

# Analysis Report

The Equipment Under Test (EUT) is a portable wireless Mic.

The EUT is powered by 3x1.5V AAA battery. After switching on the EUT and being paired with the smart phone via Bluetooth 3.0 protocol, the light indicator will stop flashing and stay on, then it will be able to play audio file from the smart phone. Meanwhile, the microphone can amplify the sound received from the mic through the speaker. User can adjust the volume with the switches.

The Model: 50973, 50997 and 51014 are the same as the Model: 50765 in hardware aspect. The difference in model number serves as marketing strategy. The models are different in external appearance color only.

**Antenna Type: Internal, Integral**

**Antenna Type: Internal antenna**

**Antenna Gain: 0dBi**

**Nominal rated field strength is 90.8 dB $\mu$ V/m at 3m**

**Maximum allowed production tolerance: +/- 3dB**

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 93.8dB $\mu$ V/m at 3m in frequency 2.402GHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.720mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain  
So;

Conducted Power = 0.720mW.

The SAR Exclusion Threshold Level:

=  $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

=  $3.0 \cdot 5 / \sqrt{2.480}$  mW

= 9.525 mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.