

Analysis Report

The Equipment Under Test (EUT), is a portable 27MHz Transmitter for a RC Car. The sample supplied operated on a single channel, 27.145MHz.

The EUT is powered by 2 x 1.5V AA Batteries. After switching on the EUT, the car will be moved forward or backward and turned left and right based on the switches pressed in the controller. Light will be emitted from the car when it is moving forward.

Antenna Gain: 0 dBi

Frequency Range: 27.145MHz

Peak Radiated range: 48.4 dB μ V/m to 54.4dB μ V/m

According to the KDB447498 D01 v06:

Radiated Power (maximum)
= 54.4 dB μ V/m (0.0000832mW)

The SAR Exclusion Threshold Level 27.145MHz when the minimum test separation distance is < 50mm:
= $[474 * (1 + \log_{10}(f(\text{MHz})))]/2$
= $[474 * (1 + \log_{10}(27.145))]/2$ mW
= 371.22 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.