

FCC RF Exposure

EUT Description: Wireless keyboard

Model No.: K51-3

FCC ID: 2AFVE-K51-3

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:

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

$$\text{EIRP(dBm)} = 103.42(\text{dBuV/m}) - 95.2 = 8.22(\text{dBm})$$

	Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power (mW)	Min test separation distance (mm)	Result	Limit	SAR Test Exclusion
BLE	2480	-3.56	-4 $\pm$ 1(-3)	0.501	5	0.158	3.0	Pass
2.4GTX	2480	8.22	7.5 $\pm$ 1(8.5)	7.079	5	2.230	3.0	Pass

Note:

PK Output power = conducted power.

Conducted power see the test report **HK2511056023-1E/2E**, antenna gain = 2.58dBi

BT and 2.4GTX cannot be transmitted at the same time

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 2.230 which is ≤ 3 , SAR testing is not required.

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

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

Distance = 5mm