

# Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Bluetooth 4.0 dual mode transceiver (i.e. Bluetooth basic rate/EDR and BLE). The EUT is powered by a 3.7V rechargeable battery which can be charged with a USB cable. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz. After pairing with Bluetooth device, the audio signal can be received via Bluetooth communication and sound playing from the speaker through 3.5mm AUX out port.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 99.1dB $\mu$ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

For Stand Alone SAR information;

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 102.1dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 4.865\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 4.865mW.

The SAR Exclusion Threshold Level:

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

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

= 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.