

RF Exposure Evaluation

FCC ID: 2AIGWYU-01

1. Client Information

Applicant : Shenzhen Kairuixiang Electronics Co.,Ltd.
Address : Room 8029, F8, Saige Square, Huaqiang North, Futian District, Shenzhen City, China
Manufacturer : Shenzhen Kairuixiang Electronics Co.,Ltd.
Address : Room 8029, F8, Saige Square, Huaqiang North, Futian District, Shenzhen City, China

2. General Description of EUT

EUT Name	:	Anti lost of Bluetooth	
Models No.	:	YU-01, YU-02, YU-03, YU-05, YU-06, YU-07, YU-08, YU-09	
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name for commercial.	
Product Description	:	Operation Frequency: BLE:2402~2480MHz	
		Number of Channel:	BLE:40 Channels
		Max Peak Output Power:	GFSK:-0.816 dBm
		Antenna Gain:	-1 dBi PCB Antenna
		Modulation Type:	1Mbps(GFSK)
Power Supply	:	DC power by Lithium battery.	
Power Rating	:	DC 3V by Lithium battery.	
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 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 ≤ 5 mm are determined by:

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

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

2.

Calculation:

Test separation: 5mm					
BLE Mode (GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-0.816	± 0.5	0.930	0.288	3.0
2.442	-1.384	± 0.5	0.816	0.255	3.0
2.480	-2.011	± 0.5	0.706	0.222	3.0

So standalone SAR measurements are not required.