Analysis Report

The equipment under test (EUT) is a transmitter for Remote Key Finder operating at 433.92MHz. The EUT is powered by DC 3V battery. The EUT has six control Keys, press the corresponding control key on the EUT in order to locate the desired receiver. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna
Antenna Gain: 1.2dBi

The nominal conducted output power specified: -2dBm (+/- 3dB)

The nominal radiated output power (e.r.p) specified: -2.95dBm (+/- 3dB)

Modulation Type: ASK

According to the KDB 447498:

The worst-case peak radiated emission for the EUT is 92.60dBμV/m at 3m in the frequency 433.92MHz
The EIRP = [(FS*D) ^2 / 30] mW= -2.63dBm
The ERP=EIRP-2.15=-4.78dBm
which is within the production variation.

The maximun conducted output power specified is 1dBm = 1.26mW
The source- based time-averaging conducted output power
= 1.26 * Duty Cycle mW= 0.139mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (0.43392) mW
= 22.77 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.

The duration of one cycle = 45.50ms
Effective period of the cycle = 16*0.18+ 9*0.22=4.86ms
DC = 4.86 / 45.50ms = 0.11 or 11%