

Analysis Report

Report No.: 19020247HKG-003

The Equipment Under Test (EUT) is a Bluetooth device. The EUT can operate with mobile app.

The Bluetooth portion occupies frequency range of 2402MHz to 2480MHz (39 channels with channel spacing of 2MHz).

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 84.7dB 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 87.7dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.18\text{mW}$

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

Conducted Power = 0.18mW.

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 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.