

Analysis Report

The Equipment Under Test (EUT) is a portable 2.4GHz Transceiver (RC robot dinosaur) operating at the frequencies stated below:

2407	2408	2409	2410	2411	2412	2413	2435	2436	2437
2438	2439	2440	2441	2442	2443	2444	2445	2467	2468
2469	2470	2471	2472	2473	2474	2475	2476	2477	

The EUT is powered by 3.7V rechargeable battery. And it can be controlled to move and make sound.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 93.8 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 96.8 dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 1.436\text{mW}$

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

Conducted Power = 1.436mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \text{sqrt}(2.477) \text{ mW}$

= 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.