



RF MPE REPORT

Report No.: 20230217G1196X-W4

Product Name: UAM022

Model No.: UAM022

FCC ID: 2A68EJX-UAM022

Applicant: Shenzhen Uascent Technology Co.,Ltd

7th Floor, Building A2, Chuangzhiyuncheng, Liuxian Avenue, Xili Address:

Community, Xili Street, Nanshan District, Shenzhen

Dates of Testing: 2023.03.02-2023.03.20

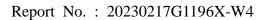
Issued by: CCIC Southern Testing Co., Ltd.

Electronic Testing Building, No. 43 Shahe Road, Xili Street,

Lab Location:

Nanshan District, Shenzhen, Guangdong, China.

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Test Report

Product: UAM022

Brand Name.....: Uascent

Trade Name: Uascent

Applicant.....: Shenzhen Uascent Technology Co.,Ltd

Avenue, Xili Community, Xili Street, Nanshan District,

Shenzhen

Manufacturer: ShengXianZhiKongCo.,Ltd

Manufacturer Address: Room 804, one of No.9 Yucheng Road, Chang'an Town,

Dongguan City, Guangdong Province

Test Standards 47 CFR Part 2.1091

Test Result.....: Pass

Tested by

2023.03.28

Kim Li, Test Engineer

Chris You, Senior Engineer

Approved by: 2023.03.28

Yang Fan, Manager

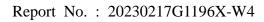
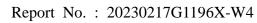




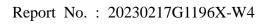
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Change History					
Issue	Date	Reason for change			
1.0 2023.03.28		First edition			





1. GENERAL INFORMATION

1.1. EUT Description

Product Name	UAM022		
Hardware Version	V1.0		
Software Version	V1.0.6		
EUT supports Radios application	2.4G WIFI/BLE		
Eraquanay Banga(Ty)	BLE: 2.402GHz ~ 2.480GHz		
Frequency Range(Tx)	2.4G WIFI: 2.412GHz ~ 2.462GHz		
	BLE: 1Mbps		
Bandwidth	2.4G WIFI: 802.11b/g/n-HT20: 20MHz		
	802.11n-HT40: 40MHz		
Modulation Tyme	BLE: GFSK		
Modulation Type	2.4G WIFI: DSSS (802.11b), OFDM (802.11g/n)		
Antonno poin	BLE: -1.3dBi		
Antenna gain	2.4G WIFI: -1.3dBi		
Antenna Type	PCB Antenna		



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1.2. EUT Description

EUT has been tested according to the following standards.

No.	Identity	Document Title		
1	47 CFR Part 1	Practice and Procedure		
2	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General		
2	4/ CFR Part 2	Rules and Regulations		
3	KDB 447498 D01 General	RF Exposure Procedures and Equipment Authorization		
	RF Exposure Guidance v06	Policies for Mobile and Portable Devices		
1	OET Bulletin 65	Evaluating Compliance with FCC Guidelines for Human		
4	Edition 97-01	Exposure to Radiofrequency Electromagnetic Fields		

1.3. Laboratory Facilities

FCC-Registration No.: 406086

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until April 19th, 2023.

ISED Registration: 11185A-1

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until Jun. 30th, 2023.

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.4. Laboratory Location

Company Name:	CCIC Southern Testing Co., Ltd.			
Address:	Electronic Testing Building, No. 43 Shahe Road, Xili Street,	Nanshan		
110010001	District, Shenzhen, Guangdong, China			



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2. Technical Requirements Specification in CFR Title 47 Part 2.1091

2.1. Exposure Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 to §1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Averaging Time (minutes)				
	(i) Limits for Occupational/Controlled Exposure							
0.3-3.0	614	1.63	*(100)	< 6				
3.0-30	1824/f	4.89/f	$*(900/f^2)$	< 6				
30-300	61.4	0.163	1.0	< 6				
300-1500	/	/	f/300	< 6				
1500-100,000	/	/	5	< 6				
	(ii) Limits for General Population/Uncontrolled Exposure							
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								
Note: f = frequency in MHz. * = Plane-wave equivalent power density.								

2.2. Predication of MPE limit at a given distance

Refer to formulas on page 19 of OET Bulletin 65, Edition 97-01.

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

 $G = numeric \ gain \ of \ the \ antenna \ in \ the \ direction \ of \ interest \ relative \ to \ an \ isotropic \ radiator$

R = distance to the centre of radiation of the antenna (appropriate units, e.g., cm)



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2.3. Evaluation Results

Worst-Case mode Conducted Output Power Results for BLE

Band	Mode	Frequency	Maximum Output	Max Tune up	Max Tune up	
Dallu	Mode	(MHz)	Power (dBm)	power (dBm)	power (mW)	
BLE	GFSK	2440	5.620	5±1	3.98	

Worst-Case mode Conducted Output Power Results for 2.4G WLAN

Band	Mode	Frequency (MHz)	Maximum Output Power (dBm)	Max Tune up power (dBm)	Max Tune up power (mW)	
2.4G WIFI	802.11b	2412	16.05	16±1	50.12	

Calculation results: Worst-Case mode

Band	Max Tune up power (dBm)	Antenna Gain (dBi)	Distance (cm)	Result (mW/cm2)	Power Density (mW/cm2)	Ratio
BLE	6	-1.3	20	0.0006	1.00	0.0006
2.4G WIFI	17	-1.3	20	0.0074	1.00	0.0074

2.4. Conclusion

According to the KDB 447498 D01 General RF Exposure Guidance v06 section 7.2 determine the device is exclusion from SAR test.

** END OF REPORT **