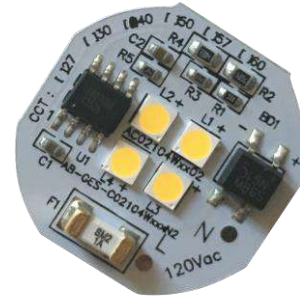


AB-GES-C02104WxxNN2

Features & Applications

Features:

- 4W 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

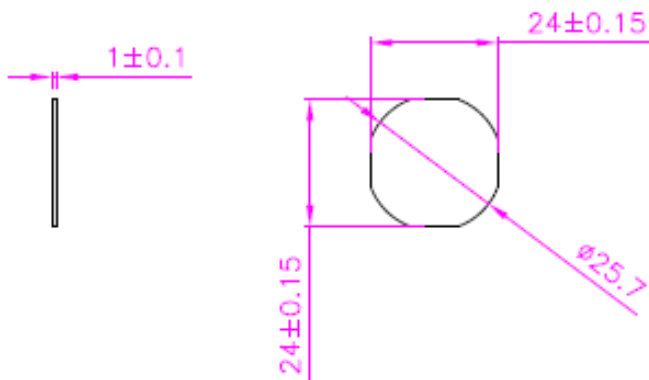
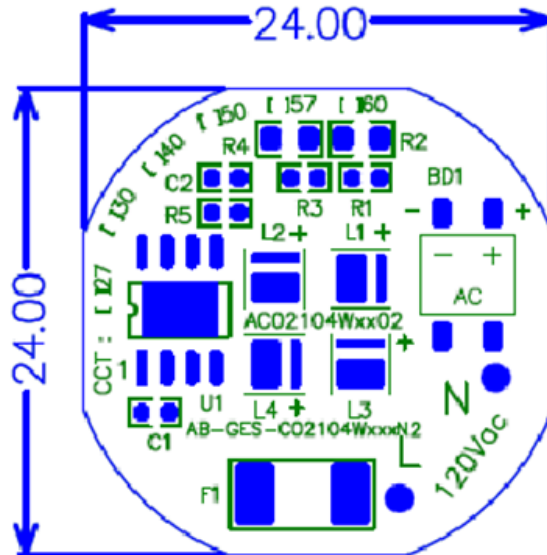


Applications:

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



Outline Dimensions



Units: mm

Notes:

1. Wire connection is used
2. Thickness of PCB is 1.0mm, there's no 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 75°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	V _{ac}
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 75°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	V _{ac}
Input Frequency	Freq.	50/60		Hz
Power Factor	PF	0.9	0.95	-

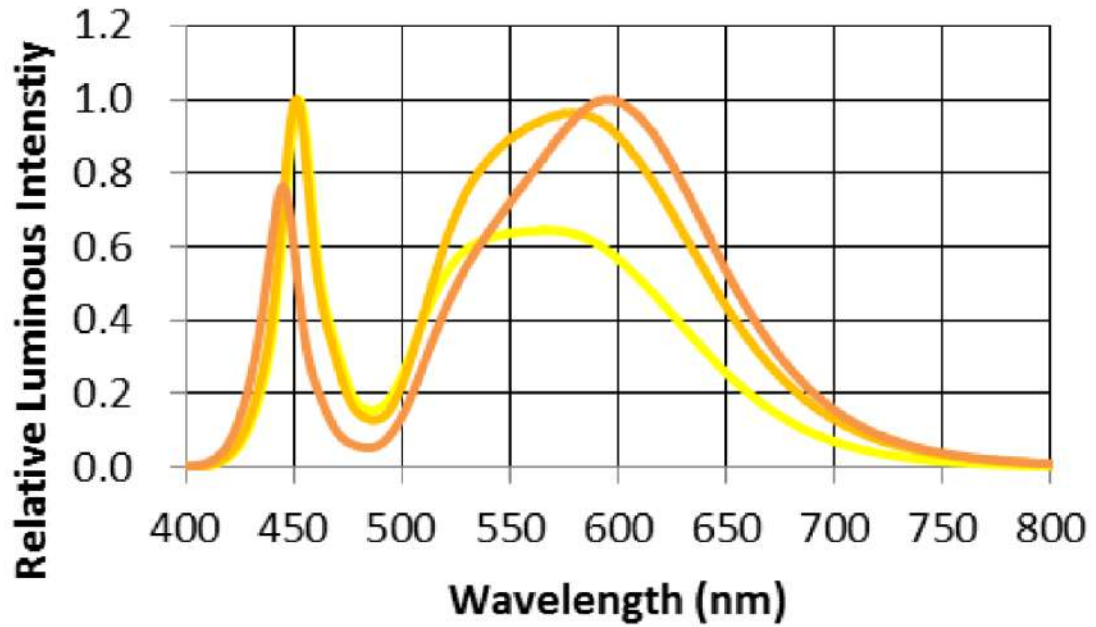
* This surge protection is without the protection device circuit.

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

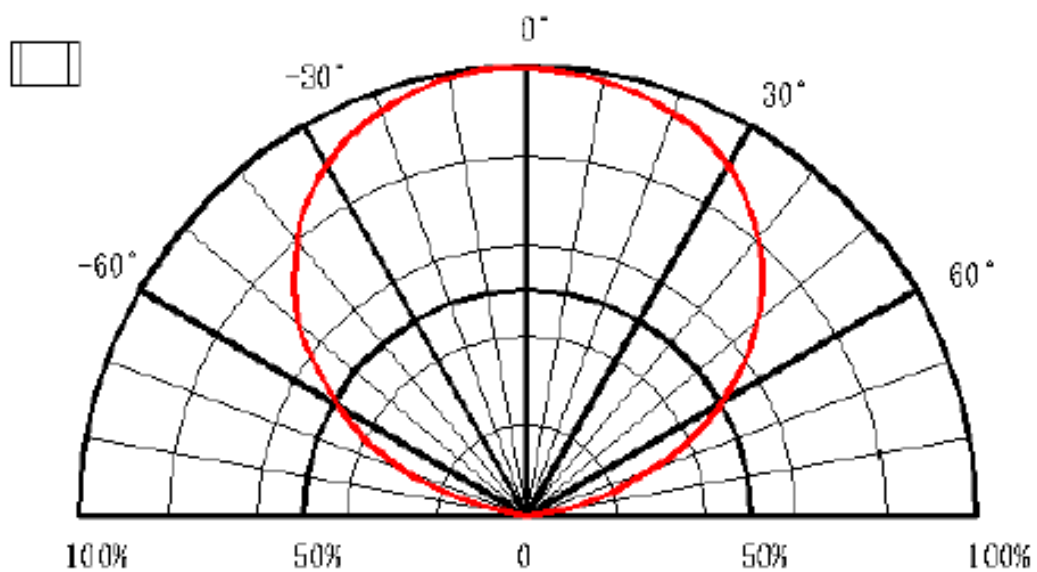
Model name	AC Power			Color Temp	Luminous Flux(lm)		CRI
	Min	Typ.	Max	(K)	Min	Typ	
AB-GES-C02104W30NN2	3.5	4.0	4.5	3000	270	300	>80
AB-GES-C02104W40NN2	3.5	4.0	4.5	4000	300	340	>80
AB-GES-C02104W50NN2	3.5	4.0	4.5	5000	300	340	>80

- 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 ;
- Calibration error CCT 3000K ±175K ; 4000K ±300K ; 6500K ±400K

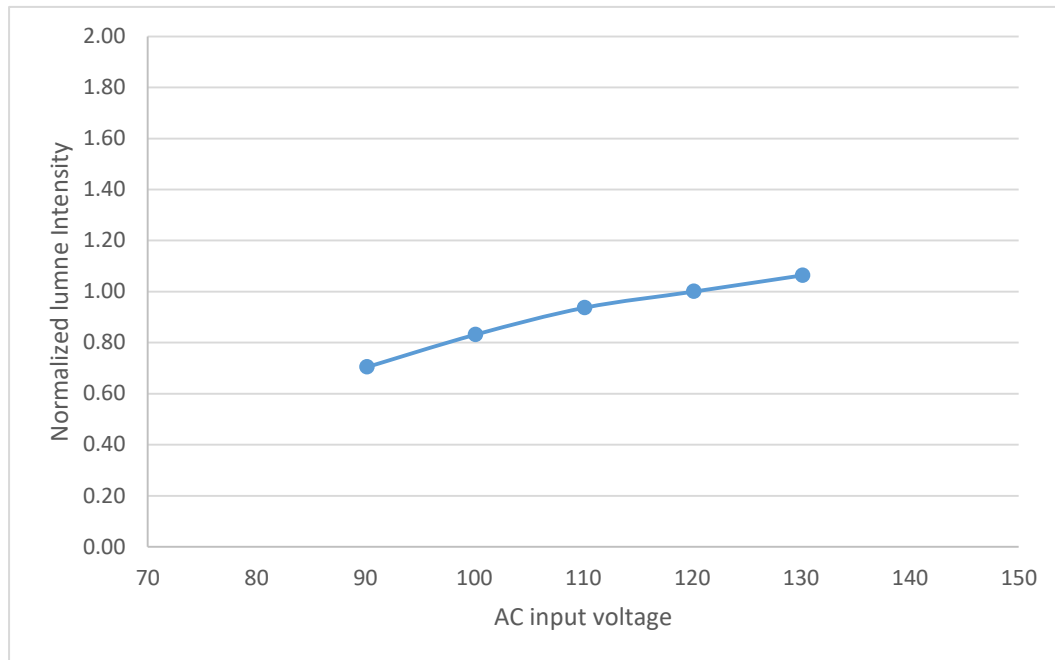
■ **Relative Spectrum of Emission (Ta=25°C)**



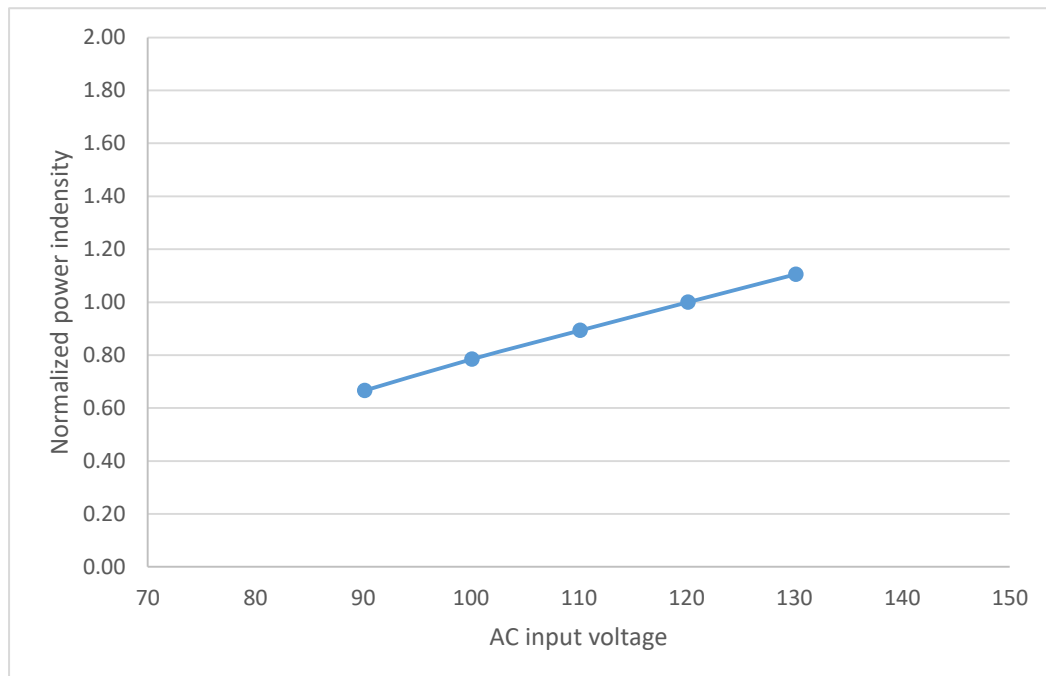
■ **Radiation Pattern**



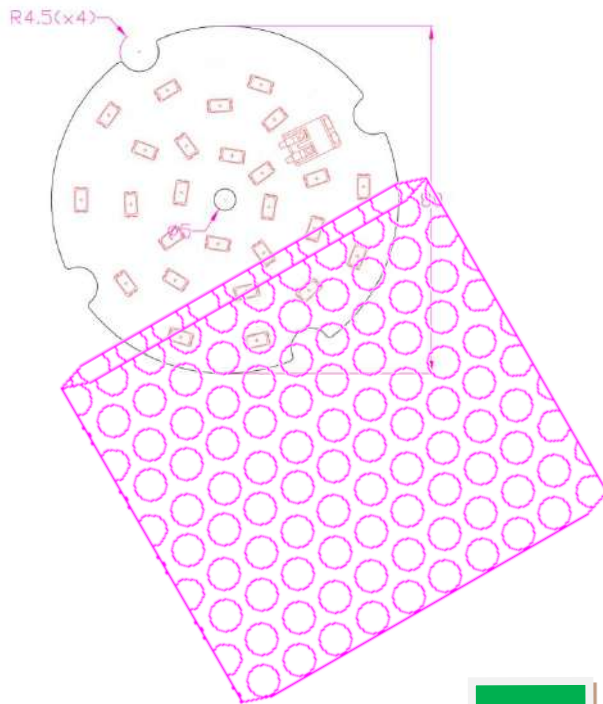
■ **Relative luminous vs. Input voltage (Ta=25°C)**



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



Packing



1 Box = 4K PCS (about 1.7 Kgs)

Box size (391mm x 226mm x 140mm) =TBD

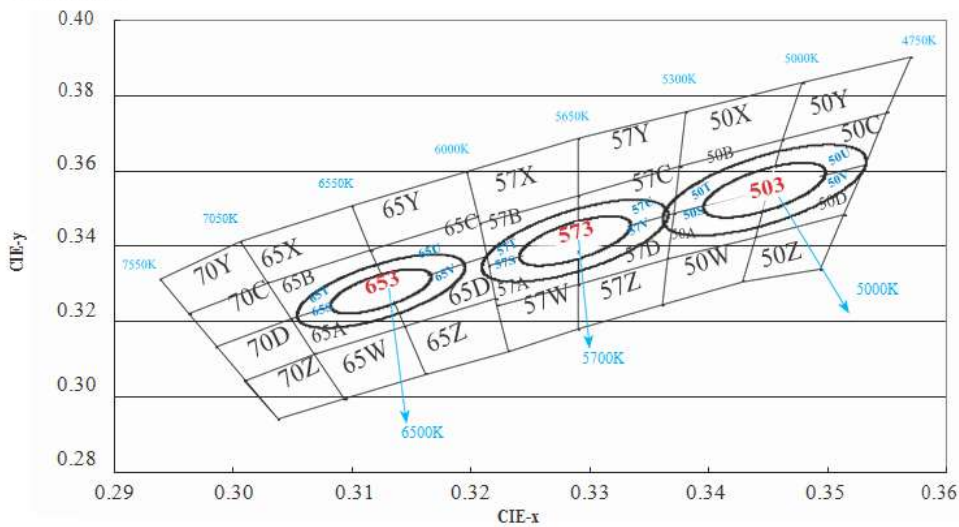
Color Bin Code

Color region stays within Macadam "3-Step" ellipse from the chromaticity center. The chromaticity center refers to ANSI C78.377:2008.

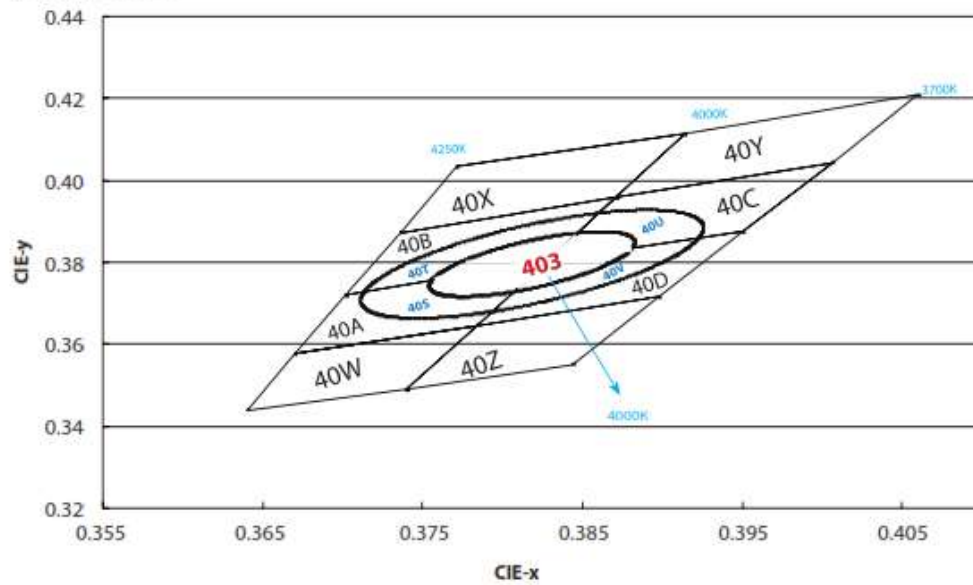
Please refer to ANSI C78.377 for the chromaticity center.

CCT	Steps	C _x	C _y	a	b	theta
2700K	3	0.4578	0.4101	0.00810	0.00420	53.70
3000K	3	0.4338	0.4030	0.00834	0.00408	53.22
3500K	3	0.4073	0.3917	0.00927	0.00414	54.00
4000K	3	0.3818	0.3797	0.00939	0.00402	53.72
5000K	3	0.3447	0.3553	0.00822	0.00354	59.62
5700K	3	0.3287	0.3417	0.00746	0.00320	59.09
6500K	3	0.3123	0.3282	0.00669	0.00285	58.57

Cool White



Neutral White



Warm White

