RF Exposure

The equipment under test (EUT) is a Key Fob (WL/WS) operating at 433.92MHz. The EUT is powered by DC 3V by CR2450 battery. For more detail information pls. refer to the user manual.

Antenna Type: Integral Antenna
Modulation: ASK for manually operated, FSK for automatically activated
Antenna Gain: -15dBi Max.

According to the KDB 447498 D04 Interim General RF Exposure Guidance v01 (D01 447498 General RF Exposure Guidance v07):

The Maximum peak radiated emission for the EUT is 88.7 dBμV/m at 3m in for ASK mode
The EIRP = [(FS*D) ^2 / 30] mW = -6.5dBm
which is within the production variation.

The nominal radiated output power (e.i.r.p) specified: -5.0 dBm (Tolerance: ±2dB)
The nominal conducted output power specified: 10.0 dBm (Tolerance: ±2dB)

The maximum conducted output power specified is 12.0dBm= 15.849mW
The source- based time-averaging conducted output power
=15.849* Duty cycle mW＜15.849* Duty cycle mW (Duty cycle ＜100%)

The SAR Exclusion Threshold Level:

P_{th}(mW) = ERP_{20cm} * $(d/20cm)^{x}$ (X= $-\log_{10}\left(\frac{60}{ERP_{20\ cm}\sqrt{f}}\right)$)

= 2040*0.43392 * $(0.5/20)^{0.99}$ mW

= 23.17 mW

Since max. conducted output power and effective radiated power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.