

Analysis Report

The Equipment Under Test (EUT) is a 915MHz Transmitter of thermostat Controller. The EUT is powered by 3.0VDC (2X1.5V AAA Batteries). After switch on the EUT and paired with thermostat, the EUT can be controlled to turn on/off Heater/Cooler/Fan.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Maximum rated field strength: 93.8dB μ V/m at 3m

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 93.8dB μ V/m at 3m in frequency 915MHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.720\text{mW}$

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

Conducted Power = 0.720mW.

The SAR Exclusion Threshold Level:
 $= 3.0 * (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}} = 3.0 * 5 / \sqrt{0.915} \text{ mW} = 15.68 \text{ mW}$

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.