

FCC RF Exposure

EUT Description: keyboard

Model No.: KG991W

FCC ID: 2A9SC-KG991W

1. Limits

According to KDB 447498 D04 General RF Exposure Guidance v01 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

2402MHz:

EIRP(dBm) = 79.91(dBuV/m) - 95.2 = -15.29(dBm)

| | Output power (dBm) | Tune Up Power (dBm) | Max Tune Up power dBm/mW | Min test separation distance mm | Result | Limit | SAR Test Exclusion |
|---|--------------------|---------------------|--------------------------|---------------------------------|--------|-------|--------------------|
| 2.4GTX | -15.29 | -15 \pm 1(-14) | 0.040 | 5 | 0.012 | 3.0 | Pass |
| BLE | 2.34 | 2 \pm 1(3) | 1.995 | 5 | 0.628 | 3.0 | Pass |
| Note: PK Output power = conducted power. Conducted power see the test report HK2310244958-1E/2E, antenna gain = 3.85dBi | | | | | | | |

Per KDB 447498 D04, 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 0.628 which is ≤ 3 , SAR testing is not required.

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

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Distance = 5mm