

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Swamp Crawler operating at 2.4G Band. The EUT can be powered by DC 6.4V (1 x 6.4V 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: -2.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -2.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 94.3dB μ V/m at 3m in the frequency 2443MHz

The EIRP = [(FS*D) ^2 / 30] mW = -0.93dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 91.6dB μ V/m at 3m in the frequency 2410MHz

The EIRP = [(FS*D) ^2 / 30] mW = -3.63dBm

which is within the production variation.

The maximum conducted output power specified is 1.0dBm= 1.259mW

The source- based time-averaging conducted output power =1.259mW

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.