

Analysis Report

The Equipment Under Test (EUT) operates at frequency range of 2420MHz to 2465MHz with the following 25 channels used:

2420MHz, 2422MHz, 2424MHz, 2426MHz, 2428MHz, 2430MHz, 2431MHz, 2433MHz, 2435MHz, 2437MHz, 2439MHz, 2441MHz, 2443MHz, 2445MHz, 2446MHz, 2447MHz, 2449MHz, 2451MHz, 2453MHz, 2455MHz, 2457MHz, 2459MHz, 2461MHz, 2463MHz and 2465MHz.

The EUT is powered by 2x 1.5V AA battery.

After switch on the EUT, the car will be moved forward or backward, turned left or right and the car shape changing based on the joystick control in the controller.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength is 94.3 dB μ V/m at 3m

Maximum allowed production tolerance: +/- 6dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 100.3dB μ V/m at 3m in frequency 2.465GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 3.22\text{mW}$

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

Conducted Power = 3.22mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \text{sqrt}(2.465) \text{ mW}$

= 9.55 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.