

Analysis Report

Report No.: 18030264HKG-003

The Equipment Under Test (EUT) is a portable 2.4GHz Toy Drone (Drone portion) operating at the frequency range of 2408-2472MHz with 1 MHz channel spacing. It can be controlled by the corresponding controller to move forward/ backward/ left/ right. The EUT is powered by 1 x 3.7V rechargeable battery.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 73.0dBμV/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 76.0dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.0119\text{mW}$

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

Conducted Power = 0.0119mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \sqrt{2.440} \text{ mW}$

= 9.60 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.