

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 4.5V (3 x 1.5V AA 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: -23.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -23.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 72.6 dB μ V/m at 3m in the frequency 2405MHz

The EIRP = $[(FS^*D)^2 / 30] \text{ mW} = -22.63\text{dBm}$
which is within the production variation.

The Minimum peak radiated emission for the EUT is 70.1dB μ V/m at 3m in the frequency 2440MHz

The EIRP = $[(FS^*D)^2 / 30] \text{ mW} = -25.13\text{dBm}$
which is within the production variation.

The maximum conducted output power specified is -20dBm= 0.010mW

The source- based time-averaging conducted output power
=0.010* Duty cycle mW <0.010 mW(Duty cycle <100%)

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.475) 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.