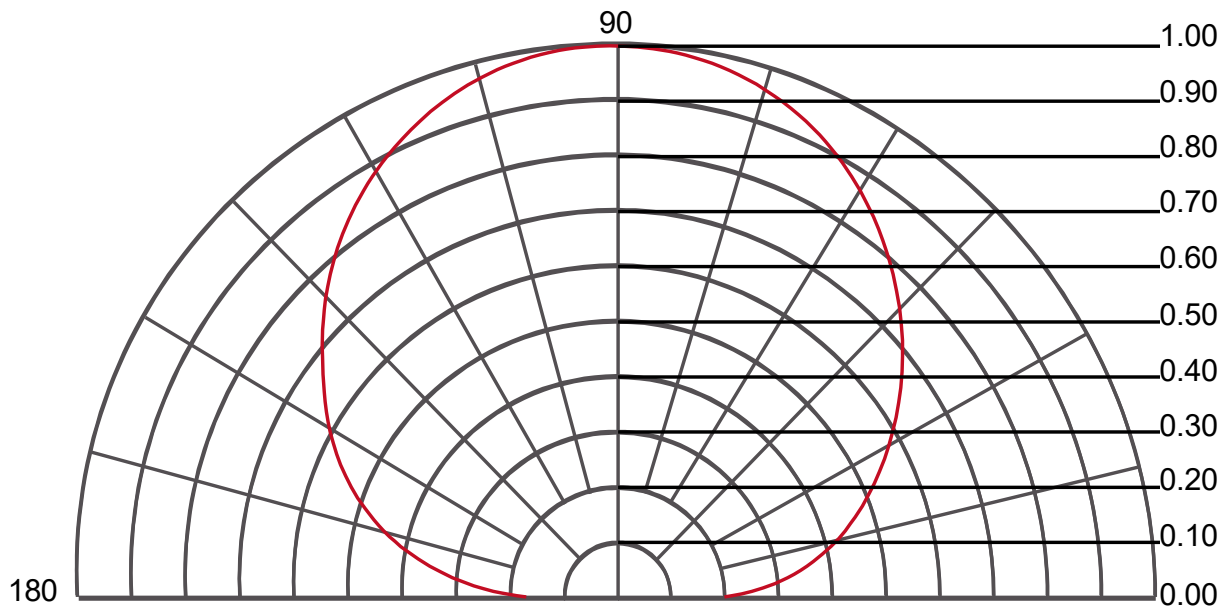
波長特性(額定電流, $T_a=25^{\circ}\text{C}$ ) WAVELENGTH CHARACTERISTICS AT RATED TEST CURRENT, $T_a=25^{\circ}\text{C}$



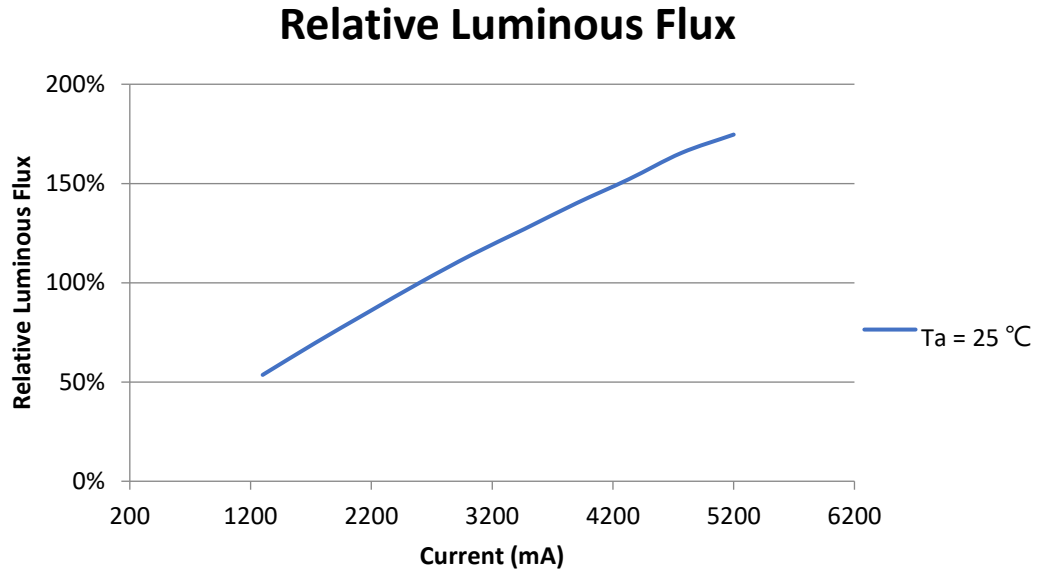
空間分布 TYPICAL SPATIAL DISTRIBUTION



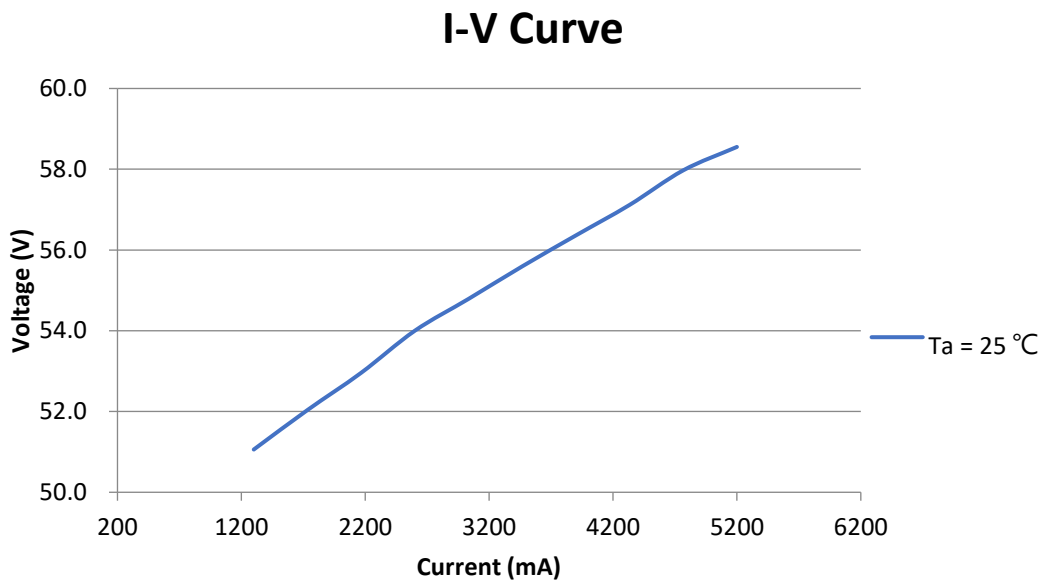
光形圖 TYPICAL POLAR RADIATION PATTERN



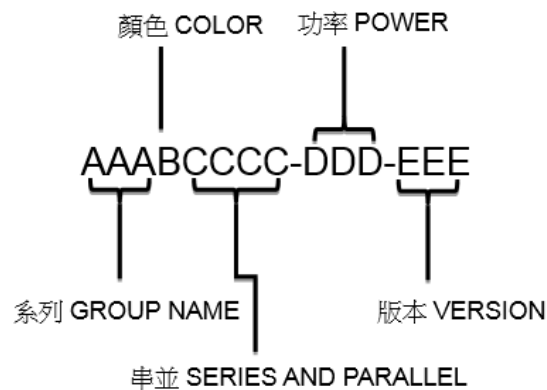
不同電流下之 相對光通量百分比 Relative Luminous Flux vs Current (Ta=25°C)



不同電流下之電壓值 I-V Curve (Ta=25°C)

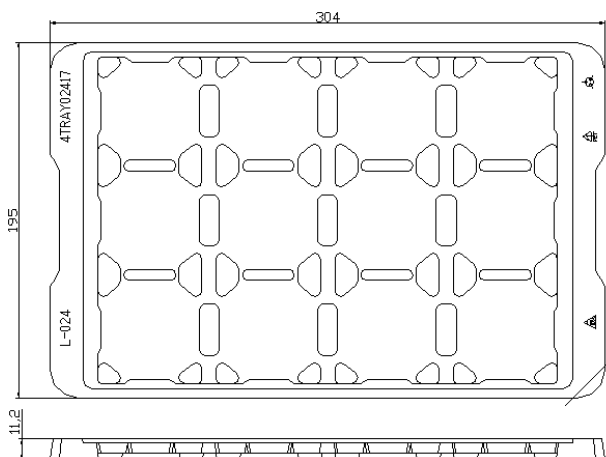


## 訂單碼格式 ORDER CODES FORMAT

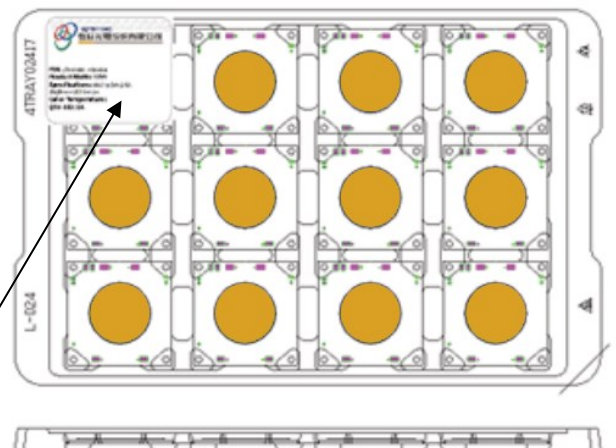


## 包裝方式 PACKING SPEC.

包裝盤尺寸 PET TRAY dimension



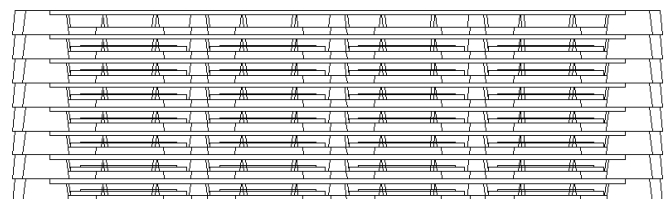
燈芯擺入包裝盤 Put Emitter onto tray  
最上層貼標籤不同 Bin 或 Lot 亦需貼標  
Tape label on top cover (also applied  
on different Bin or Lot)



外標籤格式 Label format



堆疊至滿箱並加 1 片上蓋  
Stack up with 1 cover (full)



## 使用方式及注意事項 ASSEMBLY NOTE

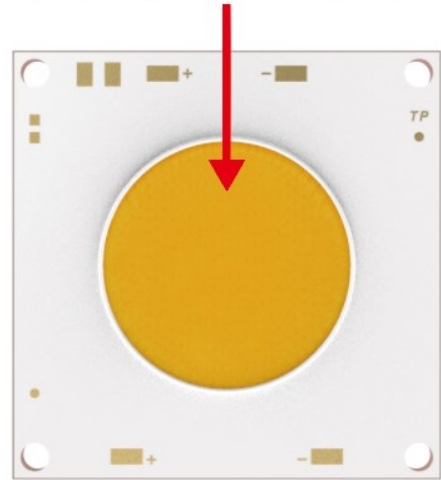
禁止碰觸發光區域

Do not touch emitting area

禁止碰觸或破壞發矽膠外型區域 會造成晶片或者是金線鍵結力，進而造成損壞現象

Do not touch or scratch silicon forming matrix area since it could damage the bonding of LED chips or wires and cause dead zone.

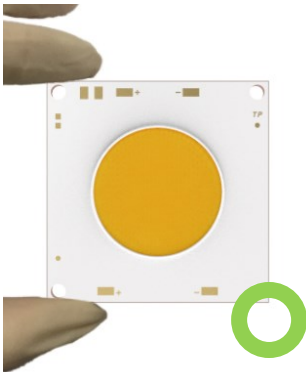
**Don't Touch**



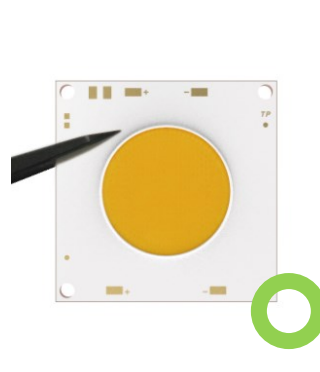
建議 Recommended

燈芯需要手動挑選及放置的產品,建議拿取時帶塑膠手套或使用塑膠鑷子拿取

Emitter needs manually pick and place, recommend using plastic tweezers or plastic gloves.



帶塑膠手套拿取  
Use plastic gloves



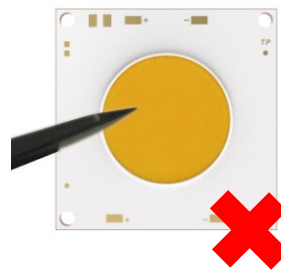
使用 塑膠鑷子拿取  
Use plastic tweezers



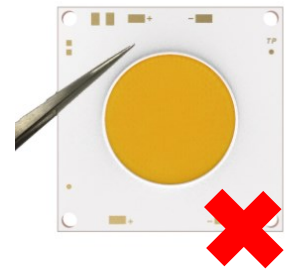
不可徒手拿取  
Don't use hand without plastic gloves



不可夾電極處  
Don't clip both electrode



不可夾到發光區  
Don't clip emitting area



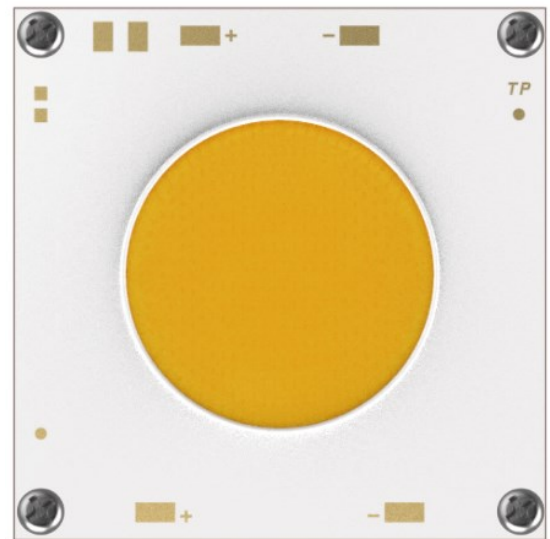
不可使用鐵製鑷子  
Don't use iron tweezers



## 組裝方式 Assembly Guidelines

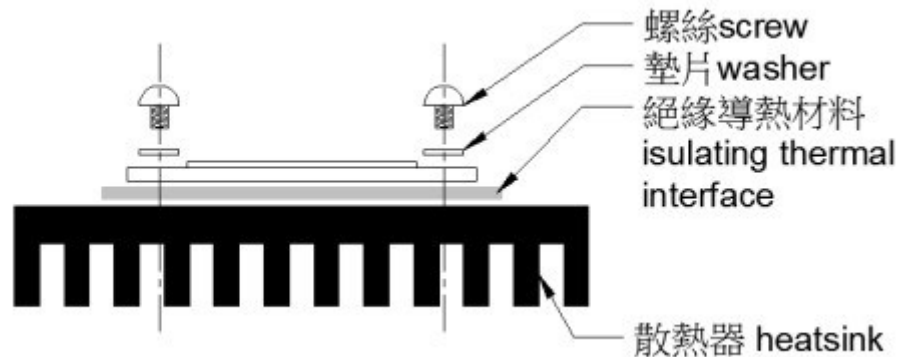
先將電線焊上燈芯正面之正負極,再於孔位鎖附螺絲於鋁擠上

Wiring emitter's anode/cathode pad, then fix emitter with screws onto heat sink



為減低熱阻與散熱器保持絕緣，建議燈芯與散熱器中間介面加上高導熱絕緣材質，散熱膏皆可  
To reduce thermal resistance and keep insulation of heatsink, high thermal insulating material is recommended to be used uniformly between emitter and heatsink. Either thermal sheet is fine.

$T_a=25^{\circ}\text{C}$  時，操作電流為標準電流時， $T_p$  點須控制在  $70^{\circ}\text{C}$  以下  
 $T_a=25^{\circ}\text{C}$ ,  $T_p$  should be controlled below  $70^{\circ}\text{C}$  under typical current.



電線:

- ★ 燈芯外接電源建議使用絞線（及軟性電線），勿使用單芯線（較硬）  
Suggest using strand wires (softer) to connect power, don't use solid wires.