

**Analysis Report**  
**Report No.: 13081259HKG-001**

The Equipment Under Test (EUT) is Bluetooth music receiver powered by 5.0VDC from an AC/DC adaptor. The EUT is a Bluetooth 4.0 device and it is compatible with the Bluetooth host version 3.0. The AC/DC adaptor can accept universal input voltage (100V-240VAC). The EUT shall be connected to the speaker or amplifier through the audio cable and pairing with the bluetooth device to play the music of the bluetooth device. When the EUT is switched ON, the light will flash red. The corresponding Bluetooth device would be searched and connected to the EUT before playing audio. After pairing, the light will be switched to blue.

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

Bluetooth version 3.0  
2402MHz – 2480MHz, 79 channels, 1MHz spacing

Bluetooth version 4.0:  
2402MHz – 2480MHz, 39 channels, 2MHz spacing

Bluetooth Antenna Type: Internal integral (PCB Trace)

Operating Mode	Nominal Radiated Field Strength	Production Tolerance	Antenna Gain
Bluetooth v.3.0	101.6dB $\mu$ V/m at 3m	$\pm$ 3dB	0dBi
Bluetooth v.4.0	101.6dB $\mu$ V/m at 3m	$\pm$ 3dB	0dBi

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 104.6dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;  
The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 8.652mW$   
Conducted power = Radiated Power (EIRP) - Antenna Gain  
So;  
Conducted Power = 8.652mW.

The SAR Exclusion Threshold Level:  
=  $3.0 \cdot (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$   
=  $3.0 \cdot 5 / \text{sqrt}(2.480) mW$   
= 9.53 mWm

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.