

# Analysis Report

Report No.: 13081079HKG-001

The equipment under test (EUT) is a portable Bluetooth headset. The EUT is equipped with a USB interface and contains a Bluetooth module. The Bluetooth module in the EUT supports both is operating in the frequency range from 2402MHz to 2480MHz (79 channels with 1MHz channel spacing). The EUT is powered by 1 X 3.7V rechargeable battery (Li-Poly). The EUT can be used for management and communication of phone calls once paired with Bluetooth enabled mobile phones. The EUT is using non-adaptive frequency hopping in the Bluetooth module as declared by the applicant. The USB interface of the EUT does not contain PC Connectivity which is for charging use only.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 100.9dB $\mu$ 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 103.9dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 7.364\text{mW}$

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

Conducted Power = 7.364mW.

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.