

INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Control unit for DRONE LUNAR 2INCH NANO model: DRO 001 operating at 2.4GHz band. It is powered by DC 3.0V (2 x 1.5V AAA 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: -22.0dBm (tolerance: +/- 3dB).

The normal conducted output power is: -22.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 72.8dBμV/m at 3m in the frequency 2407MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -22.43dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 71.8dBμV/m at 3m in the frequency 2477MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -23.43dBm
which is within the production variation.

The maximum conducted output power specified is -19.0dBm = 0.01mW

The source- based time-averaging conducted output power
= $0.01 \cdot \text{Duty Cycle}$ mW < 0.01mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$
= $3.0 \cdot 5 / \sqrt{2.477}$ 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 = 2.55ms

Effective period of the cycle = 1.5ms

DC = 1.5ms/2.55ms = 0.5882 or 58.82%

FCC ID: Z6QFX156TXK