

RF Exposure evaluation

Product Description: Freedom Bluetooth Speaker
Model Number: 750-910-JHE
FCC ID: 2ABDS750-910-JHE

According to 447498 D01 General RF Exposure Guidance v05 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: $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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

According to the above test data,

$$P_t = 9.81 \text{ dBm} = 0.00957 \text{ W} = 9.57 \text{ mW}$$

The result is rounded to one decimal place for comparison
Worse case is as below: [2402 MHz - 9.57 mW output power]
 $(9.57 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.402 \text{ (GHz)}}] = 2.97 < 3.0$ for 1-g SAR
Then SAR evaluation is not required

NOTE: For the maximum power, you can refer FCC test report.