Analysis Report

The Equipment Under Test (EUT) is a portable 2.4GHz Transceiver (Plane Unit) for a RC Controller from 2408-2472MHz with 1MHz channel spacing. The EUT is powered by 1 X 3.7V Rechargeable battery pack. After switch on the EUT and paired with controller, the EUT can be controlled to move forward, backward, turning left/right direction by the controller.

Antenna Type: External integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 82.3BµV/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 $85.3 dB\mu V/m$ at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS*D)^2*1000 / 30] = 0.102 \text{mW}$

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

Conducted Power =0.102mW.

The SAR Exclusion Threshold Level: = 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz) = 3.0 * 5 / 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.