Analysis Report

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Car Unit). The operation frequency range is between 2405MHz and 2480MHz with 76 channels.

2405	2414	2422	2430	2438	2446	2454	2462	2470
2407	2415	2423	2431	2439	2447	2455	2463	2471
2408	2416	2424	2432	2440	2448	2456	2464	2472
2409	2417	2425	2433	2441	2449	2457	2465	2473
2410	2418	2426	2434	2442	2450	2458	2466	2474
2411	2419	2427	2435	2443	2451	2459	2467	2475
2412	2420	2428	2436	2444	2452	2460	2468	2480
2413	2421	2429	2437	2445	2453	2461	2469	

The EUT is powered by 1 x 4.8V rechargeable battery. After switch on the EUT, the car will be moved forward or backward, turned left or right based on the switches pressed in the controller.

The Model: TY5873B-1, TY5873C-1, TY5873D-1, TY6007 and TY6007A are the same as the Model: TY5873A-1 in hardware aspect. The difference in model number serves as marketing strategy. The models are different in model number, color and accessories only.

Antenna Type: Internal, Integral

Antenna Type: Internal antenna
Antenna Gain: 0dBi
Nominal rated field strength is 98.3 dBµV/m at 3m
Maximum allowed production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 101.3dBµV/m at 3m in frequency 2.480GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 4.047mW

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

Conducted Power =4.047mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.48) mW
= 9.525 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.