

Analysis Report

Report No.: 14010277HKG-002

The Equipment Under Test (EUT) is a 5 Disc Audio System that can accept audio sources including 5 CD changer, 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 headphone output and a USB port (for 5V DC charging purpose only). The EUT is powered by 100-120VAC.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 100.6dBμV/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 103.6dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 6.87\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 6.87mW.

The conducted source-based time-averaged output power

= $(6.87 \cdot 5/6)$ mW

= 5.725 mW

The SAR Exclusion Threshold Level:

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

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

= 9.53 mW

Since the above conducted source-based time-averaged output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.