



RF EXPOSURE EVALUATION

FCC ID: 2BRNY-UAW658E

Product	:	Wireless module
Model Name	:	UAW6158B
Brand	:	Uascent
Report No.	:	PTC25070118701E-FC02

Prepared for

Guangdong Xingyu Intelligent Technology Co., LTD.

Room 208, Building 1, No.64, Dezheng Mid Road, Chang'an Town, Dongguan City,
Guangdong Province, China

Prepared by

Precise Testing & Certification Co., Ltd.

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



TEST RESULT CERTIFICATION

Applicant's name : GuangdongXingyuIntelligentTechnologyCo.,LTD.
Address : Room 208, Building 1, No.64, DezhengMid Road, Chang'an Town, Dongguan City, Guangdong Province, China
Manufacturer's name : GuangdongXingyuIntelligentTechnologyCo.,LTD.
Address : Room 208, Building 1, No.64, DezhengMid Road, Chang'an Town, Dongguan City, Guangdong Province, China
Product name : Wireless module
Model name : UAW6158B
Test procedure : FCC CFR47 Part 1.1307(b)(1)
Test Date : July. 8, 2025 to July. 29, 2025
Date of Issue : July. 29, 2025
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:

A handwritten signature in black ink, appearing to read "Jack Zhou".

Jack Zhou / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read "Simon Pu".

Simon Pu / Manager



Contents

	Page
RF EXPOSURE EVALUATION	1
2 TEST SUMMARY	4
2.1 TEST SITE	4
2.2 MEASUREMENT UNCERTAINTY	4
3 GENERAL INFORMATION	5
3.1 GENERAL DESCRIPTION OF E.U.T	5
4 RF EXPOSURE	6
4.1 REQUIREMENTS	6
4.2 TEST RESULT	6



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		

2.1 Test Site

Precise Testing & Certification Co., Ltd

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

FCC Registration Number: 790290

A2LA Certificate No.: 4408.01

IC Registration Number: 12191A

FCC Designation Number: CN1219

2.2 Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	±1.0dB
Power Spectral Density, conducted	±2.2dB
Radio Frequency	± 1 x 10 ⁻⁶
Bandwidth	± 1.5 x 10 ⁻⁶
Time	±2%
Duty Cycle	±2%
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±3%
Conducted Emissions (150kHz~30MHz)	±3.64dB
Radiated Emission(9kHz~30MHz)	±3.15dB
Radiated Emission(30MHz~1GHz)	±5.03dB
Radiated Emission(1GHz~25GHz)	±4.74dB



3 General Information

3.1 General Description of E.U.T.

Product Name	:	Wireless module
Model Name	:	Uascent
Specification	:	802.11b/g/n HT20/HT40
Operating frequency	:	2412-2462MHz for 802.11b/g/ n(HT20) 2422-2452MHz for 802.11 n(HT40)
Numbers of Channel	:	11 channels for 802.11b/g/ n(HT20) 7 channels for 802.11n(HT40)
Antenna Type	:	FPC Antenna
Antenna Gain	:	4.69 dBi
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
Power supply	:	Input:DC19.0.6A,24W Battery:14.4V capacity:2400 mAh
Hardware Version	:	V1.0
Software Version	:	N/A
Test sample No.	:	PTC25070118701E-1
Model difference	:	all models are different color only. the function is same.



4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v06

4.1 Requirements

According to § 15.247(i) and § 1.1307b(1), 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 of the Commission's guidelines. See KDB 447498 D01 General RF Exposure Guidance v06, section 4. 3. 1.

The 1-g and 10-g SAR test exclusion thresholds for 100MHz to 6GHz at test separation distances \leq 50mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})]^*[\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g SAR extremity SAR, where}$

- $f(\text{GHz})$ 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 \leq 50mm and for transmission frequencies between 100MHz and 6GHz. When the minimum test separation distance is $< 5\text{mm}$, a distance of 5mm is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

4.2 Test Result

Channel (MHz)	Maximum output power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Distance (mm)	Calculation results	Limit	Operating Mode
2412(11G)	8.67	8.67 \pm 1	9.268298	5	2.872873	3	802.11g

Conclusion:

1. Calculate in the worst-case mode.
2. Max. Tune Up Power is declared by manufacturer, and used to calculate.

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