

AB-GES-C02204WxxNN2

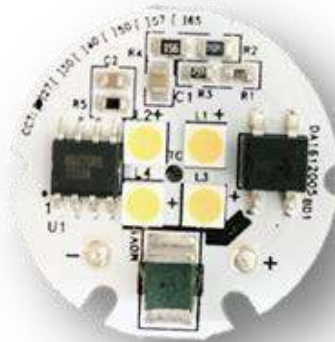
Features & Applications

Features:

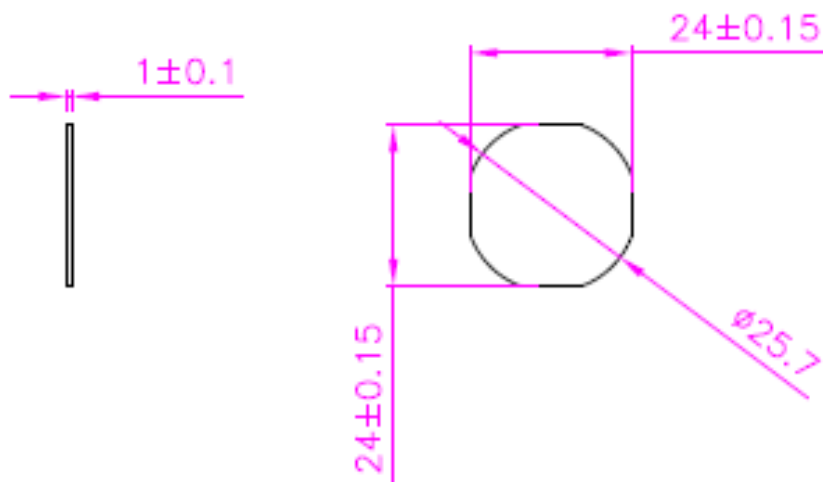
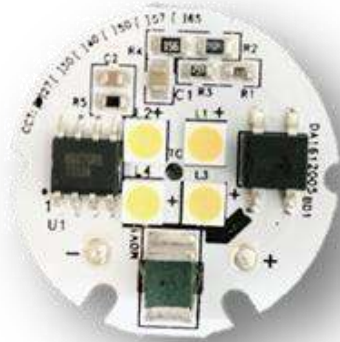
- 4W circular AC LED light engine
- SimpleDrive® - 230V AC drive technology
- 3030 Nichia LED
- Driver on Board structure
- Long life - No Electrolytic capacitors
- Easily to be integrated
- CE Compliance

Applications:

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



Outline Dimensions



Units: mm

Notes:

1. BJB's Terminal block is used
2. Thickness of PCB is 1.0mm, and there's 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}	230	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. 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}	210	250	Vac
Input Frequency	Freq.	50/60		Hz
Power Factor	PF	0.9	0.95	-
THDi			30%	

* This surge protection is without the protection device circuit.

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

Model name	AC Power			Color Temp (K)	Luminous Flux(lm)		CRI
	Min	Typ.	Max		Min	Typ	
AB-GES-C02204W27NN2	3.5	4.0	4.5	2700	275	313	>80
AB-GES-C02204W30NN2	3.5	4.0	4.5	3000	280	320	>80
AB-GES-C02204W40NN2	3.5	4.0	4.5	4000	300	360	>80
AB-GES-C02204W50NN2	3.5	4.0	4.5	5000	300	362	>80

Correlated color Temperature is derived from the CIE 1931 Chromaticity diagram.

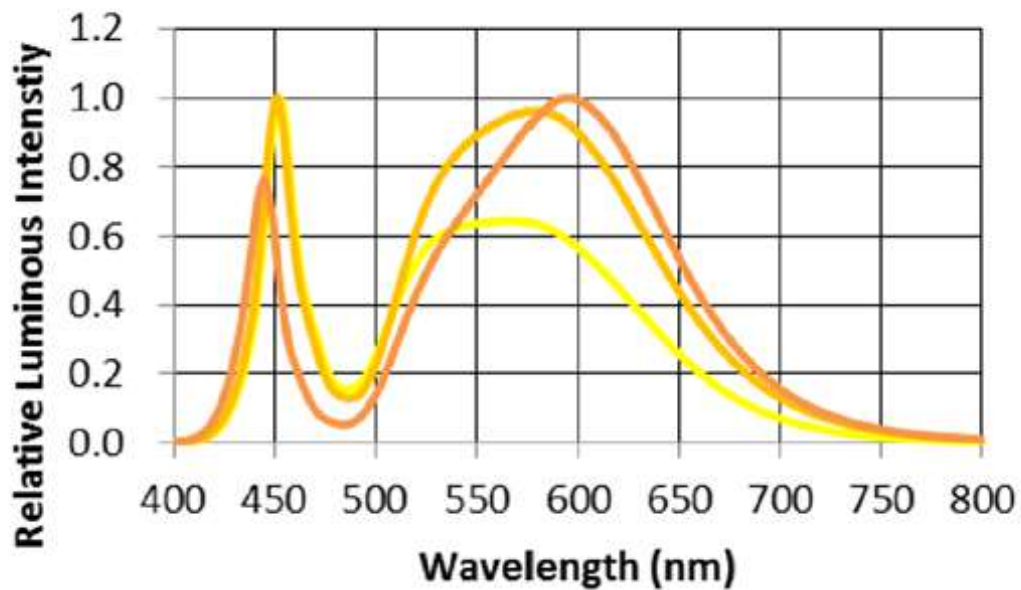
The luminous flux tolerance is ± 10%.

This CRI value tolerance is ± 2.

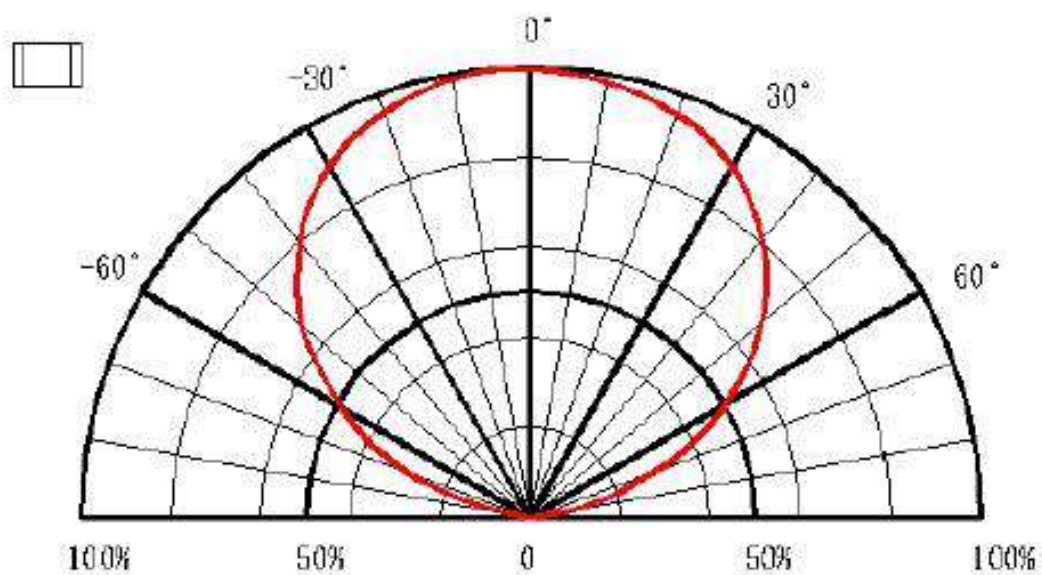
Calibration accuracy of CIE_x and CIE_y : 0.007 ;

Calibration error CCT 2700K±175K ; 3000K±175K ; 4000K±300K ; 5000K±400K

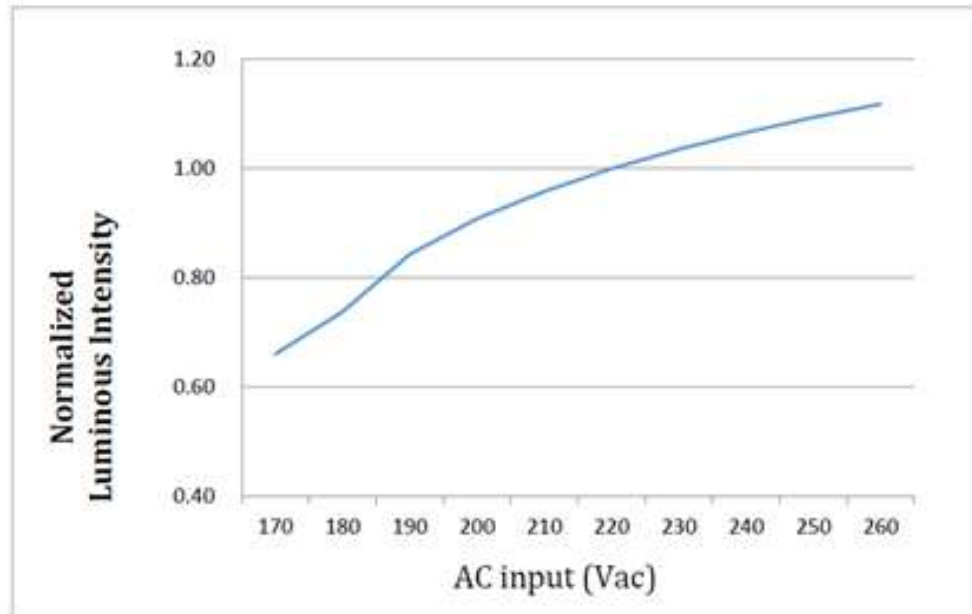
■ Relative Spectrum of Emission (Ta=25°C)



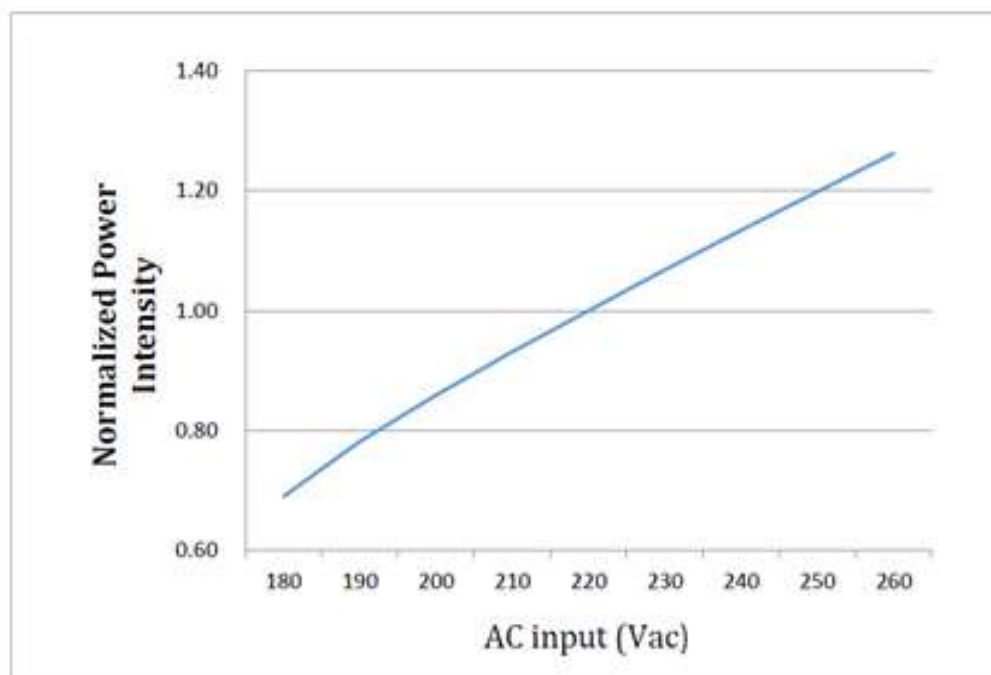
■ Radiation Pattern



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



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

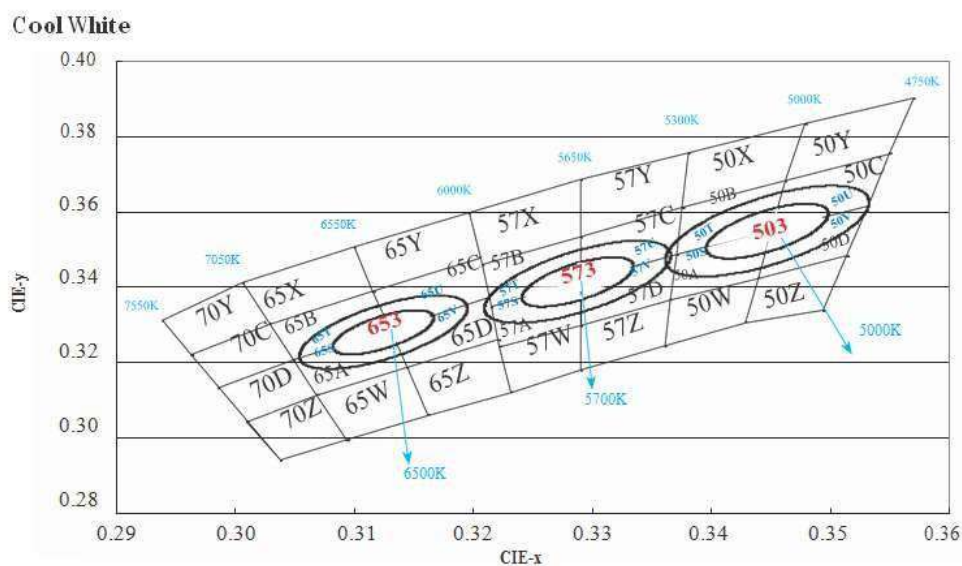


Color Bin Code

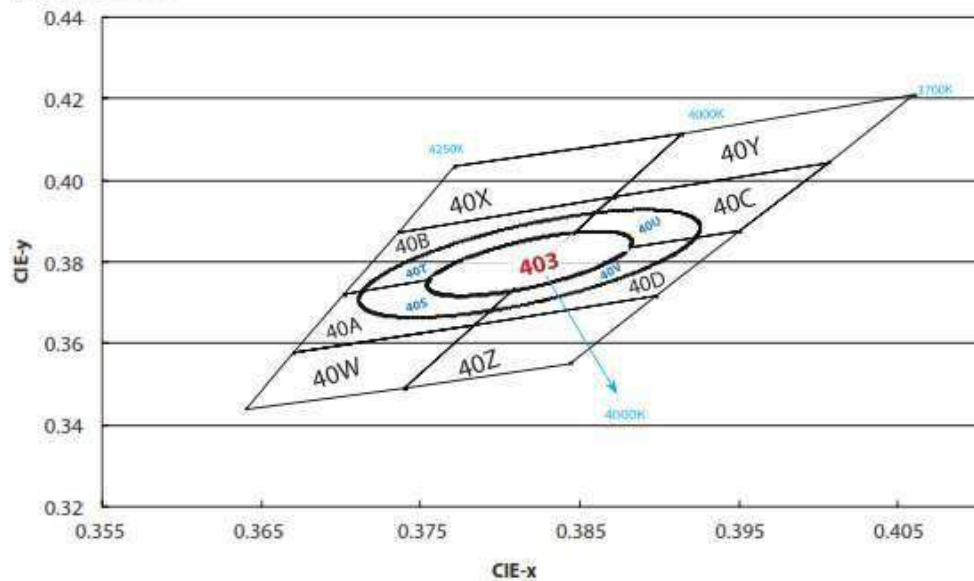
Color region stays within Macadam "3-Step" ellipse from the chromaticity center. The chromaticity center refers to ANSI C78.377:2008.

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



Neutral White



Warm White

