

RF Exposure Evaluation

FCC ID: 2ABQOAMK-K33-02B

1. Client Information

Applicant : DongGuan Meiluodi Electronics Co., Ltd
Address : No.16, Zhenxing Road, Shangjiao, Chang'an, Dongguan, Guangdong, 523878 China
Manufacturer : DongGuan Meiluodi Electronics Co., Ltd
Address : No.16, Zhenxing Road, Shangjiao, Chang'an, Dongguan, Guangdong, 523878 China

2. General Description of EUT

EUT Name	:	Portable speaker backpack	
Models No.	:	AMK-K33-02B	
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: 3.77 dBm(GFSK 1Mbps)
		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 5V by USB Cable from PC system. 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 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:

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

- [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)] * $[\sqrt{f_{\text{(GHz)}}}] \leq 7.5.0$ 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	3.658	± 0.5	2.605	0.807	3.0
2.441	3.770	± 0.5	2.673	0.835	3.0
2.480	3.522	± 0.5	2.525	0.795	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	2.221	± 0.5	1.871	0.580	3.0
2.441	3.141	± 0.5	2.313	0.723	3.0
2.480	2.239	± 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	2.446	± 0.5	1.971	0.611	3.0
2.441	2.087	± 0.5	1.814	0.567	3.0
2.480	2.043	± 0.5	1.796	0.566	3.0

So standalone SAR measurements are not required.

-----End of Report-----