

INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Car unit for 1:6 R/C Ford Raptor (2.4G) model: 81601 (14023/81601) operating at 2.4GHz band. It is powered by DC 6.4V (1 x 6.4V rechargeable battery). 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: 0.0dBm (tolerance: +/- 4dB).

The normal conducted output power is 0.0dBm (tolerance: +/- 4dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 94.3dB μ V/m at 3m in the frequency 2410MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -0.93dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 91.3dB μ V/m at 3m in the frequency 2450MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -3.93dBm

which is within the production variation.

The maximum conducted output power specified is 4.0dBm = 2.5mW

The source- based time-averaging conducted output power

= 2.5* Duty Cycle mW < 2.5 mW (Duty Cycle <100%)

The SAR Exclusion Threshold Level:

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

= 3.0 * 5 / sqrt (2.471) mW

= 9.54 mW

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.