

## INTERTEK TESTING SERVICES

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### RF Exposure

The Equipment under Test (EUT) is a Control unit for RC TOYS model: 3781 operating at 2.4GHz band. It is powered by DC 3.0V (2 x 1.5V AA batteries). For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The normal radiated output power (e.i.r.p) is: -3.0dBm (tolerance: +/- 3dB).

The normal conducted output power is: -3.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 92.3dB $\mu$ V/m at 3m in the frequency 2407MHz

The EIRP = [(FS\*D) <sup>2</sup> / 30] mW = -2.93dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 89.8dB $\mu$ V/m at 3m in the frequency 2477MHz

The EIRP = [(FS\*D) <sup>2</sup> / 30] mW = -5.43dBm

which is within the production variation.

The maximum conducted output power specified is 0dBm = 1.0mW

The source- based time-averaging conducted output power

= 1.0\* Duty Cycle mW < 1.0mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level:

= 3.0 \* (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 \* 5 / sqrt (2.477) mW

= 9.53mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.

The duration of one cycle= 12.3188ms

Effective period of the cycle = 0.13768ms x16 =2.20288ms

DC = 2.20288ms/12.3188ms = 0.1788 or 17.88%