

Analysis Report

Report No.: 13071240HKG-001

The Equipment Under Test (EUT) is a Bluetooth Wireless Keyboard. It can pair with a Bluetooth device such as the Android mobile or IOS mobile. 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 internal 3.7VDC Ni-MH rechargeable battery which can be charged by 5VDC from USB port. .

Antenna Type: Internal integral (PCB Trace)

Antenna Gain: 1.87dB

Nominal rated field strength: 90.9dB μ V/m at 3m

Maximum allowed field strength of production tolerance: -/+3 dBm

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 95.8dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 1.141\text{mW}$

Conducted power = Radiated Power (EIRP) - Antenna Gain

So;

Conducted Power = 0.736mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \sqrt{2.480} \text{ mW}$

= 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.