

# **RF Exposure Report**

## FCC ID: 2AC23-WCT3EM2611

Product: WIFI Module

Trade Name : GSD

Model Number: WCT3EM2611

#### Issued for

Hui Zhou Gaoshengda Technology Co.,LTD NO.75 Zhongkai Development Area, Huizhou, Guangdong, China

#### Issued by

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### **MPE Calculation**

#### 1. Antenna Gain:

BT PIFA Antenna:	2.402~2.48 GHz: 2.0 dBi
WIFI PIFA Antenna:	2.412~2.462 GHz: 2.0 dBi
WIFI PIFA Antenna:	5.15~5.25GHz: 3.0 dBi
WIFI PIFA Antenna:	5.725~5.85GHz: 3.0 dBi

#### 2. EUT Operation Condition:

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

#### 3. Exposure Evaluation:

Equation from page 18 of OET Bulletin 65, Edition 97-01 S=(PG)/4πR<sup>2</sup>

Where

- **S**: power density
- **P**: power input to the 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

#### 4. Test Result:

MPE Result							
Mode	N <sub>TX</sub>	Frequency (MHz)	Power (dBm) [P]	ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/cm <sup>2</sup> ) [S]	
BT	1	2402	0.71	2.0	20	0.0004	
BT(BLE)	1	2442	1.63	2.0	20	0.0005	
2.4G WIFI	2	2412	20.45	2.0	20	0.0349	
U-NII-1 Band WIFI	2	5240	15.92	3.0	20	0.0155	
U-NII-3 Band WIFI	2	5825	15.35	3.0	20	0.0136	

Note:

(1) N<sub>TX</sub>= Number of Transmit Antennas

(2) RF Output power specifies that Maximum Conducted Peak Output Power.

#### 5. Conclusion:

FCC and IC:

FCC: As specified in Table 1B of 47 CFR 1.1310- Limits for Maximum Permissible Exposure (MPE),IC: As specified in 4.2 RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)



#### Limits for General Population/ Uncontrolled Exposure

Frequency Range (MHz)	Power density (mW/ cm²)
300-1,500	F/1500
1,500-100,000	1.0

For all the operating frequency band the MPE limit S: 1 mW/ cm<sup>2</sup>

The maximum MPE is calculated as 0.0349 mW / cm<sup>2</sup> < limit 1 mW / cm<sup>2</sup>. So, RF exposure limit warning or SAR test are not required.

The EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47 CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.

#### Note

For a more detailed features description, please refer to the RF Test Report.