

Analysis Report

Report No.: 17010665HKG-001

The Equipment Under Test (EUT) is a CD Stereo System that can accept audio sources including CD, FM Tuner, analog line-in and Bluetooth devices. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (79 channels with 1MHz channel spacing). The audio signal is amplified and fed to the supplied passive external stereo loudspeakers. The EUT contains a USB port (charging only). The EUT is powered by 120VAC. The applicant declared that Bluetooth 4.0 BLE is not used in the product.

Bluetooth Portion

Modulation Type: GFSK

Antenna Type: Internal, Integral

Frequency Range: 2402MHz to 2480MHz, 1MHz channel spacing, 79 channels

Antenna Gain: 0dBi

Normal rated field strength: 82 dB μ V/m @ 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 85 dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.095 \text{ mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.095 mW.

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.