

SADC SERIES



Testing



Pending



Testing

SADC-L117

Specifications are subject to change without notice.

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SADC Series



SADC-L117

The core of an air sterilization module made up from foundation that focuses light and a dust-proof housing that was specially designed according to the characteristics of high-power ultraviolet LED.

From sterilization effectiveness point, the module can replace the traditional UV lamps. It has the advantages of occupying only small volumes, high sterilizing efficiency, and can effectively guaranteeing the indoor environment sanitation of the user.

● Product Features:

1. Sterilization rate reaches above 70% after turning on module for 1 hour^① ;
2. Operating under pulse mode can extend life cycle to above 10,000 hours^②
3. Extremely low wind resistance, greatly reducing the noise of air flow
4. Extremely low standby operating current : < 0.1 uA
5. Lead-free, environmental, and RoHS compatible

① Laboratory testing environment (30m³) and stand slant culturing of E.coli [NMKL official procedure(147.1993)], testing results under the condition of fan ventilation 300m³/H

② IESNA (Illuminating Engineering Society of North America) LM70 experimental method, 70% Lumens depreciation evaluation standard, pulse percentage accounting up to 10% of standard

● **Product Specification:**

1. Module Spec:

Spec		Symbol	SADC-L117-NNN	SADC-L117-DNN
Wavelength		nm	265-280	
Radiance	Typ.	mW	18	
Vin Voltage		V	24	
Power	Typ.	W	1.44	
Consumption①	Max		1.6	
Connector Type			Pitch 2.5 2Pin	Pitch2.5 2Pin
Signal Detection			-	LED open circuit
Life Cycle		hrs	<ul style="list-style-type: none"> ● Operating under pulse mode can extend life cycle to above 10,000 hours② ● Operating under continuous lighting mode for 5,000 hours or more. <p>**It is recommended to set the module controller to work in pulse. Turn-on the sterilization mode according to the actual needs, and turn off the module in time after the sterilization is achieved, to prolong its life.</p>	

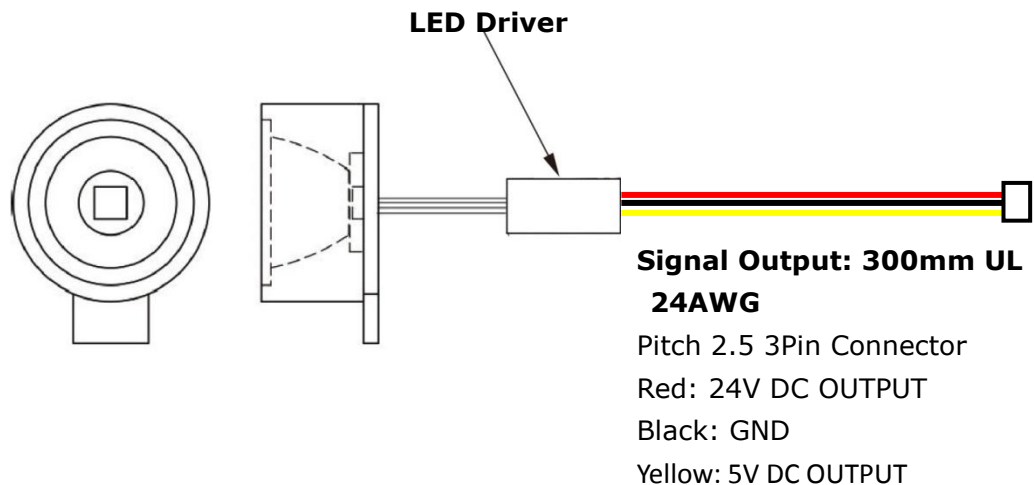


Fig. 1 Wire Schematic

2. Module dimension: $\varnothing 21\text{mm} \times 12.6\text{mm}$

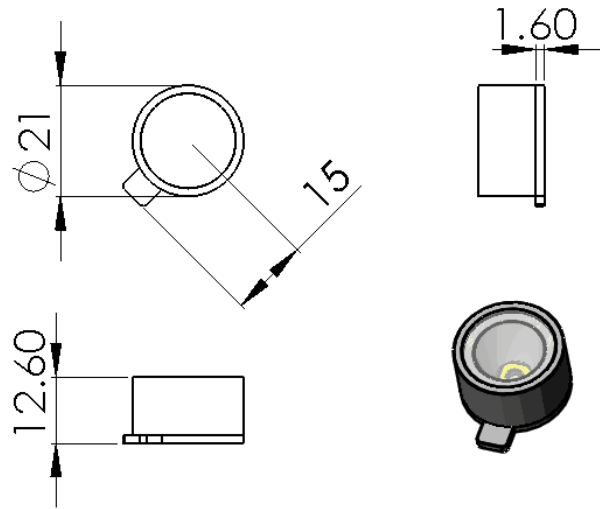


Fig. 2 Module Dimensions

- 3. Material: Housing – High purity aluminum alloy Glass – High purity quartz glass
- 4. Module SADC-Lxxx-DNN with warning function, provide instant feedback of High (5V) module working status

I. LED Open Circuiting

Note: The acceptable performance measurement parameters of the table are: irradiance (P0) 10%, forward voltage drop $\pm 0.15\text{V}$, peak wavelength $\pm 3\text{ nm}$

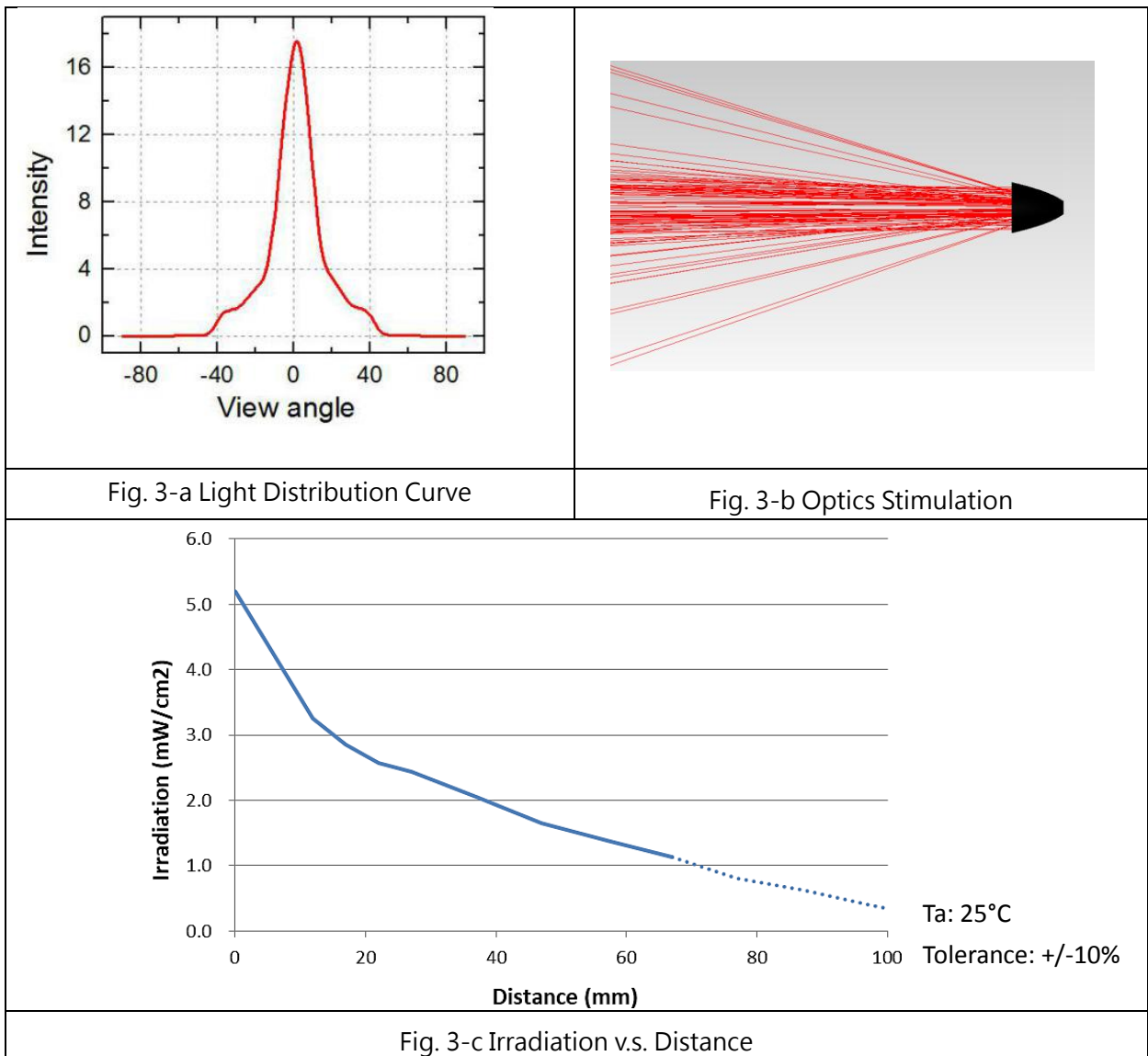
- ③ Power capacity above 5W
- ④ IESNA (Illuminating Engineering Society of North America) LM80 experimental method, 70% Lumens depreciation evaluation standard

● **Installation Instructions:**

This part is designed as a small module with a maximum exterior size of 21mm, which is easy to fit inside air conditioner and purifier type of appliances. The main part of the module has a spare screw hole available for bolting the module inside the appliances.

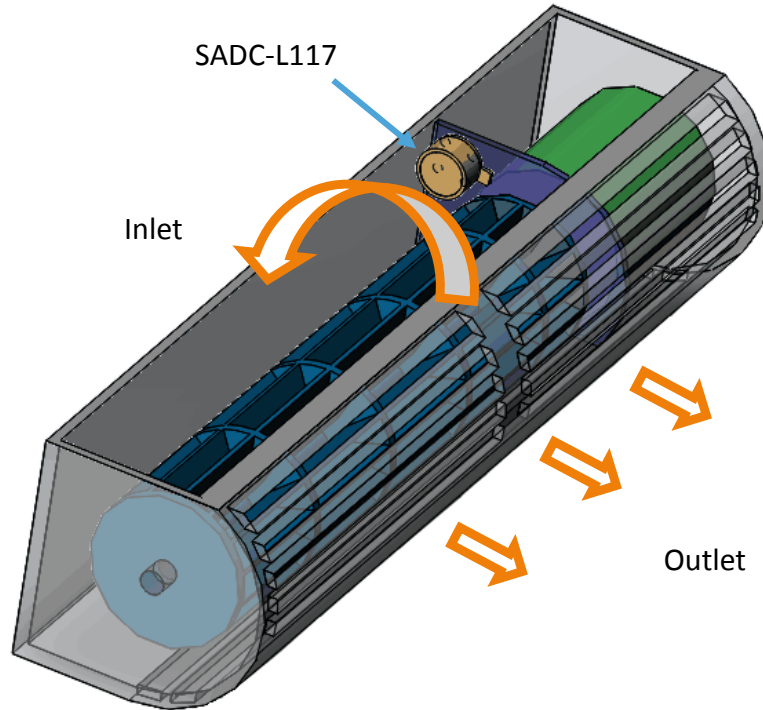
This sterilization module focuses ultraviolet light (the view angle is about 15° as shown in Fig.3, and UV radiation outside the 15° view angle is <5%). It is best installed in the narrow interior spaces of air purifiers as light will not be easily blocked or absorbed by the appliance, boosting up UV utilization rate.

After the module position is fixed, connect the power terminal to a 24V voltage power source according to the correct polarity (red positive black negative). It is recommended to add a control switch in the control system for timed and cyclic operation, extending the life of the module.



Suggest customers with air purifying applications to install the module as below:

- 1. Air conditioner, fresh air ventilation systems etc:



- 2. Air Purifiers etc:

