



# FCC Test Report

Report No: FCS202508308H01

Issued for

Applicant:	Guangzhou Yingwu E-commerce Co., Ltd.
Address:	No. 102, Unit One, Jinxing Road, Lantang Village, Donghuan Street, Panyu District, Guangzhou City
Product Name:	plant light
Brand Name:	PARAKEET
Model Name:	Zwdsg001
Series Model:	Zwdsg002
FCC ID:	
Test Standard:	FCC 47CFR §2.1093
Issued By: Flux Compliance Service Laboratory Add: Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan Tel: 769-27280901 Fax:769-27280901 <a href="http://www.FCS-lab.com">http://www.FCS-lab.com</a>	

**TEST RESULT CERTIFICATION**

Applicant's Name.....: Guangzhou Yingwu E-commerce Co., Ltd.  
Address .....: No. 102, Unit One, Jinxing Road, Lantang Village, Donghuan Street, Panyu District, Guangzhou City  
Manufacture's Name.....: Guangzhou Yingwu E-commerce Co., Ltd.  
Address .....: No. 102, Unit One, Jinxing Road, Lantang Village, Donghuan Street, Panyu District, Guangzhou City

**Product Description**

Product Name.....: plant light  
Brand Name .....: PARAKEET  
Model Name .....: Zwdsg001  
Series Model.....: Zwdsg002  
Test Standards.....: FCC 47CFR §2.1093  
447498 D04 Interim General RF Exposure Guidance v01

This device described above has been tested by Flux Compliance Service Laboratory, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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**Date of Test .....**

Date (s) of performance of tests : Aug. 13 2025 ~ Aug. 21 2025

Date of Issue.....: Aug. 21 2025

Test Result.....: Pass

Tested by

:

*Scott Shen*

(Scott Shen)

Reviewed by

:

*Duke Qian*

(Duke Qian)

Approved by

:

*Jack Wang*

(Jack Wang)





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### **Revision History**

Rev.	Issue Date	Contents
00	Aug. 21 2025	Initial Issue

## 1. GENERAL INFORMATION

### 1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	plant light	
Brand	PARAKEET	
Model Number	Zwdsg001	
Series Model(s)	Zwdsg002	
Model Difference	Only the controlled brightness is different	
Product Description	The EUT is plant light	
	Operation Frequency:	434.08 MHz
	Modulation Type:	OOK
	Antenna gain:	-0.58 dBi
	Antenna Designation:	PCB antennas
Power Supply	DC 3V from Button battery	
Battery	DC 3V from Button battery	
Hardware Version	V1.0	
Software Version	V1.0	



## 1.2 TEST FACTORY

Company Name:	Flux Compliance Service Laboratory		
Address:	Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan		
Telephone:	+86-769-27280901		
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FCC Test Firm Registration Number: 514908 Designation number: CN0127 A2LA accreditation number: 5545.01 ISED Number: 25801 CAB ID : CN0097			
<b>Organization</b>  FLUX COMPLIANCE SERVICE LABORATORY  Baohao Technology Building 1 No. 15 Gongye West Road Hi-Tech Industrial Park Songshan Lake Dongguan, Guangdong. 523808 PRC.  <b>ISED#: 25801</b> Contact: Andy Yue andy-yue@fcs-lab.com	<b>CAB identifier</b>  CN0097	<b>Scope / Recognition Date (yyyy-mm-dd)</b>  RSS-102(RFExp) (2020-01-09)  RSS-GEN (2020-01-09)  RSS-210 (2020-01-09) RSS-247 (2020-01-09)	<b>Expiration (yyyy-mm-dd)</b>  <b>RECOGNIZED UNTIL: 2023-12-31</b>  A2LA ISO/IEC 17025: 2017 Expires: 2023-12-31

## 2. FCC 47CFR §2.1093 REQUIREMENT

### 2.1 TEST STANDARDS

Follow the maximum permissible exposure (MPE) limits specified in 447498 D04 Interim General Radio Frequency Exposure Guidelines v01. The gain of the antenna used in the product was extracted from the supplied antenna data sheet and the maximum total power input to the antenna was also measured. Calculate the distance from the product to the MPE limit by the formula.

### 2.2 LIMIT

For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of Part 1.1307. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold  $P_{th}$  (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

$d$  = the separation distance (cm);

(C) Or using below table and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of  $\lambda/4$  or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

RF Source frequency (MHz)	Threshold ERP(watts)
0.3-1.34	$1,920 R^2$ .
1.34-30	$3,450 R^2/f^2$ .
30-300	$3.83 R^2$ .
300-1,500	$0.0128 R^2f$ .
1,500-100,000	$19.2R^2$ .

For multiple RF sources: Multiple RF sources are exempt if:

(A) The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required). This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(i)(A) of Part 1.1307. Medical implant devices may only use this exemption and that in paragraph (b)(3)(i)(A).

(B) in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where:

a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of Part 1.1307 for P<sub>th</sub>, including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of Part 1.1307 for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

P<sub>i</sub> = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

P<sub>th,i</sub> = the exemption threshold power (P<sub>th</sub>) according to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i.

ERP<sub>j</sub> = the ERP of fixed, mobile, or portable RF source j.

ERP<sub>th,j</sub> = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least λ/2π according to the applicable formula of paragraph (b)(3)(i)(C) of Part 1.1307.

Evaluated<sub>k</sub> = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

Exposure Limit<sub>k</sub> = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from § 1.1310.

## 2.3 TEST RESULT

Turn up

Mode	Field Strength	EIRP	Turn up EIRP
434.08 MHz	77.48 dBuV/m	-17.72 dBm	-16dBm (+/- 1dBm)

Protocol	Fre. (GHz)	Separation distance (cm)	Max ERP (dBm)	Max EIRP (mW)	Limit (mW)	Result
434.08 MHz	0.43408	0.5	-17.15	0.0193	1	Pass

Note: 1.  $EIRP(dBm) = E(dBuV/m) - 95.2$

2.  $ERP = EIRP - 2.15$

3. The Maximum power is less than 1mW, complies with the exemption requirements.

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