

# Analysis Report

The Equipment Under Test (EUT) is a Wireless Speaker. It can accept audio signal from analog input source (3.5mm phone jack aux-in) and wireless Bluetooth device. The audio signal is amplified and fed to the built-in passive loudspeakers. The EUT is powered by 3.6V internal rechargeable battery and/or 5VDC (USB port). The USB ports is for charging internal battery only without PC data transfer function.

## **2.4GHz Bluetooth Module:**

**Modulation Type: GFSK**

**Antenna Type: Integral, Internal (PCB Trace)**

**Frequency Range: 2402MHz - 2480MHz, 1MHz channel spacing, 79 channels**

**EIRP range is -4 dBm to 4 dBm**

**Antenna gain is 0dBi**

According to the KDB 447498:

Conducted power = Radiated Power (EIRP) – Antenna Gain  
= 4 dBm – 0 dBi = 4 dBm

Conducted Power = 2.5 mW.

The SAR Exclusion Threshold Level:

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

=  $3.0 * 5 / \text{sqrt}(2.480)$  mW

= 9.53 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.