

# FCC RF Exposure

EUT Description: Ultra-Performance Bluetooth Speaker

Model No.: SoundTank

FCC ID: 2AGA6-SOUNDTANK

## 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  $\leq 50$  mm are determined by:  

$$\left[ \frac{\text{max power of channel, including tune - up tolerance, mW}}{\text{(min. test separation distance, mm)}} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0$$
 for 1 - g SAR and  $\leq 7.5$  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
BT	-5.653	-6 ± 1	-5/ 0.32	5	0.09919	3.0	Pass

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2008312535-1E**, 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 0.09919 which is  $\leq 3$ , RF Exposure testing is not required.

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

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

Distance=5mm