

FCC RF Exposure

EUT Description: Bluetooth Speaker with Power Bank

Model No.: BTS-106

1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 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:

$$\text{Result} = P/D \cdot \sqrt{F}$$

F= the RF channel transmit frequency in GHz

P=Maximum turn - up power in mw

D=Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

2.4G

	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit	SAR Test Exclusion
EDR	-6.75	-7 ± 1	-6/ 0.25	5	0.07812	3.0	Pass
Note: PK Output power= conducted power. Conducted power see the test report HK2011273740-E , antenna gain=-0.58dBi							

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.07812 which is ≤ 3 , RF Exposure testing is not required.

Note: Exclusion Thresholds Results= $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$

f(GHz) is the RF channel transmit frequency in GHz

Distance=5mm