

## Analysis Report

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Controller Unit) for a RC car. The EUT is powered by 1 x 9V battery.

After switch on the EUT, model: 1002396, the car will be moved forward or backward, turned left or right based on the joystick control in the controller.

**Antenna Type: Internal antenna**

**Antenna Gain: 0dBi**

**Nominal field strength is 86.6 dB $\mu$ V/m at 3m**

**Maximum allowed production tolerance: +/- 3dB**

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 89.6dB $\mu$ V/m at 3m in frequency 2.475GHz, thus;

The EIRP =  $[(FS * D)^2 * 1000 / 30] = 0.274\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.274mW.

The SAR Exclusion Threshold Level:

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

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

= 9.535 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.