

Analysis Report

Report No.: HK13020061-3

The Equipment under test (EUT) is a portable 2.4GHz RF transceiver (Car) of a RC Car system which operating at 2404MHz to 2479MHz with 1 MHz channel spacing. The EUT is powered by 3 x 1.5V AAA batteries. The EUT has an ON/OFF switch. The RC car can be controlled to moving forward, backward, turning left and right direction by the corresponding controller.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Production tolerance: -7dBm (Minimum) to -6dBm (Maximum)

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was -6dBm in frequency 2.4GHz, thus;

Maximum radiated power (EIRP) is 0.251mW (i.e. -6dBm), thus;

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.251mW.

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \text{sqrt} (2.479) \text{ mW}$

= 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.