



AB-GES-C04108WxxBN2

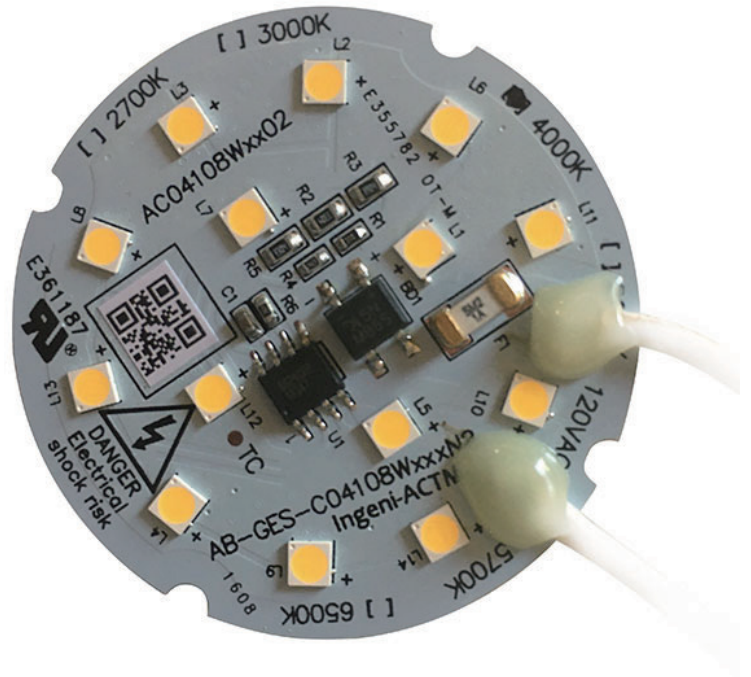
Features & Applications

Features:

- 8W small size (45mm) circular AC LED light engine
- SimpleDrive® - 120V AC drive technology
- Driver on Board structure
- Long life - No Electrolytic capacitors
- Easily to be integrated
- UL Compliance(E361187)

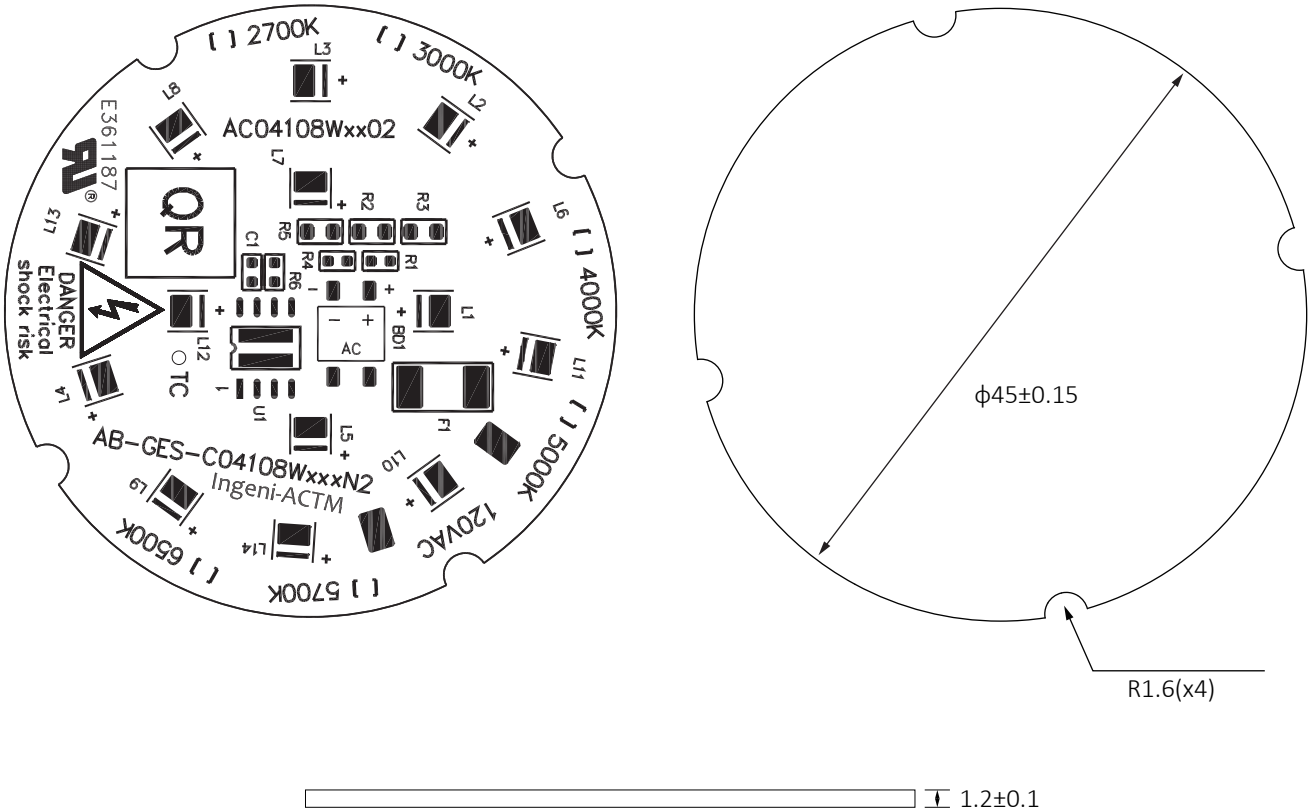
Applications:

- Suspension light
- Crystal light
- Underground light
- Wall mounted light





Outline Dimensions



Units: mm

Notes:

1. Wire connection is used for the connection.
2. Thickness of PCB is 1.2mm, There's the thermal tape in the back side of Module
3. Tolerance of dimension is ± 0.15 mm
4. TC point is in the center of AC DOB module. The Temperature of TC & LED soldering pad needs to be lower than 70°C and the temperature of top of IC needs to be lower than 110°C If the temperature doesn't exceed the limitation of temperature, we can provide the warranty.



Characteristics

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Input Voltage	V _{in}	130	Vac
LED Junction Temperature	T _J	115	°C
Storage Temperature	T _{stg}	-40 ~ 100 °C	°C
Operation Temperature	T _{opr}	-40 ~ 85 °C	°C

- Proper current rating must be observed to maintain junction temperature below maximum at all time. For this product, we suggest to keep the Temperature of TC point under 70°C, and the temperature of Top IC surface under 115°C. After passing the maximum temperature of IC, the rating current will be lower automatically for protecting the whole circuit.

Electrical Characteristics, Ta=25°C

Parameter	Symbol	Min.	Max.	Unit
Input Voltage	V _{in}	110	130	Vac
Input Frequency	Freq.	50/60		Hz
Power Factor	PF	0.9	0.99	-

* This surge protection is added on the protection device circuit.

Optical Characteristics (V_{in}=120V, Ta=25°C)

Model name	AC Power			Color Temp	Luminous Flux(lm)		CRI
	Min	Typ.	Max	(K)	Min	Typ	
AB-GES-C04108W27BN2	7.0	8.0	9.0	2700	720	800	>80
AB-GES-C04108W30BN2	7.0	8.0	9.0	3000	760	830	>80
AB-GES-C04108W40BN2	7.0	8.0	9.0	4000	800	900	>80
AB-GES-C04108W50BN2	7.0	8.0	9.0	5000	820	920	>80

- Correlated color Temperature is derived from the CIE 1931Chromaticity diagram.
- The luminous flux tolerance is ± 10%.
- This CRI value tolerance is ± 2.
- Calibration accuracy of CIE_x and CIE_y :±0.007 ;
- Calibra on error 2700K±175K ; 3000K±200K; 4000K±300K; 5000K±400K

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■ Characteristics Graph

Fig 1. Color Spectrum, $T_j = 25^\circ\text{C}$

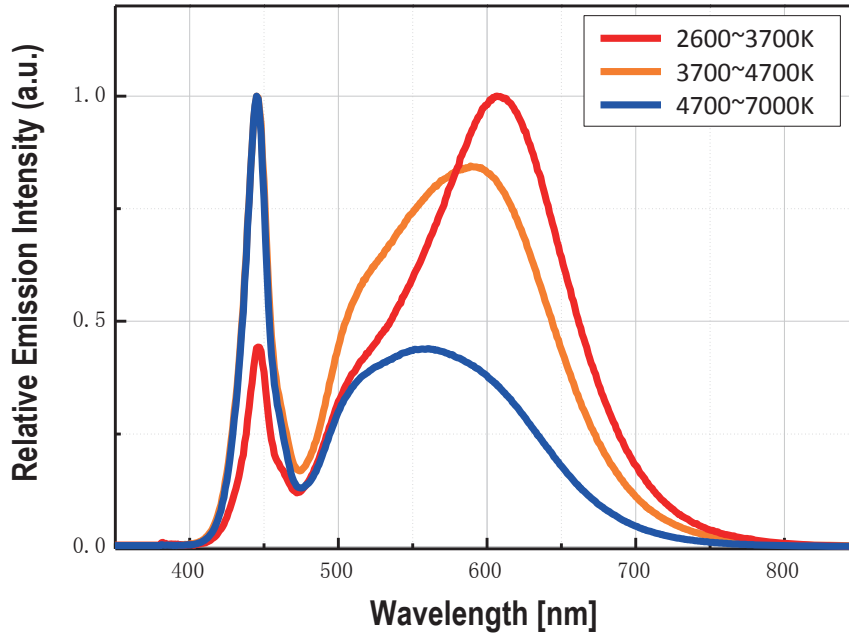
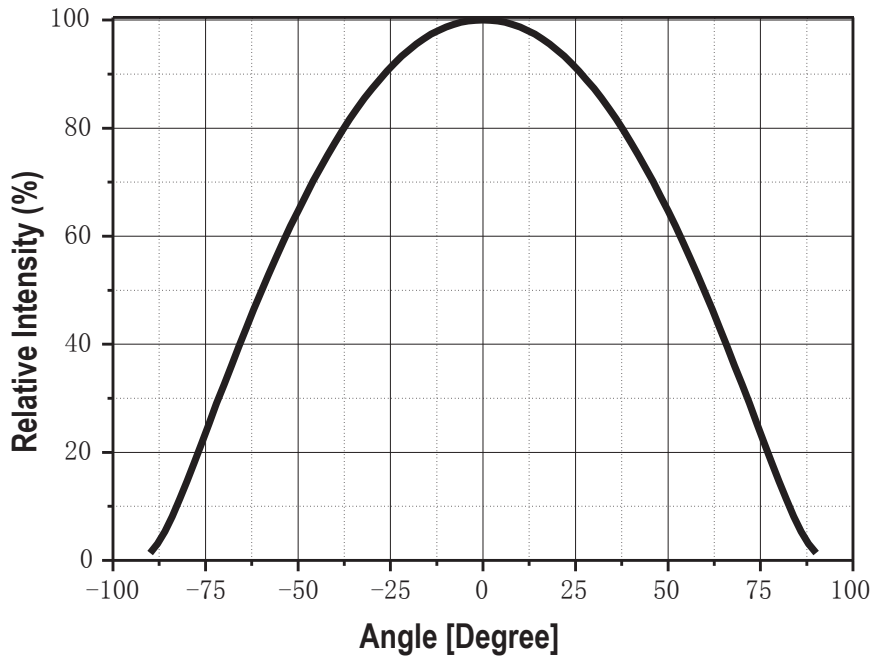
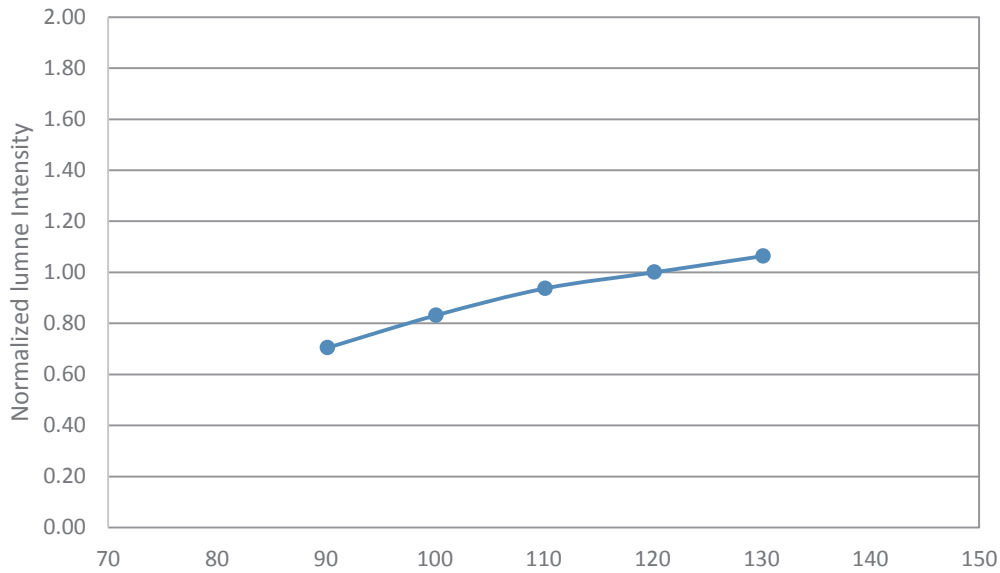


Fig 2. Radiant Pattern, $T_j = 25^\circ\text{C}$

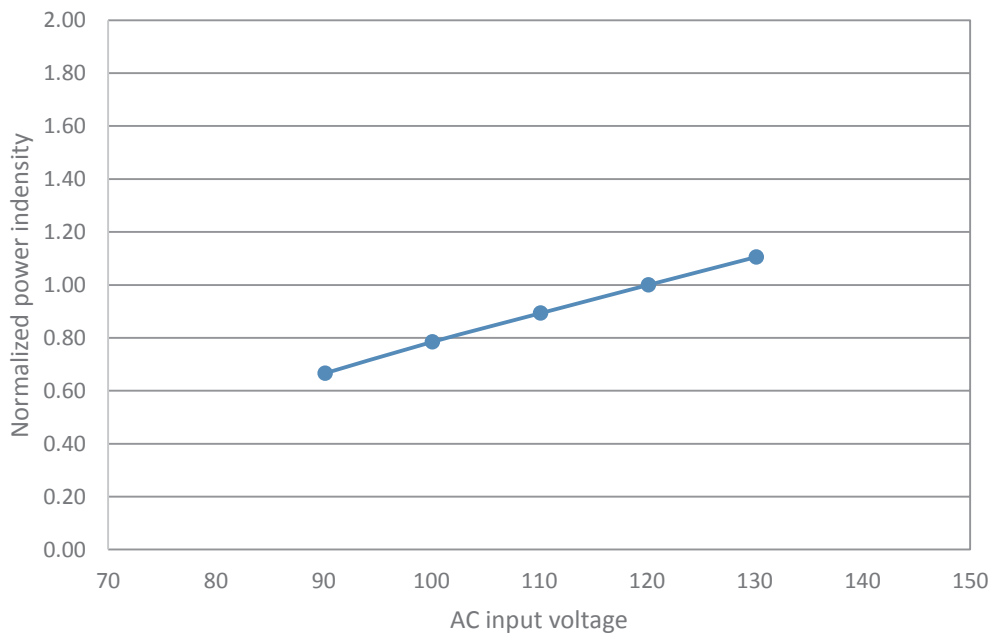




■ **Relative luminous vs. Input voltage (Ta=25°C)**



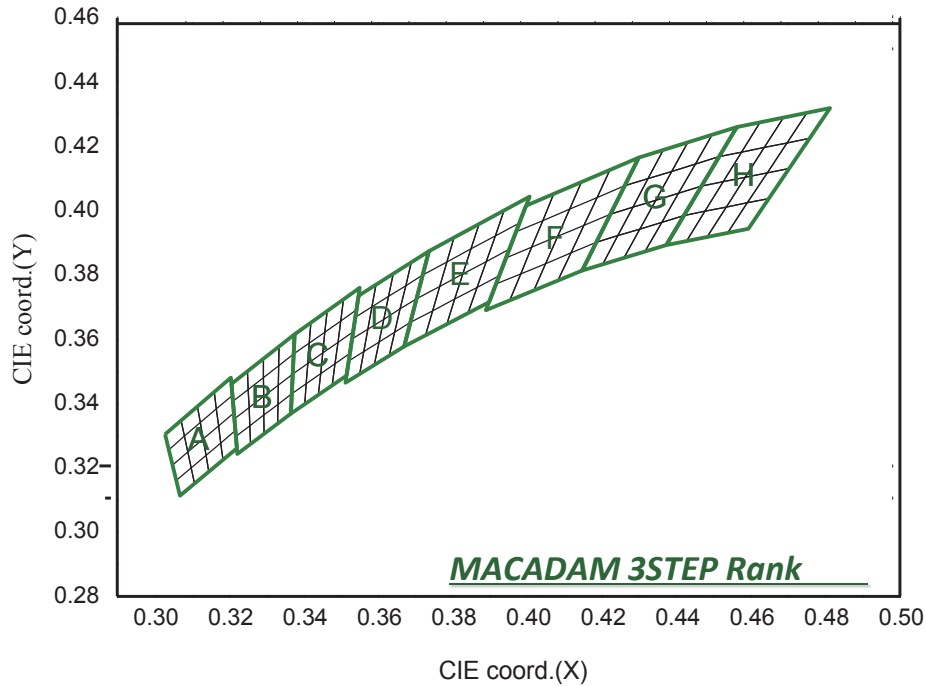
■ **Relative power distribution vs. Input voltage (Ta=25°C)**



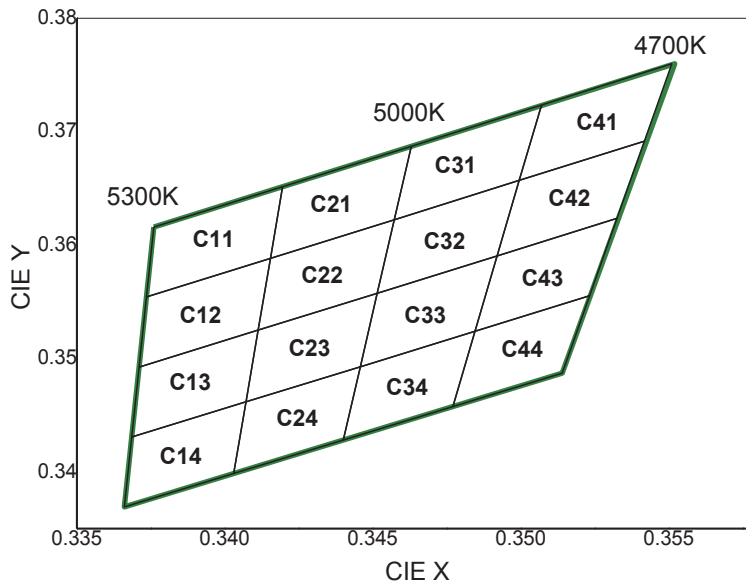


Color Bin Structure

CIE Chromaticity Diagram $T_j=25^\circ\text{C}$, $I_F=40\text{mA}$

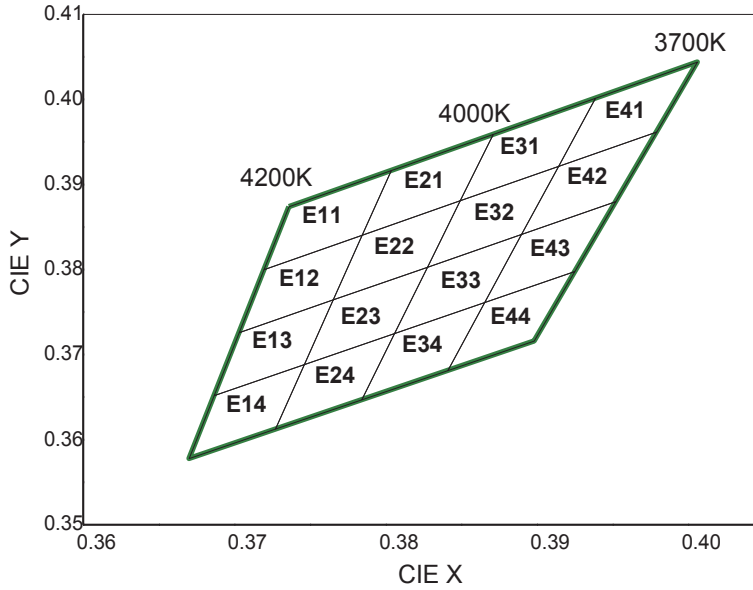


CIE Chromaticity Diagram (Cool white), $T_j=25^\circ\text{C}$, $I_F=40\text{mA}$

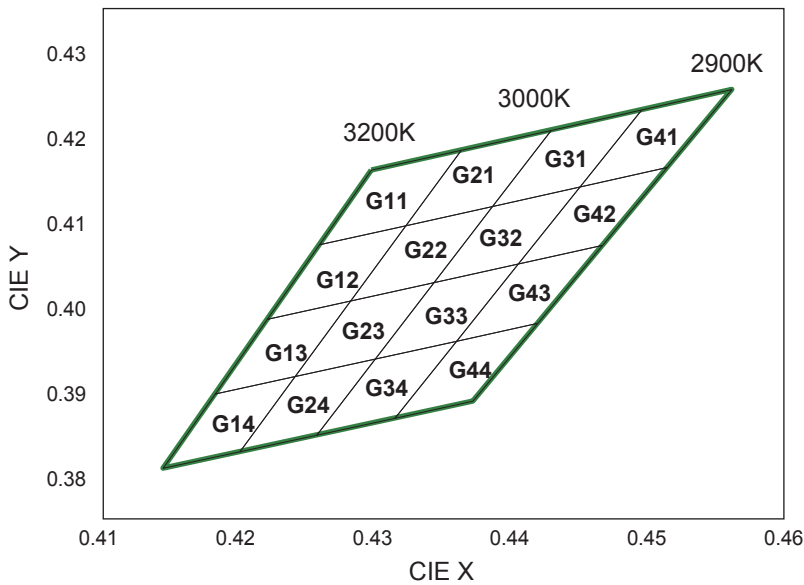




CIE Chromaticity Diagram (Neutral white), T_j=25 °C, I_F=40mA

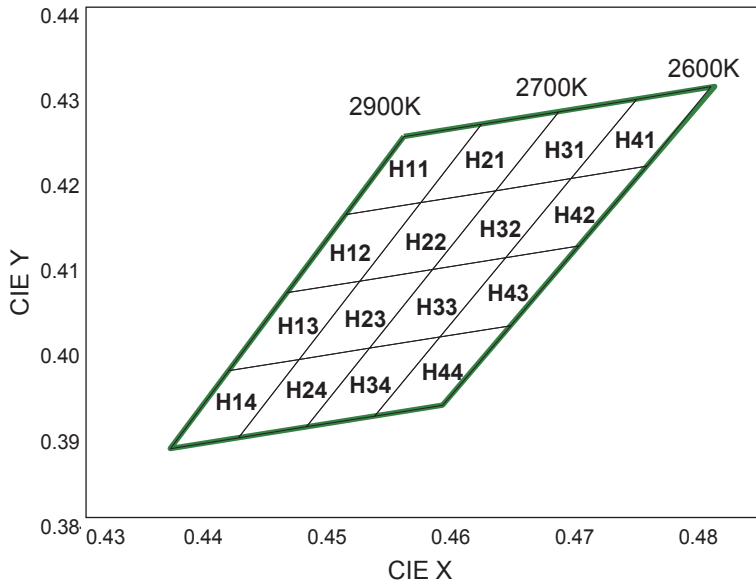


CIE Chromaticity Diagram (Warm white), T_j=25 °C, I_F=40mA

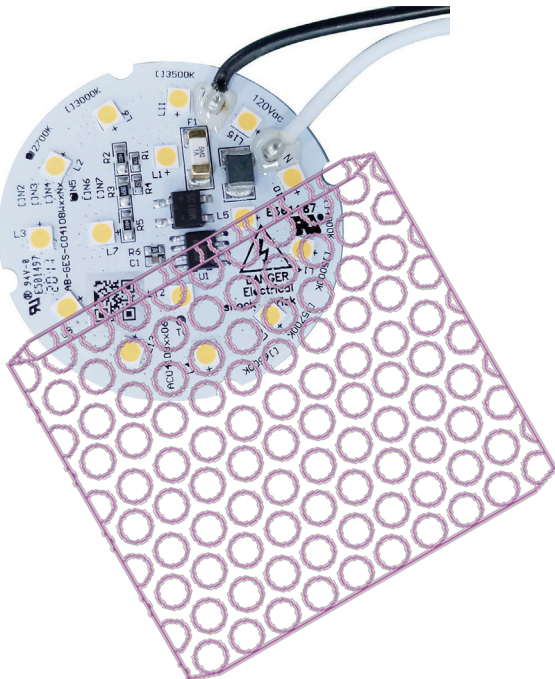




CIE Chromaticity Diagram (Warm white), Tj=25°C



Packing



1 Box = 100PCS (about 2 Kgs)
Box size: 375 x 150 x 160mm

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