

RF Exposure Evaluation

FCC ID: 2ACG3M80

1. Client Information

Applicant : HANGZHOU YANGCHANG I&E Co.,LTD
Address : The A12A05 room of the Blue Ocean International Times Building
1NO.39.Yile Road HangZhou
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	:	Mini speaker	
Models No.	:	M80	
Model Difference	:	N/A	
Product Description	:	Operation Frequency: Bluetooth:2402~2480MHz	
		Number of Channel:	Bluetooth:79 Channels
		Max Peak Output Power:	8-DPSK: -0.885 dBm
		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	
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:
$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] \cdot [\sqrt{f_{\text{(GHz)}}}]}{\leq 3.0 \text{ for 1-g SAR}}$$

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

2.

Calculation:

Bluetooth Mode (GFSK)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	TX Power (mW)	Distance (mm)	Calculation Value	Threshold Value
2.402	-1.679	0	0.679	5	0.211	3.0
2.441	-2.962	0	0.506	5	0.158	3.0
2.480	-4.924	0	0.321	5	0.101	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	-0.885	0	0.815	5	0.233	3.0
2.441	-2.118	0	0.614	5	0.191	3.0
2.480	-4.042	0	0.394	5	0.124	3.0

So standalone SAR measurements are not required.