

Analysis Report

Report No.: 13060563HKG-001

The Equipment Under Test (EUT) is a transmitter of a RC Pterodactyl operating at 27.145 MHz as dictated by a crystal. The EUT is powered by a 9.0 V DC source (6x 1.5V "AA" batteries). The EUT has 4 control buttons to control the RC Pterodactyl ascending, descending, steering left or right. And it has a charging port to charge the internal rechargeable battery of the RC Pterodactyl.

After switching ON the EUT and the receiver of the RC Pterodactyl activating the control levers on the EUT can control the receiver ascending, descending, steering left or right.

Antenna Type: External, integral

Antenna Gain: 0dBi

Nominal rated field strength: 71.6dB μ V/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 74.6dB μ V/m at 3m in frequency 27.145MHz, thus;

The EIRP = $[(FS^2 * D) / 30] = 0.0087\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.0087mW.

The SAR Exclusion Threshold Level for 27.145MHz when the minimum test separation

distance is < 50mm:

$$= [474 * (1 + \log_{10}(f/\text{MHz}))]/2$$

$$= 371.2\text{mW}$$

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.