

Analysis Report

Report No.: 16100151HKG-001

The Equipment Under Test (EUT) is a 2.4GHz Transceiver (Controller Unit) operating at a frequency range of 2407-2477MHz with the following occupied frequencies.

2407	2408	2409	2410	2411	2412	2413	2435	2436
2438	2439	2440	2441	2442	2443	2444	2445	2468
2469	2470	2471	2472	2473	2474	2475	2476	2477

The EUT is powered by 2 * 1.5V AAA batteries. After switch on the EUT and 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: 2.1dBi

Nominal rated field strength: 90.2 dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/-3 dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 93.2 dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30]$ = 0.627mW

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.386mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \text{sqrt}(2.477)$ 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.