

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a SNF0023 - SNF - Remote Control Vehicle (Spidey RC Vehicle) operating at 2.4G Band. The EUT can be 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: -12.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -12.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 82.3 dB μ V/m at 3m in the frequency 2405MHz

The EIRP = $[(FS^*D)^2 / 30] \text{ mW} = -12.93\text{dBm}$
which is within the production variation.

The Minimum peak radiated emission for the EUT is 81.8 dB μ V/m at 3m in the frequency 2475MHz

The EIRP = $[(FS^*D)^2 / 30] \text{ mW} = -13.43\text{dBm}$
which is within the production variation.

The maximum conducted output power specified is -9dBm= 0.126mW

The source- based time-averaging conducted output power
 $=0.126 * \text{Duty cycle mW} < 0.126 \text{ mW} (\text{Duty cycle} < 100\%)$

The SAR Exclusion Threshold Level:

$= 3.0 * (\text{min. test separation distance, mm}) / \text{sqrt(freq. in GHz)}$
 $= 3.0 * 5 / \text{sqrt}(2.475) \text{ mW}$
 $= 9.53 \text{ mW}$

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.