

# RF EXPOSURE REPORT

**FCC ID: 2AC23-WT541**

**IC : 12290A-WT541**

Applicant's name ..... : Hui Zhou Gaoshengda Technology Co., LTD  
Address ..... : NO.75 Zhongkai Development Area, Huizhou,  
Guangdong,China  
Manufacturer ..... : Hui Zhou Gaoshengda Technology Co., LTD

Equipment ..... : WIFI+BT Module  
Trade Mark ..... : GSD  
Model ..... : WT54M2001  
Ratings ..... : DC 3.3V

Testing Laboratory ..... : DongGuan ShuoXin Electronic Technology Co., Ltd.  
Address ..... : Zone A, 1F, No. 6, XinGang Road YuanGang Street,  
XinAn District, ChangAn Town, DongGuan City,  
GuangDong, China  
According ..... : FCC Guidelines for Human Exposure IEEE C95.1 &  
FCC Part 2.1091

## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

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

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)	Note
1	N/A	N/A	PIFA	IPEX	2.57	
2	N/A	N/A	PIFA	IPEX	2.57	

## TEST RESULTS

EUT :	WIFI+BT Module	Model Name :	WT54M2001
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	DC 5V		

### 2.4G WIFI

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
1.72	1.4859	26.66	463.4469	0.13707	1	Complies

### 5G Band UNII-1

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.57	1.8072	16.93	49.3174	0.01774	1	Complies

### 5G Band UNII-2A

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.57	1.8072	17.07	50.9331	0.01832	1	Complies

### 5G Band UNII-2C

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.57	1.8072	17.05	50.6991	0.01824	1	Complies

### 5G Band UNII-3

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.57	1.8072	16.97	49.7737	0.01790	1	Complies

BT

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
1.72	1.4859	7.460	5.5719	0.00165	1	Complies

LE

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
1.72	1.4859	5.256	3.3543	0.00099	1	Complies

**For 2.4G+5G simultaneous transmission MPE:**

$$0.00099+0.00165+0.13707+0.01832=0.15803$$

Note: the calculated distance is 20 cm.