

RF Exposure Evaluation

FCC ID: 2AFXGG-RBS

1. Client Information

Applicant : M&S Accessory Network
Address : 10 West 33rd Street, Suite 718, New York, NY 11223, USA
Manufacturer : Hong Kong Fanco Electronic Company Ltd.
Address : 5H, Rich Business Tower, No.108 Centre Road, Shajing, Baoan, Shenzhen, China

2. General Description of EUT

EUT Name	:	Gabba Goods Wireless Emoji Speaker
Models No.	:	GG-RBS
Brand Name	:	N/A
Model Difference	:	N/A
Product Description	:	Operation Frequency: Bluetooth 2.1+EDR : 2402~2480MHz
	:	Number of Channel: Bluetooth:79 Channels
	:	Max Peak Output Power: Bluetooth: 1.762 dBm(GFSK)
	:	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 by Li-ion 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 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:

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

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

2.

Calculation:

Test separation: 5mm					
Bluetooth 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	1.330	±0.5	1.524	0.472	3.0
2.441	1.633	±0.5	1.634	0.511	3.0
2.480	1.762	±0.5	1.683	0.530	3.0
Bluetooth Mode ($\pi/4$ -DQPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-0.406	±0.5	1.022	0.317	3.0
2.441	0.088	±0.5	1.145	0.358	3.0
2.480	0.412	±0.5	1.234	0.389	3.0
Bluetooth Mode (8-DPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-0.207	±0.5	1.070	0.332	3.0
2.441	0.195	±0.5	1.174	0.367	3.0
2.480	0.532	±0.5	1.268	0.399	3.0

So standalone SAR measurements are not required.