Analysis Report

Report No.: HK19031421-001

The Equipment Under Test (EUT) is portable controller for Remote controlled car set which operates at 27.145MHz. The EUT is power by 2 x 1.5V AAA batteries.

After switch on the EUT, the car will be moved forward or backward and turned left and right based on the switches pressed in the controller.

The Model: 9207 is the same as the Model: 9204 in hardware aspect as declared by client. The models are different in non-conductive outer casing only as declared by client.

Antenna Type: Internal, Integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 67.4dBμV/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 70.4dBμV/m at 3m in frequency 27.145MHz, thus;

The worst case of SAR Exclusion Threshold Level for 27.145MHz when the minimum test separation distance is < 50mm:
= [474 * (1 + log100/f(MHz))]/2
= 371.2mW

According to the KDB 412172 D01:
EIRP = [(FS*D) ^2*1000 / 30]

Calculated Field Strength for 371.2mW is 120.9dBuV/m @3m

Since maximum field strength plus production tolerance < = 120.9dBuV/m @3m and antenna gain is > = 0.0dBi, it is concluded that maximum Conducted Power and Field Strength are well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.