Analysis Report

The Equipment Under Test (EUT), is a 2.4GHz Bluetooth BLE (1Mbps) Transceiver for a Bluetooth vacuum cleaner. The sample supplied operated on 40 channels, normally at 2402 – 2480MHz. The channels are separated with 2MHz spacing.

The EUT is powered by 4 x 3.67VDC rechargeable battery. After switching on the EUT, it can be paired up with a smartphone and different status and settings can be viewed through a mobile app.

2.4GHz Bluetooth BLE portion
Antenna Type: Internal, Integral
Antenna Gain: -0.8dBi

Conducted (Peak) Power Range is 0dBm to 5dBm

According to the KDB 447498:

Conducted Power (max)
= 5 dBm (3.16 mW)

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(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.