

RF Exposure Evaluation

FCC ID: 2AUD4-V3

1. Client Information

Applicant : Xiamen xingboda electronic technology co., LTD
Address : 520 xinglin yuandong road, jimei district, xiamen city, China
Manufacturer : Xiamen xingboda electronic technology co., LTD
Address : 520 xinglin yuandong road, jimei district, xiamen city, China

2. General Description of EUT

EUT Name	: Bluetooth Module	
Models No.	: Carbon Flyer, Carbon Flyer V3	
Model Difference	: All models are in the same PCB layout interior structure and electrical circuits, the only difference is the model.	
Product Description	Operation Frequency:	Bluetooth 4.0(BLE): 2402MHz~2480MHz
	Modulation Type:	BLE: GFSK
Power Supply	: DC 3.7V for battery or DC 5V for PC USB port. (This report only shows the worst mode for PC USB port power.) The PC adapter : Input: 100-240V,50-60Hz,1.8A Output: 20V-3.25A	
Software Version	: VERSION 2	
Hardware Version	: CARBON FLYER BT PCB V3	
Connecting I/O Port(S)	: 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 v06.

- (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 ≤ 5 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 3.0 \text{ for 1-g SAR}$$
$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 7.5.0 \text{ for 10-g SAR}$$

2.

Calculation:

Test separation: 5mm							
BLE Mode (GFSK)							
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dbm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value	
2.402	-1.675	-1±1	0	1	0.30997	3.0	
2.442	-0.788	-1±1	0	1	0.31247	3.0	
2.480	-0.443	-1±1	0	1	0.31496	3.0	

So standalone SAR measurements are not required.**-----END OF REPORT-----**