

Analysis Report

Report No.: HK13011084-1

The Equipment Under Test (EUT) is an AM/FM Portable Bluetooth Radio. The Bluetooth portion is operating between 2402MHz and 2480MHz (79 channels with 1MHz channel spacing). The EUT is powered by internal 3.7VDC rechargeable battery or USB port (5V DC). When the EUT is switched ON in Bluetooth mode, the display will show "BT" and flashing. The corresponding device would be searched and connected to the EUT before playing audio. After pairing, the "BT" will stay lit.

Antenna Type: Internal, integral PCB trace antenna

Antenna Gain: 0dBi

Nominal rated field strength: 104.1dBμV/m at 3m

Maximum allowed field strength of production tolerance: +0dB / - 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 104.1dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 7.7\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 7.7mW.

The SAR Exclusion Threshold Level:

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

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

= 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.