Analysis Report

The Equipment Under Test (EUT) is a transmitter of a RF controlled car. The EUT is powered by a 9V alkaline battery. The EUT operating frequency is from 2405-2475MHz (71 channels with 1MHz channel spacing). After switching ON the EUT and the corresponding car (Receiver), activating the control keys on the EUT can control the car moving forward, backward, left and right.

Antenna Type: Internal antenna
Antenna Gain: 0dBi
Nominal rated field strength: 93.2 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 96.2dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 1.251mW

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

Conducted Power =1.251mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.475) mW
= 9.53 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.