Analysis Report

Report No.: HK12071116-1

The equipment under test (EUT) is a portable 2.4GHz RF transceiver (Controller) for a corresponding RC Car which is operating at frequency range 2401MHz to 2480MHz with 1MHz channel spacing. The EUT is powered by 4 X1.5V AA batteries. The EUT has a Steering wheel, Throttle Trigger, Pair/Sync button, ON/OFF switch, Turbo button, Trimmer button, Throttle Trimming Dial and Handedness selector. After switched ON the EUT, the Throttle Trigger is used to control the car moving forward/backward motion. The Steering wheel is used to control the car turning left and right direction. The Pair/Sync button is used to pairing with the RC Car. Turbo button is used to control the car moving forward to extra turbo boost. The trimmer button and Throttle Trimming Dial are used to adjust the steering function of the RC Car. The Handedness selector is used to fit the User's handedness.

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 91.5dBμV/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 94.5dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.846mW

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

Conducted Power = 0.846mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) 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.