

# FCC RF Exposure

EUT Description: Wireless Bluetooth keyboard

Model No.: BK030

FCC ID: 2BTZ7-BK030

## 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  $\leq 50$  mm are determined by:

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

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

| Frequency (MHz) | Output power (dBm) | Tune Up Power (dBm) | Max Tune Up power (mW) | Min test separation distance mm | Result | Limit | SAR Test Exclusion |
|-----------------|--------------------|---------------------|------------------------|---------------------------------|--------|-------|--------------------|
| 2402            | 2.29               | 2±1(3)              | 1.995                  | 5                               | 0.618  | 3.0   | Pass               |

Note:

PK Output power = conducted power.

Conducted power see the test report HK2512196589-E, antenna gain = 2.58dBi

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 0.618 which is  $\leq 3$ , 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