

## Analysis Report

The Equipment Under Test (EUT) is a Alarmbox RC with 433MHz TX + 433MHz RX (433.9MHz Transmitter). When the button of the EUT is activated, the corresponding 433.9MHz remote receiver will sound. The EUT is powered by Battery 3.0VDC (1 x 3V "CR2" Battery).

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 90 dB $\mu$ V/m at 3m in frequency 433.9MHz, thus;

It below calculated field strength according to minimum SAR exclusion threshold level as follows:

The worst case of SAR Exclusion Threshold Level:  
=  $3.0 * (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$   
=  $3.0 * 5 / \sqrt{0.4339}$  mW  
= 22.77 mW

According to the KDB 412172 D01:  
 $\text{EIRP} = [(\text{FS} * \text{D})^2 * 1000 / 30]$

Calculated Field Strength for 22.77mW is 108.8 dB $\mu$ V/m @3m

Since maximum field strength plus production tolerance  $\leq 108.8$  dB $\mu$ V/m @3m and antenna gain is  $\geq 0.0$  dBi, it is concluded that maximum Conducted Power and Field Strength are well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.