

Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Transmitter (Watch). The EUT is powered by 1 x 3V CR2032 battery. The 2.4GHz module is operating at the frequencies (2409 and 2458) MHz. After switching on the EUT and the corresponding Receiver (Engine), activating the control keys on the EUT can control the (Engine) moving.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength: 91.4 dB μ V/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 94.4dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 0.826mW$

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

Conducted Power = 0.826mW.

The SAR Exclusion Threshold Level:

= $3.0 * (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

= $3.0 * 5 / \text{sqrt}(2.458) \text{ mW}$

= 9.568 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.