Analysis Report

The equipment under test (EUT) is a Bluetooth Cassette Adapter model BWA19WI001 with Bluetooth technology operating in 2402-2480MHz. The EUT is powered by rechargeable battery (DC 3.7V, 120mAh) which can be charged by DC 5V. For more detail information pls. refer to the user manual.

Modulation Type: GFSK, π/4-DQPSK and 8-DPSK
Bluetooth Version: 4.0(without BLE)
Antenna Type: PCB Antenna
Antenna Gain: 3dBi
The nominal conducted output power specified: 5.5dBm (Tolerance: +/-3dB)
The nominal radiated output power specified: 8.5dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 105.6 dBμV/m at 3m in the frequency 2.441GHz = [(FS*D) ^2 / 30] mW
= 10.4 dBm which is within the production variation

The minimum radiated emission for the EUT is 101.7dBμV/m for at 3m in the frequency 2.480GHz = [(FS*D) ^2 / 30] mW
= 6.5 dBm which is within the production variation

The maximun conducted output power specified is 8.5dBm = 7.08mW
The source- based time-averaging conducted output power
= 7.08* Duty cycle mW <= 7.08mW (Duty Cycle<=100%)

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 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.