

Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz RC car operating from 2410-2475MHz with 1MHz channel spacing. The EUT is powered by 6X1.5V AA batteries. After switch on the EUT and paired with Controller, the RC Car can be controlled to move forward, backward, turn left/right.

Antenna Type: Internal antenna

Antenna Gain: 0Bi

Nominal rated field strength: 71.2dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 5dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 76.2dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 0.013\text{mw}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.013mW.

The SAR Exclusion Threshold Level:

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

GHz) = $3.0 * 5 / \text{sqrt}(2.475) \text{ mW}$

= 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.