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*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*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* Duty Cycle mW < 0.01mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 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%