Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Transceiver (Helicopter Unit) for a RC helicopter operating at 2412MHz ~ 2460MHz. The Helicopter Unit is operating at 2433MHz after paired with the Controller Unit. The EUT is powered by 1 X 3.7V rechargeable battery (Li-Poly). The EUT equipped with a camera for photo shooting and video recording and save the data to the micro-USB. After switch on the EUT and paired with controller, the EUT can be controlled to fly forward, backward and turning left/right direction by the corresponding controller. Using an USB charging cable can charge the internal battery in the helicopter via PC. Also, Using an USB cable can transfer the data, ie. Photo and vedio from the helicopter to PC.

Antenna Type: Internal antenna
Antenna Gain: 0dBi
Nominal rated field strength: 93.2dBμV/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 96.2dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 1.251mW

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

Conducted Power =1.251mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz) = 3.0 * 5 / sqrt (2.460) mW
= 9.56 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.