

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a Security System Fob operating at 433.9MHz. The EUT is powered by DC 3V by battery. For more detailed features description, please refer to the user's manual.

Modulation Type: FSK

Antenna Type: Integral antenna.

Antenna Gain: 0 dBi Max

The nominal conducted output power specified: -25dBm (+/-3dB).

The nominal radiated output power (e.i.r.p) specified: -25dBm (+/- 3dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 72.4dB μ V/m at 3m in the frequency 433.9MHz.

The EIRP = $[(FS^*D)^2 / 30]$ mW = -22.83dBm

which is within the production variation.

The maximum conducted output power specified is -22dBm = 0.0063mW

The source- based time-averaging conducted output power

= 0.0063 * Duty factor mW (where Duty Factor ≤ 1)

= 0.0063 mW

The SAR Exclusion Threshold Level:

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

= 3.0 * 5 / sqrt (0.4339) mW

= 22.77 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.