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 $87.7dB\mu$ V/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.