

Analysis Report

The Equipment Under Test (EUT) is a wireless remote control unit of pet training system. It operates at frequency of 434MHz. The device was powered by a 2x1.5V AAA Alkaline battery.

Module:

Modulation Type: ASK

Antenna Type: Integral, Internal

Frequency Range: 434MHz

Nominal field strength is 94.4dB μ V/m @ 3m

Production Tolerance of field strength is +/- 3dB

Antenna gain is -8dBi

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 97.4dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 1.65\text{mW}$

Conducted Power = 10.4 mW

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \text{sqrt}(0.43)$ mW

= 22.76 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.