

Analysis Report

The Equipment Under Test (EUT) is a CD Audio System that can accept audio sources including CD, AM/FM Tuner, analog line-in, tape, phono and Bluetooth devices. The Bluetooth 3.0 module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (79 channels with 1MHz channel spacing). The audio signal is amplified and fed to the supplied passive external stereo loudspeakers. The EUT is powered by 120VAC.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength: 91.1 dBμV/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB.

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 94.1dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.771\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;

Conducted Power = 0.771mW.

The SAR Exclusion Threshold Level:

$$\begin{aligned} &= 3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}} \\ &= 3.0 \cdot 5 / \sqrt{2.480} \text{ mW} \\ &= 9.52 \text{ mW} \end{aligned}$$

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.