Analysis Report

Report No.: 17050807HKG-001

The Equipment Under Test (EUT) is a portable 2.4GHz Transmitter (Controller Unit) for a RC car operating at the frequency range of 2405-2475MHz with 1MHz channel spacing.

The EUT is powered by 9.0VDC Alkaline battery. After switching on the EUT and being paired with car, the car can be controlled to move forward, backward and turn left/right by the controller.

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 95.8dBμV/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 98.8dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 2.276mW

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

Conducted Power = 2.276mW.

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.