

Analysis Report

Report No.: HK13020627-1

The Equipment Under Test (EUT) is a Bluetooth Music Receiver. It can pair with a Bluetooth device as the audio source. The demodulated audio signal is then drive an external active speaker via phone jack output. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (79 channels with 1MHz channel spacing). The EUT is powered by 5V DC from an AC/DC adaptor. The adaptor accepts 100-240VAC 50/60Hz.

Antenna Type: Internal integral antenna

Antenna Gain: +1.76dBi

Nominal rated field strength: 100.3dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 2.5dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 102.8dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 5.7\text{mW}$

Conducted power = Radiated Power (EIRP) - Antenna Gain
So;

Conducted Power = 3.8mW.

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.

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