

RF Exposure

The equipment under test (EUT) is a wireless mouse with 2.4G transmitter function operating in 2405-2474MHz. The EUT is powered by DC 5V from USB port. For more detail information pls. refer to the user manual.

Modulation Type: GFSK

Antenna Type: Integral antenna.

Antenna Gain: 4dBi Max

The nominal conducted output power specified: -13.0dBm (± 1.0 dB)

The nominal radiated output power (e.i.r.p) specified: -9.0dBm (± 1.0 dB).

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 87.0dB μ V/m at 3m in the frequency 2474MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -8.23dBm

which is within the production variation.

The minimum peak radiated emission for the EUT is 86.1dB μ V/m at 3m in the frequency 2442MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -9.13dBm

which is within the production variation.

The maximum conducted output power specified is -12.0dBm = 0.1mW

The source- based time-averaging conducted output power

= 0.1 * Duty factor mW (where Duty Factor ≤ 1)

= 0.1 mW

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \sqrt{2.474}$ 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.