

Analysis Report

The Equipment Under Test (EUT) is a portable pure transmit controller unit for 2.4GHz remote control car set. The EUT is operating in the frequency range from 2410MHz to 2475MHz (66 channels with 1MHz channel spacing). The EUT control the remote control car to move forwards or backwards and turn left or right.

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

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 97.8 dBµV/m at 3m

Maximum allowed production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 100.8dBµV/m at 3m in frequency 2.465GHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 3.61mW$

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

Conducted Power = 3.61mW.

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.