

Analysis Report

Report No.: 16051175HKG-002
#14300

The Equipment Under Test (EUT) is a 2.4GHz transceiver (a RC car) that operating at 2410 to 2475MHz with 1MHz channel spacing. It is powered by 7.5V (1.5V X 5) 'AA' batteries. After switched on and paired with the corresponding controller, the EUT can be controlled to moving forward, backward, turning left and right directions.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 74.4dB 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 77.4dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.016mW

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

Conducted Power = 0.016mW.

The SAR Exclusion Threshold Level:

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

= 3.0 * 5 / sqrt (2.475) 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.