

Analysis Report

Report No.: 17081126HKG-001

The Equipment Under Test (EUT) is a portable 2.4GHz Transmitter (Controller Unit) for a plane unit operating at the frequency range of 2439-2480MHz and the channel table is shown as below.

Channel	Frequency (MHz)
0	2439
1	2470
2	2471
3	2472
4	2473
5	2474
6	2475
7	2476
8	2477
9	2478
10	2479
11	2480

The EUT is powered by 6*1.5V AA battery. After switching on the EUT and being paired with plane, the plane can be controlled to fly up/ down and change the direction by the controller.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 96.6dBμV/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 99.6dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 2.736mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 2.736mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \sqrt{2.480} \text{ mW}$

= 9.53 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.