



# FCC RF EXPOSURE REPORT

**CERTIFICATION TEST REPORT** 

For

WIFI+BT Module

**MODEL NUMBER: WXT23M2001** 

REPORT NUMBER: 4790755571-1-RF-5

ISSUE DATE: April 12, 2023

FCC ID: 2AC23-WXT23

Prepared for

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Prepared by

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# **Revision History**

Rev.	Issue Date	Revisions	Revised By
V0	April 12, 2023	Initial Issue	



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## 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

Address: No.2, Jin-da Road, Huinan High-tech Industrial Park, Huizhou,

Guangdong, China

**Manufacturer Information** 

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

Address: No.2, Jin-da Road, Huinan High-tech Industrial Park, Huizhou,

Guangdong, China

**EUT Information** 

EUT Name: WIFI+BT Module Model: WXT23M2001

Brand: GSD

Sample Received Date: February 27, 2023

Sample Status: Normal Sample ID: 5828961

Date of Tested: February 28, 2023 to April 12, 2023

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 and KDB447498D01v06.

## 3. FACILITIES AND ACCREDITATION

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.
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 Delcaration of Conformity (DoC) and Certification rules
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 ISED.
The Company Number is 21320 and the test lab Conformity Assessment
Body Identifier (CABID) is CN0046.
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

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/cm²)	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 <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/4πR<sup>2</sup>

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**

Worst Case						
Mode	Max Tune Up Power	Antenna Gain	Power Density	Power Density Limit	Test Result	
	dBm	dBi	mW/cm2	mW/cm2	1	
BLE	8	1.72	0.00187	1.0	Complies	

Worst Case						
Mode	Max Tune Up Power	Antenna Gain	Power Density	Power Density Limit	Test Result	
	dBm	dBi	mW/cm2	mW/cm2	1	
ВТ	10	1.72	0.00296	1.0	Complies	

Worst Case							
Mode	Max Tune Up Power	Antenna Gain	Power Density	Power Density Limit	Test Result		
	dBm	dBi	mW/cm2	mW/cm2			
WIFI 2.4G SISO	16	1.72	0.01177	1.0	Complies		

Worst Case							
Mode	Max Tune Up Power	Antenna Gain	Power Density	Power Density Limit	Test Result		
	dBm	dBi	mW/cm2	mW/cm2			
WIFI 5G SISO	16	2.57	0.01431	1.0	Complies		



Worst Case						
Mode	Max Tune Up Power	Directional Gain	Power Density	Power Density Limit	Test Result	
	dBm	dBi	mW/cm2	mW/cm2	-1	
WIFI 2.4G MIMO	19	4.73	0.04696	1.0	Complies	

	Worst Case						
Mode	Max Tune Up Power	Directional Gain	Power Density	Power Density Limit	Test Result		
	dBm	dBi	mW/cm2	mW/cm2			
WIFI 5G MIMO	19	5.58	0.05711	1.0	Complies		

#### Note:

- 1. The Power comes from report operation description.
- 2. BT and WIFI cannot support simultaneous emission.
- 3. The minimum separation distance of the device is greater than 20 cm, and 20cm separation distance was set for calculation.
  - 4. Calculate by WORST-CASE mode.

**END OF REPORT**