

TEST REPORT

Report No.:SHATBL2509017W02

Applicant : Satellite Electronic(Zhong Shan)Ltd.

Product Name : Ceiling fan remote control switch

Brand Name : Coleto, Kichler, Progress Lighting

Model Name : TRD032K1M

Series Model : C2670

FCC ID : 2AQZU-18069

Test Standard : 47 CFR Part 2.1093

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REVISION HISTORY

Rev.	Issue Date	Report No.	Effect Page	Contents
00	Oct.31, 2025	SHATBL2509017W02	ALL	Initial Release

1. GENERAL DESCRIPTION

1.1. Applicant

Name : Satellite Electronic(Zhong Shan)Ltd.

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

1.2. Manufacturer

Name : Satellite Electronics (Zhong shan)Ltd.

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

1.3. Factory

Name : CHUNGGEAR 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 switch
Trade Name	Coletto, Kichler, Progress Lighting
Model Name	TRD032K1M
Series Model	C2670
Model Difference	Only model name are different.
Frequency band	304.25MHz
Power supply	DC 3V From Battery
Modulation Type	ASK
Antenna type	PCB Antenna
Antenna gain	-6dBi
Hardware version number	TRD032K1M 250815
Software version number	TK50-01

1.5. Laboratory Information

Company Name:	Shanghai ATBL Technology Co., Ltd.
Address:	Building 8, No. 160, Basheng Road, Waigaoqiao Free Trade Zone, Pudong New Area, Shanghai
Telephone:	+86(0)21-51298625
FCC-Registration Number:	485917
Designation Number:	CN1306
A2LA-Lab Cert. No.:	6184.01

2. FCC 47CFR §2.1093 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 §2.1093 RF exposure is calculated.

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

2.2. Limit

According to KDB447498 D01 General RF Exposure Guidance v06 Section 4.3.1 Standalone SAR test exclusion considerations: "Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.²² The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander (see 5) of section 4.1). To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, typically in the SAR measurement or SAR analysis report, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting is required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for the SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops & tablets etc.²³ "

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f \text{ (GHz)}}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where:}$$

- f (GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation

- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

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 Port	Model No. of antenna:	Type of antenna:	Gain of the antenna (Max.)	Frequency range: (MHz)
Antenna 0	/	PCB Antenna	-6dBi	304.25

2.5. Manufacturing Tolerance

Frequency (MHz)	ANT0		
	304.25	--	--
Target (dBm)	-32.29	--	--
Tolerance ± (dB)	1.0	--	--

Note: dBm= dBuV-95.2=62.91dBuV-95.2=-32.29dBm

2.6. Test Result

f (MHz)	Antenna Distance (mm)	Max.RF output power (including tune-up tolerance)		SAR Test Exclusion Threshold	SAR Test Exclusion
		dBm	mW		
304.25	5	-31.29	0.000743	0.0000819 <3	Yes

Note:

- 1.The Maximum power is less than the limit, complies with the exemption requirements.
- 2.Output power (Peak) including turn-up tolerance;
- 3.The calculated distance is 5mm.
- 4.Simultaneous emission is not supported.

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