Analysis Report

The equipment under test (EUT) is a Vyper 3 with Bluetooth function operating in 2402-2480MHz. The EUT is powered by DC 18V rechargeable battery which can be charged by Adaptor. For more detail information pls. refer to the user manual.

Bluetooth Version: V5.0 BLE
Modulation Type: GFSK
Antenna Type: Integral antenna (Gain: 3.36 dBi)

The nominal Radiated output power specified (BLE): 1.5dBm (Tolerance: +/-2.0dBm)

According to the KDB 447498:

The maximum Radiated emission for the EUT is 98.3dBuV/m (3.07dBm) for at the frequency 2.402GHz which is within the production variation.

The minimum Radiated emission for the EUT is 95.5dBuV/m(0.27dBm) at the frequency 2.480GHz which is within the production variation

The maximun Radiated output power specified is 3.5dBm = 2.24mW
The source- based time-averaging conducted output power
= 2.24 * Duty cycle mW <= 2.24 mW (Duty Cycle<=100%)

The SAR Exclusion Threshold Level:
= 3 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3 * 5 / sqrt (2.402) mW
= 9.68 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.