

# Analysis Report

Report No.: 13051345HKG-001

The Equipment Under Test (EUT) is a nanoHIFI. It can accept analog input sources (3.5mm phone-jack line-in, FM radio, iPod/iPhone docking), digital input source (USB flash drive) and wireless Bluetooth device. 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 separate stereo loudspeakers. The EUT has audio line level output and subwoofer output. The EUT is powered by 20VDC from an AC/DC adaptor. The AC/DC adaptor can accept universal input voltage (100V-240VAC). The EUT is using non-adaptive frequency hopping as declared by applicant.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 101.4dB $\mu$ 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 104.4dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 8.26\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 8.26mW

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.