

Analysis Report

Report No.: 14031417HKG-001

The Equipment Under Test (EUT) is a 2.4GHz Bluetooth headphone with AUX-in port and NFC function. The Bluetooth portion is operating between 2402MHz and 2480MHz (79 channels with 1MHz channel spacing). The EUT is powered by 1 x 3.6VDC rechargeable battery. It has a USB port charging the rechargeable battery. When the EUT is switched ON, the light will be flashing. The corresponding Bluetooth device would be searched and connected to the EUT before playing audio. After pairing, the light will stay lit.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 103.5dBμV/m at 3m

Maximum allowed field strength of production tolerance: +0dB / - 6dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 103.5dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 6.716\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 6.716mW

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.