

RF Exposure Evaluation Report

Product : Multimedia Wireless Keyboard with Holder
Trade mark : MINISO
Model/Type reference : K802
Serial Number : N/A
Report Number : EED32N81433504
FCC ID : 2ART4-K802
Date of Issue : Feb. 11, 2022
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF Exposure
Guidance v06
Test result : PASS

Prepared for:

MINISO Corporation

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Liwan District, Guangzhou, Guangdong, China**

Prepared by:

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2 Version

Version No.	Date	Description
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4 General Information

4.1 Client Information

Applicant:	MINISO Corporation
Address of Applicant:	Room 2501, No. 486 Heye Square, Kangwang Middle Road, Liwan District, Guangzhou, Guangdong, China
Manufacturer:	Dongguan Eranode electronics limited
Address of Manufacturer:	building 2, No.17 DAHUAN Road, Dalingshan Town, Dongguan City, Guangdong Province
Factory:	Dongguan Eranode electronics limited
Address of Factory:	building 2, No.17 DAHUAN Road, Dalingshan Town, Dongguan City, Guangdong Province

4.2 General Description of EUT

Product Name:	Multimedia Wireless Keyboard with Holder
Model No.(EUT):	K802
Trade Mark:	MINISO

4.3 Product Specification subjective to this standard

For BLE:

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	662x_FCC_Rev1.4d
Antenna Type:	PCB Antenna
Antenna Gain:	-1.52 dBi
Power Supply:	Battery 2xAAA 1.5V
Max Conducted Peak Output Power:	-3.09 dBm The Max Conducted Peak Output Power data refer to the report EED32N81433501.
Sample Received Date:	Dec. 27, 2021
Sample tested Date:	Dec. 27, 2021 to Jan. 10, 2022

For 2.4G:

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	662x_FCC_Rev1.4d
Antenna Type:	PCB Antenna
Antenna Gain:	-1.52 dBi
Power Supply:	Battery 2xAAA 1.5V
Max Conducted Peak Output Power:	-3.17 dBm
	The Max Conducted Peak Output Power data refer to the report EED32N81433502.
Sample Received Date:	Dec. 27, 2021
Sample tested Date:	Dec. 27, 2021 to Jan. 10, 2022
Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.	

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.1.2 Limits

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

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

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 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

5.1.3 EUT RF Exposure

1) For BLE

Measurement Data

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-3.09	-3.5 ± 0.5	-3	0.501
Middle(2440MHz)	-3.65	-3.5 ± 0.5	-3	0.501
Highest(2480MHz)	-3.62	-3.5 ± 0.5	-3	0.501

2) For 2.4G

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-3.17	-3.5 ± 0.5	-3	0.501
Middle(2440MHz)	-3.61	-3.5 ± 0.5	-3	0.501
Highest(2480MHz)	-3.56	-3.5 ± 0.5	-3	0.501

Worst case: BLE

Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune- up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-3.09	-3.5 ± 0.5	-3	0.501	0.158	3.0
Middle (2440MHz)	-3.65	-3.5 ± 0.5	-3	0.501	0.158	
Highest (2480MHz)	-3.62	-3.5 ± 0.5	-3	0.501	0.158	

Conclusion: the calculated value ≤ 3.0 , SAR is exempted.

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32N81433501, EED32N81433502.

3) For BLE and 2.4G

BLE and 2.4G can not transmit simultaneously.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32N81433501 for EUT external and internal photos.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***