



**FCC RF EXPOSURE REPORT**  
**CERTIFICATION TEST REPORT**

*For*

**Wifi Module**

**MODEL NUMBER: SI07B**

**FCC ID: 2AFG6-SI07B**

**IC: 22166-SI07B**

**REPORT NUMBER: 4790081439-8**

**ISSUE DATE: November 8, 2021**

*Prepared for*

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*Prepared by*

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	11/08/2021	Initial Issue	



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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Guangzhou Shirui Electronics Co., Ltd.  
Address: 192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, Guangdong, China

### Manufacturer Information

Company Name: Guangzhou Shirui Electronics Co., Ltd.  
Address: 192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, Guangdong, China

### EUT Information

EUT Name: Wifi Module  
Model: SI07B  
Sample Received Date: August 31, 2021  
Sample Status: Normal  
Sample ID: 4175726  
Date of Tested: September 1, 2021 ~ November 8, 2021

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

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b> 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</p> <p><b>ISED (Company No.: 21320)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.</p> <p><b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</b> 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.</p> <p>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</p>
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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.

## 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/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> 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 MT7663BUN

Mode	Output Power	Directional Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 2.4G	17	3.56	0.02264	1.0	Complies

Mode	Output Power	Directional Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 5G	16	4.36	0.02161	1.0	Complies

## Module AIC8800D

Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
BLE	5	3.15	0.0013	1.0	Complies

Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
BT	5	3.15	0.0013	1.0	Complies

Mode	Output Power	Directional Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 2.4G	13	3.75	0.00941	1.0	Complies

Mode	Output Power	Directional Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 5G	15	4.36	0.01717	1.0	Complies



Note: 1. The calculated distance is 20cm.

2. Module 7663 WIFI 2.4GHz + Module 8800 BT 2.4GHz/Module 8800 BLE 2.4GHz +  
Module 8800 5GHz= $0.02264 + 0.0013 + 0.01717 = 0.04111$  (mW/ cm<sup>2</sup>)

Module 7663 WIFI 2.4GHz + Module 8800 BT 2.4GHz/Module 8800 BLE 2.4GHz +  
Module 8800 2.4GHz= $0.02264 + 0.0013 + 0.00941 = 0.03335$  (mW/ cm<sup>2</sup>)

Module 7663 WIFI 5GHz + Module 8800 BT 2.4GHz/Module 8800 BLE 2.4GHz +  
Module 8800 5GHz= $0.02161 + 0.0013 + 0.01717 = 0.04008$  (mW/ cm<sup>2</sup>)

Module 7663 WIFI 5GHz + Module 8800 BT 2.4GHz/Module 8800 BLE 2.4GHz +  
Module 8800 2.4GHz= $0.02161 + 0.0013 + 0.00941 = 0.03232$  (mW/ cm<sup>2</sup>)

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

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## END OF REPORT