

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Leonardo Da Vinci's Ornithopter operating at 2.4G Band. The EUT is powered by DC 5.0V by adaptor. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna

Modulation Type: GFSK

Antenna Gain: -3.66dBi Max

The normal radiated output power (e.i.r.p) is: -5.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -1.34dBm (tolerance: +/- 3dB).

According to the KDB 447498 V06:

The Maximum peak radiated emission for the EUT is 90.2dBμV/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -5.03dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 89.2dBμV/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -6.03dBm

which is within the production variation.

The maximum conducted output average power specified is 1.66dBm= 1.466mW

The source- based time-averaging conducted output power
=1.466 mW

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

= $3.0 \cdot 5 / \text{sqrt}(2.480)$ mW

= 9.53 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.