

Analysis Report

The Equipment Under Test (EUT) is portable controller for Remote controlled car set which operates at 49.860MHz. The EUT is power by 1 x 9.0V alkaline battery.

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

The Model: 85476, 85576 and 5F633FA are the same as the Model: 85376 in hardware aspect. The difference in model number serves as marketing strategy. The models are different in non-conductive outer casing only.

Antenna Type: Dedicated

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

Antenna Type: Dedicated antenna

Antenna Gain: 0dBi

Nominal rated field strength is 66.8 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 69.8dB μ V/m at 3m in frequency 49.860MHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.003\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.003mW.

The SAR Exclusion Threshold Level:

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

$= 3.0 \cdot 5 / \sqrt{0.04986} \text{ mW}$

$= 67.176 \text{ mW}$

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.