

Analysis Report

The Equipment Under Test (EUT) is a portable 2.4GHz Transceiver (controller) operating at the frequency range of 2411-2472MHz with the following frequency table.

2411MHz	2413MHz	2420MHz	2422MHz	2424MHz
2426MHz	2428MHz	2435MHz	2437MHz	2439MHz
2441MHz	2443MHz	2445MHz	2451MHz	2453MHz
2455MHz	2457MHz	2461MHz	2468MHz	2470MHz
2472MHz				

The EUT is powered by 4*1.5V AA battery. By activating the slide bar, the EUT will be able to control the speed of the plane.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength: 88.9dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 91.9dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.465\text{mw}$

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

Conducted Power = 0.465mW.

The SAR Exclusion Threshold Level:

$= 3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$
 $= 3.0 \cdot 5 / \sqrt{2.475} \text{ mW}$
 $= 9.53 \text{ mW}$

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.