

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a PAUBA with Bluetooth function operating in 2402-2480MHz. The EUT is powered by DC 3.7V lithium battery which can be charged by USB port. The USB port is only use for charging purpose. In charging mode Bluetooth doesn't work. For more detail information pls. refer to the user manual.

Bluetooth Version: 4.0 Single Mode (BLE)

Modulation Type: GFSK

Antenna Type: Integral antenna (Gain: 2.0 dBi)

The nominal conducted output power specified: -3.0dBm (Tolerance: +/-5dB)

According to the KDB 447498:

The maximum conducted emission for the EUT is -5.75dBm for at the frequency 2.402GHz which is within the production variation

The minimum conducted emission for the EUT is -6.98dBm at the frequency 2.480GHz which is within the production variation

The maximum conducted output power specified is 2.0dBm = 1.58mW

The source- based time-averaging conducted output power
= $1.58 \times \text{Duty cycle mW} \leq 1.58 \text{ mW}$ (Duty Cycle $\leq 100\%$)

The SAR Exclusion Threshold Level:

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

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

= 9.53 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.