

FCC RF Exposure

EUT Description: Gaming Mouse

Model No.: X6

FCC ID: 2BNE3-X6

1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 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:

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

Where:

Result = $P/D \cdot \sqrt{F}$

F = the RF channel transmit frequency in GHz

P = Maximum turn-up power in mw

D = Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

2.4GTX: EIRP(dBm) = 101.34(dBuV/m) - 95.2 = 6.14(dBm)

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit	SAR Test Exclusion
BLE	3.14	3±1(4)	2.512	5	0.791	3.0	Pass
2.4GTX	6.14	5.2±1(6.2)	4.169	5	1.313	3.0	Pass

Note:

PK Output power = conducted power.

Conducted power see the test report HK2412268097-1E/2E, antenna gain = 1.87dBi

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 1.313 which is ≤ 3 , SAR testing is not required.

Note: Exclusion Thresholds Results = $\left[\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \right] \cdot \sqrt{f(\text{GHz})}$

f(GHz) is the RF channel transmit frequency in GHz

Distance = 5mm