



MPE REPORT

Report No.: SET2022-13396

Product Name: SMOOTH 5S

Model No. : SM118

FCC ID: 2AIHFZYSM118

Applicant: Guilin Zhishen Information Technology Co., Ltd.

Address: 09 Huangtong Road, Tieshan Industrial Zone, Qixing District, Guilin, Guangxi, China.

Dates of Testing: 2022.09.14-2022.09.27

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

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Test Report

Product.....: SMOOTH 5S
Brand Name.....: ZHIYUN
Trade Name.....: ZHIYUN
Applicant.....: Guilin Zhishen Information Technology Co., Ltd.
Applicant Address.....: 09 Huangtong Road, Tieshan Industrial Zone, Qixing District,
Guilin, Guangxi, China.
Manufacturer.....: Guilin Zhishen Information Technology Co., Ltd.
Manufacturer Address.....: 09 Huangtong Road, Tieshan Industrial Zone, Qixing District,
Guilin, Guangxi, China.
Test Standards.....: FCC Part 2.1091
KDB 447498
Test Result.....: PASS

Tested by.....: Kim Li 2022.09.30
Kim Li, Test Engineer

Reviewed by.....: Chris You 2022.09.30
Chris You, Senior Engineer

Approved by.....: Shuangwen Zhang 2022.09.30
Shuangwen Zhang, Manager



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Change History		
Issue	Date	Reason for change
1.0	2022.09.30	First edition



1. GENERAL INFORMATION

1.1 EUT Description

Product Name	SMOOTH 5S	
EUT supports Radios application	BLE	
Antenna Type	Internal Antenna	
Supply voltage	DC 7.4V	
Antenna Gain	BLE	2.09dBi



1.2 Test Standards and Results

The EUT has been tested according to the following specifications

Standard	Test Type	Result
FCC Part 2.1093	Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands)	PASS

1.3 Identification of the Responsible Testing Laboratory

Company Name:	CCIC Southern Testing Co., Ltd.
Address:	Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China



2. TECHNICAL REQUIREMENTS SPECIFICATION IN CFR TITLE 47 PART 2.1093

2.1 Evaluation method

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(s), listed below, is (are) 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. The minimum test separation distance defined in 4.1 f) 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. To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified, typically in the SAR measurement or SAR analysis report, by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting are required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for 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 and tablets, etc..

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})]$

- $[\sqrt{f_{(\text{GHz})}}] \leq 3.0$ for 1-g SAR and ≤ 7.5 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 calculation
- 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 according to 4.1 f) is applied to determine SAR test exclusion.



2.2 Evaluation Results

Worst-Case mode Conducted Output Power Results for BLE

Band	Mode	Test Frequency	Output Power (dBm)	Tune Up tolerance (dBm)
BLE	GFSK	2402	-0.250	-1 ± 1
	GFSK	2440	-0.219	-1 ± 1
	GFSK	2480	0.002	0 ± 1

Maximum Evaluation Results

Bluetooth BLE					
Frequency (MHz)	Antenna Distance (mm)	RF output power (including tune-up tolerance)		SAR Test Exclusion Threshold	SAR Test Exclusion
		dBm	mW		
2480	5	1	1.26	$0.40 < 3.0$	Yes

2.3 Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB447498 D01 General RF Exposure Guidance v06 section 4.3.1.

**** END OF REPORT ****