

RF Exposure Evaluation

FCC ID: 2ABQOAMK-K66-02

1. Client Information

Applicant : Dongguan Meiluodi Electronics Co., Ltd
Address : No.16, Zhenxing Road, Shangjiao, Chang'an, Dongguan, Guangdong, 523876, China
Manufacturer : Dongguan Meiluodi Electronics Co., Ltd
Address : No.16, Zhenxing Road, Shangjiao, Chang'an, Dongguan, Guangdong, 523876, China

2. General Description of EUT

EUT Name	:	Bluetooth Speaker
Models No.	:	AMK-K66-02
Model Difference	:	N/A
Product Description	:	Operation Frequency: Bluetooth:2402~2480MHz
	:	Number of Channel: Bluetooth:79 Channels
	:	Max Peak Output Power: GFSK:-1.965 dBm
	:	Antenna Gain: 0 dBi PIFA 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 ≤ 50 mm are determined by:

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

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

2.

Calculation:

Bluetooth Mode (GFSK)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	TX Power (mW)	Distance (mm)	Calculation Value	Threshold Value
2.402	-1.965	0	0.636	5	0.197	3.0
2.441	-1.970	0	0.635	5	0.198	3.0
2.480	-2.143	0	0.611	5	0.192	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	-3.611	0	0.435	5	0.135	3.0
2.441	-3.189	0	0.479	5	0.150	3.0
2.480	-3.345	0	0.463	5	0.146	3.0

So standalone SAR measurements are not required.