# Co-Location Radio Test Report

**for**

**OMNI Fleet**

**Model No.: OMNI-23MAI001**

**FCC ID: 2BBAB-MAI-OMNI**

Applicant: Mindtronic AI Inc.
Address: 7506 Silvercrest Dr, Austin, TX 78757 United States

Tested and Prepared

By

**Worldwide Testing Services (Taiwan) Co., Ltd.**

**FCC Registration No.: TW1477, TW1072**

**Industry Canada filed test laboratory Reg. No.: 20037, 5107A**



**Report No.: W6M22304-22580-CLR**

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C.
TEL: 886-2-66068877 FAX: 886-2-66068879 E-mail: wts@wts-lab.com

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

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# 1 General Information

## 1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.
The tests were carried out and passed in accordance to the standards:

**47 CFR PART 15 SUBPART C § 15.247 (2021-10)**

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.
Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification (only telecommunication products).
Neither is there any guarantee that such a test sample will interwork with other genuinely open systems.
The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

Laboratory disclaimer-

1. The test results of this test report relate exclusively to the item tested as specified in 1.6.
2. The test report may only be reproduced or published in full.
3. Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

**Important Notes:**

Proper labelling is required for each device. Devices shall be labelled in accordance with labelling requirements pursuant to section 15.19 and section 2.1074 of the FCC rules.
Devices subject to a Declaration of Conformity shall be uniquely identified by the responsible party.
This identification shall not be of a format which could be confused with the FCC Identifier required on certified, notified type accepted or type approved equipment.
The responsible party shall maintain adequate identification records to facilitate positive identification for each device.
The user manual or instruction manual shall included also a warning statement that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Reference Section 15.21
Furthermore information to the user regarding to the interference potential of the device and about simple measures that can be taken to correct interference is required.
Reference Section 15.105
The responsible party must warrant that each unit of equipment marketed under a Declaration of Conformity is identical to the unit tested and found acceptable with the standards and that the records maintained by the responsible party continue to reflect the equipment being produced under the Declaration of Conformity within the variation that can be expected due to quantity production and testing on a statistical basis.

## 1.2 Tester

| | | | |
|---|---|---|---|
| June 14, 2023 | | Sora Kuo | Sora. |
| Date | WTS-Lab. | Test Engineer | Signature |

Technical responsibility for area of testing:

| | | | |
|---|---|---|---|
| June 14, 2023 | | Kevin Wang | Kevin Wang |
| Date | WTS | Name | Signature |

## 1.3 Testing laboratory

### 1.3.1 Location

10m OATS
No.5-1, Lishui, Shuang Sing Village, Wanli Dist.,
New Taipei City 207, Taiwan (R.O.C.)

3 meter semi-anechoic chamber
No.35, Aly. 21, Ln. 228, Ankang Rd., Neihu Dist.,
Taipei City 114, Taiwan (R.O.C.)
Tel: 886-2-6613-0228

Worldwide Testing Services (Taiwan) Co., Ltd.
6F., No. 58, Ln. 188, Ruiguang Rd., Neihu Dist.,
Taipei City 114 , Taiwan (R.O.C.)
Tel: 886-2-6606-8877

### 1.3.2 Details of accreditation status

Accredited testing laboratory
FCC filed test laboratory Reg. No.: TW1477, TW1072
Industry Canada filed test laboratory Reg. No.: 20037, 5107A

### 1.3.3 Test location, where different from Worldwide Testing Services (Taiwan) Co., Ltd.

| | |
|---|---|
| Name: | ./. |
| Accredited number: | ./. |
| Street: | ./. |
| Town: | ./. |
| Country: | ./. |

## 1.4 Details of applicant

| | |
|---|---|
| Name: | Mindtronic AI Inc. |
| Street: | 7506 Silvercrest Dr, |
| Town: | Austin, TX 78757 |
| Country: | United States |

## 1.5 Application details

| | |
|---|---|
| Date of receipt of test item: | April 24, 2023 |
| Date of test: | from April 25, 2023 to June 12, 2023 |

## 1.6 Test item

### 1.6.1 Description of test item

Type of product: OMNI Fleet

Type identification: OMNI-23MAI001

Multi-listing model no.: ./.

Brand name: Mindtronic AI

Maximum operating frequency: 2462 MHz

Sample no.: #02

### 1.6.2 Manufacturer (if different from applicant in point 1.4)

Name: Mindtronic AI Co., Ltd. (Cayman Island) Taiwan Branch
Street: 7 F., No. 218, Sec. 6, Roosevelt Rd., Wenshan Dist.,
Town: Taipei City 11674,
Country: Taiwan (R.O.C.)

### 1.6.3 Frequency behavior

| Highest frequency generated in the device or on which the device operates or tunes (MHz) | | Upper frequency of measurement range (MHz) |
|---|---|---|
| ☐ | Below 1.705 | 30 |
| ☐ | 1.705 - 108 | 1000 |
| ☐ | 108 -500 | 2000 |
| ☐ | 500 - 1000 | 5000 |
| ☒ | Above 1000 | 5th harmonic of the highest frequency or 40 GHz, whichever is lower |

## 1.7 Test standards

**47 CFR Part 15 Subpart B : October 2021**

**ANSI C63.4-2014 amended as per ANSI C63.4a-2017**

**47 CFR PART 15 SUBPART C § 15.247 (2021-10)**

# 2 Technical test

## 2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed. ☒

**Or**

The deviations were ascertained in the course of the tests performed. ☐

## 2.2 Test environment

Relative humidity content: 20 ... 75 %

Air pressure: 860 ... 1030 hPa

Details of power supply: 12Vd.c.

Other parameters: without

| Test item Name | Measurement Uncertainty |
|---|---|
| Estimation Result of Uncertainty of Conducted Emission | Expanded Uncertainty：<br>AMN：0.94 dB<br>Voltage probe：0.96 dB<br>Include Pulse Limiter：1.52 dB |
| Estimation Result of Uncertainty of Radiated Emission(3M) | Expanded Uncertainty：<br>0.009-30 MHz：3.48 dB<br>30-1000 MHz：3.96 dB<br>1-18 GHz：2.46 dB<br>18-40 GHz：2.44 dB |

The decision rule is: Measurement uncertainty is not included in the calculation of test results.

## 2.3 Test equipment utilized

| No. | Test equipment | Type | Serial No. | Manufacturer | Cal. Date | Next Cal. Date |
|---|---|---|---|---|---|---|
| ETSTW-CE 001 | EMI TEST RECEIVER | ESHS10 | 842121/013 | R&S | 2022/6/22 | 2023/6/21 |
| ETSTW-CE 003 | AC POWER SOURCE | APS-9102 | D161137 | GW | Function Test | |
| ETSTW-CE 004 | ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK | ESH3-Z5 | 840731/011 | R&S | 2022/10/24 | 2023/10/23 |
| ETSTW-CE 006 | IMPULSBEGRENZER PULSE LIMITER | ESH3-Z2 | 100226 | R&S | 2022/10/24 | 2023/10/23 |
| ETSTW-CE 008 | HF-EICHLEITUNG RF STEP ATTENUATOR 139dB DPSP | 334.6010.02 | 844581/024 | R&S | Function Test | |
| ETSTW-CE 009 | TEMP.&HUMIDITY CHAMBER | GTH-225-40-1P-U | MAA0305-009 | GIANT FORCE | 2022/8/3 | 2023/8/2 |
| ETSTW-CE 016 | TWO-LINE V-NETWORK | ENV216 | 100050 | R&S | 2022/11/9 | 2023/11/8 |
| ETSTW-CE 028 | MXE EMI Receiver | N9038A | MY53220110 | Agilent | 2022/7/29 | 2023/7/28 |
| ETSTW-RE 003 | EMI TEST RECEIVER | ESI 26 | 831438/001 | R&S | 2022/6/21 | 2023/6/20 |
| ETSTW-RE 004 | EMI TEST RECEIVER | ESI 40 | 832427/004 | R&S | 2022/10/17 | 2023/10/16 |
| ETSTW-RE 012 | TUNABLE BANDREJECT FILTER | D.C 0309 | 146 | K&L | Function Test | |
| ETSTW-RE 013 | TUNABLE BANDREJECT FILTER | D.C 0336 | 397 | K&L | Function Test | |
| ETSTW-RE 018 | MICROWAVE HORN ANTENNA | AT4560 | 27212 | AR | 2022/8/18 | 2023/8/17 |
| ETSTW-RE 019 | MICROWAVE HORN ANTENNA | 22240-25 | 121074 | FM | 2023/5/18 | 2024/5/17 |
| ETSTW-RE 027 | Passive Loop Antenna | 6512 | 00034563 | ETS-Lindgren | 2022/6/22 | 2023/6/21 |
| ETSTW-RE 030 | Double-Ridged Guide Horn Antenna | 3117 | 00035224 | ETS-Lindgren | 2023/5/18 | 2024/5/17 |
| ETSTW-RE 042 | Biconical Antenna | HK116 | 100172 | R&S | 2023/3/2 | 2024/3/1 |
| ETSTW-RE 043 | Log-Periodic Dipole Antenna | HL223 | 100166 | R&S | 2022/6/28 | 2023/6/27 |
| ETSTW-RE 044 | Log-Periodic Antenna | HL050 | 100094 | R&S | 2022/8/1 | 2023/7/31 |
| ETSTW-RE 045 | ESA-E SERIES SPECTRUM ANALYZER | E4404B | MY45111242 | Agilent | Pre-test Use | |
| ETSTW-RE 050 | Attenuator 10dB | 50HF-010-1 | None | JFW | 2023/2/17 | 2024/2/16 |
| ETSTW-RE 051 | Attenuator 6dB | 50HF-006-1 | None | JFW | 2023/2/17 | 2024/2/16 |
| ETSTW-RE 053 | Attenuator 3dB | 50HF-003-1 | None | JFW | 2023/2/17 | 2024/2/16 |
| ETSTW-RE 055 | SPECTRUM ANALYZER | FSU 26 | 200074 | R&S | 2023/3/22 | 2024/3/21 |
| ETSTW-RE 060 | Attenuator 30dB | 5015-30 | F651012z-01 | ATM | 2023/2/17 | 2024/2/16 |
| ETSTW-RE 062 | Amplifier Module | CHC 2 | None | KMIC | 2023/2/20 | 2024/2/19 |
| ETSTW-RE 064 | Bluetooth Test Set | MT8852B-042 | 6K00005709 | Anritsu | Function Test | |
| ETSTW-RE 069 | Double-Ridged Guide Horn Antenna | 3117 | 00069377 | ETS-Lindgren | Function Test | |
| ETSTW-RE 072 | CELL SITE TEST SET | 8921A | 3339A00375 | HP | 2022/11/5 | 2023/11/4 |
| ETSTW-RE 088 | SOLID STATE AMPLIFIER | KMA180265A01 | 99057 | KMIC | 2022/9/16 | 2023/9/15 |
| ETSTW-RE 091 | Match Pad | MDCS1500 | None | WOKEN | 2023/5/18 | 2024/5/17 |
| ETSTW-RE 099 | DC Block | 50DB-007-1 | None | JFW | 2023/2/17 | 2024/2/16 |
| ETSTW-RE 112 | AC POWER SOURCE | TFC-1005 | T-0A023536 | T-Power | Function test | |

| | | | | | | |
|---|---|---|---|---|---|---|
| ETSTW-RE 115 | 2.4GHz Notch Filter | N0124411 | 473874 | MICROWAVE CIRCUITS | 2023/1/4 | 2024/1/3 |
| ETSTW-RE 120 | RF Player | MP9200 | MP9210-111022 | ADIVIC | 2022/11/8 | 2023/11/7 |
| ETSTW-RE 122 | SIGNAL GENERATOR | SMF100A | 102149 | R&S | 2022/6/20 | 2023/6/19 |
| ETSTW-RE 125 | 5GHz Notch filter | 5NSL11-5200/E221.3-O/O | 1 | K&L Microwave | 2022/8/5 | 2023/8/4 |
| ETSTW-RE 126 | 5GHz Notch filter | 5NSL12-5800/E221.3-O/O | 1 | K&L Microwave | 2022/8/5 | 2023/8/4 |
| ETSTW-RE 127 | RF Switch Box | RFS-01 | None | WTS | 2023/2/17 | 2024/2/16 |
| ETSTW-RE 128 | 5.3GHz Notch filter | N0153001 | SN487233 | Microwave Circuits | 2022/8/5 | 2023/8/4 |
| ETSTW-RE 129 | 5.5GHz Notch filter | N0555984 | SN487234 | Microwave Circuits | 2022/8/5 | 2023/8/4 |
| ETSTW-RE 130 | Handheld RF Spectrum Analyzer | N9340A | CN0147000204 | Agilent | Pre-test Use | |
| ETSTW-RE 142 | Amplifier | 8447D | 2805A03378 | Agilent | 2023/2/20 | 2024/2/19 |
| ETSTW-RE 146 | Preamplifier | JPA-10M1G | 15090004 | JPT | 2023/5/18 | 2024/5/17 |
| ETSTW-RE 152 | Bi-log Hybrid Antenna | MCTD 2786B | BLB20J04029 | ETC | 2023/3/21 | 2024/3/20 |
| ETSTW-RE 153 | Signal Analyzer | FSV40 | 101929 | R&S | 2022/10/3 | 2023/10/2 |
| ETSTW-RE 159 | Bi-log Hybrid Antenna (30M~1000 MHz) | MCTD 2786B | BLB21N04035 | ETC | 2022/12/22 | 2023/12/21 |
| ETSTW-RE 177 | Bi-log Hybrid Antenna with 6dB Attenuator | VULB 9168& EMCI-N-6-06 | 01380& AT-06007 | SCHWARZBECK& EMC | 2022/9/1 | 2023/8/31 |
| ETSTW-RF 002 | Electromagnetic field probe | LF-30 | K-0007 | STT | 2022/7/14 | 2023/7/13 |
| ETSTW-EMI 011 | USB Compact Modulator | SFC-U | 101689 | R&S | 2023/5/18 | 2024/5/17 |
| ETSTW-GSM 002 | Universal Radio Communication Tester | CMU 200 | 109439 | R&S | 2023/3/22 | 2024/3/21 |
| ETSTW-GSM 003 | Radio Communication Analyzer | MT8820C | 6201342073 | Anritsu | 2023/4/27 | 2024/4/26 |
| ETSTW-GSM 004 | Wideband Radio Communication Tester | CMW500 | 128092 | R&S | 2022/10/24 | 2023/10/23 |
| ETSTW-GSM 019 | Band Reject Filter | WRCTF824/849-822/851-40 /12+9SS | 3 | WI | 2023/1/4 | 2024/1/3 |
| ETSTW-GSM 020 | Band Reject Filter | WRCD1747/1748-1743/1752-32/5SS | 1 | WI | 2023/1/4 | 2024/1/3 |
| ETSTW-GSM 021 | Band Reject Filter | WRCD1879.5/1880.5-1875.5/1884.5-32/5SS | 3 | WI | 2023/1/4 | 2024/1/3 |
| ETSTW-GSM 022 | Band Reject Filter | WRCT901.9/903.1-904.25-50/8SS | 1 | WI | 2023/1/4 | 2024/1/3 |
| ETSTW-GSM 023 | Power Divider | 4901.19.A | None | SUHNER | 2022/9/2 | 2023/9/1 |
| ETSTW-GSM 024 | Radio Communication Analyzer | MT8821C | None | Anritsu | 2023/4/24 | 2024/4/23 |
| ETSTW-GSM 025 | Band Reject Filter | BRM19835 | 001 | Micro-Tronics | 2022/8/5 | 2023/8/4 |
| ETSTW-Cable 016 | BNC Cable | Switch Box | B Cable 1 | Schwarz beck | 2023/2/4 | 2024/2/3 |
| ETSTW-Cable 017 | BNC Cable | X Cable | B Cable 2 | Schwarz beck | 2023/2/4 | 2024/2/3 |
| ETSTW-Cable 018 | BNC Cable | Y Cable | B Cable 3 | Schwarz beck | 2023/2/4 | 2024/2/3 |
| ETSTW-Cable 019 | BNC Cable | Z Cable | B Cable 4 | Schwarz beck | 2023/2/4 | 2024/2/3 |
| ETSTW-Cable 020 | N TYPE Cable | OATS Cable 1 | N30N30-L335-15M | JYE BAO CO.,LTD. | 2022/6/29 | 2023/6/28 |
| ETSTW-Cable 027 | Microwave Cable | SUCOFLEX 104 | 279083 | HUBER+SUHNER | 2023/4/27 | 2024/4/26 |
| ETSTW-Cable 028 | Microwave Cable | FA147A0015M2020 | 30064-2 | UTIFLEX | 2022/9/16 | 2023/9/15 |
| ETSTW-Cable 029 | Microwave Cable | FA147A0015M2020 | 30064-3 | UTIFLEX | 2022/9/16 | 2023/9/15 |
| ETSTW-Cable 030 | Microwave Cable | SUCOFLEX 104 （S_Cable 9） | 279067 | HUBER+SUHNER | 2023/02/17 | 2024/2/16 |

| | | | | | | |
|---|---|---|---|---|---|---|
| ETSTW-Cable 045 | Microwave Cable | SUCOFLEX 104 | 325536 | HUBER+SUHNER | 2022/10/21 | 2023/10/20 |
| ETSTW-Cable 058 | Microwave Cable | SUCOFLEX 104 | none | HUBER+SUHNER | 2023/5/18 | 2024/5/17 |
| ETSTW-Cable 064 | Microwave Cable | SUCOFLEX 104 | MY28891 | HUBER+SUHNER | 2023/2/20 | 2024/2/19 |
| ETSTW-Cable 071 | N TYPE CABLE | EMCCFD400-NM-NM-25000 | 170239 | EMCI | 2023/5/18 | 2024/5/17 |
| ETSTW-Cable 072 | SMA type cable (8m) | SUCOFLEX 104 | 805800/4 | HUBER+SUHNER | 2023/2/20 | 2024/2/19 |
| ETSTW-Cable 074 | SMA type cable (2m) | SUCOFLEX 104 | 802563/4 | HUBER+SUHNER | 2023/2/20 | 2024/2/19 |
| ETSTW-Cable 076 | SMA type cable (1m) | N/A | 812652/4 | HUBER+SUHNER | 2023/2/20 | 2024/2/19 |
| WTSTW-SW 002 | EMI TEST SOFTWARE | EZ_EMC | None | Farad | Version ETS-03A1<br>Version EMEC-3A1+ | |
| WTSTW-SW 006 | EMI TEST SOFTWARE | e3 | None | AUDIX | Version 9.161014 | |
| WTSTW-SW 008 | Signal studio | Agilent | None | AUDIX | Version 2.0.0.1 | |
| ETSTW-TH 002 | Thermohygrometer | 608-H1 | 45204317 | Testo | 2022/9/16 | 2023/9/15 |
| ETSTW-TH 003 | Wireless weather station | GAIA | N/A | TFA | 2022/10/28 | 2023/10/27 |

**Test location**

| | | |
|---|---|---|
| OATS (10m) | No.5-1, Lishui, Shuang Sing Village, Wanli Dist., New Taipei City 207, Taiwan (R.O.C.) | ☐ |
| semi-anechoic chamber (3m) | No.35, Aly. 21, Ln. 228, Ankang Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.) | ☒ |

## 2.4 Test results

☒ 1st test ☐ test after modification ☐ production test

| Test Emission / Immunity | | | Done | Test passed | Test failed |
|---|---|---|---|---|---|
| Emission | Radiated Emission | 47 CFR part 15.109 Class B | ☒ | ☒ | ☐ |

(The following is intentionally left blank.)

### 2.4.1 Radiated Emission

#### 2.4.1.1 Test Equipment

a) EMI TEST RECEIVER (ESI 40)
For your reference please find it in our test equipment list at page 8 to 10 as number : ETSTW-RE 004
b) Amplifier Module (CHC2)
For your reference please find it in our test equipment list at page 8 to 10 as number : ETSTW-RE 062
c) Preamplifier (8447D)
For your reference please find it in our test equipment list at page 8 to 10 as number : ETSTW-RE 142
d) Bi-log Hybrid Antenna (MCTD 2786B)
For your reference please find it in our test equipment list at page 8 to 10 as number : ETSTW-RE 152
e) Double-Ridged Guide Horn Antenna (3117)
For your reference please find it in our test equipment list at page 8 to 10 as number : ETSTW-RE 030

#### 2.4.1.2 Test Procedures

- Test configuration

The test configuration corresponds to the standard ANSI C63.4-2014 amended as per ANSI C63.4a-2017. The equipment under test is placed on a non metallic table with 0.8m height. The power supply and the RF connection points are close to the equipment under test at the floor inside a connection box. The cables to this connection box are shielded and below the double floor. The receiving antenna is placed in a height at 1.0 to 4.0m, in a distance of 3m. The measurement receiver is placed in a special room.

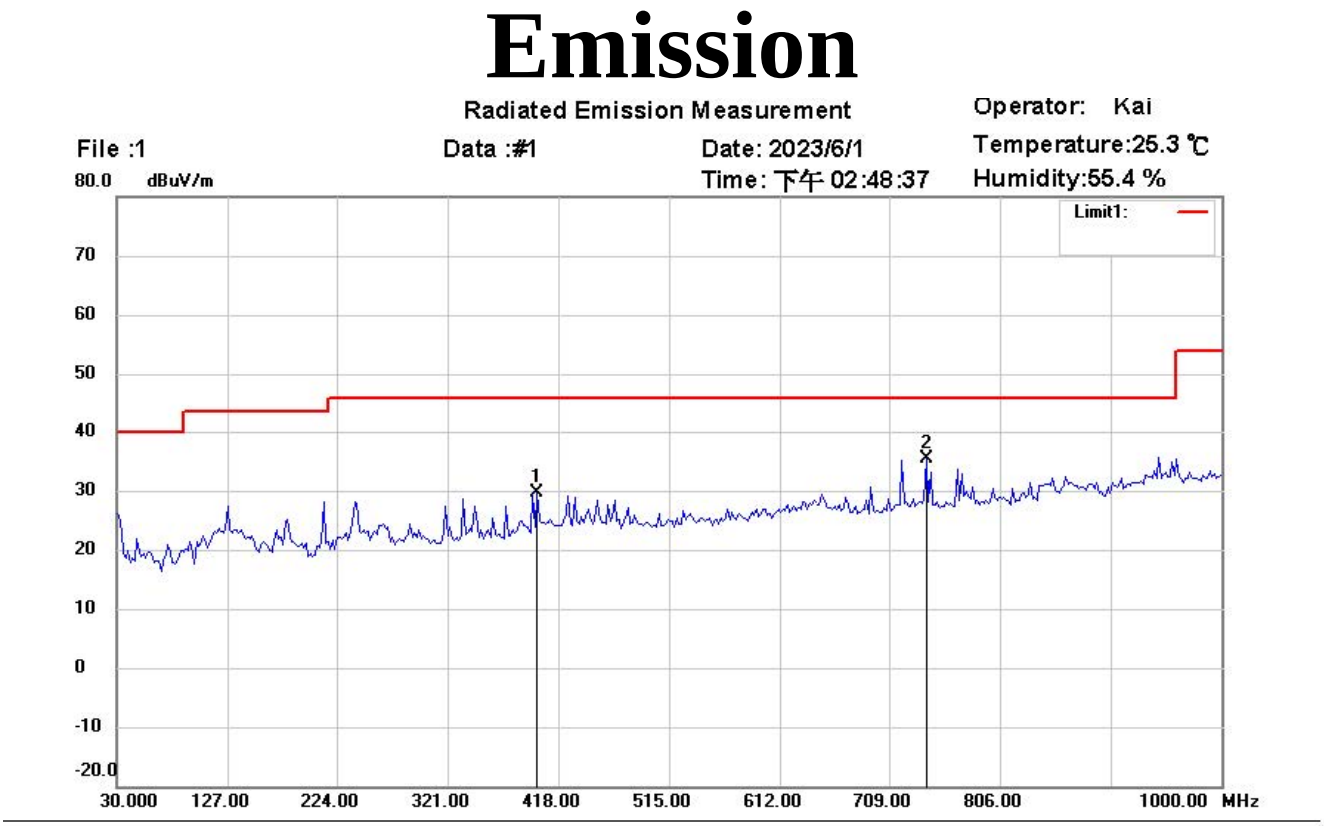
- Test parameters and marginal conditions

The test is carried out with horizontal and vertical polarization of the antenna in a frequency range of 30 MHz to 40000 MHz. Further information please find in the test protocol.

## 2.5 Test protocols

### 2.5.1 Radiated Emission

## Radio Noise Field Strength

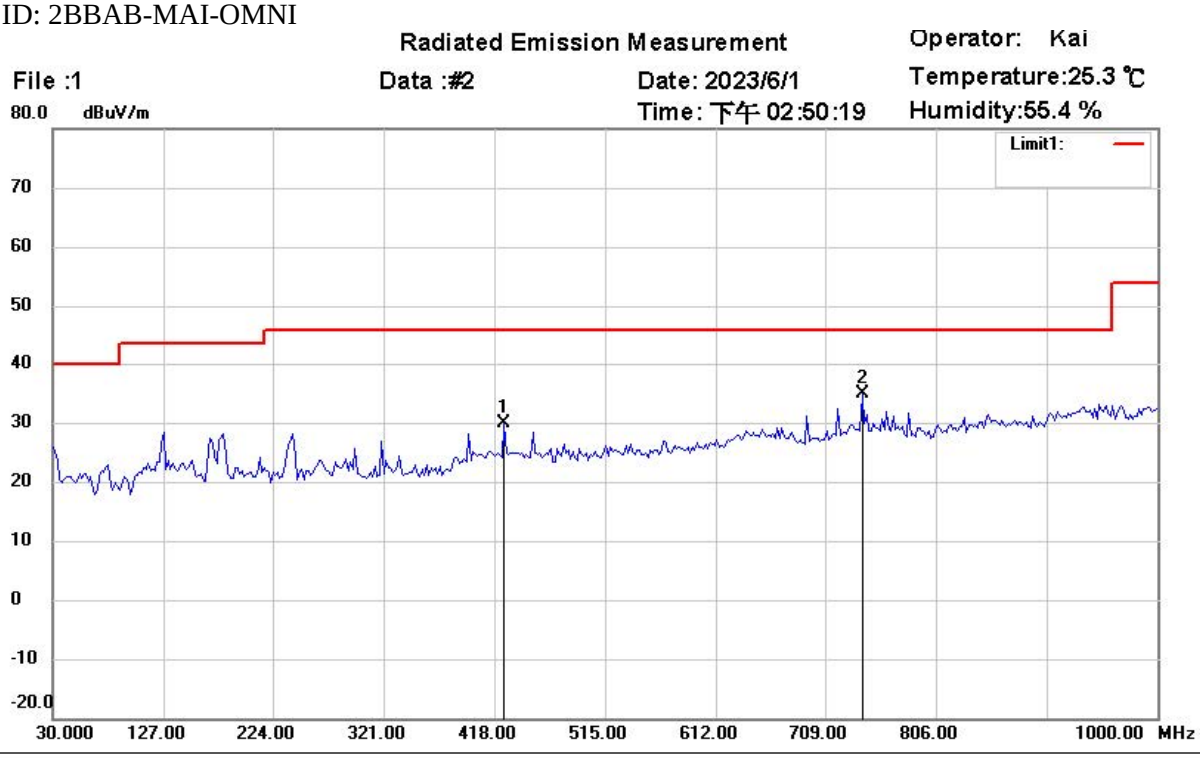



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_30-1000MHz
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Horizontal*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | 399.3387 | 33.18 | peak | -3.66 | 29.52 | 46.00 | 100 | 88 | -16.48 | |
| * | 741.4628 | 34.92 | peak | 0.41 | 35.33 | 46.00 | 100 | 152 | -10.67 | |

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI




Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_30-1000MHz
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Vertical*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | 426.5530 | 33.22 | peak | -3.35 | 29.87 | 46.00 | 100 | 65 | -16.13 | |
| * | 741.4628 | 34.49 | peak | 0.41 | 34.90 | 46.00 | 100 | 213 | -11.10 | |

Registration number: W6M22304-22580-CLR
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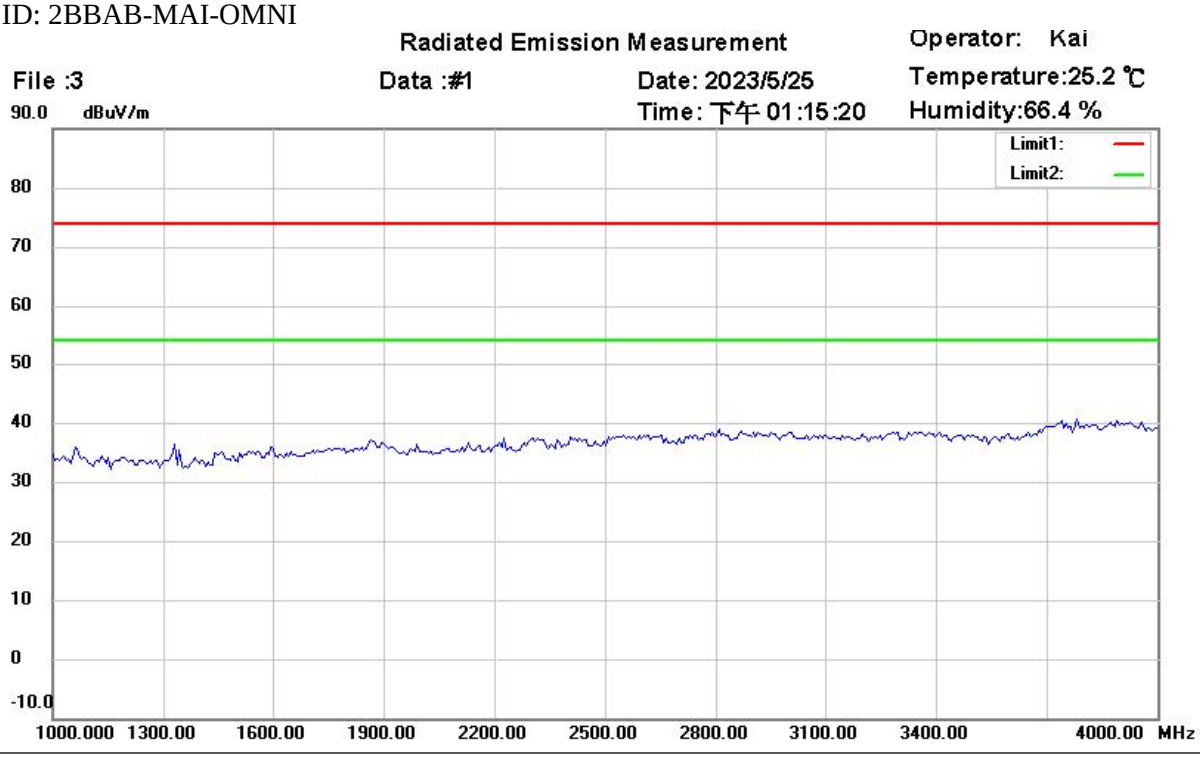
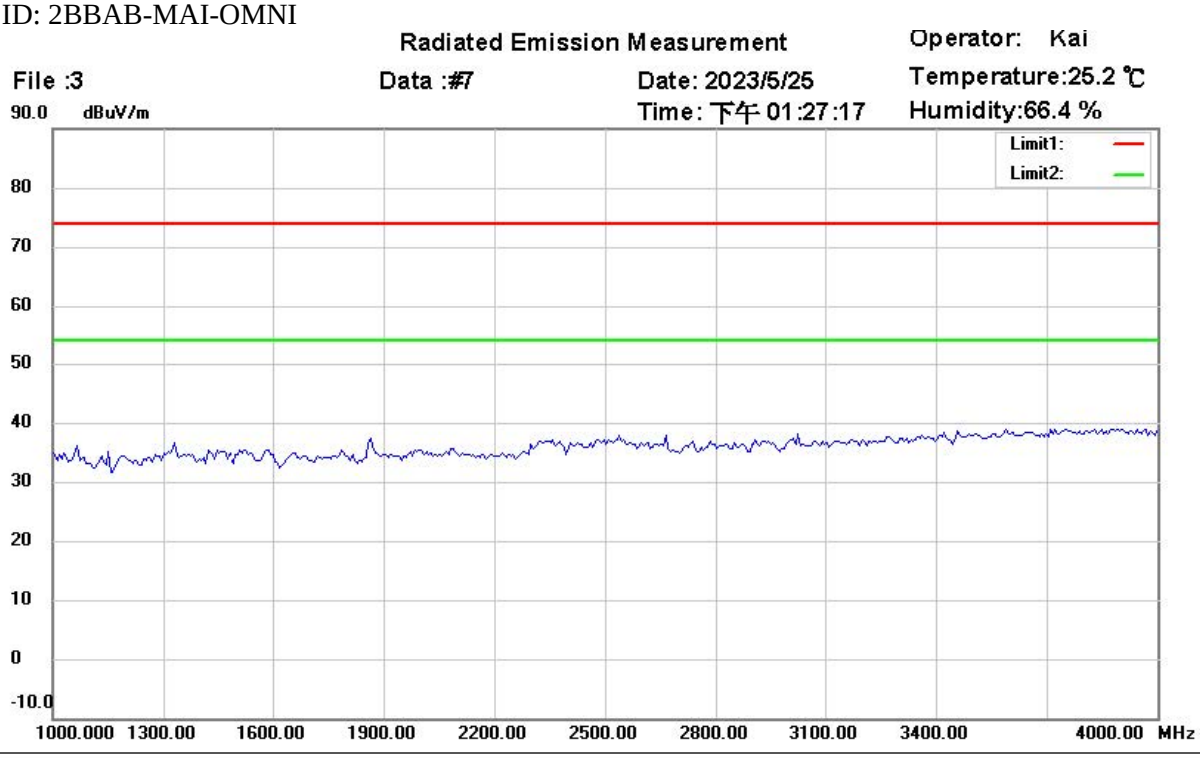



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WFI
Note :

Polarization: *Horizontal*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

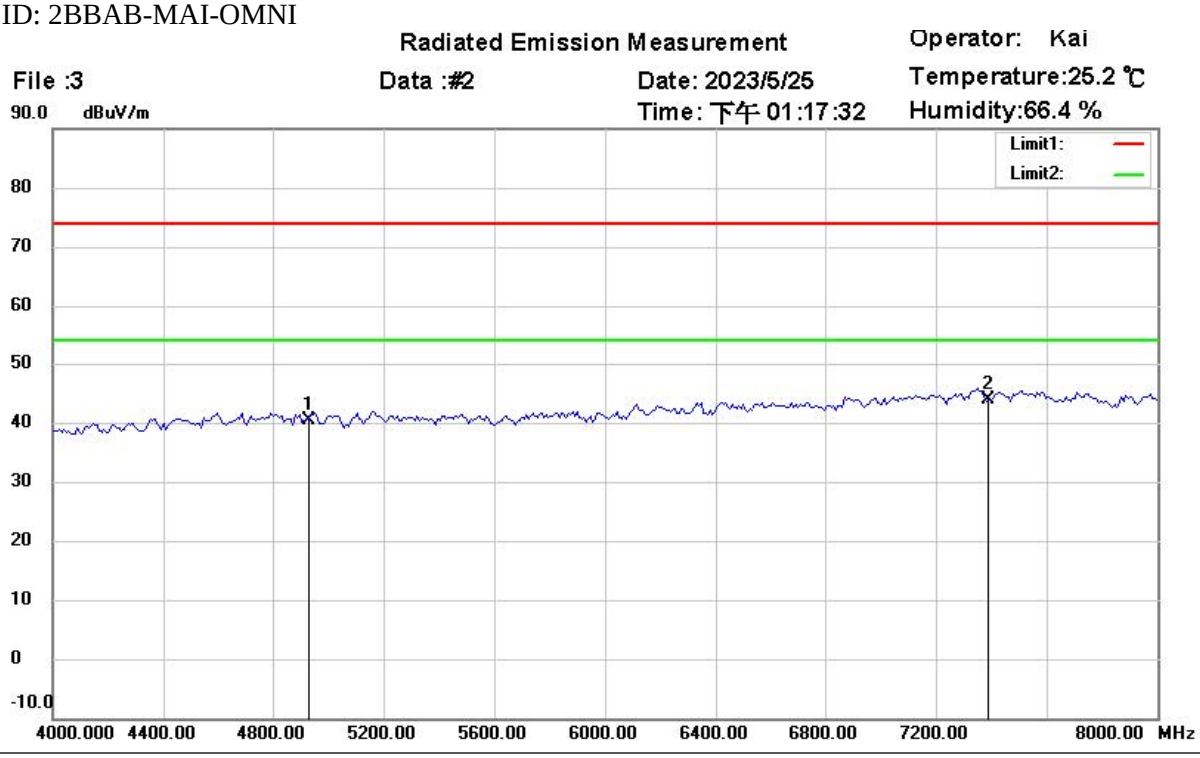



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Vertical*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

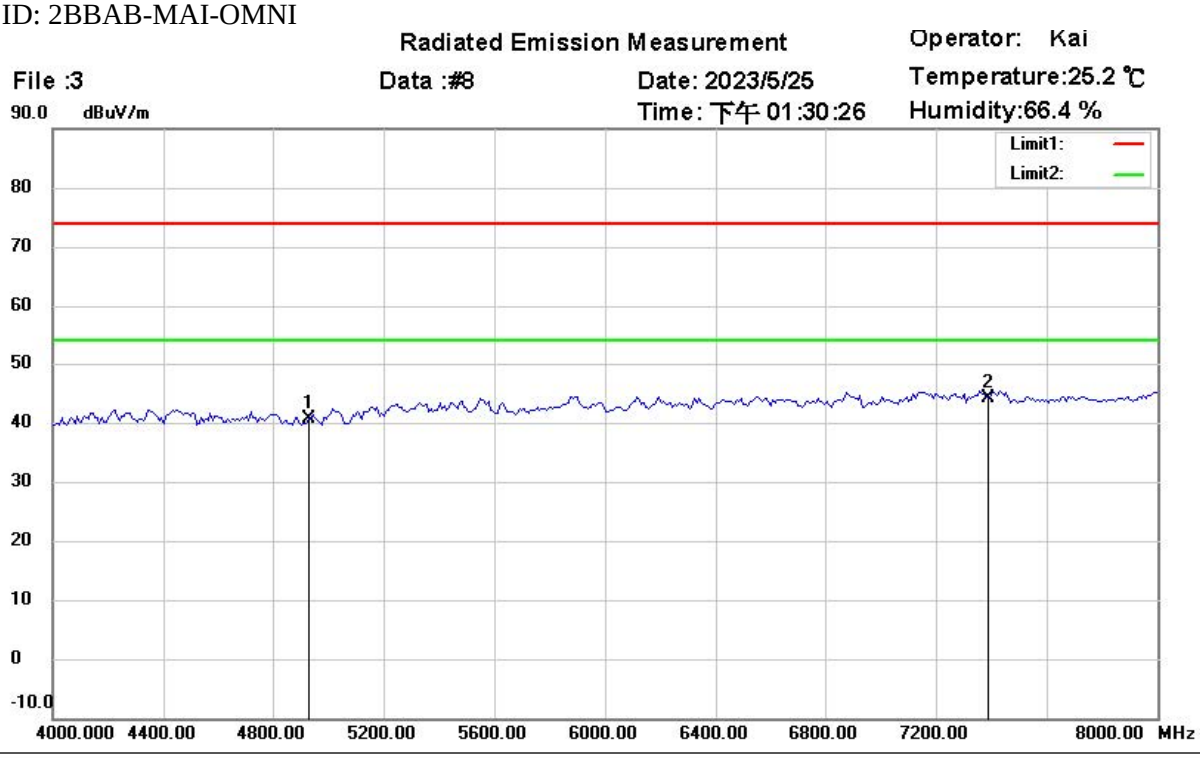



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WFI
Note :

Polarization: *Horizontal*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | 4924.000 | 41.47 | peak | -1.11 | 40.36 | 74.00 | 150 | 50 | -33.64 | |
| * | 7386.000 | 39.74 | peak | 4.06 | 43.80 | 74.00 | 150 | 95 | -30.20 | |

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

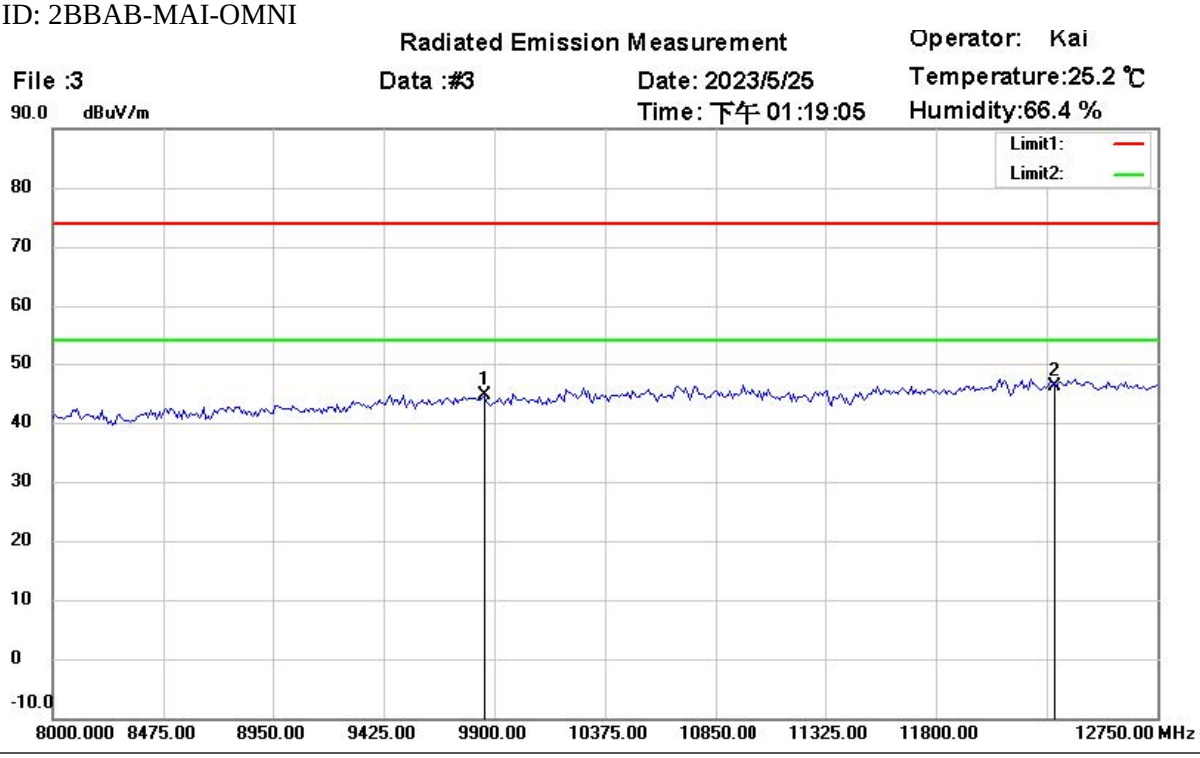



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Vertical*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | 4924.000 | 41.68 | peak | -1.11 | 40.57 | 74.00 | 150 | 185 | -33.43 | |
| * | 7386.000 | 39.95 | peak | 4.06 | 44.01 | 74.00 | 150 | 30 | -29.99 | |

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

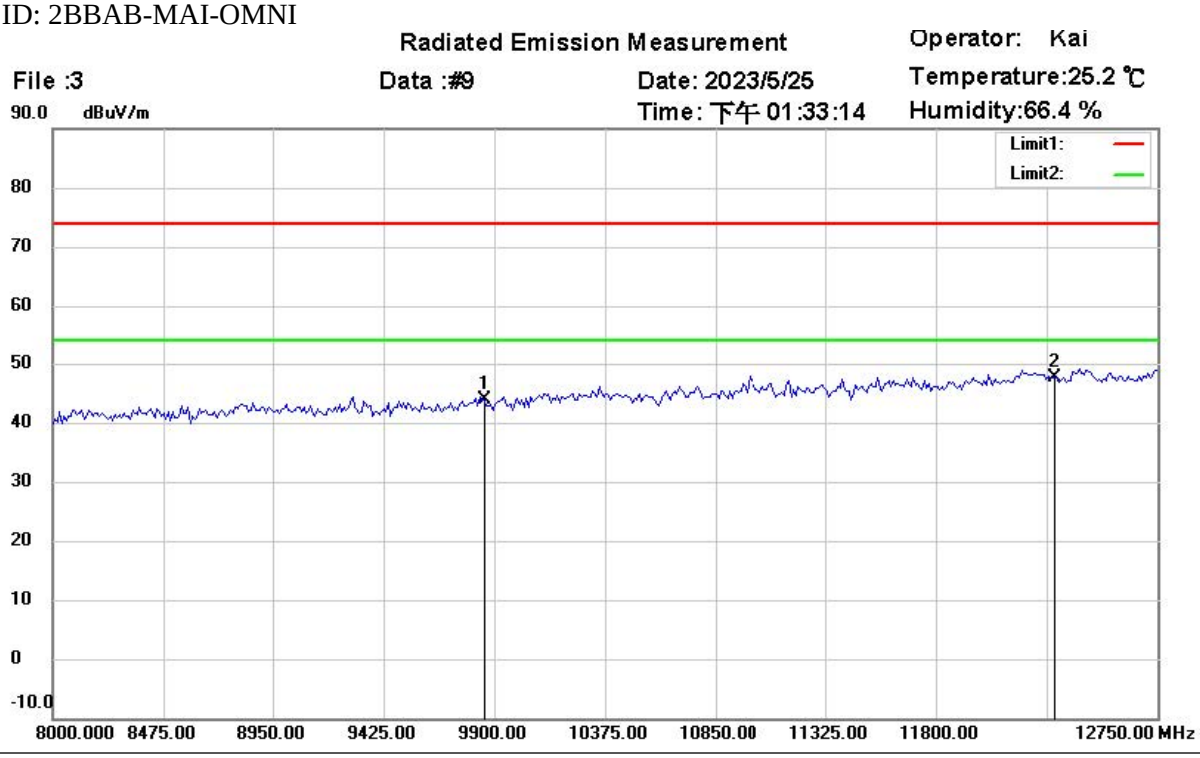



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Horizontal*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | 9848.000 | 37.34 | peak | 7.32 | 44.66 | 74.00 | 150 | 210 | -29.34 | |
| * | 12310.000 | 32.98 | peak | 13.20 | 46.18 | 74.00 | 150 | 166 | -27.82 | |

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

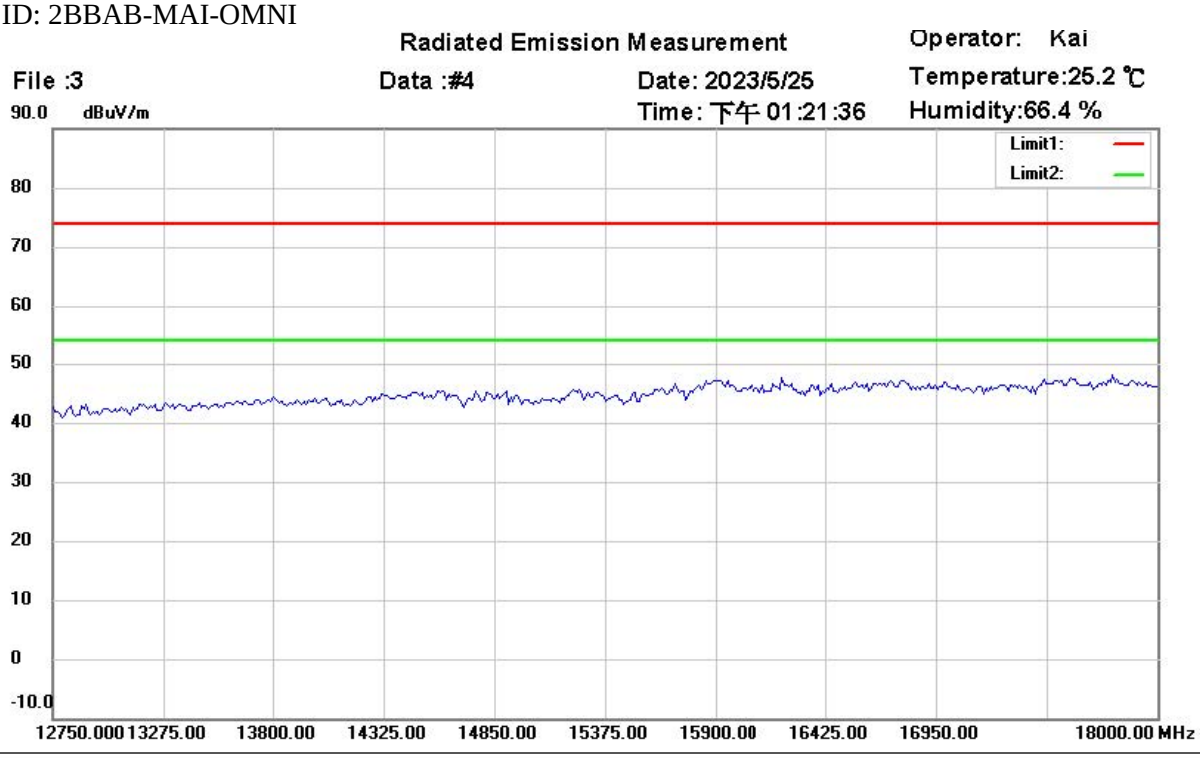



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Vertical*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | 9848.000 | 36.50 | peak | 7.32 | 43.82 | 74.00 | 150 | 145 | -30.18 | |
| * | 12310.000 | 34.42 | peak | 13.20 | 47.62 | 74.00 | 150 | 310 | -26.38 | |

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

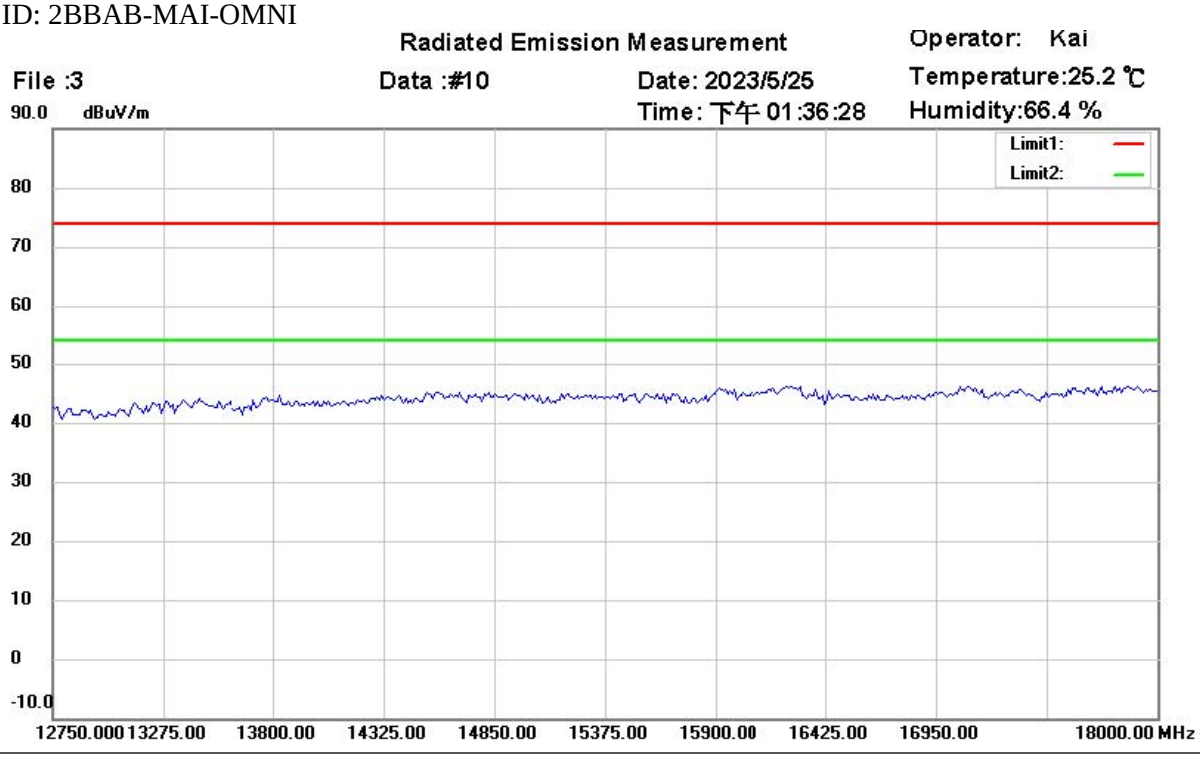



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Horizontal*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

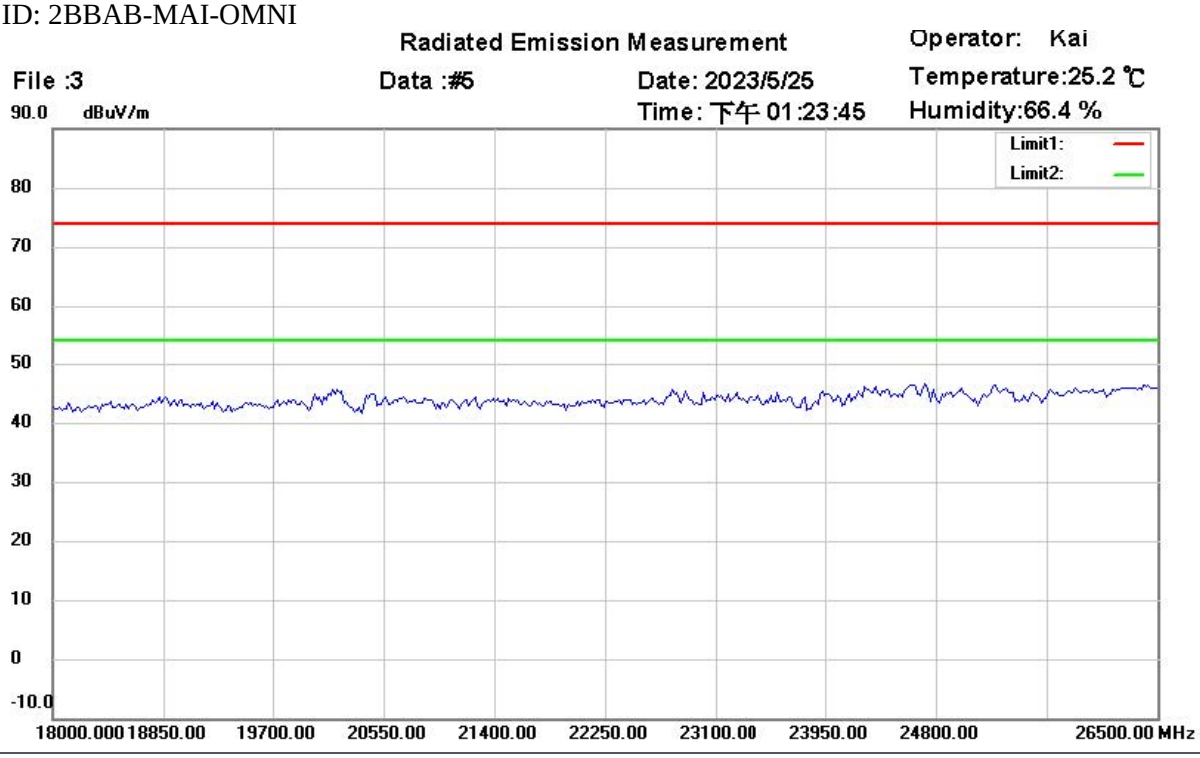



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Vertical*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

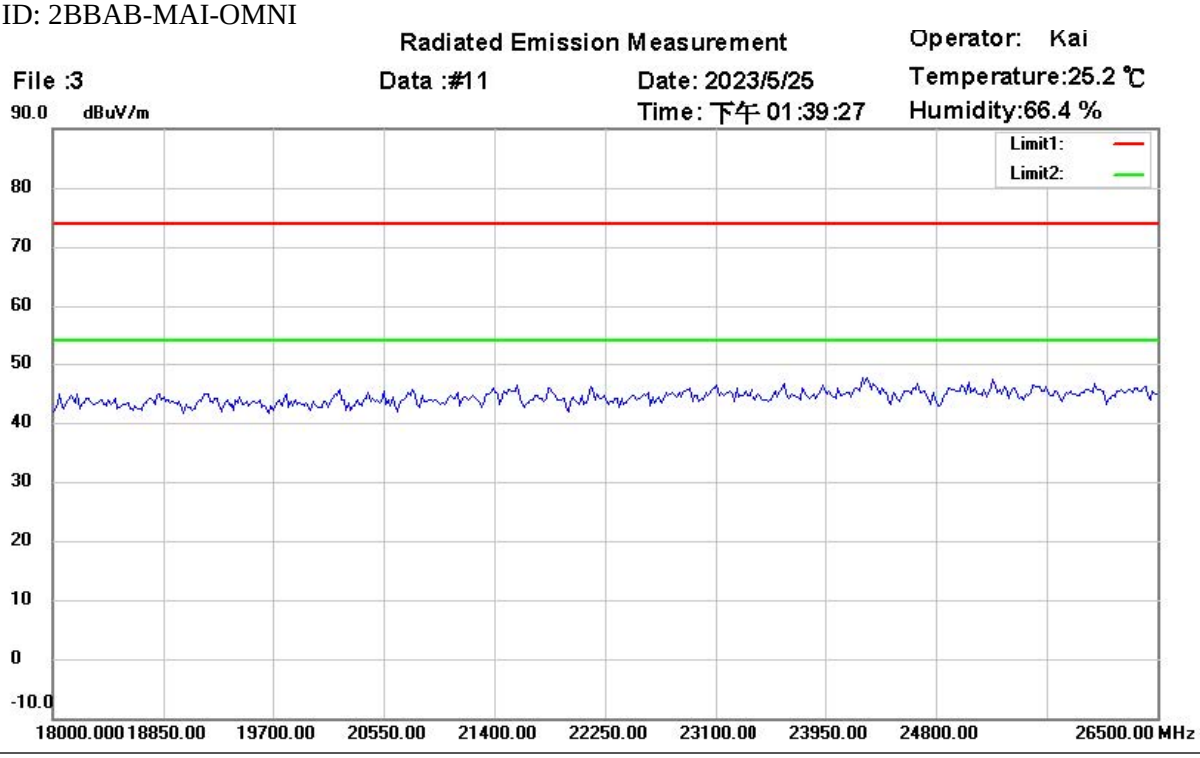



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WFI
Note :

Polarization: *Horizontal*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

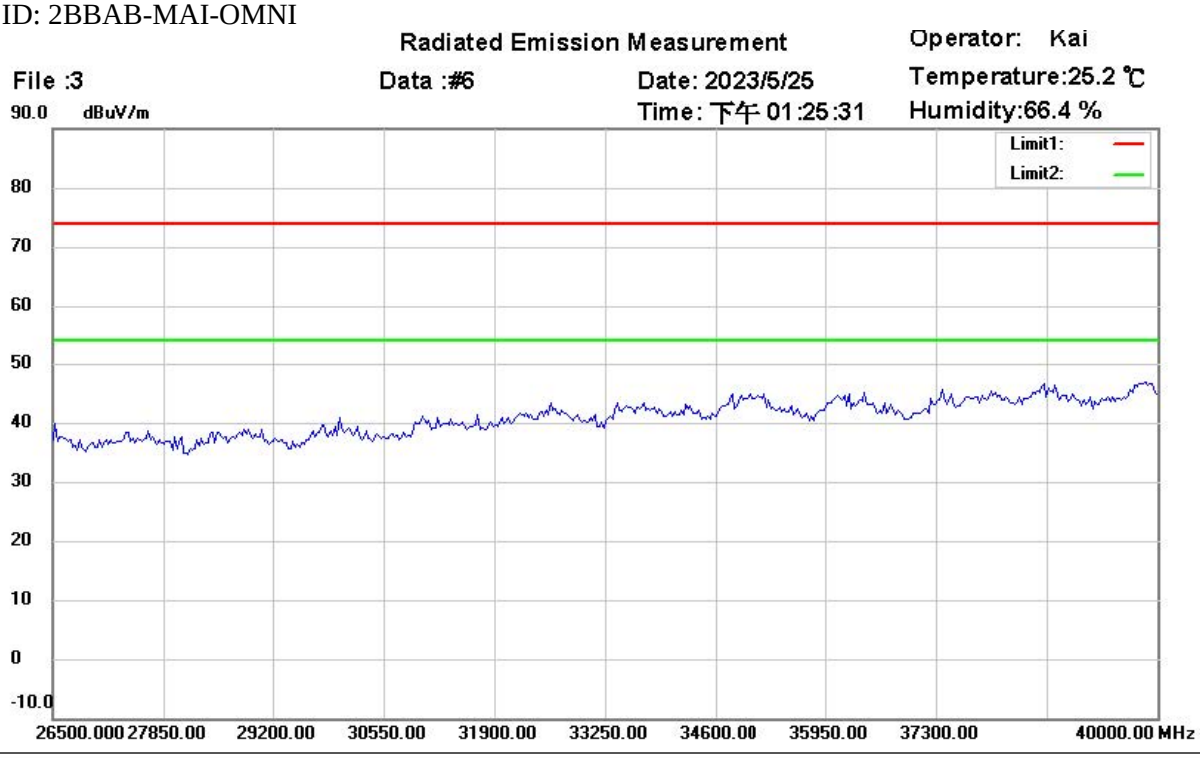



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Vertical*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI

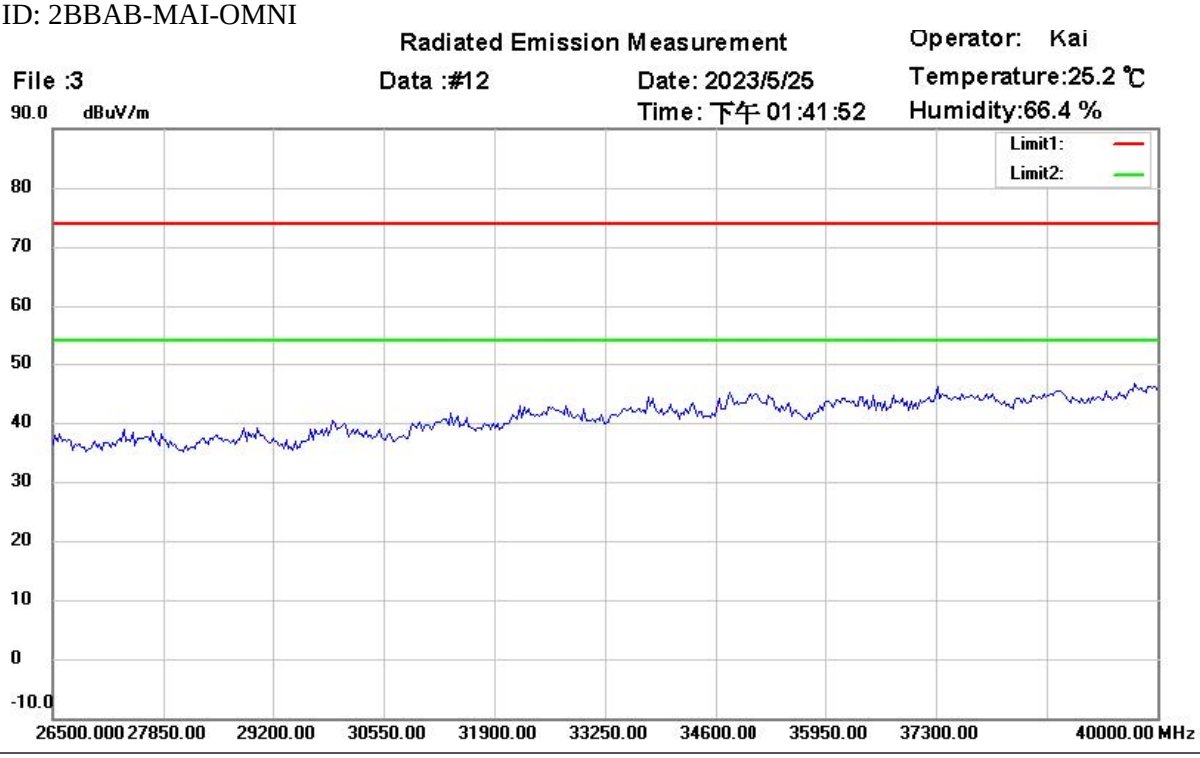



Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WIFI
Note :

Polarization: *Horizontal*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|

Registration number: W6M22304-22580-CLR
FCC ID: 2BBAB-MAI-OMNI




Site : 966 Chamber
Condition : FCC_part 15 RE-Class B_Above 1GHz_PK
EUT : W6M22304-22580
M/N:
Test Mode : LTE+WFI
Note :

Polarization: *Vertical*
Power : 12 Vd.c.
Distance: 3m

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corr. factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Ant.Pos (cm) | Tab.Pos (deg.) | Margin (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|

**Note:**

1. **Correction Factor = Antenna factor + Cable loss - Preamplifier**
2. **The formula of measured value as: Test Result = Reading + Correction Factor**
3. **Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average**
4. **All not in the table noted test results are more than 20 dB below the relevant limits.**
5. **Up Line: PK Limit Line, Down Line: Ave Limit Line.**

## 2.6 Equipment Modification

No modification was made to pass all tests.

# 3 Normative references

/1/ 47 CFR part 15 Subpart B
Radio Frequency Devices

/2/ ANSI C63.4a-2017 (Amendment to ANSI C63.4-2014)
American National Standard for Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz