

Analysis Report

Report No.: HK13020273-3

The Equipment Under Test (EUT) is a Home Theater Sound Bar with Subwoofer. It can accept analog input sources: RCA aux-in and 3.5mm phone jack line-in; and digital input sources: optical 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 built-in stereo loudspeakers and a separate passive subwoofer. The EUT is powered by 13VDC from an AC/DC adaptor. The AC/DC adaptor can accept only 120AC input voltage (100V-120VAC).

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 94.0dB μ 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 97.0dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 1.504\text{mW}$

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

Conducted Power = 1.504mW

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 the applicant.