RF Exposure

The equipment under test (EUT) is a Moga Pro Player(IOS) with Bluetooth function. The EUT was powered by a 3.7 VDC Li-ion rechargeable battery charged by an USB Power Adapter with AC 120V, 60Hz. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna.
Antenna Gain: 0dBi.
The nominal conducted output power specified: -5.5dBm (+/-3dB).
The nominal radiated output power (e.i.r.p) specified: -5.5dBm (+/- 3dB).

Modulation Type: GFSK, π/4-DQPSK, 8DPSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 92.6dBμV/m at 3m in the frequencies 2402MHz
The EIRP = [(FS*D) ^2 / 30] mW =-2.6dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 87.0dBμV/m at 3m in the frequency 2480MHz
The EIRP = [(FS*D) ^2 / 30] mW =-8.2dBm
which is within the production variation.

The maximun conducted output power specified is -2.5dBm = 0.56mW
The source- based time-averaging conducted output power
= 0.56 * Duty factor mW= 0.47 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 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.

Transmitter Duty Cycle Calculation

Based on the Bluetooth Specification (BT version:2.1 with EDR), the duty factor is dependent of packet type (DH1, DH3 and DH5).For one period for a pseudo-random hopping through all 79 RF channels, for DH5:
One hop set consists of 5 TX slot and 1 RX slot.
Duty factor = 5 / 6 = 0.833

This requirement is according to KDB 865664 D02