

FCC RF Exposure

EUT Description: Gaming keyboard

Model No.: K7PRO

FCC ID: **2BBEO-K7PRO**

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:

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

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

BLE:

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit (mW/cm ²)	SAR Test Exclusion
2480	3.39	3±1	4/2.512	5	0.791	3.0	Pass

Note:
PK Output power= conducted power.
Conducted power see the test report **HK2305111872-1E**, antenna gain= 2.69dBi

2.4G:

$$\text{EIRP (dBm)} = 101.81(\text{dBuV/m}) - 95.3 = 6.51(\text{dBm})$$

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit (mW/cm ²)	SAR Test Exclusion
2479	6.51	5.7±1	6.7/4.677	5	1.473	3.0	Pass

Note:
PK Output power= conducted power.
Conducted power see the test report **HK2305111872-2E**, antenna gain= 2.69dBi

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 1.473 which is <= 3, RF Exposure testing is not required.

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

$f_{(GHz)}$ is the RF channel transmit frequency in GHz

Distance=5mm