RF Exposure

The equipment under test (EUT) is an Toy RC Gravity Rover Replaceable Batteries operating at 2.4G Band. The EUT can be powered by DC 3.7V (1 x 3.7V rechargeable battery). And the RF function will be shut down and it can't transmit RF signals while charging. 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: -13.0dBm (tolerance: +/- 3dB).
The normal conducted output power is -13.0dBm (tolerance: +/- 3dB).
Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 83.7dBμV/m at 3m in the frequency 2442MHz
The EIRP = [(FS*D) ^2 / 30] mW = -11.53dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 80.8dBμV/m at 3m in the frequency 2405MHz
The EIRP = [(FS*D) ^2 / 30] mW = -14.43dBm
which is within the production variation.

The maximum conducted output power specified is -10.0dBm= 0.100mW
The source- based time-averaging conducted output power
=0.100mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.478) 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.