Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Transceiver (Tower Arm). The EUT is powered by 6.0 VDC (4 x 1.5V AA batteries). The 2.4GHz RF module in the EUT is operating at the frequencies 2425MHz, 2431MHz, 2434MHz and 2445MHz (4 Channels). After turning the Power Pad on the corresponding transmitter (i.e. Wayne Tower) clockwise, the copter on the (Tower Arm) spin and fly. The EUT (Tower Arm) will send a dummy signal to prevent from entering malfunction when it has not received the signal from the corresponding transmitter.

Antenna Type: Internal antenna
Antenna Gain: 0dBi
Nominal rated field strength: 71.0 dBμV/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 74.0dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.008mW

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

Conducted Power =0.008mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.445) mW
= 9.59 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.