

# Analysis Report

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Controller Unit) for a dinosaur. The EUT is powered by 1 x 3.7V rechargeable Li-ion battery.

After switch on the EUT, model: FLY56, the dinosaur will be moved forward or backward, turned left or right or the hand or mouth moving based on the joystick control and the pressed switches in the controller.

**Antenna Type: Internal antenna**

**Antenna Gain: 0dBi**

**Nominal rated field strength is 97.0 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 100.0dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 3.00\text{mW}$

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

Conducted Power = 3.00mW.

The SAR Exclusion Threshold Level:

$$\begin{aligned} &= 3.0 * (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz}) \\ &= 3.0 * 5 / \text{sqrt}(2.475) \text{ mW} \\ &= 9.53\text{mW} \end{aligned}$$

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.