



# FCC RF EXPOSURE REPORT CERTIFICATION TEST REPORT

For

WiFi Module

**MODEL NUMBER: SI06B** 

FCC ID:2AFG6-SI06B

IC:22166-SI06B

REPORT NUMBER: 4790446022-2-RF-7

**ISSUE DATE: July 22, 2022** 

Prepared for

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Prepared by

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# **Revision History**

Rev.	Issue Date	Revisions	Revised By
V0	7/22/2022	Initial Issue	



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## 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: Guangzhou Shirui Electronics Co., Ltd.

Address: 192 Kezhu Road, Scientech Park, Guangzhou Economic &

Technology Development District, Guangzhou, Guangdong, China

**Manufacturer Information** 

Company Name: Guangzhou Shirui Electronics Co., Ltd.

Address: 192 Kezhu Road, Scientech Park, Guangzhou Economic &

Technology Development District, Guangzhou, Guangdong, China

**EUT Information** 

EUT Name: WiFi Module

Model: SI06B

Sample Received Date: June 24, 2022

Sample Status: Normal Sample ID: 5161650

Date of Tested: June 25, 2022 to July 22, 2022

APPLICABLE STANDARDS				
STANDARD TEST RESULTS				
FCC 47CFR§2.1091	PASS			

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# 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

# 3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4102.01)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1187)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	Has been recognized to perform compliance testing on equipment subject
	to the Commission's Declaration of Conformity (DoC) and Certification rules
	ISED (Company No.: 21320)
Accreditation	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Certificate	has been registered and fully described in a report filed with
	Industry Canada. The Company Number is 21320.
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with VCCI, the
	Membership No. is 3793.
	Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China.

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## 4. REQUIREMENT

#### **LIMIT AND CALCULATION METHOD**

Systems operating under the provisions of FCC 47 CFR 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.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with. Limits for General Population/Uncontrolled Exposure

#### **RF EXPOSURE LIMIT**

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time  E ²,  H ² or S (Minutes)
0.3 1.34	614	1.63	(100)*	30
1.34 30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30 300	27.5	0.073	0.2	30
300 1500			f/1500	30
1500 100,000			1.0	30

#### **CALCULATION METHOD**

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

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



# **CALCULATED RESULTS**

#### Module SKI.W7613E.1

Mode	Output Power	Directional Gain	Power Density	Power Density Limit	Test Result
Mode	dBm	dBi	mW/cm2	mW/cm2	
WIFI 5G	14	4.71	0.01478	1.0	Complies

## Module SKL.WB800D.3

Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
Mode	dBm	dBi	mW/cm2	mW/cm2	-
BLE	4	0	0.0005	1.0	Complies

Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
Mode	dBm	dBi	mW/cm2	mW/cm2	
BT	4	0	0.0005	1.0	Complies

Mode	Output Power	Directional Gain	Power Density	Power Density Limit	Test Result
Mode	dBm	dBi	mW/cm2	mW/cm2	
WIFI 2.4G	15	1	0.00792	1.0	Complies

Mode	Output Power	Directional Gain	Power Density	Power Density Limit	Test Result
Mode	dBm	dBi	mW/cm2	mW/cm2	
WIFI 5G	13	1.7	0.00587	1.0	Complies



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Note: 1. The calculated distance is 20cm.

2. Module 7613 WIFI 5GHz + Module 8800 BT 2.4GHz/Module 8800 BLE 2.4GHz + Module 8800 5GHz=0.01478 + 0.0005 + 0.00587=0.02115 (mW/ cm $^2$ )

Module 7613 WIFI 5GHz + Module 8800 BT 2.4GHz/Module 8800 BLE 2.4GHz + Module 8800 2.4GHz=0.01478 + 0.0005 + 0.00792=0.02320 (mW/ cm²)

Therefor the maximum calculations of above situations are less than the "1" limit.

**END OF REPORT**