RF Exposure

The equipment under test (EUT) is a Bluetooth Boombox with AM/FM Radio with Bluetooth function. The EUT was powered by a 3.6 VDC Li-ion rechargeable battery which is charged by USB Power Adapter with AC 120V, 60Hz. For more detail information pls. refer to the user manual.

Bluetooth Version: 2.1+EDR
Modulation Type: GFSK, π/4DQPSK, 8DPSK
Antenna Type: Integral antenna.
Antenna Gain: 2.0dBi.
The nominal conducted output power specified: -12.0dBm (+/-3dB)
The nominal radiated output power (e.i.r.p) specified: -10.0dBm (+/- 3dB)

According to the KDB 447498:

The maximun peak radiated emission for the EUT is 87.7dBμV/m at 3m in the frequency 2402MHz
The EIRP = [(FS*D) ^2 / 30] mW =-7.53dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 85.3dBμV/m at 3m in the frequency 2480MHz
The EIRP = [(FS*D) ^2 / 30] mW = -9.93dBm
which is within the production variation.

The maximun conducted output power specified is -9.0dBm = 0.126mW
The source- based time-averaging conducted output power
= 0.126 * Duty Cycle mW (where Duty Cycle≤1)
≤ 0.126 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.