

## RF Exposure Report

**Report No.:** MFBDKG-WTW-P22060007

**FCC ID:** JNZYR0087

**Test Model:** YR0087

**Received Date:** 2022/5/21

**Test Date:** 2022/6/28

**Issued Date:** 2022/7/19

**Applicant:** LOGITECH FAR EAST LTD.

**Address:** 7700 Gateway Boulevard Newark California United States

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory

**Lab Address:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan

**Test Location:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan

**FCC Registration /  
Designation Number:** 723255 / TW2022



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### Release Control Record

Issue No.	Description	Date Issued
MFBDKG-WTW-P22060007	Original release.	2022/7/19

## 1 Certificate of Conformity

**Product:** Wireless Keyboard

**Brand:** Logitech

**Test Model:** YR0087

**Sample Status:** Engineering sample

**Applicant:** LOGITECH FAR EAST LTD.

**Test Date:** 2022/6/28

**FCC Rule Part:** FCC Part 2 (Section 2.1093)

**Standards:** KDB 447498 D01 General RF Exposure Guidance v06

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :** Vivian Huang , **Date:** 2022/7/19  
Vivian Huang / Specialist

**Approved by :** May Chen , **Date:** 2022/7/19  
May Chen / Manager

## 2 Evaluation Result

Following FCC KDB 447498 D01 “General SAR test exclusion guidance”

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) 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:
 

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

  - $f(\text{GHz})$  is the RF channel transmit frequency in GHz.
  - Power and distance are rounded to the nearest mW and mm before calculation.
  - The result is rounded to one decimal place for comparison. The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.
  
- 2) At 100 MHz to 6 GHz and for test separation distances  $> 50$  mm, the SAR test exclusion threshold is determined according to the following:
  - a) [Threshold at 50 mm in step 1) + (test separation distance - 50mm) · ( f(MHz)/150)] mW, at 100MHz to 1500 MHz
  - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at  $> 1500$  MHz and  $\leq 6$  GHz
  
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
  - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$  for test separation distances  $> 50$  mm and  $< 200$  mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq 50$  mm.
  - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

### 3 SAR Test Exclusion Thresholds

#### BT-LE Avg. Power Table

BT-LE 1M			
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	5.483	7.39
19	2440	5.521	7.42
39	2480	5.458	7.37
logi bolt -1M			
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	5.47	7.38
19	2440	5.495	7.40
39	2480	5.445	7.36

BT-LE 2M			
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2404	5.495	7.40
19	2440	5.521	7.42
38	2478	5.47	7.38
logi bolt -2M			
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2404	5.47	7.38
19	2440	5.495	7.40
38	2478	5.458	7.37

#### For BT-LE SAR Test Exclusion Thresholds

Frequency (MHz)	Max Avg. Power (dBm)	Max Avg. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value <sup>(NOTE 1)</sup>	1-g SAR test exclusion thresholds	Result
2402 ~ 2480	7.42	5.521	5	1.739	3	Pass

Note: 1. Calculate SAR test exclusion thresholds from condition "1" formulas.

### 4 Conclusion

Since average power is below SAR test exclusion power thresholds, the SAR evaluation is not required.

The device of BT-LE and logi bolt function cannot transmit simultaneously.

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