

Analysis Report

Report No.: 14040701HKG-001

The Equipment Under Test (EUT) is a 2.4GHz Transceiver (Controller Unit) for a RC helicopter operating at 2412, 2424, 2442 and 2460MHz. 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 and right direction 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

Production tolerance: -4dBm (Minimum) to +4dBm (Maximum)

According to the KDB 447498:

Based on the Maximum allowed radiated power of production tolerance was +4.0dBm in frequency 2.4GHz, thus;

Maximum radiated power (EIRP) is 2.512mW (i.e. +4.0dBm), thus;

The maximum conducted source-based output power
= 2.512 mW.

The SAR Exclusion Threshold Level:

= $3.0 * (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

= $3.0 * 5 / \text{sqrt}(2.460)$ mW

= 9.56 mW

Since the above conducted source-based output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.