



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR241000391103

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RF EXPOSURE EVALUATION REPORT

Application No.: SZCR2410003911AT
Applicant: Guangdong Shiji Technology Co.,Ltd
Address of Applicant: No.5 ,2nd Sanlian Longtan Area, Lianshang Town, Liannan Industrial Zone,Chenghai District, Shantou, China

Equipment Under Test (EUT):

EUT Name: RC QUADCOPTER
Model No.: F22 S3 PRO, S70W1080P(GPS), S70W1080P-5G(GPS), X300-1, F11 4K PRO, F11s 4K PRO, F11s 4K PRO+, F11s 4K PRO+ R, F22 S2+ XR, F11s 4K, F11s 2.7K PRO+, F11a PRO, F11s 6K PRO+, F11 S2 PRO, F11 S2 PRO R, F11 S2 PRO+, F11 S3 PRO, F11 S3 PRO R, F11 S3 PRO+, F11 X3 PRO+, F7s 2.7K PRO+, F7 4K , F7 4K PRO, F7s 4K, F7s 4K PRO, F7s 4K PRO+, F5, F5 PRO, F5s PRO, F5s PRO+, F5 4K PRO, F5s 4K PRO+, F5 6K PRO, F5s 6K PRO+, F5s PRO-C02, F5 S3 PRO, F5 S3 PRO-C02, F5 S3 PRO R, F5-C01, F5-C02, F15, F15 PRO, F15s PRO, F15s PRO+, F15s 4K, F15s 4K PRO+, F15s 6K PRO+, F22 S2 XR, F22 4K PRO, F22s 4K PRO, F22s 4K PRO+, F22s 6K PRO+, F22 S2 PRO, F22 S2 PRO R, F22 S2 PRO+, F22 S2 PRO+ R, F22 S3 PRO, F22 S3 PRO R, F22 S3 PRO+, F22 S3 XR, SJ200, SJ250, SJ2001, X200-1, X200-2, F22PRO, F35PRO, TF770S, F11, F11PRO, F11GIM2, F11GIM3, F7GB2, R111, V113, V11, V11PRO, B112, G115, BTW001, XR-1

Please refer to section 3.2 of this report which indicates which model was actually tested and which were electrically identical.

FCC ID: 2ALUJF22S3PRO
Standard(s) : 47 CFR PART 1, Subpart I, Section 1.1307
47 CFR PART 2, Subpart J, Section 2.1093
KDB447498D01 General RF Exposure Guidance v06

Date of Receipt: 2024-10-22
Date of Evaluation: 2024-11-04 to 2024-12-08
Date of Issue: 2024-12-16

Evaluation Result:	Pass*
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* In the configuration evaluated, the EUT complied with the standards specified above.

Kenx. Xu

Keny Xu
EMC Laboratory Manager



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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2024-12-16		Original

Authorized for issue by:				
		Gebin Sun		
		Gebin Sun/Project Engineer		
		Eric Fu		
		Eric Fu/Reviewer		

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3 General Information

3.1 General Description of E.U.T.

Product Type:	<input checked="" type="checkbox"/> Portable device
	<input type="checkbox"/> Mobile device
	<input type="checkbox"/> Fixed device

3.2 Details of E.U.T.

Power supply:	Rechargeable battery DC7.4V, 550mAh x 2pcs for Remote controller, charged by USB DC5V
Operating Frequency:	5180MHz to 5240MHz
Channel number:	4
Channel Spacing	20MHz
Modulation Type:	802.11a: OFDM(16QAM, 64QAM, QPSK, BPSK)
Antenna Type:	PCB Antenna
Antenna gain:	2.10dBi

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.



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Declaration of EUT Family Grouping:

Model No.: F22 S3 PRO, S70W1080P(GPS), S70W1080P-5G(GPS), X300-1, F11 4K PRO, F11s 4K PRO, F11s 4K PRO+, F11s 4K PRO+ R, F22 S2+ XR, F11s 4K, F11s 2.7K PRO+, F11a PRO, F11s 6K PRO+, F11 S2 PRO, F11 S2 PRO R, F11 S2 PRO+, F11 S3 PRO, F11 S3 PRO R, F11 S3 PRO+, F11 X3 PRO+, F7s 2.7K PRO+, F7 4K, F7 4K PRO, F7s 4K, F7s 4K PRO, F7s 4K PRO+, F5, F5 PRO, F5s PRO, F5s PRO+, F5 4K PRO, F5s 4K PRO+, F5 6K PRO, F5s 6K PRO+, F5s PRO-C02, F5 S3 PRO, F5 S3 PRO-C02, F5 S3 PRO R, F5-C01, F5-C02, F15, F15 PRO, F15s PRO, F15s PRO+, F15s 4K, F15s 4K PRO+, F15s 6K PRO+, F22 S2 XR, F22 4K PRO, F22s 4K PRO, F22s 4K PRO+, F22s 6K PRO+, F22 S2 PRO, F22 S2 PRO R, F22 S2 PRO+, F22 S2 PRO+ R, F22 S3 PRO, F22 S3 PRO R, F22 S3 PRO+, F22 S3 XR, SJ200, SJ250, SJ2001, X200-1, X200-2, F22PRO, F35PRO, TF770S, F11, F11PRO, F11GIM2, F11GIM3, F7GB2, R111, V113, V11, V11PRO, B112, G115, BTW001, XR-1

Only the model F22 S3 PRO was tested, since according to the declaration from the applicant, the electrical circuit design, PCB layout, components used, internal wiring and functions were identical for all the above models, with only difference on appearance, color and model name for commercial purpose.

3.3 Separation Distance

Minimum test separation distance:	5mm
Remark: This 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.	

3.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

3.5 Test Facility

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

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI (Member No. 1937)

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC –Designation Number: CN1336

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

3.6 Deviation from Standards

None

3.7 Abnormalities from Standard Conditions

None



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4 Technical Requirements Specification

4.1 RF Exposure Evaluation

4.1.1 Limit & Test Method

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation¹⁷
- The result is rounded to one decimal place for comparison

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 is applied to determine SAR test exclusion

4.1.2 Conclusion

The Max. power (including tune-up tolerance) is 7.28 dBm on the highest channel 5.24 GHz (*)
7.28 dBm logarithmic terms convert to numeric result is nearly 5.35 mW

According to the formula. calculate the test exclusion thresholds:

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]}{\leq 3.0}$$

$$\text{General RF Exposure} = (5.35 \text{ mW} / 5 \text{ mm}) \times \sqrt{5.24 \text{ GHz}} = 2.45 \quad (1)$$

SAR requirement:

$$S = 3.0 \quad (2)$$

$(1) < (2)$

So the SAR report is not required.

(*) Max. power refer to Report No.:SZCR241000391102

5 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for SZCR2410003911AT

-End of the Report-



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