INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Control unit for RC DRONE model: X601H operating at 2.4GHz band. It is powered by DC 6.0V (4 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: 6.0dBm (tolerance: +/- 3dB). The normal conducted output power is: 6.0dBm (tolerance: +/- 3dB). Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is $103.3dB\mu V/m$ at 3m in the frequency 2453MHz The EIRP = [(FS*D) ^2 / 30] mW = 8.07dBm which is within the production variation.

The Minimum peak radiated emission for the EUT is $102.4dB\mu V/m$ at 3m in the frequency 2478MHz The EIRP = [(FS*D) ^2 / 30] mW = 7.17dBm which is within the production variation.

The maximum conducted output power specified is 9.0dBm = 7.9mW The source- based time-averaging conducted output power = 7.9* Duty Cycle mW < 7.9mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level: = 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz) = 3.0 * 5 / sqrt (2.478) 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 = 4.0870ms Effective period of the cycle = 0.3768ms x 1=0.3768ms DC = 0.3768ms / 4.0870ms = 0.0922 or 9.22%