

RF EXPOSURE Test Report

Product: AI Wireless Lavalier Microphone

Trade Mark: maono

Model Number: WM621 Plus

FCC ID: 2AJJB-WM621

Prepared for

Shenzhen Maono Technology Co., Ltd.

No. 1307, 13th Floor, Building 4, Phase II of Tianan Yungu Industrial Park,
Gangtou Community, Bantian Street, Longgang District, Shenzhen, China

Prepared by

Shenzhen HongBiao Certification& Testing Co., Ltd

Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan
Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen,
China

Tel.: +86-755-2998 9321 Fax.: +86-755-2998 5110

Website: <http://www.sz-hongbiao.com>

Table of Contents

1 GENERAL DESCRIPTION 5

1.1 DESCRIPTION OF EUT 5

1.2 TEST MODE..... 5

1.3 TEST SETUP 5

1.4 ANCILLARY EQUIPMENT 6

2 TEST FACILITIES AND ACCREDITATIONS 7

2.1 TEST LABORATORY 7

2.2 ENVIRONMENTAL CONDITIONS 7

2.3 MEASUREMENT UNCERTAINTY 7

2.4 TEST SOFTWARE 7

3 LIST OF TEST EQUIPMENT 8

4 RF EXPOSURE..... 9

4.1 STANDALONE SAR TEST EXCLUSION CONSIDERATIONS..... 9

4.1.1. *Limit* 9

4.1.2. *Test Procedures* 9

4.1.3. *Test Result* 10

TEST RESULT CERTIFICATION

Applicant's Name..... : Shenzhen Maono Technology Co., Ltd.
No. 1307, 13th Floor, Building 4, Phase II of Tianan Yungu
Address : Industrial Park, Gangtou Community, Bantian Street, Longgang
District, Shenzhen, China
Manufacturer's Name : Shenzhen Maono Technology Co., Ltd.
No. 1307, 13th Floor, Building 4, Phase II of Tianan Yungu
Address : Industrial Park, Gangtou Community, Bantian Street, Longgang
District, Shenzhen, China

Product description

Product name : AI Wireless Lavalier Microphone
Model Number : WM621 Plus

Standards : FCC CFR 47 PART 1 , 1.1310

Test procedure : KDB 447498 D01 General RF Exposure Guidance v06

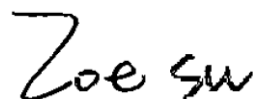
This device described above has been tested by Shenzhen HongBiao Certification& Testing Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.

Date of Test :

Date (s) of performance of tests : July 28, 2025~ Aug. 15, 2025

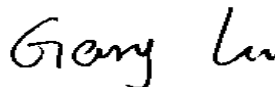
Test Result..... : **Pass**

Testing Engineer :



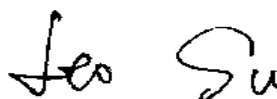
(Z o e S u)

Technical Manager :



(G a r y L u)

Authorized Signatory :



(L e o S u)

[illegible]

1 General Description

1.1 Description of EUT

| | |
|----------------------------|---|
| Product name: | AI Wireless Lavalier Microphone |
| Model name: | WM621 Plus |
| Series Model: | WM621 Plus PB2, WM621 Plus B1, WM621 Plus PC2, WM621 Plus C1, WM621 Plus PBC2, WM621 Plus PA2, WM621 Plus A1, WM621 Plus A3, Wave T1 Plus, WM621, WM621 PB2, WM621 B1, WM621 PC2, WM621 C1, WM621 PBC2, WM621 PA2, WM621 A1, WM621 A2, WM621 A3, T1, T1 Plus, T1 Pro, T1 Max, T1 S, T1 Ultra, RC-1, RL-1, RA-1, WM621 Pro |
| Different of series model: | All the models are the same circuit and module, except the model No.. |
| Operation frequency: | 2402-2480MHz |
| Modulation type: | GFSK |
| Bit Rate of transmitter: | 1 Mbps |
| Antenna type: | LDS Antenna |
| Antenna gain: | 0.48dBi |
| Max. output power: | 2.22dBm |
| Hardware version: | V1.0 |
| Software version: | V1.0 |
| Battery: | DC 3.8V, 145mAh |
| Power supply: | For Wireless Microphone: Powered by internal battery For Wireless Microphone: Input DC 5V/120mAh Battery for Wireless Microphone: DC 3.8V, 145mAh |
| Adapter information: | N/A |

1.2 Test Mode

| Pretest Test Mode | Description of Mode |
|-------------------|---------------------|
| 1 | TX |
| 2 | / |
| 3 | / |

1.3 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Ancillary Equipment

| Equipment | Model | S/N | Manufacturer |
|-----------|-------|-----|--------------|
| / | / | / | / |
| | | | |
| | | | |
| | | | |

2 Test Facilities and Accreditations

2.1 Test Laboratory

| | |
|-----------------------|---|
| Test Site | Shenzhen HongBiao Certification& Testing Co., Ltd |
| Test Site Location | Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China |
| Telephone: | (86-755) 2998 9321 |
| Fax: | (86-755) 2998 5110 |
| FCC Registration No.: | CN1341 |
| A2LA Certificate No.: | 6765.01 |

2.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

| | |
|--------------------|--------------|
| Temperature: | 15°C~35°C |
| Relative Humidity: | 20%~75% |
| Air Pressure: | 98kPa~101kPa |

2.3 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

The data and results quoted in this document are true and accurate values, and uncertainties are not involved in the calculations.

In addition, components and mass production processes that are similar to testing equipment may introduce additional deviations, and the manufacturer is solely responsible for the continued compliance of the equipment.

| Measurement Frequency Range | U, (dB) | Note |
|-----------------------------|--------------------|------|
| RF frequency | 2×10^{-5} | |
| RF power, conducted | ± 0.57 dB | |
| Temperature | ± 1 degree | |
| Humidity | ± 5 % | |

2.4 Test Software

| Software name | Manufacturer | Model | Version |
|----------------|--------------|----------|----------|
| RF Test System | MWRF | MTS 8310 | V2.0.0.0 |

3 List of Test Equipment

| RF | | | | | | | |
|------|---------------|--|--------------|----------------|------------|------------------|------------|
| Item | Equipment No. | Equipment name | Manufacturer | Model | Serial No. | Calibration date | Due date |
| 1 | HB-E041 | MXG Anaio Signal Generator | Agilent | N5181A | MY47070421 | 2025-05-07 | 2026-05-06 |
| 2 | HB-E042 | WIDEBAND RADIO COMMUNIC ATION TESTER | R&S | CMW500 | 132108 | 2025-05-08 | 2026-05-07 |
| 3 | HB-E043 | MXG Anaio Signal Generator | Agilent | N5182A | US46240335 | 2025-05-08 | 2026-05-07 |
| 4 | HB-E044 | Signal & spectrum Analyzer | R&S | FSV3044 | 101264 | 2025-05-07 | 2026-05-06 |
| 5 | HB-E045 | RF Control Box | Noyetec | NY100-R FCB | N/A | 2025-05-08 | 2026-05-07 |
| 6 | HB-E058 | Thermometer Clock Humidity Monitor | N/A | HTC-1S | N/A | 2025-05-09 | 2026-05-08 |

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

4 RF Exposure

4.1 Standalone SAR test exclusion considerations

4.1.1. Limit

3.0 for 1g SAR.

4.1.2. Test Procedures

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 Test Exclusion Threshold condition(s), listed below, is (are) satisfied.

These 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.

The minimum test separation distance defined in 4.1 f) is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.

To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified, typically in the SAR measurement or SAR analysis report, by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, according to the required published RF exposure KDB procedures.

When no other RF exposure testing or reporting are required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for SAR test exclusion.

When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions.

- a) 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:

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

- $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- 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.

- b) 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) $\{[\text{Power allowed at } \textit{numeric threshold} \text{ for } 50 \text{ mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)]\}$ mW, for 100 MHz to 1500 MHz
- 2) $\{[\text{Power allowed at } \textit{numeric threshold} \text{ for } 50 \text{ mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot 10]\}$ mW, for > 1500 MHz and ≤ 6 GHz

- c) 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 $[1 + \log(100/f(\text{MHz}))]$
- 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 $\frac{1}{2}$
- 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.

4.1.3. Test Result

We use 5mm as separation distance to calculated.

2.4GHz:

| Transmit Frequency (GHz) | Mode | Measured Power (dBm) | Tune-up power (dBm) | Max tune-up Power (dBm) | Result calculation | 1g SAR |
|--------------------------|---------|----------------------|---------------------|-------------------------|--------------------|--------|
| 2.402 | GFSK 1M | 2.22 | 2±1 | 3 | 0.6185 | 3 |
| 2.441 | | 1.77 | 2±1 | 3 | 0.6233 | 3 |
| 2.480 | | 1.77 | 2±1 | 3 | 0.6284 | 3 |

Conclusion:

For the max result: $0.6284 \leq 3.0$ for 1g SAR, No SAR is required.

***** END OF REPORT *****