

Analysis Report

Report No.: 13041644HKG-001

The Equipment Under Test (EUT) is a 2.4GHz Transceiver (Controller Unit) for a RC helicopter operating at 2402 – 2477.5MHz with 0.5 MHz channel spacing. The EUT is powered by 8 X 1.5V AA batteries. After switch on the EUT and paired with helicopter, the helicopter can be controlled to fly forward, backward, turning left, right direction and turn on a LED by the EUT. To charge the internal battery in the helicopter, plug the charging connector into the charging jack on the helicopter for starting the charge process.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 95.2dB 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 98.2dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 1.982mW

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

Conducted Power = 1.982mW.

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 * 5 / sqrt (2.402) mW

= 9.68 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.