RF Exposure Evaluation Report

Product	:	Lotso Collection IPX7 Waterproof TWS Earphones
Trade mark	:	MINISO
Model/Type reference	:	Q66C
Serial Number	:	N/A
Report Number	:	EED32N81429102
FCC ID	:	2ART4-Q66C
Date of Issue	:	Feb. 18, 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
2501, No. 486 Heye Square, Kangwang Middle Road, Liwan District, Guangzhou, Guangdong, China

Prepared by:

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Approved by: David Wang Date: Feb. 18, 2022

David Wang

Check No.: 3212231221

2 Version

Version No.	Date	Description
00	Feb. 18, 2022	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	MINISO Corporation
Address of Applicant:	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:	Lotso Collection IPX7 Waterproof TWS Earphones
Model No.(EUT):	Q66C
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:	PCB Antenna
Antenna Gain:	Ear L: -2.51 dBi Ear R : -2.52dBi
Power Supply:	Battery DC 3.7V, 50mAh
Max Conducted Peak Output Power:	-11.38 dBm
	The Max Conducted Peak Output Power data refer to the report EED32N81429101
Sample Received Date:	Dec. 24, 2021
Sample tested Date:	Dec. 24, 2021 to Jan. 05, 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:
[(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:

The Ear L of data is worst,only the worst case is recorded in the report.

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-13.7	-13±1	-12	0.063
Middle(2441MHz)	-13.17	-13±1	-12	0.063
Highest(2480MHz)	-12.34	-13±1	-12	0.063

π/4DQPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-12.9	-12±1	-11	0.079
Middle(2441MHz)	-12.35	-12±1	-11	0.079
Highest(2480MHz)	-11.38	-12±1	-11	0.079

Worst case is Ear L: π/4DQPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-12.9	-12±1	-11	0.079	0.025	3.0
Middle (2441MHz)	-12.35	-12±1	-11	0.079	0.025	
Highest (2480MHz)	-11.38	-12±1	-11	0.079	0.025	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32N81429101.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32N81429101 for EUT external and internal photos.

*** End of Report ***