

Analysis Report

The Equipment-Under-Test (EUT) is a Coffee Maker with Bluetooth. The EUT contains a boiler, a 5V USB charging port and a Bluetooth 3.0 radio with audio playback. The EUT can accept wireless audio signal via Bluetooth devices. The EUT has internal power amplifier and loudspeaker. It is powered 120VAC.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 91.1dB μ V/m at 3m

Allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production was 94.1dB μ V/m at 3m, 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:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

= $3.0 \cdot 5 / \sqrt{2.480} \text{ mW}$

= 9.53 mW

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