

RF Exposure Evaluation Report

1 RF EXPOSURE

Product Name: Wireless K-song Bluetooth speaker
 Model No.: BG-K13, AB4063, AB4051, AB4057
 FCC ID: 2BDPJ-BG-K13

2. RF Exposure Evaluation

FCC KDB447498 D01 General RF Exposure Guidance v06: Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.

FCC CFR 47 part1 1.1310: Radiofrequency radiation exposure limits.

FCC CFR 47 part2 2.1091: Radiofrequency radiation exposure evaluation: mobile devices.

2.1 LIMITS

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2.2 EUT RF EXPOSURE EVALUATION

Worst Mode						
Channel (MHz)	Conducted Power (dBm)	Tune up Tolerance (dBm)	Maximum tune-up Power		Calculated value	Limit
			(dBm)	(mW)		
ANT1-2DH5-2441MHz	-2.35	-2 $\pm$ 1	-1.0	0.794	0.248	3.0
ANT2-2DH5-2480MHz	3.46	3 $\pm$ 1	4.0	2.512	0.791	3.0

Calculated value is $0.248 < 3.0$ & $0.791 < 3.0$, So there is no require SAR test