RF Exposure Evaluation Report

Product	:	Noise Cancelling Mini TWS Earphones
Trade mark	:	MINISO
Model/Type reference	:	Q51B
Serial Number	:	N/A
Report Number	:	EED32O80606902
FCC ID	:	2ART4-Q51B
Date of Issue	:	Jun. 10, 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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Prepared by:

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2 Version

Version No.	Date	Description
00	Jun. 10, 2022	Original

3 Contents

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:	SHENZHEN ABC INDUSTRIAL CO., LTD
Address of Manufacturer:	601, building 3, No. 59, Haoye Road, Zhancheng community, Fuhai street, Bao'an District, Shenzhen,P.R.China.
Factory:	SHENZHEN ABC INDUSTRIAL CO., LTD
Address of Factory:	601, building 3, No. 59, Haoye Road, Zhancheng community, Fuhai street, Bao'an District, Shenzhen,P.R.China.

4.2 General Description of EUT

Product Name:	Noise Cancelling Mini TWS Earphones
Model No.(EUT):	Q51B
Trade Mark:	MINISO

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz	
Modulation Type:	GFSK, π/4DQPSK	
Test Power Grade:	Default	
Test Software of EUT:	FCC_assist_1.0.2.2	
Antenna Type:	Dipole Antenna	
Antenna Gain:	2.0 dBi	
Power Supply:	USB port:	DC 5.0V
	Battery:	DC 3.7V,35mAh，0.1295Wh
Test Voltage:	DC 3.7V	
Max Conducted Peak Output Power:	-1.31dBm	
	The Max Conducted Peak Output Power data refer to the report EED32O80606901	
Sample Received Date:	May. 10, 2022	
Sample tested Date:	May. 25, 2022 to May. 29, 2022	

Remark:

N/A:The Bluetooth function does not work while the product is charging.

Company Name and Address shown on Report, the sample(s) and sample Information were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

Model No.:Q51B

The product have two colors,which white and black,and the inside of the left earphone is identical to the inside of the right earphone,only the white of left earphone was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being color of appearance.

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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation[17]

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 Bluetooth Classic

Measurement Data:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-4.21	-3.00±1	-2.00	0.631
Middle(2441MHz)	-3.01	-3.00±1	-2.00	0.631
Highest(2480MHz)	-2.29	-3.00±1	-2.00	0.631

π/4DQPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-3.25	-2.00±1	-1.00	0.794
Middle(2441MHz)	-2.00	-2.00±1	-1.00	0.794
Highest(2480MHz)	-1.31	-2.00±1	-1.00	0.794

Worst case is : π/4DQPSK mode						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-3.25	-2.00±1	-1.00	0.794	0.246	3.0
Middle (2441MHz)	-2.00	-2.00±1	-1.00	0.794	0.248	
Highest (2480MHz)	-1.31	-2.00±1	-1.00	0.794	0.250	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32O80606901.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32O80606901 for EUT external and internal photos.

*** End of Report ***