Analysis Report

The equipment under test (EUT) is a transmitter for Remote door bell operating at 433MHz which is operated by a crystal. The EUT is powered by 3.0VDC (2 x AA batteries). Each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.

Antenna Type: Internal antenna
Antenna Gain: 0dBi
Nominal rated field strength: 77.0 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 80.0dBμV/m at 3m in frequency 433MHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.03mW

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

Conducted Power =0.03mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (0.433) mW
= 22.7 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.