

Analysis Report

The Equipment Under Test (EUT) operates at frequency range of 2407MHz to 2477MHz with the following 8 channels used: 2407MHz, 2411MHz, 2435MHz, 2438MHz, 2440MHz, 2470MHz, 2474MHz and 2477MHz.

The EUT is power by 1x 9V battery.

After switch on the EUT, model: 1230399, the car will be moved forward or backward, turned left or right based on the joystick control 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 93.6 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 96.6 dB μ V/m at 3m in frequency 2.477GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30]$ = 1.37mW

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

Conducted Power = 1.37mW.

The SAR Exclusion Threshold Level:

$$\begin{aligned} &= 3.0 * (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz}) \\ &= 3.0 * 5 / \text{sqrt}(2.477) \text{ mW} \\ &= 9.53 \text{ mW} \end{aligned}$$

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.