FCC TEST REPORT
FCC ID：2BB7G-R9

Product	:	R9
Model Name	:	R9
Brand	:	N/A
Report No.	:	PTC23061308501E-FC02

Prepared for

Shenzhen Xiaowei Intelligent Technology Co., Ltd

B5C, Building 29, Yintian Industrial Zone, Yantian Community, Xixiang Street, Baoan District, Shenzhen, Guangdong Province

Prepared by

Precise Testing & Certification Co., Ltd.

Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China

TEST RESULT CERTIFICATION

Applicant's name	:	Shenzhen Xiaowei Intelligent Technology Co., Ltd
Address	:	B5C, Building 29, Yintian Industrial Zone, Yantian Community, Xixiang Street, Baoan District, Shenzhen, Guangdong Province
Manufacture's name	:	Shenzhen Xiaowei Intelligent Technology Co., Ltd
Address	:	B5C, Building 29, Yintian Industrial Zone, Yantian Community, Xixiang Street, Baoan District, Shenzhen, Guangdong Province
Product name	:	R9
Model name	:	R9
Test procedure	:	FCC CFR47 Part 1.1307(b)(1)
Test Date	:	Jul. 04, 2023 to Jul. 11, 2023
Date of Issue	:	Aug. 24, 2023
Test Result	:	PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

Simon Pu

Simon Pu / Engineer

Technical Manager:

Ronnie Liu

Ronnie Liu / Manager

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2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	15.247 (i)	PASS
Remark:		
N/A: Not Applicable		

3 General Information

3.1 General Description of E.U.T.

Product Name	:	R9
Model Name	:	R9
Specification	:	802.11b/g/n HT20
Operation Frequency	:	2412-2462MHz for 802.11b/g/ n(HT20)
Number of Channel	:	11 channels for 802.11b/g/ n(HT20)
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
Antenna installation	:	PIFA Antenna
Antenna Gain	:	2.44 dBi
Power supply	:	Input: 5V⎓ 1A
Hardware Version	:	V1.2
Software Version	:	13.2

4 RF Exposure

Test Requirement   :   15.247 (i)

Evaluation Method   :   FCC Part 2.1091

4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density

4.3 MPE Calculation Method

$$E \ (V/m) \ = \ \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density: } Pd \ (W/m^2) \ = \ \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd \ = \ \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm^2)	Limit of Power Density (mW/cm^2)	Result
2412	1.75	20.45	21±1	158.489319	0.5518	1	Pass

******THE END REPORT*****