

RF Exposure Evaluation

FCC ID: 2ACG3TRX-1011

1. Client Information

Applicant : HANGZHOU YANGCHANG I&E Co., LTD

Address : A12A05 Room, NO.39, Blue Ocean International Times Building 1, Yile Road, Hangzhou City, Zhejiang Province, China

Manufacturer : East West Life Technology CO., LTD

Address : 6/F, Fuyuan Industry and commerce Building Chentian, hangcheng Industrial Area, Xixiang Town Bao'an District, Shenzhen, Guangdong, China

2. General Description of EUT

EUT Name	:	Bluetooth Speaker	
Models No.	:	TRX-1011	
Model Difference	:	N/A	
Product Description	:	Operation Frequency: 2402MHz~2480MHz	
	:	Number of Channel:	Bluetooth:79Channels
	:	Max Peak Output Power:	8-DPSK: 0.439 dBm (Conducted Power)
	:	Antenna Gain:	0 dBi PCB Antenna
	:	Modulation Type:	GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)
Power Supply	:	DC Voltage supplied from Host System by USB cable DC power by Li-ion Battery	
Power Rating	:	DC 5.0V by USB cable DC 3.7V Li-ion Battery 850 mAh	
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.

MPE 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 ≤ 50 mm are determined by:

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

- $$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] \cdot [\sqrt{f_{(\text{GHz})}}]}{\leq 7.5 \text{ for 10-g SAR}}$$

Calculation:

The maximum power is 0.439 dBm(1.106mW) @2.402GHz

Separation Distance: 5mm

For 1-g SAR Result: $(1.106\text{mW} / 5\text{mm}) \cdot [\sqrt{2.402(\text{GHz})}] = 0.343 < 3.0$ for 1-g SAR

So standalone SAR measurements are not required.