



**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

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



TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. REQUIREMENT	6



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>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.</p> <p>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</p> <p>ISED (Company No.: 21320) 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>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</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 ²)	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 ²)*	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/ cm²)

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/ cm²)

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/ cm²)

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/ cm²)

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

END OF REPORT