RF Exposure Evaluation Report

Product	:	FASHION WIRELESS HEADPHONES WITH COLORFUL LIGHTS
Trade mark	:	MINISO
Model/Type reference	:	2101
Serial Number	:	N/A
Report Number	:	EED32N80944302
FCC ID	:	2ART4-2101
Date of Issue	:	Oct. 29, 2021
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:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Compiled by: mark.chen. Mark Chen

Reviewed by: Aaron Ma Aaron Ma

Approved by: David Wang David Wang

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1 Version

Version No.	Date	Description
00	Oct. 29, 2021	Original

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3 General Information

3.1 Client Information

Applicant:	MINISO Corporation
Address of Applicant:	2501, No. 486 Heye Square, Kangwang Middle Road, Liwan District, Guangzhou, Guangdong, China
Manufacturer:	Shenzhen Bao Tianhua Technology Co., Ltd
Address of Manufacturer:	301,Building Plant No.5 Anliang Road ,Xi Keng Community Yuanshan Sub-district, Longgang district,Shenzhen, Guangdong, China
Factory:	Shenzhen Bao Tianhua Technology Co., Ltd
Address of Factory:	301,Building Plant No.5 Anliang Road ,Xi Keng Community Yuanshan Sub-district, Longgang district,Shenzhen, Guangdong, China

3.2 General Description of EUT

Product Name:	FASHION WIRELESS HEADPHONES WITH COLORFUL LIGHTS
Model No.(EUT):	2101
Test Model No.:	2101
Trade mark:	MINISO
Bluetooth Version:	V5.1
Product Type:	☐ Mobile ☒ Portable ☐ Fix Location
Power Supply:	Battery 200mAh 3.7V 0.74Wh
Test Voltage:	DC 3.7V
Sample Received Date:	Sep.27, 2021
Sample tested Date:	Sep.27, 2021 to Sep.30, 2021

3.3 General Description of BT Classic

Operation Frequency:	2402MHz~2480MHz
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, π/4DQPSK
Number of Channel:	79
Hopping Channel Type:	Adaptive Frequency Hopping systems
Antenna Type:	PCB Antenna
Antenna Gain:	-0.58dBi

3.4 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

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.

3.7 Other Information Requested by the Customer

None.

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 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.

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

4.1.2 EUT RF Exposure

1) For BT Classic

Measurement Data

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-2.63	-2.5±0.5	-2	0.63
Middle(2441MHz)	-2.04	-2.5±0.5	-2	0.63
Highest(2480MHz)	-2.19	-2.5±0.5	-2	0.63
π/4DQPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-1.92	-1.5±0.5	-1	0.79
Middle(2441MHz)	-1.57	-1.5±0.5	-1	0.79
Highest(2480MHz)	-1.55	-1.5±0.5	-1	0.79

Worst case: 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)	-1.92	-1.5±0.5	-1	0.79	0.2	3.0
Middle (2441MHz)	-1.57	-1.5±0.5	-1	0.79	0.2	
Highest (2480MHz)	-1.55	-1.5±0.5	-1	0.79	0.2	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32N80944301.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32N80944301 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 ***