

RF Exposure Evaluation Report

1 Product Information

Product Name: Wireless Mouse
 Model No.: RF-107
 FCC ID: 2BFDCRF-107

2. RF Exposure Evaluation

FCC KDB447498 D01 General RF Exposure Guidance v06: Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.

FCC CFR 47 part1 1.1310: Radiofrequency radiation exposure limits.

FCC CFR 47 part2 2.1091: Radiofrequency radiation exposure evaluation: mobile devices.

2.1 LIMITS

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2.2 EUT RF EXPOSURE EVALUATION

Worst Mode: GFSK-2405MHz						
Channel (MHz)	Conducted Power (dBm)	Tune up Tolerance (dBm)	Maximum tune-up Power		Calculated value	Limit
			(dBm)	(mW)		
2405	-16.65	-16.65±1	-15.65	0.027	0.008	3.0

Calculated value $0.008 < 3.0$, So there is no require SAR test

$\text{dbm} = \text{dbuv}/\text{m} - 95.2$, so the 2.4G-2479.85MHz power is $78.55 - 95.2 = -16.65\text{dBm}$