Analysis Report

The Equipment Under Test (EUT) is a BAB Plush Headphones which equips with 2.4GHz Bluetooth 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 headphone. The EUT is powered by a 3.7V internal rechargeable battery which can be charged via USB port. The applicant declared that Bluetooth 4.0 BLE is not used in the product. The USB port is for charging only.

2.4GHz Bluetooth portion
Antenna Type: Internal, Integral
Antenna Gain: 0 dBi

Bluetooth 3.0
Modulation Type: GFSK
Frequency Range: 2402MHz to 2480MHz, 1MHz channel spacing, 79 channels

EIRP range is -4dBm to 2dBm

According to the KDB 447498:

Conducted Power (max) = EIRP – Antenna gain
= 2 dBm - 0 dBi
= 2 dBm (1.58 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.