

## FCC RF EXPOSURE REPORT

## **CERTIFICATION TEST REPORT**

For

## WIFI+BT Module

## MODEL NUMBER: WCT22M2101

## FCC ID: 2AC23-WCT22

### **REPORT NUMBER: 4790180073.2-5**

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**Prepared for** 

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## **Revision History**

Rev.	Issue Date	Revisions	Revised By
V0	11/22/2021	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, Hui-ao
	Avenue, Huizhou City, Guangdong, China

#### Manufacturer Information

Company Name:	Hui Zhou Gaoshengda Technology Co.,LTD
Address:	No.2, Jin-da Road, Huinan High-tech Industrial Park, Hui-ao
	Avenue, Huizhou City, Guangdong, China

#### **EUT Information**

EUT Name:	WIFI+BT Module
Model:	WCT22M2101
Brand:	GSD
Sample Received Date:	November 25, 2021
Sample Status:	Normal
Sample ID:	4414590
Date of Tested:	November 25 ~ December 22, 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

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 <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (Minutes)
0.3 1.34	614	1.63	(100)*	30
1.34 30	824/f	2.19/f	(180/f²)*	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	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result		
	dBm	dBi	mW/cm2	mW/cm2			
BLE	4	2	0.00079	1.0	Complies		

Worst Case							
Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result		
	dBm	dBi	mW/cm2	mW/cm2			
BT	13	2	0.006291	1.0	Complies		

Worst Case						
Mode	Output Power	Directional Antenna Gain	Power Density	Power Density Limit	Test Result	
	dBm	dBi	mW/cm2	mW/cm2		
WIFI 2.4G	18	5	0.03969	1.0	Complies	

Worst Case							
Mode	Output Power	Directional Antenna Gain	Power Density	Power Density Limit	Test Result		
	dBm	dBi	mW/cm2	mW/cm2			
WIFI 5G	19	6	0.06291	1.0	Complies		

Note:

- 1. The Power comes from report operation description.
- 2. The EUT cannot support simultaneous emission.
- 3. The minimum separation distance of the device is greater than 20 cm.
- 3. Calculate by WORST-CASE mode.

## **END OF REPORT**

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