

RF Exposure Evaluation

FCC ID: 2ABQOAMK-S2-02B

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-S2-02B
Brand Name	:	MEILUODI
Product Description	:	Operation Frequency: Bluetooth:2402~2480MHz
	:	Number of Channel: Bluetooth:79 Channels
	:	Max Peak Output Power: GFSK: 2.559dBm
	:	Antenna Gain: 0 dBi PCB Antenna
	:	Modulation Type: GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)
Power Supply	:	DC power supplied by AC/DC Adapter DC Voltage supplied from Li-ion battery.
Power Rating	:	Input: AC 100~240V 50/60Hz 0.2A Output: 5V 1A DC 3.7V 1000mAh from 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:

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

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

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	2.248	± 0.5	1.883	0.584	3.0
2.441	2.559	± 0.5	2.023	0.632	3.0
2.480	2.240	± 0.5	1.879	0.592	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	2.287	± 0.5	1.900	0.589	3.0
2.441	2.532	± 0.5	2.010	0.628	3.0
2.480	2.143	± 0.5	1.838	0.579	3.0

So standalone SAR measurements are not required.