

# Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz RC Car operating from 2405.5-2463.5MHz with 0.5MHz channel spacing for Controller. The EUT is powered by 3\*1.5V AAA batteries. After switch on the EUT and paired with Controller, the EUT can be controlled to fly forward, backward, turn left/right by controller.

Antenna Type: Internal antenna

Antenna Gain: 0Bi

Nominal rated field strength: 85.8dB $\mu$ 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 88.8dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS * D)^2 * 1000 / 30] = 0.228\text{mw}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.228mW.

The SAR Exclusion Threshold Level:

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

=  $3.0 * 5 / \text{sqrt}(2.475)$  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.