Analysis Report

The Equipment Under Test (EUT), is a portable 27.14496MHz Transmitter (Controller Unit) for a RC car. The EUT is powered by 1 X 9.0V alkaline battery.

After switch on the EUT, model: 85021, the car will be moved forward or backward, turned left or right based on the joystick control in the controller.

The Model: 85051, 85071, 85091, 85101, 85111, 85121, 85131, 85181, 85221, 85231, 85241, 85281, 85291, 85301, 85311, 85331, 85341, 85351, 85361, 85391, 85411, 85421, 85431, 85511, 85022, 85052, 85072, 85092, 85102, 85112, 85122, 85132, 85182, 85222, 85232, 85242, 85282, 85292, 85302, 85312, 85332, 85342, 85352, 85362, 85392, 85412, 85422, 85432, 85512, AD15452, 85126, 85286, 5F62D85, 5F62D86 and 5F62DB7 are the same as the Model: 85021 in hardware aspect. The difference in model number serves as marketing strategy. The models are different in non-conductive outer casing only.

Antenna Type: Internal, Integral

Antenna Type: Internal antenna
Antenna Gain: 0dBi
Nominal rated field strength is 72.1 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 75.1dBμV/m at 3m in frequency 0.027145GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.010mW

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

Conducted Power =0.010mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (0.027145) mW
= 91.04 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.