Analysis Report

The Equipment Under Test is a Wireless Earphones which equips with 2.4GHz Bluetooth audio playback feature. The EUT operates at frequency range of 2402MHz to 2480MHz. There are total 79 channels with 1MHz channel spacing. The EUT can play wireless audio signal when paired with a Bluetooth devices. The audio signal is then amplified and driving earphones. The USB ports is for charging internal battery only. The EUT is powered by 3.7V rechargeable battery.

2.4GHz Bluetooth Module:
Modulation Type: GFSK
Antenna Type: Integral, Internal (PCB Trace)
Frequency Range: 2402MHz - 2480MHz, 1MHz channel spacing, 79 channels

EIRP range is -6dBm to 0dBm
Antenna gain is 0dBi

According to the KDB 447498:

Conducted power = Radiated Power (EIRP) – Antenna Gain
= 0dBm – 0dBi = 0dBm
Conducted Power = 1 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.