

Analysis Report

The Equipment Under Test (EUT) is a portable 2.4GHz Transceiver (controller Unit) operating at 2412, 2420, 2427, 2439, 2442, 2450, 2457 and 2468 MHz for RC Car operating at 2412MHz. The EUT is powered by 2 X 1.5V AA batteries. After switch on the EUT and paired with RC Car, the RC Car can be controlled to fly forward, backward, turning left/ right direction by the controller.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 84.5dB 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 87.5dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.169mW

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

Conducted Power = 0.169mW.

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 * 5 / sqrt(2.468) mW

= 9.55 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.