

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a wireless mouse with 2.4G function operating in 2408-2474MHz. The EUT is powered by DC 3.0V (2 x AA battery). For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna

Modulation Type: GFSK

Antenna Gain: 2.0dBi Max

The nominal conducted output power specified: -14 dBm (± 2 dB)

The nominal radiated output power (e.i.r.p) specified: -12.0 dBm (± 2 dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 83.4dB μ V/m at 3m in the frequency 2408MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -11.83 dBm

which is within the production variation.

The minimum peak radiated emission for the EUT is 82.1dB μ V/m at 3m in the frequency 2474MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -13.13dBm

which is within the production variation.

The maximum conducted output power specified is -12 dBm = 0.063 mW

The source-based time-averaging conducted output power

= 0.063 * Duty factor mW (where Duty Factor ≤ 1)

= 0.063 mW

The SAR Exclusion Threshold Level:

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

= 3.0 * 5 / sqrt(2.474) 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.