

RF Exposure Evaluation Report

Report Reference No...... : **MTEB24020084-H**

FCC ID..... : **2AABM-680755**

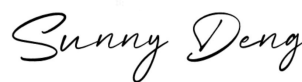
Compiled by

(position+printed name+signature)..: File administrators Alisa Luo



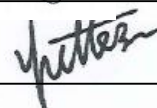
Supervised by

(position+printed name+signature)..: Test Engineer Sunny Deng



Approved by

(position+printed name+signature)..: Manager Yvette Zhou



Date of issue..... : **February 21,2024**

Representative Laboratory Name. : **Shenzhen Most Technology Service Co., Ltd.**

Address..... : No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park,
Nanshan, Shenzhen, Guangdong, China.

Applicant's name..... : **TECH-AUDIO CO., LTD**

Address..... : No. 14, Aly. 5, Ln. 216, Zhongxing Rd., Longtan Dist., Taoyuan City
325, Taiwan

Test specification/ Standard..... : **47 CFR Part 1.1307;47 CFR Part 1.1310**
KDB447498D01 General RF Exposure Guidance v06

TRF Originator..... : Shenzhen Most Technology Service Co., Ltd.

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Test item description.....: Bluetooth Speaker

Trade Mark.....: N/A

Model/Type reference.....: Nexa 1

Listed Models: Nexa 2, Nexa 3, Nexa 4, Nexa X, Nexa 1 Pro, Nexa 2 Pro, Nexa 3 Pro, Nexa 1 Ultra. Nexa 2 Ultra. Nexa 3 Ultra, Nexa 1 Mini, Nexa 2 Mini, Nex 3 Mini, A1, A2, A3, A1 Elite, A2 Elite, A3 Elite

Modulation Type.....: GFSK, $\pi/4$ DQPSK, 8DPSK

Operation Frequency.....: From 2402MHz to 2480MHz

Hardware Version..... V1.1

Software Version..... V1.1

Rating.....: POWER Input: TYPE-C 5V/2.1A

Battery: 7.2V/2500mAh

Result.....: **PASS**

TEST REPORT

Equipment under Test : Bluetooth Speaker

Model /Type : Nexa 1

Listed Models : Nexa 2, Nexa 3, Nexa 4, Nexa X, Nexa 1 Pro, Nexa 2 Pro, Nexa 3 Pro, Nexa 1 Ultra. Nexa 2 Ultra. Nexa 3 Ultra, Nexa 1 Mini, Nexa 2 Mini, Nex 3 Mini, A1, A2, A3, A1 Elite, A2 Elite, A3 Elite

Remark : The model name is different and the appearance is different, and the rest remains unchanged.

Applicant : TECH-AUDIO CO., LTD

Address : No. 14, Aly. 5, Ln. 216, Zhongxing Rd., Longtan Dist., Taoyuan City 325, Taiwan

Manufacturer : XIAMEN TECH-SOUND CO., LTD

Address : NO.170, Ji Yin Road, Tong An District , Xiamen , China.

Test Result:	PASS
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The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2024-02-21	Initial Issue	Alisa Luo

2. SAR Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. 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.

2.1.2 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:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \left[\sqrt{f(\text{GHz})} \right] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

$f(\text{GHz})$ 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

2.1.3 EUT RF Exposure

BT classic

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	1.359	1.359 ± 1	2.359
Middle(2441MHz)	3.047	3.047 ± 1	4.047
Highest(2480MHz)	2.816	2.816 ± 1	3.816

$\pi/4$ DQPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	0.153	0.153 ± 1	1.153
Middle(2441MHz)	1.605	1.605 ± 1	2.605
Highest(2480MHz)	1.762	1.762 ± 1	2.762

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	0.209	0.209 ± 1	1.209
Middle(2441MHz)	1.812	1.812 ± 1	2.812
Highest(2480MHz)	1.803	1.803 ± 1	2.803

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Lowest(2402MHz)	3.047	4.047	2.54	0.65	3.0	Yes

.....**THE END OF REPORT**.....