

# Analysis Report

Report No.: 13051675HKG-001

The Equipment Under Test (EUT) is Bluetooth Music Receiver. It has function of audio playback from Bluetooth device after pairing. The audio output has both analog (3.5mm phone-jack aux out) and SPDIF digital (TOSLINK optical). The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (79 channels with 1MHz channel spacing). The EUT supports NFC function to connect the Bluetooth communication when it is touched with NFC enabled device. The EUT is powered by 5VDC from supplied AC/DC adaptor. This AC/DC adaptor can accept universal input (100-240VAC).

The EUT is using non-adaptive frequency hopping as declared by the applicant.

Antenna Type: Internal, integral

Antenna Gain: 0dBi

Nominal rated field strength: 93.6dB $\mu$ V/m at 3m

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

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 96.6dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 1.37\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 1.37mW

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.