

Analysis Report

15070784HKG-001

The Equipment Under Test (EUT) is a Bluetooth Keyboard. After pairing with a mobile device (such as smartphone), the EUT act as a wireless keyboard. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (79 channels with 1MHz channel spacing). The EUT is powered by USB port (5VDC) and/or 3.7VDC internal rechargeable Li-ion battery.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

| Operating mode | Nominal Radiated Field Strength | Production Tolerance | Modulation Type |
|----------------|---------------------------------------|-------------------------|--------------------|
| Bluetooth 3.0 | 91.8 dB μ V/m at 3m | +3/-3dB | GFSK |

According to the KDB 447498:

For Bluetooth:

Based on the Maximum allowed field strength of production tolerance was 94.8dB μ V/m at 3m in frequency 2.480GHz, thus;

The EIRP = $[(FS^*D)^2 * 1000 / 30] = 0.906mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.906mW.

The SAR Exclusion Threshold Level:

= $3.0 * (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

= $3.0 * 5 / \sqrt{2.480} mW$

= 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.