

RF Exposure Evaluation Report

Product	: Sport wireless Earphones
Trade mark	: MINISO
Model/Type reference	: TB15
Serial Number	: N/A
Report Number	: EED32N80784502
FCC ID	: 2ART4-TB15
Date of Issue	: Oct. 08, 2021
Test Standards	: 47 CFR Part 1.1307 47 CFR Part 1.1093 KDB447498D01 General RF Exposure Guidance v06
Test result	: PASS

Prepared for:

MINISO Corporation
Room 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:

Ware Xin

Ware xin

Approved by:

David Wang

David Wang

Reviewed by:

Aaron Ma

Aaron Ma

Date:

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1 Version

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3 General Information

3.1 Client Information

Applicant:	Miniso Corporation
Address of Applicant:	Room 2501, No. 486 Heye Square Kangwang Middle Road, Liwan District, GuangZhou, Guangdong, China
Manufacturer:	Dongguan Shengbang Electronic Technology Co. , Ltd.
Address of Manufacturer:	Room 101, No. 33, Shenxi Road, Houjie Town, Dongguan City, Guangdong Province
Factory:	Dongguan Shengbang Electronic Technology Co. , Ltd.
Address of Factory:	Room 101, No. 33, Shenxi Road, Houjie Town, Dongguan City, Guangdong Province

3.2 General Description of EUT

Product Name:	Sport wireless Earphones
Model No.(EUT):	MINISO
Trade Mark:	TB15
Power Supply:	DC 3.7V 165 mAh (Li-on Rechargeable Battery)
Test Voltage:	DC 3.7V

3.3 Product Specification subjective to this standard

Frequency Range:	2402MHz to 2480MHz
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, π /4DQPSK, 8DPSK
Test Software of EUT:	BT_Tool V1.0.5
Test Power Grade:	Default
Antenna Type:	PCB antenna
Antenna Gain:	0dBi
Power Supply:	DC 3.7V
Max Conducted Peak Output Power:	BT: -4.37dBm
	The Max Conducted Peak Output Power data refer to the report EED32N80784501
Sample Received Date:	Aug. 26, 2021
Sample tested Date:	Aug. 26, 2021 to Sep. 23, 2021
Remark:	<p>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.</p> <p>Note: There is only one model: TB15, but it has three colors (black, white, and green), only the green EUT has been tested.</p>

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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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

4.1.2 EUT RF Exposure

The tune-up power is -4.5 dBm +/- 0.5dB, therefore the highest tune-up power is

-4.0dBm (0.40mW) @2480 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$(0.40\text{mW} / 5\text{mm}) * (2480\text{GHz}^{0.5})=0.12$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 0.12 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32N80784501 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 ***