

Analysis Report

The Equipment Under Test (EUT), is a portable 2.4GHz Portable Controller for a RC jet toy set. The operation frequency range is between 2405MHz and 2475MHz with 1 MHz channel spacing following 71 channels used.

The EUT is powered by 2 x 1.5V AAA batteries.

After switching on the EUT, the jet will be moved forward or backward and turned left or right based on the switches pressed in the controller.

Antenna Type: Internal, Integral

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength is 97.9 dB μ 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 100.9dB μ V/m at 3m in frequency 2.465GHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 3.69mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 3.69mW.

The SAR Exclusion Threshold Level:

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

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