Analysis Report

The equipment under test (EUT) is a Bluetooth Boombox with Bluetooth technology operating in 2402-2480MHz. The EUT is powered by AC 120V/60Hz. For more detail information pls. refer to the user manual.

Modulation Type: GFSK, π/4-DQPSK and 8-DPSK
Bluetooth Version: 4.2+ EDR
Antenna Type: Integral antenna
Antenna Gain: 0 dBi
The nominal radiated output power specified: -7dBm (Tolerance: +/-3dB)
The nominal conducted output power specified: -7dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The maximum conducted emission for the EUT is 87.9 dBμV/m at 3m in the frequency 2.441GHz = [(FS*D) ^2 / 30] mW
= -7.3 dBm which is within the production variation

The minimum conducted emission for the EUT is 85.7 dBμV/m for at 3m in the frequency 2.480GHz = [(FS*D) ^2 / 30] mW
= -9.5 dBm which is within the production variation

The maximun conducted output power specified is -4dBm = 0.40mW
The source- based time-averaging conducted output power
= 0.40 * Duty cycle mW <= 0.40 mW (Duty Cycle<=100%)

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.