RF Exposure

The equipment under test (EUT) is a BLUETOOTH STEREO IN EAR SPORT HEADSETS with Bluetooth function. The EUT was powered by the fully-charged DC 3.7V, 80mAh new rechargeable battery which was charged by USB port (DC 5V). For more detail information pls. refer to the user manual.

Modulation Type: GFSK for BT 4.0 BLE and GFSK, π/4DQPSK, 8DPSK for BT 3.0, 2.1+EDR. Bluetooth Version: 4.0 and 3.0, 2.1 with EDR.

Antenna Type: Integral antenna.
Antenna Gain: 0dBi.
The nominal conducted output power specified: 6.0dBm +/-3dB.
The nominal radiated output power (e.i.r.p) specified: 6.0dBm (+/- 3dB)

According to the KDB 447498:

The maximun peak radiated emission for the EUT is 103.5dBμV/m at 3m for BT 4.0 BLE
The EIRP = [(FS*D) ^2 / 30] mW = 8.3dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 100.7dBμV/m at 3m for BT 3.0+EDR
The EIRP = [(FS*D) ^2 / 30] mW = 5.5dBm
which is within the production variation.

The maximun conducted output power specified is 9.0dBm = 7.9mW
The source- based time-averaging conducted output power
= 7.9 * Duty Cycle mW (where Duty Cycle≤100%)
= 7.9 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.5 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.