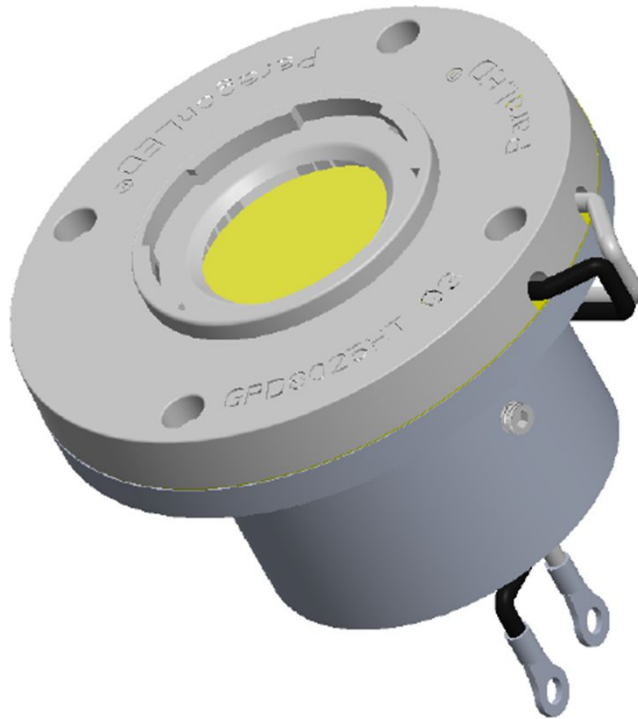


ParaLED AC12V Waterproof LED module Datasheet



ParaLED®

Introduction :

Compared with DC LED modules, ParagonLED AC (Driver on Board) ParaLED® Series module does not need an external driver so that it is able to enhance lifespan and shows compact dimension.

Description :

- 12V AC
- 12W
- 125 LM/W
- 5000K CCT
- 70 CRI
- Customized available
- IP67

Feature and Benefits:

- Driver on Board
- Industry grade solid state components
- Lifespan>50K hrs TC<85°C
- Lowest thermal resistance



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General Information

Ordering Code Format

C D AV - 176 - 080 25 - 012V - 5000 - WP1
1 2 3 4 5 6 7 8 9

- 1 . Model type
- 2 . Chip efficacy
- 3 . Driving condition (AC)
- 4 . Numbers of chips
- 5 . Outline dimension
- 6 . Dimension of emission area
- 7 . Forward voltage (AC)
- 8 . Correlated color temperature (K)
- 9 . Water Proof



Characteristics

Parameter	Symbol	Value	Unit
Forward Voltage	V _F	12	VAC
Forward Voltage range	V _F	±10%	VAC
Operation Frequency	F _{op}	60	Hz
Power Dissipation	P _D	12±10%	W
Operating Temperature	T _{op}	-40 ~ +85	°C
Storage Temperature	T _{st}	-40 ~ +85	°C

ANSI CCT	step*	C _x	C _y
2700K	3	0.458	0.410
3000K	3	0.434	0.403
3500K	3	0.407	0.392
4000K	3	0.382	0.380
4500k	3	0.361	0.366
5000K	3	0.345	0.355
5700k	5	0.329	0.342
6500K	5	0.312	0.328

*Color region stay within MacAdam ellipse from the chromaticity center.

IEC CCT	step*	C _x	C _y
2700K	3	0.463	0.420
3000K	3	0.440	0.403
3500K	3	0.409	0.394
4000K	3	0.380	0.380
5000K	3	0.346	0.359
6500K	5	0.313	0.337

* Color region stay within MacAdam ellipse from the chromaticity center.

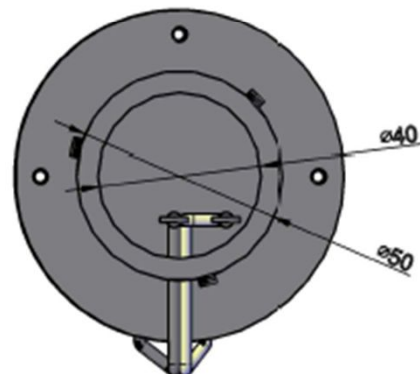
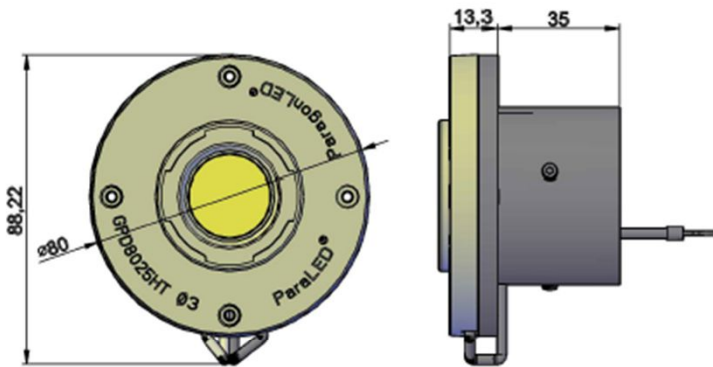
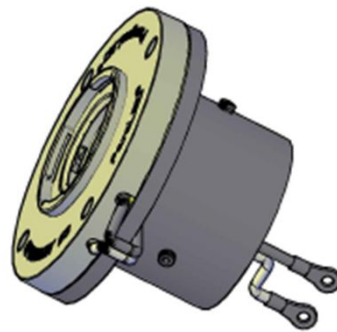
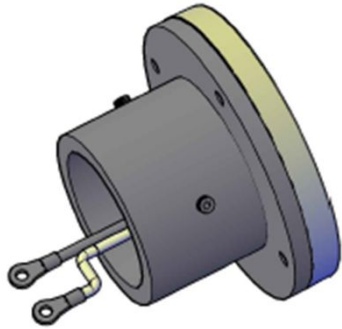


Luminous Flux Characteristic

Product No	Forward Voltage	Watt	lm/W	Lumen MIN.	Lumen AVE.	Color rendering	Color Temperature
CDAV-176-08025-012V-5000-WP1	12V	12	125	1350	1500	70	5000



Mechanical Dimensions

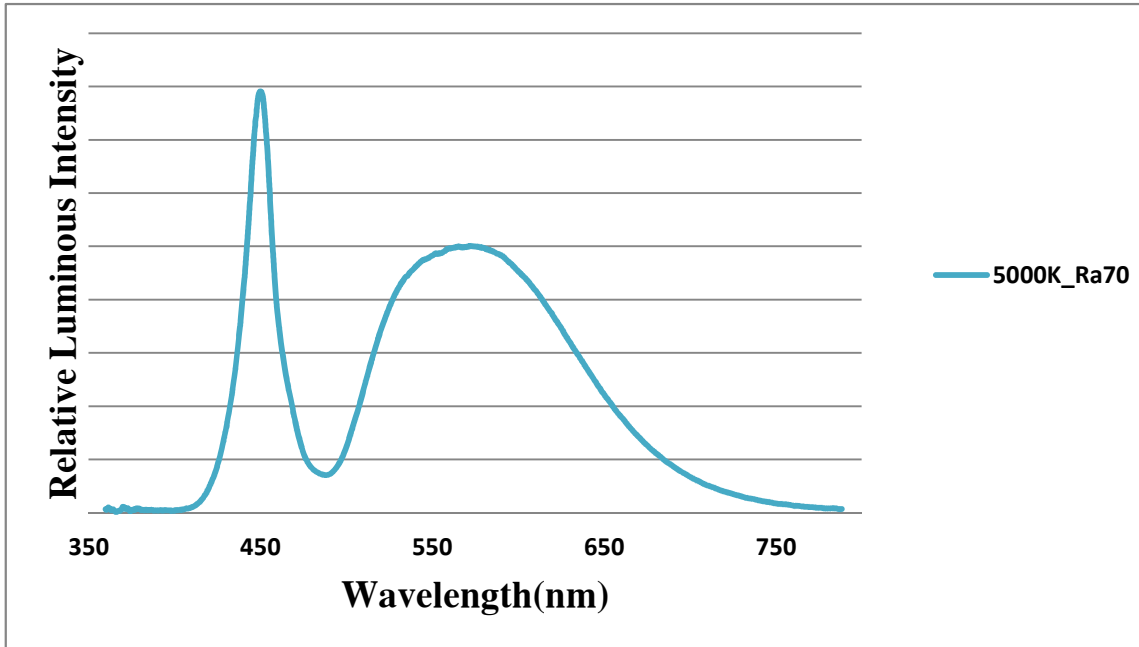


1. All dimensions are measured in mm.
2. Tolerance : $\pm 0.2\text{mm}$

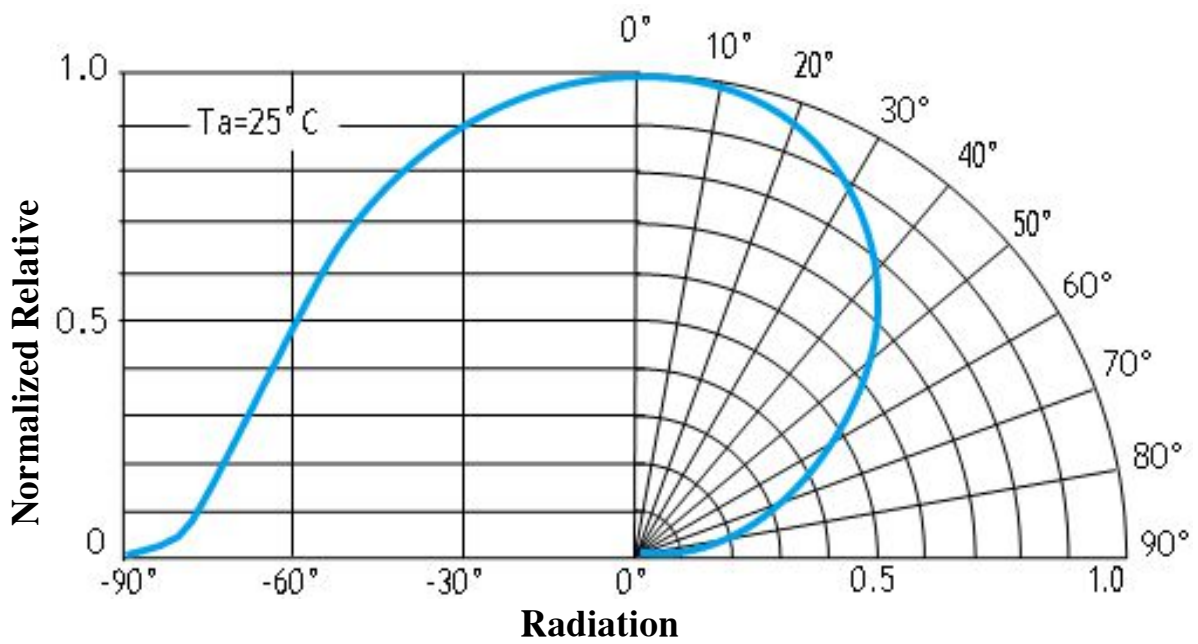


Characteristic curve

Color Spectrum

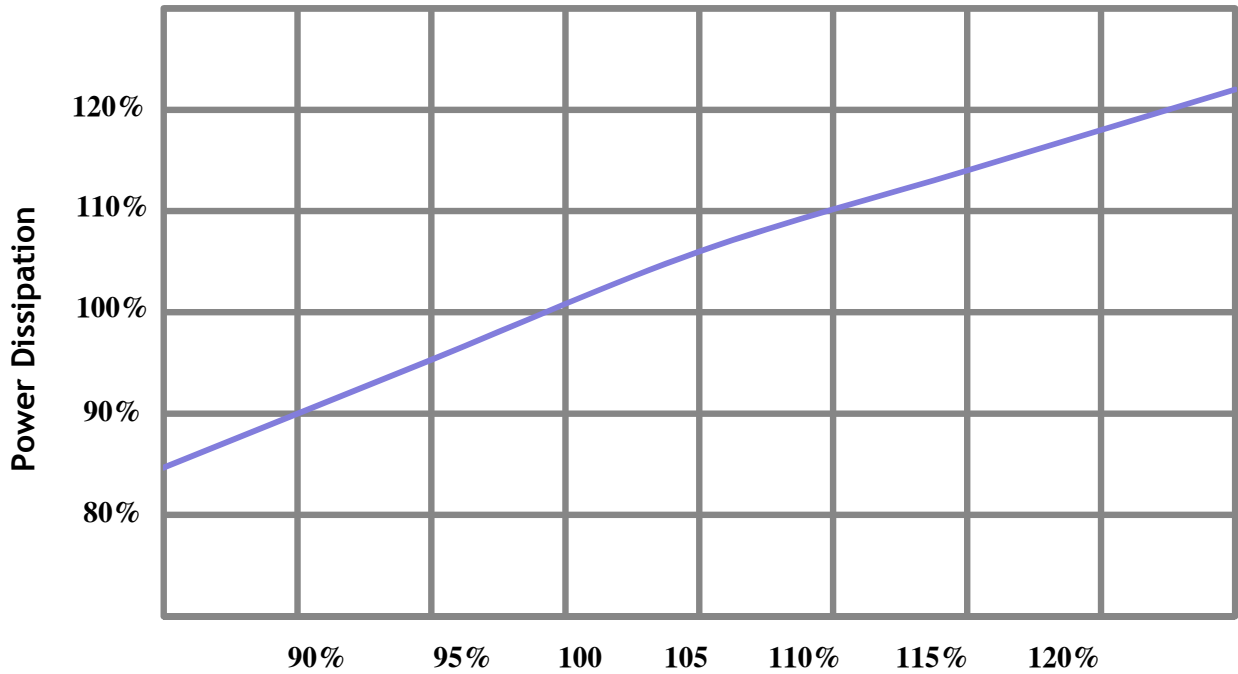


Beam Pattern

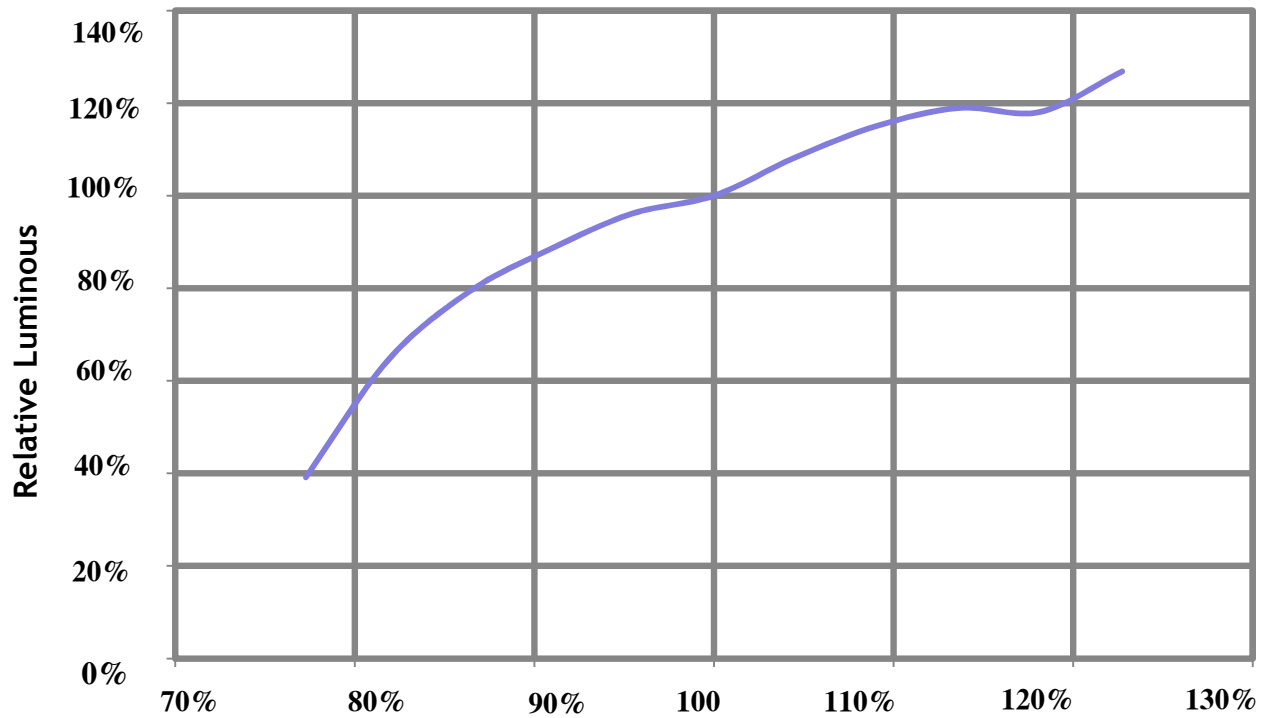


Characteristic curve

Power Dissipation vs. Voltage



Relative Luminous Flux vs. Voltage



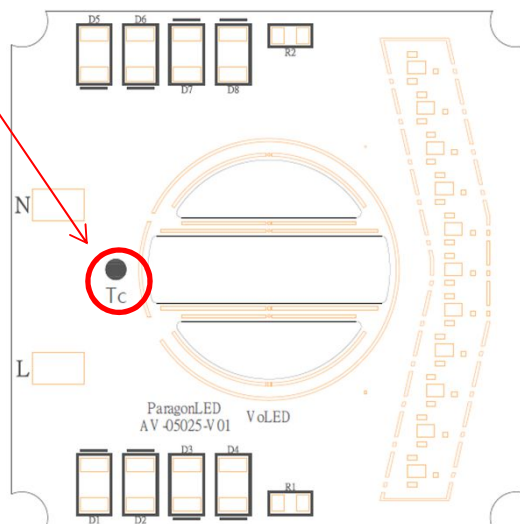
Reliability

No.	Test Item	Test Condition	Remark
1	Temperature Cycle	-40°C~100°C (30 mins / 30 mins)	100 Cycle
2	Low-Temperature Storage	Ta= -40°C	1000 hrs
3	High-Temperature Storage	Ta=85°C	1000 hrs
4	High Temperature High Humidity Life test	Ta=85°C, RH=85%	500 hrs
5	High Temperature Operation Life test	Tc = 55°C / 70°C / 85°C	6000 hrs
6	ON/OFF Test	3 sec ON, 3 sec OFF	2Million times

Ta : Temperature Ambient

RH : Relative Humidity

TC Point

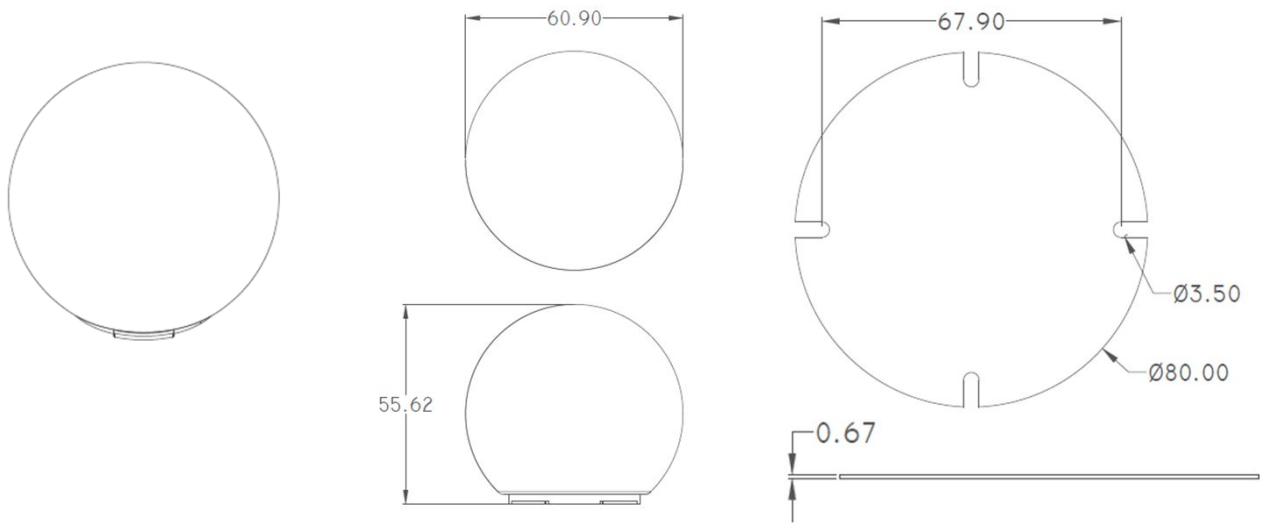


Accessory

Accessories

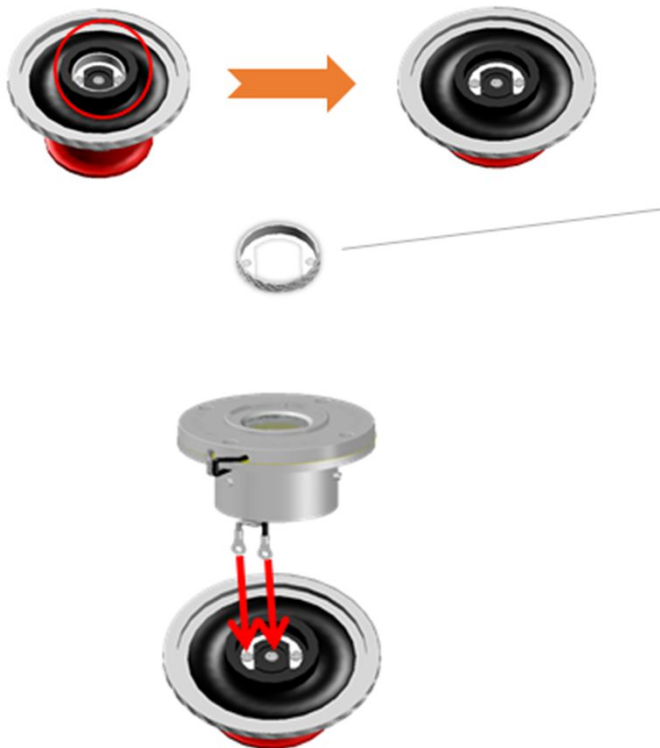
Buld diffuser -270°

Dimensions (ØxH): 60.90x55.62mm



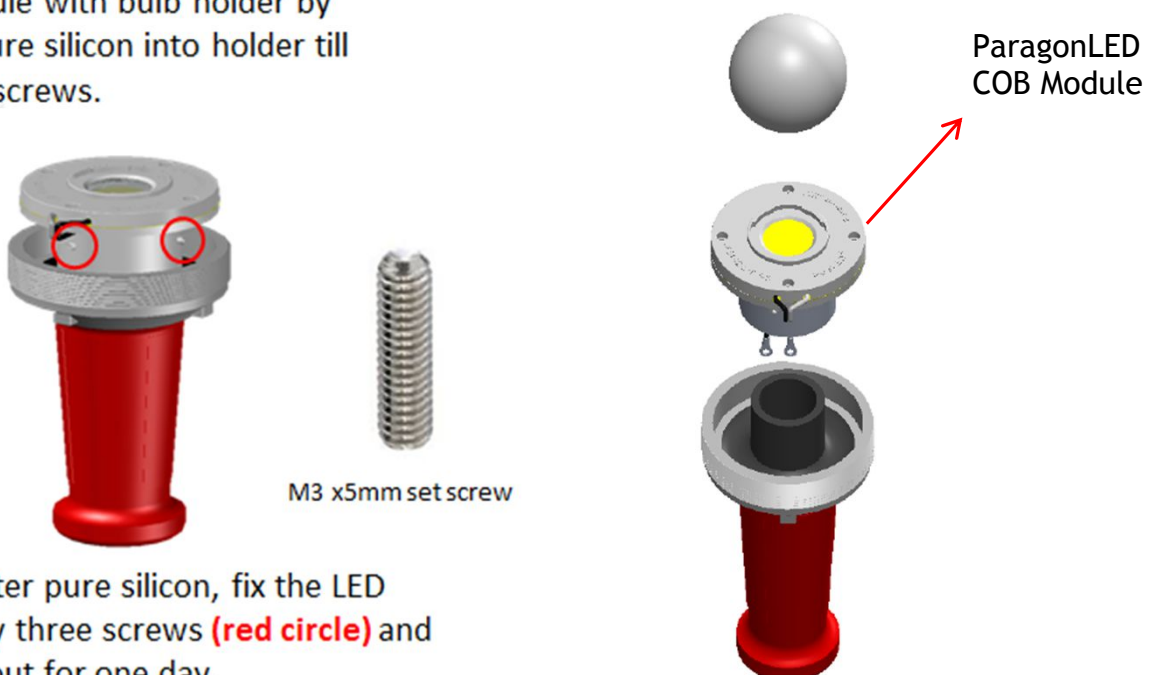
Assembly Notes

Step 1. To remove the connector from inside of bulb holder (**red circle**).



A connector from inside of holder removing.

Step 2. To connect the wire from LED module with bulb holder by **Screw**, pure silicon into holder till cover all screws.



Step 3. After pure silicon, fix the LED module by three screws (**red circle**) and keep dry out for one day.



About ParagonLED

Established in 2008, Paragon Semiconductor Lighting Technology Co., Ltd. (ParagonLED®) has been devoted to be a comprehensive supplier of COB LED products. Our product lines include 1.AC LED module 2.Thermal management integration 3.Optical integration 4.AI integration 5.Constant power module series. We have been addressed ourselves to provide good quality products to satisfy clients' needs. Meanwhile we are not in a standstill situation, but keep pursuing progression and innovation.

ParagonLED® pride ourselves on our products, so we have overall arrangement in patent; the total applied patents have been reached 135 items until now. Our manufacturing techniques are also patented by many countries, and we still keep moving forward. Meanwhile we supply good quality products with good performance on CRI and efficiency (lm/w), and strictly controlled CCT.

In ParagonLED®, we do not only supply products, but also provide technical recommendations. What's more, we are more than willing to solve problems with clients together. Hence ParagonLED® and our clients can work together to supply reliable and qualified products to end users!
Devote ourselves to bring more added-value to clients

- →Direct Marketing + Localized operation

We have offices in Taiwan, in DongGuan, China, so that we can deal with enquiries directly. Also with agents in many different countries, we and they are able to take care of clients on local basis.

- → Fast delivery

With the manufacturing site located in New Taipei City Linkou, Taiwan, we have different yet convenient transportation ways to reach the world.

- Customized service

Through professional and experienced research and development techniques, we provide customized products that can be tailored to different requirements.

