

TEST REPORT

Applicant

: Satellite Electronic (Zhong shan) Co Ltd.

Product Name

: CEILING FAN REMOTE CONTROL

Brand Name

: N/A

Model Name

: TRD050G2Z

FCC ID

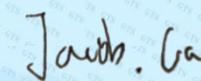
: 2AQZU-18066

Test Standard

: 47 CFR Part 2.1091

Date of Test

: 2025.07.23-2025.08.04

Report Prepared by :

(Jacob Cai)

Report Approved by :

(Jason Wu)

Authorized Signatory :

(Robinson Luo)

Authorized Signature:

**Robinson Luo
Laboratory Manager**

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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REVISION HISTORY

Rev.	Issue Date	Revisions	Revised by
00	2025.08.04	Initial Release	N/A

DECLARATION OF REPORT

1. The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the requirements of 47 CFR Part 2.1091. And it is applicable only to the tested sample identified in the report.
2. This report shall not be reproduced except in full, without the written approval of GTS, this document only be altered or revised by GTS, personal only, and shall be noted in the revision of the document.
3. The general information of EUT in this report is provided by the customer or manufacture, GTS is only responsible for the test data but not for the information provided by the customer or manufacture.
4. The results in this report is only apply to the sample as tested under conditions. The customer or manufacturer is responsible for ensuring that the additional production units of this model have the same electrical and mechanical components.

5. In this report, '□' indicates that EUT does not support content after '□', and '☒' indicates that it supports content after '☒'.

1. GENERAL DESCRIPTION

1.1. Applicant

Name : Satellite Electronic (Zhong shan) Co Ltd.

Address : No.8, Chuang Ye Road, Torch Development Zone, Zhongshan, Guangdong, China

1.2. Manufacturer

Name : Satellite Electronic (Zhong shan) Co Ltd.

Address : No.8, Chuang Ye Road, Torch Development Zone, Zhongshan, Guangdong, China

1.3. Factory

Name : CHUNGEAR INDUSTRIAL CO., LTD.

Address : No.12, Jingke 8th Rd., Nantun Dist., Taichung City 40852, Taiwan (R.O.C.)

1.4. General Information of EUT

Product Name	CEILING FAN REMOTE CONTROL
Trade Name	N/A
Model Name	TRD050G2Z
Series Model	N/A
Model Difference	N/A
Frequency band	433.92MHz
Power supply	DC 3V
Modulation Type	ASK
Antenna type	PCB Antenna
Antenna gain	-6dBi
Hardware version number	250508
Software version number	VX30E92C

1.5. Laboratory Information

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC —Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

- **ISED—Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing.

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

2. FCC 47CFR §2.1091 Requirement

2.1. Test Standards

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

KDB447498 D01: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

2.2. Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	6
3.0 – 30	1842/f	4.89/f	(900/f ²)*	6
30 – 300	61.4	0.163	1.0	6
300 – 1500	/	/	f/300	6
1500 – 100,000	/	/	5	6

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 30	824/f	2.19/f	(180/f ²)*	30
30 – 300	27.5	0.073	0.2	30
300 – 1500	/	/	f/1500	30
1500 – 100,000	/	/	1.0	30

F=frequency in MHz

*=Plane-wave equivalent power density

2.3. MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

2.4. Antenna Information

EUT can only use antennas certificated as follows provided by manufacturer;

Antenna	Model No. of antenna:	Type of antenna:	Gain of the antenna (Max.)	Frequency range: (MHz)
433.92M	/	PCB Antenna	-6dBi	433.92

2.5. Manufacturing Tolerance

Frequency (MHz)	ANT0		
	433.92	--	--
Target (dBm)	-33.63	--	--
Tolerance \pm (dB)	1.0	--	--

Note: dBm= dBuV-95.2=61.57dBuV-95.2=-33.63dBm

2.6. Test Result

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 0.5 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, $r=0.5\text{cm}$, as well as the gain of the used antenna is refer to section 4, the RF power density can be obtained.

Modulation Type	Output power (Target)		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
433.92MHz	-32.63	0.00055	-6.0	0.25	0.00043	0.289

Note:

- 1.The Maximum power is less than the limit, complies with the exemption requirements.
- 2.Output power including turn-up tolerance;
- 3.The calculated distance is 5mm.

*****END OF THE REPORT*****