Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Transmitter (Controller) for a RC Car set. The EUT is powered by 2 x 1.5V AA batteries. The 2.4GHz module is operating at the frequencies (2405-2470)MHz. After switching on the EUT and the corresponding Receiver (Car), activating the control keys on the EUT can control the Car moving forward, backward, left and right.

Frequency Table:

Group0:	2409	2431	2438	2455
Group1:	2415	2422	2445	2460
Group2:	2411	2423	2439	2457
Group3:	2418	2433	2445	2453
Group4:	2407	2425	2448	2464
Group5:	2410	2427	2444	2458
Group6:	2412	2433	2437	2470
Group7:	2408	2431	2438	2455
Group8:	2413	2421	2444	2464
Group9:	2405	2425	2436	2458
Group10:	2419	2429	2442	2451
Group11:	2420	2430	2441	2453
Group12:	2411	2435	2440	2460
Group13:	2411	2422	2449	2464
Group14:	2417	2427	2450	2463
Group15:	2415	2425	2444	2462
Group16:	2416	2430	2447	2457
Group17:	2408	2434	2445	2460
Group18:	2417	2435	2446	2453
Group19:	2420	2423	2443	2458
Group20:	2406	2430	2442	2466

Antenna Type: Internal antenna
Antenna Gain: 0dBi
Nominal rated field strength: 89.8 dBμV/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 92.8dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.572mW

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

Conducted Power =0.572mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.470) mW
= 9.54 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.