

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Toy RC Propeller with Foam Planes with 2.4GHz transmit function operating in 2410-2465MHz. The EUT is powered by DC 3V(2*AAA battery). For more detail information pls. refer to the user manual.

Modulation Type: GFSK.

Antenna Type: Integral antenna.

Antenna Gain: 2dBi.

The nominal conducted output power specified: -13dBm (+/-3dB).

The nominal radiated output power (e.i.r.p) specified: -11dBm (+/- 3dB).

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 82.6dB μ V/m at 3m in the frequency 2437MHz

The EIRP = $[(FS^*D)^2 / 30]$ mW = -12.63dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 81.4dB μ V/m at 3m in the frequency 2410MHz

The EIRP = $[(FS^*D)^2 / 30]$ mW = -13.83dBm
which is within the production variation.

The maximum conducted output power specified is -10dBm = 0.1mW

The source- based time-averaging conducted output power
= 0.1 * Duty factor mW (where Duty Factor ≤ 1)
= 0.1 mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.465) mW
= 9.55 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.