

# RF Exposure Evaluation

## FCC ID: 2ACVA-BT02B150

### 1. Client Information

**Applicant** : HUIZHOU GAOSHENGDA TECHNOLOGY CO., LTD  
**Address** : HUA YU RD., NO.75, ZHONGKAI HIGH-TECH DEVELOPMENT AREA, HUIZHOU, CHINA  
**Manufacturer** : HUIZHOU GAOSHENGDA TECHNOLOGY CO., LTD  
**Address** : HUA YU RD., NO.75, ZHONGKAI HIGH-TECH DEVELOPMENT AREA, HUIZHOU, CHINA

### 2. General Description of EUT

<b>EUT Name</b>	:	Bluetooth Module
<b>Models No.</b>	:	BT02B150
<b>Model Difference</b>	:	N/A
<b>Product Description</b>	:	Operation Frequency: Bluetooth with BLE: 2402MHz~2480MHz
	:	Number of Channel: Bluetooth:79 Channels Bluetooth (BLE): 40 Channels
	:	Max Peak Output Power: Bluetooth: 1.915 dBm BLE(GFSK): 3.305 dBm
	:	Antenna Gain: 3 dBi PIFA Antenna
	:	Modulation Type: GFSK 1Mbps(1 Mbps) $\pi$ /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps) BLE (GFSK)
<b>Power Supply</b>	:	DC Voltage supplied from PC System.
<b>Power Rating</b>	:	DC 5V by USB adapter from PC System.
<b>Connecting I/O Port(S)</b>	:	Please refer to the User's Manual

#### Note:

More test information about the EUT please refer the RF Test Report.

## SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v05r02.

(1) Clause 4.3: General SAR test reduction and exclusion guidance

Sub clause 4.31: Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 3.0$  for 1-g SAR

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 7.5.0$  for 10-g SAR

2. Calculation:

Bluetooth Mode (GFSK)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	TX Power (mW)	Distance (mm)	Calculation Value	Threshold Value
2.402	-0.87	3	1.633	5	0.506	3.0
2.441	-1.604	3	1.379	5	0.431	3.0
2.480	-2.587	3	5.728	5	0.346	3.0
Bluetooth Mode (8-DPSK)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	TX Power (mW)	Distance (mm)	Calculation Value	Threshold Value
2.402	1.915	3	3.101	5	0.961	3.0
2.441	1.116	3	4.699	5	0.806	3.0
2.480	-0.044	3	4.699	5	0.622	3.0
Bluetooth Mode (BLE)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	TX Power (mW)	Distance (mm)	Calculation Value	Threshold Value
2.402	3.305	3	4.271	5	1.324	3.0
2.442	2.550	3	2.596	5	0.811	3.0
2.480	1.143	3	2.596	5	0.818	3.0

**So standalone SAR measurements are not required.**