RF EXPOSURE

APPLICANT	:	Shenzhen Sincodynamic Technology Co.,Ltd
PRODUCT NAME	:	ANC Headphone
MODEL NAME	:	BSNCH102BK-BMCYTKT BSNCH102WH-BMCYTKT B8-ANC B6-ANC
BRAND NAME	:	/
FCC ID	:	2AJO8-BSNCH102
STANDARD(S)	:	47 CFR Part 2(2.1093)
RECEIPT DATE	:	2023-02-09
TEST DATE	:	2023-02-09 to 2023-02-20
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DIRECTORY

Change History		
Version	**Date**	**Reason for change**
1.0	2023-02-20	First edition

1. Technical Information

Note: Provide by applicant.

1.1 Applicant and Manufacturer Information

Applicant:	**Shenzhen Sincodynamic Technology Co.,Ltd**
Applicant Address:	**Building 1 Changguang Industrial area AoBei Second Village Henggang town,Village Henggang town, Longgang District, Shenzhen, China**
Manufacturer:	Shenzhen Sincodynamic Technology Co.,Ltd
Manufacturer Address:	Building 1 Changguang Industrial area AoBei Second Village Henggang town,Village Henggang town, Longgang District, Shenzhen, China

1.2 Equipment Under Test (EUT) Description

Product Name:	ANC Headphone
Sample No.:	1#
Hardware Version:	V1.0
Software Version:	V1.0
Equipment Type:	Bluetooth classic
Bluetooth Version:	5.2
Operating Frequency Range:	2402MHz-2480MHz
Modulation Type:	FHSS (GFSK(1Mbps), π/4-DQPSK(EDR 2Mbps), 8-DPSK(EDR 3Mbps)
Antenna Type:	PCB Antenna
Antenna Gain:	-0.58dBi

1.3 Applied Reference Documents

Leading reference documents for testing:

Identity	Document Title	Method Determination /Remark
47 CFR Part 2(2.1093)	Radio Frequency Radiation Exposure Assessment: Portable devices	No deviation
KDB 447498 v06	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices	No deviation
Note 1: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table. **Note 2:** When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.		

2. Device Category and RF Exposure Limit

Per user manual, based on 47 CFR 2.1093, this device belongs to portable device category with General Population/Uncontrolled exposure.

Portable Devices:

47 CFR 2.1093(b)

For purposes of this section, a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

General Population/Uncontrolled Exposure:

47 CFR 2.1093(d) (2)

Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section.

3. RF Output Power

<Bluetooth Output Power>

Mode	Modulation	Frequency (MHz)	Average Power (dBm)
			GFSK
Bluetooth	GFSK	2480	1.53
	π/4-DQPSK	2480	2.25
	8-DPSK	2480	2.68

Note 1: According to KDB 447498, SAR test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

Note 2: The output power refers to report (Report No.: SZ23020372W01).

4. RF Exposure Assessment

➢ **Standalone Transmission SAR Assessment**

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following: [(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, 30 where
f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation31
The result is rounded to one decimal place for comparison
The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

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 according to 4.1 f) is applied to determine SAR test exclusion.

For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):
1) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm) • (f(MHz)/150)]} mW, for 100 MHz to 1500 MHz
2) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm) • 10]} mW, for > 1500 MHz and ≤ 6 GHz
For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):
1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by [1 + log(100/f(MHz))]
2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by ½
3) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any SAR test results below 100 MHz to be acceptable.

1. When the device is used, 5mm as the most conservative minimum test separation distance was used for evaluating.

Channel	Frequency (MHz)	Separation Distance (cm)	P_{th} (mW)
CH 00	2440	0.5	9.7

Note: The maximum source-based time-averaged power including tune-up limit is less than the SAR-based exemption, therefore SAR measurement is not required for this device.

<Estimated SAR Evaluation>

Frequency (MHz)	Separation Distance (cm)	P_{max} (dBm)	P_{max} (mW)
2440	0.5	2.68	1.86

- **Simultaneous SAR Assessment**

This device only incorporates one Bluetooth transmitter, therefore simultaneous SAR evaluation is not required.

- **Conclusion**

According to FCC 47 CFR Part 2(2.1093), this device complies with the EMF basic restrictions.

Annex A Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.

END OF REPORT