

RF Exposure Requirements

Product Description: Wireless mouse

Model No.: GSME04

FCC ID: 2AO23-GSME04

According to the KDB 447498 D01 V06, the following RF exposure evaluation shall to demonstrate RF exposure compliance.

General 2.4GHz Technique

Tx frequency range: 2405 MHz ~ 2475 MHz

Type of Modulation: GFSK

Antenna Type: Integral antenna (Gain: -1 dBi)

The maximum radiated output power (e.i.r.p): -1.67 dBm

The conducted output power specified is -1 dBm

Tolerance: ± 1 dB

The maximum radiated emission for the EUT is 93.56dB μ V/m at 3m

The maximum conducted output power specified is 0 dBm = 1.0 mW

The source- based time-averaging conducted output power
= $1.0 * \text{Duty cycle mW} = 0.021 \text{ mW}$ (Duty Cycle = 2.10%)

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \text{sqrt}(2.480) \text{ mW}$

= 9.5 mW

Source-based time-averaged Conducted output power is $0.021 \text{ mW} < 9.5 \text{ mW}$

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.