

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 1 of 52

**Applicant** : Airista Flow, Inc.  
**Address of Applicant** : 1966 Greenspring Drive, Suite 125  
Timonium, Maryland 21093.

**Product Name** : Personnel Display Tag  
**Brand Name** : Airista  
**Model Name** : B6  
**Sample Acquisition Method** : Sent by Client

**Sample No.** : E24120036-01#04  
E24120036-01#02

**FCC ID** : TA7-B6

**Standards** : FCC CFR47 Part 15.407, Subpart E

**Date of Receipt** : 2024-12-19  
**Date of Test** : 2024-12-19 ~ 2025-04-11  
**Date of Issue** : 2025-04-14

**Remark:**

*This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.*

Prepared by: Erik Yang (Erik Yang)      Reviewed by: Jennifer Zhou (Jennifer Zhou)      Approved by: Echo Mu (Authorized signatory: Echo Mu)

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 2 of 52

## Contents

|          |                                                              |           |
|----------|--------------------------------------------------------------|-----------|
| <b>1</b> | <b>GENERAL INFORMATION .....</b>                             | <b>3</b>  |
| 1.1      | TESTING LABORATORY .....                                     | 3         |
| 1.2      | DETAILS OF APPLICATION .....                                 | 3         |
| 1.3      | DETAILS OF EUT .....                                         | 3         |
| 1.4      | TEST METHODOLOGY .....                                       | 6         |
| 1.5      | TEST SUMMARY .....                                           | 6         |
| <b>2</b> | <b>TEST CONDITION .....</b>                                  | <b>7</b>  |
| 2.1      | ENVIRONMENTAL CONDITIONS .....                               | 7         |
| 2.2      | EQUIPMENT LIST .....                                         | 7         |
| 2.3      | MEASUREMENT UNCERTAINTY .....                                | 8         |
| <b>3</b> | <b>TEST SET-UP AND OPERATION MODES .....</b>                 | <b>9</b>  |
| 3.1      | DETAILS OF TEST MODE .....                                   | 9         |
| 3.2      | SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT .....            | 10        |
| 3.3      | SUPPORT SOFTWARE .....                                       | 10        |
| 3.4      | TEST SETUP DIAGRAM .....                                     | 11        |
| <b>4</b> | <b>TEST RESULTS .....</b>                                    | <b>13</b> |
| 4.1      | TRANSMITTER REQUIREMENT & TEST SUITES .....                  | 13        |
| 4.1.1    | <i>Antenna Requirement</i> .....                             | 13        |
| 4.1.2    | <i>Maximum Conducted Output Power</i> .....                  | 14        |
| 4.1.3    | <i>26dB Bandwidth and 99% Bandwidth</i> .....                | 17        |
| 4.1.4    | <i>6dB Bandwidth and 99% Bandwidth</i> .....                 | 19        |
| 4.1.5    | <i>Maximum Conducted Output Power Spectral Density</i> ..... | 28        |
| 4.1.6    | <i>Conducted Spurious Emission</i> .....                     | 31        |
| 4.1.7    | <i>Radiated Emission</i> .....                               | 32        |
| 4.1.8    | <i>Band Edge (Restricted-band band-edge)</i> .....           | 33        |
| 4.1.9    | <i>Frequency Stability</i> .....                             | 34        |
| 4.2      | MAINS EMISSIONS .....                                        | 37        |
| 4.2.1    | <i>Conducted Emission on AC Mains</i> .....                  | 37        |
| <b>5</b> | <b>APPENDIXES .....</b>                                      | <b>40</b> |
| 5.1      | PHOTOGRAPHS OF THE SAMPLE .....                              | 40        |
| 5.2      | SET-UP FOR CONDUCTED EMISSIONS .....                         | 51        |
| 5.3      | SET-UP FOR CONDUCTED RF TEST AT ANTENNA PORT .....           | 51        |
| 5.4      | SET-UP FOR SPURIOUS EMISSIONS BELOW 1GHZ .....               | 52        |
| 5.5      | SET-UP FOR SPURIOUS EMISSIONS ABOVE 1GHZ .....               | 52        |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 3 of 52

## 1 General Information

### 1.1 Testing Laboratory

|              |                                                         |
|--------------|---------------------------------------------------------|
| Company Name | ICAS Testing Technology Service (Shanghai) Co., Ltd.    |
| Address      | No.1298, Pingan Road, Minhang District, Shanghai, China |
| Telephone    | 0086 21-51682999                                        |
| Fax          | 0086 21-54711112                                        |
| Homepage     | www.icasiso.com                                         |

### 1.2 Details of Application

|                           |                                                             |
|---------------------------|-------------------------------------------------------------|
| Applicant Company Name    | Airista Flow, Inc.                                          |
| Address                   | 1966 Greenspring Drive, Suite 125 Timonium, Maryland 21093. |
| Contact Person            | Patrick Jenkins                                             |
| Telephone                 | (443) 212-4251                                              |
| Email                     | Patrick.Jenkins@Airista.com                                 |
| Manufacturer Company Name | Airista Flow, Inc.                                          |
| Address                   | 1966 Greenspring Drive, Suite 125 Timonium, Maryland 21093. |
| Factory Company Name      | Airista Flow, Inc.                                          |
| Address                   | 1966 Greenspring Drive, Suite 125 Timonium, Maryland 21093. |

### 1.3 Details of EUT

|                           |                                                                                                               |
|---------------------------|---------------------------------------------------------------------------------------------------------------|
| Product Name              | Personnel Display Tag                                                                                         |
| Brand Name                | Airista                                                                                                       |
| Test Model Name           | B6                                                                                                            |
| FCC ID                    | TA7-B6                                                                                                        |
| Mode of Operation         | WIFI 802.11a/n(HT20/40)                                                                                       |
| Operation Frequency Range | U-NII-1:5180MHz~5240MHz<br>U-NII-2A:5260MHz~5320MHz<br>U-NII-2C:5500MHz~5700MHz<br>U-NII-3: 5745MHz ~ 5825MHz |
| Modulation Type           | 802.11a : OFDM /64-QAM,16-QAM, QPSK, BPSK<br>802.11n : OFDM /64-QAM,16-QAM, QPSK, BPSK                        |
| Number of Channels        | 34                                                                                                            |
| Channel Bandwidth         | 802.11a: 20MHz<br>802.11n: 20MHz, 40MHz                                                                       |
| Antenna Type              | PCB Antenna                                                                                                   |
| Antenna Gain              | 2.4dBi                                                                                                        |
| Extreme Temperature Range | 0℃~ +50℃                                                                                                      |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 4 of 52

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Voltage                | DC 3.8V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Extreme Voltage             | Low Voltage: DC 3.23V<br>High Voltage: DC 4.37V<br>(performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Product Type                | Portable for FCC standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Hardware Version            | 1.0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Software Version            | 1.0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| RF power setting in TEST SW | <b>U-NII-1:</b><br>802.11a: AmebaD_mptool_2V2_Power level setting_112<br>802.11n20: AmebaD_mptool_2V2_Power level setting_108<br>802.11n40: AmebaD_mptool_2V2_Power level setting_105<br><br><b>U-NII-2A:</b><br>802.11a: AmebaD_mptool_2V2_Power level setting_120<br>802.11n20: AmebaD_mptool_2V2_Power level setting_118<br>802.11n40: AmebaD_mptool_2V2_Power level setting_105<br><br><b>U-NII-2C:</b><br>802.11a: AmebaD_mptool_2V2_Power level setting_102<br>802.11n20: AmebaD_mptool_2V2_Power level setting_102<br>802.11n40: AmebaD_mptool_2V2_Power level setting_100<br><br><b>U-NII-3:</b><br>802.11a: AmebaD_mptool_2V2_Power level setting_108<br>802.11n20: AmebaD_mptool_2V2_Power level setting_106<br>802.11n40: AmebaD_mptool_2V2_Power level setting_102 |

Note:

1. The above information was declared by the manufacture.
2. The EUT is designed as client device.
3. The EUT do not support TPC.
4. For more details, please refer to the User's manual of the EUT.

## Channel List

| Frequency Band               | Channel Number | Frequency |
|------------------------------|----------------|-----------|
| U-NII-1:<br>5150MHz~5250MHz  | 36             | 5180 MHz  |
|                              | 38             | 5190 MHz  |
|                              | 40             | 5200 MHz  |
|                              | 44             | 5220 MHz  |
|                              | 46             | 5230 MHz  |
|                              | 48             | 5240 MHz  |
| U-NII-2A:<br>5250MHz~5350MHz | 52             | 5260 MHz  |
|                              | 54             | 5270 MHz  |
|                              | 56             | 5280 MHz  |

# TEST REPORT

|                               | 60             | 5300 MHz  |
|-------------------------------|----------------|-----------|
|                               | 62             | 5310 MHz  |
|                               | 64             | 5320 MHz  |
| Frequency Band                | Channel Number | Frequency |
| U-NII-2C:<br>5470MHz~5725MHz  | 100            | 5500 MHz  |
|                               | 102            | 5510 MHz  |
|                               | 104            | 5520 MHz  |
|                               | 108            | 5540 MHz  |
|                               | 110            | 5550 MHz  |
|                               | 112            | 5560 MHz  |
|                               | 116            | 5580 MHz  |
|                               | 118            | 5590 MHz  |
|                               | 120            | 5600 MHz  |
|                               | 124            | 5620 MHz  |
|                               | 126            | 5630 MHz  |
|                               | 128            | 5640 MHz  |
|                               | 132            | 5660 MHz  |
|                               | 134            | 5670 MHz  |
|                               | 136            | 5680 MHz  |
|                               | 140            | 5700 MHz  |
| U-NII-3:<br>5725MHz ~ 5850MHz | 149            | 5745 MHz  |
|                               | 151            | 5755 MHz  |
|                               | 153            | 5765 MHz  |
|                               | 157            | 5785 MHz  |
|                               | 159            | 5795 MHz  |
|                               | 165            | 5825 MHz  |

*Note: For 20MHZ bandwidth system use Channel*  
*36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140,149,153,157,161,165;*  
*For 40MHZ bandwidth system use Channel 38,46,54,62,102,110,118,126,134,151,159;*

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 6 of 52

## 1.4 Test Methodology

|                                   |                                                                                                                        |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------|
| 47 CFR Part 15, Subpart E         | Subpart E—Unlicensed National Information Infrastructure Devices                                                       |
| KDB Publication 789033 D02 v02r01 | Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E |
| ANSI C63.10-2013                  | American National Standard for Testing Unlicensed Wireless Devices                                                     |

### Note(s):

All test items were verified and recorded according to the standards and without any addition/deviation/exclusion during the test

## 1.5 Test Summary

| Test Item                                       | FCC Rules                          | Result |
|-------------------------------------------------|------------------------------------|--------|
| Antenna Requirement                             | FCC Part 15.407(a), 15.203         | PASS   |
| Maximum Conducted Output Power                  | FCC Part 15.407(a)                 | PASS   |
| 26dB Bandwidth and 99% Bandwidth                | FCC Part 15.407(a)                 | PASS   |
| 6dB Bandwidth                                   | FCC Part 15.407(e)                 | PASS   |
| Maximum Conducted Output Power Spectral Density | FCC Part 15.407(a)                 | PASS   |
| Conducted Spurious Emission                     | FCC Part 15.407(b), 15.209         | PASS   |
| Radiated Emission                               | FCC Part 15.407(b), 15.209, 15.205 | PASS   |
| Band Edge (Restricted-band band-edge)           | FCC Part 15.407(b), 15.205, 15.209 | PASS   |
| Frequency Stability                             | FCC Part 15.407(g)                 | PASS   |
| Conducted Emission on AC Mains                  | FCC Part 15.207(a)                 | PASS   |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 7 of 52

## 2 Test Condition

### 2.1 Environmental conditions

|                            |          |
|----------------------------|----------|
| Temperature (°C)           | 15-35    |
| Humidity (%RH)             | 30-60    |
| Barometric Pressure (mbar) | 860-1060 |

Note: Actual values will be recorded during the test.

### 2.2 Equipment List

| Name of Equipment                  | Manufacturer    | Model           | Serial No.        | Cal. Date  | Cal. Due   |
|------------------------------------|-----------------|-----------------|-------------------|------------|------------|
| Spectrum Analyzer                  | Keysight        | N9020B          | MY59260184        | 2024-06-26 | 2025-06-25 |
| Spectrum Analyzer                  | Rohde & Schwarz | FSV40N          | 101450            | 2024-06-04 | 2025-06-03 |
| Signal Generator                   | Rohde & Schwarz | SMR27           | 100184            | 2024-06-26 | 2025-06-25 |
| USB Wideband Power Sensor          | Keysight        | U2021XA         | MY57200011        | 2024-11-09 | 2025-11-08 |
| USB Wideband Power Sensor          | Keysight        | U2021XA         | MY56090008        | 2024-11-09 | 2025-11-08 |
| EMI Test Receiver                  | Rohde & Schwarz | ESPI3           | 100173            | 2024-06-05 | 2025-06-04 |
| EMI Test Receiver                  | Rohde & Schwarz | ESR 7           | 101911            | 2024-06-04 | 2025-06-03 |
| V-network                          | SCHWARZBECK     | NSLK 8127       | 8127-902          | 2024-06-05 | 2025-06-04 |
| Attenuator                         | SCHWARZBECK     | VTSD<br>9561-FN | /                 | 2024-06-05 | 2025-06-04 |
| Broadband Antenna                  | SCHWARZBECK     | VULB9163        | 9163-1037         | 2023-03-22 | 2025-03-21 |
| Broadband Antenna                  | SCHWARZBECK     | VULB9163        | 9163-1037         | 2025-03-24 | 2027-03-23 |
| Horn Antenna-18G                   | SCHWARZBECK     | BBHA9120D       | 9120D-1775        | 2023-06-13 | 2025-06-12 |
| Loop Antenna                       | SCHWARZBECK     | FMZB 1513       | /                 | 2023-06-09 | 2025-06-08 |
| Horn Antenna-40G                   | YINGLIAN        | LB-180400-KF    | N/A               | 2023-06-18 | 2025-06-17 |
| Broadband Preamplifier             | SCHWARZBECK     | BBV 9718        | 346               | 2024-06-04 | 2025-06-03 |
| Temperature Box                    | ESPEC           | ECT-2           | 055239A           | 2023-11-09 | 2025-11-08 |
| EMC chamber 9*6*6(L*W*H)           | CHANGNING       | 966             | N/A               | 2023-06-09 | 2025-06-08 |
| Shielded Enclosure<br>8*5*4(L*W*H) | CHANGNING       | 854             | N/A               | 2023-06-09 | 2025-06-08 |
| Test Software                      | BL              | BL410_E         | Version:2.1.1.436 | N/A        | N/A        |
| Test Software                      | BL              | BL410_R         | Version:2.1.1.409 | N/A        | N/A        |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 8 of 52

## 2.3 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the “Guide to the Expression of Uncertainty in measurement” (GUM) published by CISPR and ANSI. 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 95.45%.

| Parameter                                       |              | Uncertainty           |
|-------------------------------------------------|--------------|-----------------------|
| Antenna Port Conducted Emission                 |              | $\pm 1.04\text{dB}$   |
| Radiated Emission                               | < 1GHz       | $\pm 5.00\text{dB}$   |
|                                                 | > 1GHz       | $\pm 5.46\text{dB}$   |
| Conducted Emission on AC Mains                  | 150KHz-30MHz | $\pm 3.36\text{dB}$   |
| Occupied Channel Bandwidth                      |              | $\pm 39.26\text{KHz}$ |
| Maximum Conducted Output Power                  |              | $\pm 1.06\text{dB}$   |
| Maximum Conducted Output Power Spectral Density |              | $\pm 1.12\text{dB}$   |
| Frequency Stability                             |              | $\pm 0.38\text{ppm}$  |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 9 of 52

## 3 Test Set-up and Operation Modes

### 3.1 Details of Test Mode

Using test software to control EUT work in continuous transmitting and receiving mode. Select test channel as below:  
For 802.11a/n(HT20)

| U-NII-1 (5150 – 5250MHz)   |           | U-NII-2A (5250 – 5350MHz)  |           |
|----------------------------|-----------|----------------------------|-----------|
| Channel                    | Frequency | Channel                    | Frequency |
| The lowest channel (CH36)  | 5180MHz   | The lowest channel (CH52)  | 5260MHz   |
| The middle channel (CH44)  | 5220MHz   | The middle channel (CH60)  | 5300MHz   |
| The highest channel (CH48) | 5240MHz   | The highest channel (CH64) | 5320MHz   |

| U-NII-2C (5470 – 5725MHz)   |           | U-NII-3 (5725 – 5850MHz)    |           |
|-----------------------------|-----------|-----------------------------|-----------|
| Channel                     | Frequency | Channel                     | Frequency |
| The lowest channel (CH100)  | 5500MHz   | The lowest channel (CH149)  | 5745MHz   |
| The middle channel (CH116)  | 5580MHz   | The middle channel (CH157)  | 5785MHz   |
| The highest channel (CH140) | 5700MHz   | The highest channel (CH165) | 5825MHz   |

For 802.11n(HT40)

| U-NII-1 (5150 – 5250MHz)   |           | U-NII-2A (5250 – 5350MHz)  |           |
|----------------------------|-----------|----------------------------|-----------|
| Channel                    | Frequency | Channel                    | Frequency |
| The lowest channel (CH38)  | 5190MHz   | The lowest channel (CH54)  | 5270MHz   |
| The highest channel (CH46) | 5230MHz   | The highest channel (CH62) | 5310MHz   |

| U-NII-2C (5470 – 5725MHz)   |           | U-NII-3 (5725 – 5850MHz)    |           |
|-----------------------------|-----------|-----------------------------|-----------|
| Channel                     | Frequency | Channel                     | Frequency |
| The lowest channel (CH102)  | 5510MHz   | The lowest channel (CH151)  | 5755MHz   |
| The middle channel (CH118)  | 5590MHz   | The highest channel (CH159) | 5795MHz   |
| The highest channel (CH134) | 5670MHz   | --                          | --        |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 10 of 52

Through Pre-scan under all rate at lowest channel, the data rate as below table described is the worst case, so we choose these data rate for test.

| Type                         | Data rate |
|------------------------------|-----------|
| 802.11a                      | 6Mbps     |
| 802.11n(HT20), 802.11n(HT40) | MCS0      |

The basic operation modes are:

- A. On
  - 1. WIFI mode
    - a. Transmitting
    - b. Receiving
- B. Standby
- C. Off

## 3.2 Special Accessories and Auxiliary Equipment

| Description   | Manufacturer | Model Name        | Serial No.        |
|---------------|--------------|-------------------|-------------------|
| Laptop-1      | Lenovo       | TP00083A          | PF-0PRDGN 17/03   |
| Laptop-2      | HP           | HP ZHAN 66 Pro G1 | 5CD7438R1J        |
| Adapter       | AOHAI        | A8-501000         | 2017030060611     |
| USB Cable     | N/A          | N/A               | 1.00m Unshielded  |
| Debugging Box | N/A          | LAUNCHXL-CC26X2R1 | LAUNCHXL-CC26X2R1 |

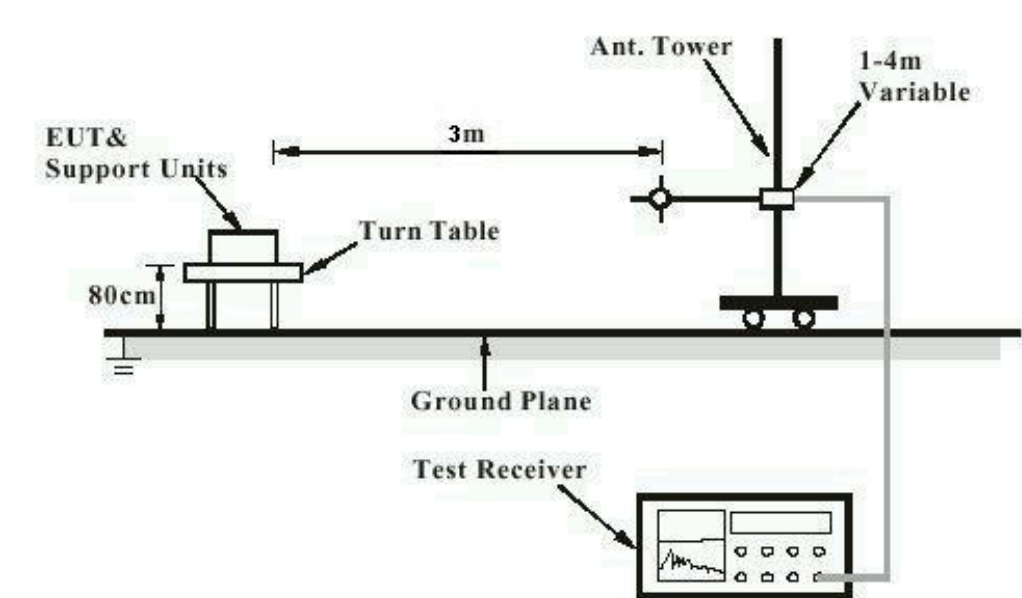
## 3.3 Support Software

| Description | Manufacturer | Software Name     |
|-------------|--------------|-------------------|
| Software    | N/A          | AmebaD_mptool_2V2 |

# TEST REPORT

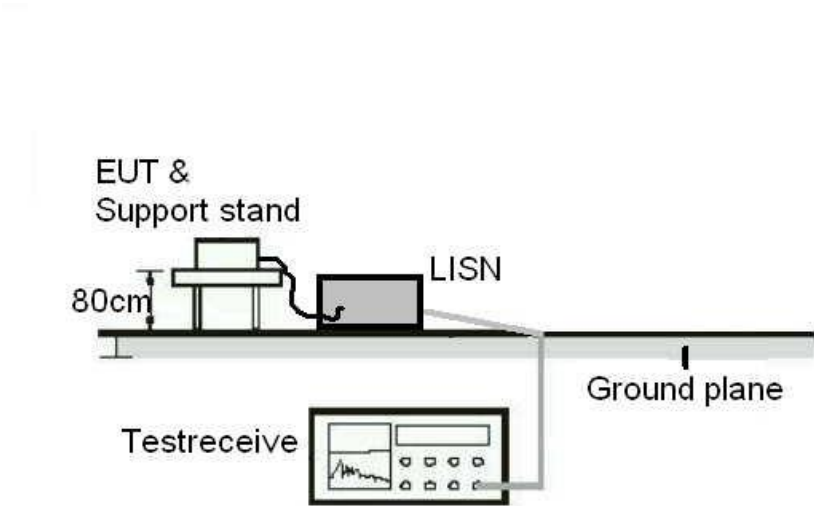
## 3.4 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test



Note: Measurements above 1GHz are done with a table height of 1.5m. In addition, there is RF absorbing material on the floor of the test site for above 1GHz measurement.

Diagram of Measurement Configuration for Conduction Test



# TEST REPORT

Diagram of Measurement Configuration for Transmitter Test

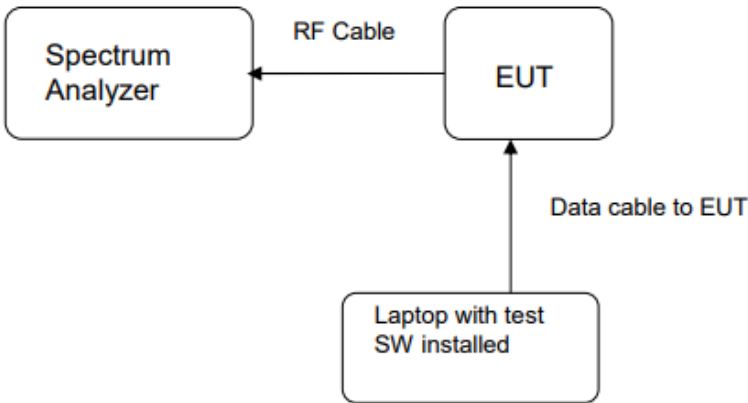
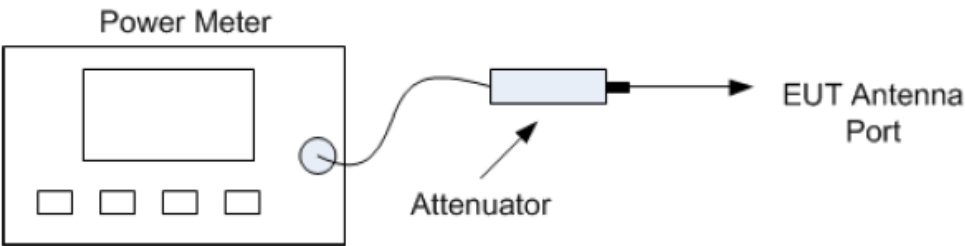


Diagram of Measurement Equipment Configuration for conducted output power setup



# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 13 of 52

## 4 Test Results

### 4.1 Transmitter Requirement & Test Suites

#### 4.1.1 Antenna Requirement

RESULT:

**PASS**

|               |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test standard | : | FCC Part 15.407(a), 15.203                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Requirement   | : | An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. In addition, If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. |

According to the manufacturer declaration, the EUT has an antenna with a directional gain of 2.4dBi. The antenna is an pcb antenna with no possibility of replacement with a non-approved antenna by the end-user.

Therefore, the EUT is considered to comply with this provision.

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 14 of 52

## 4.1.2 Maximum Conducted Output Power

RESULT:

PASS

Test standard : FCC Part 15.407(a)  
Requirement : ANSI C63.10-2013 clause 12.3.3.1, KDB 789033  
Kind of test site : Shielded room

### Test setup

Test Channel : Low/Middle/High  
Operation Mode : A.1.a  
Ambient temperature : 23.4°C  
Relative humidity : 45%

Table 1: Maximum Conducted Output Power for U-NII-1 (5150MHz~5250MHz)

| Test Mode     | Duty Cycle (%) | Test Channel (MHz) | Maximum Conducted Output Power |       | Applicable Limit |
|---------------|----------------|--------------------|--------------------------------|-------|------------------|
|               |                |                    | (dBm)                          | (mW)  |                  |
| 802.11a       | 100            | 5180               | 12.74                          | 18.79 | 250mW<br>(24dBm) |
|               |                | 5220               | 12.59                          | 18.16 |                  |
|               |                | 5240               | 12.97                          | 19.82 |                  |
| 802.11n(HT20) | 100            | 5180               | 11.57                          | 14.35 |                  |
|               |                | 5220               | 11.82                          | 15.21 |                  |
|               |                | 5240               | 11.72                          | 14.86 |                  |
| 802.11n(HT40) | 100            | 5190               | 10.71                          | 11.78 |                  |
|               |                | 5230               | 10.78                          | 11.97 |                  |

### Notes:

1. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.
2. 24dBm (250mW) for client device.

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 15 of 52

**Table 2: Maximum Conducted Output Power for U-NII-2A (5250MHz~5350MHz)**

| Test Mode     | Duty Cycle (%) | -26 dB Emission Bandwidth (MHz) | Test Channel (MHz) | Maximum Conducted Output Power |       | Applicable Limit |
|---------------|----------------|---------------------------------|--------------------|--------------------------------|-------|------------------|
|               |                |                                 |                    | (dBm)                          | (mW)  |                  |
| 802.11a       | 100            | 24.76                           | 5260               | 15.21                          | 33.19 | 250mW<br>(24dBm) |
|               |                | 25.52                           | 5300               | 15.50                          | 35.48 |                  |
|               |                | 26.91                           | 5320               | 16.01                          | 39.90 |                  |
| 802.11n(HT20) | 100            | 23.14                           | 5260               | 14.17                          | 26.12 |                  |
|               |                | 21.85                           | 5300               | 15.38                          | 34.51 |                  |
|               |                | 28.67                           | 5320               | 15.80                          | 38.02 |                  |
| 802.11n(HT40) | 100            | 38.68                           | 5270               | 11.82                          | 15.21 |                  |
|               |                | 38.57                           | 5310               | 11.98                          | 15.78 |                  |

**Notes:**

1. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.
2. The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.

**Table 3: Maximum Conducted Output Power for U-NII-2C (5470MHz~5725MHz)**

| Test Mode     | Duty Cycle (%) | -26 dB Emission Bandwidth (MHz) | Test Channel (MHz) | Maximum Conducted Output Power |       | Applicable Limit |
|---------------|----------------|---------------------------------|--------------------|--------------------------------|-------|------------------|
|               |                |                                 |                    | (dBm)                          | (mW)  |                  |
| 802.11a       | 100            | 21.18                           | 5500               | 12.51                          | 17.82 | 250mW<br>(24dBm) |
|               |                | 20.62                           | 5580               | 10.03                          | 10.07 |                  |
|               |                | 21.91                           | 5700               | 10.88                          | 12.25 |                  |
| 802.11n(HT20) | 100            | 21.43                           | 5500               | 12.39                          | 17.34 |                  |
|               |                | 21.24                           | 5580               | 10.45                          | 11.09 |                  |
|               |                | 21.66                           | 5700               | 10.95                          | 12.45 |                  |
| 802.11n(HT40) | 100            | 38.58                           | 5510               | 11.67                          | 14.69 |                  |
|               |                | 38.48                           | 5590               | 9.59                           | 9.10  |                  |
|               |                | 38.56                           | 5670               | 10.36                          | 17.82 |                  |

**Notes:**

1. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.
2. The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.

# TEST REPORT

Table 4: Maximum Conducted Output Power for U-NII-3 (5725MHz~5850MHz)

| Test Mode     | Duty Cycle (%) | Test Channel (MHz) | Maximum Conducted Output Power |       | Applicable Limit |
|---------------|----------------|--------------------|--------------------------------|-------|------------------|
|               |                |                    | (dBm)                          | (mW)  |                  |
| 802.11a       | 100            | 5745               | 13.06                          | 20.23 | 1W(30dBm)        |
|               |                | 5785               | 14.20                          | 26.30 |                  |
|               |                | 5825               | 14.42                          | 27.67 |                  |
| 802.11n(HT20) | 100            | 5745               | 13.13                          | 20.56 |                  |
|               |                | 5785               | 13.60                          | 22.91 |                  |
|               |                | 5825               | 14.19                          | 26.24 |                  |
| 802.11n(HT40) | 100            | 5755               | 12.56                          | 18.03 |                  |
|               |                | 5795               | 12.82                          | 19.14 |                  |

Notes:

1. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 17 of 52

## 4.1.3 26dB Bandwidth and 99% Bandwidth

RESULT:

PASS

Test standard : FCC Part 15.407(a)

Requirement : ANSI C63.10-2013 clause 12.4, KDB 789033

Kind of test site : Shielded room

### Test setup

Test Channel : Low/Middle/High

Operation Mode : A.1.a

Ambient temperature : 23.4°C

Relative humidity : 45%

Notes:

Test plots please refer to the annex document “SHE24120036-02FE DATA WIFI 5GHz-26dB Bandwidth and 99% Bandwidth EXHIBIT A”

Table 5: 26dB Bandwidth and 99% Bandwidth for U-NII-1 (5150MHz～5250 MHz)

| Test Mode     | Test Channel (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------------|--------------------|----------------------|---------------------|
| 802.11a       | 5180               | 20.74                | 16.598              |
|               | 5220               | 20.54                | 16.564              |
|               | 5240               | 20.80                | 16.593              |
| 802.11n(HT20) | 5180               | 21.92                | 17.763              |
|               | 5220               | 21.90                | 17.773              |
|               | 5240               | 21.83                | 17.773              |
| 802.11n(HT40) | 5190               | 38.90                | 35.954              |
|               | 5230               | 38.97                | 35.872              |

# TEST REPORT

Table 6: 26dB Bandwidth and 99% Bandwidth for U-NII-2A (5250MHz~5350 MHz)

| Test Mode     | Test Channel (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------------|--------------------|----------------------|---------------------|
| 802.11a       | 5260               | 24.76                | 16.811              |
|               | 5300               | 25.52                | 16.754              |
|               | 5320               | 26.91                | 16.801              |
| 802.11n(HT20) | 5260               | 23.14                | 17.795              |
|               | 5300               | 21.85                | 17.793              |
|               | 5320               | 28.67                | 17.931              |
| 802.11n(HT40) | 5270               | 38.68                | 35.845              |
|               | 5310               | 38.57                | 35.839              |

Table 7: 26dB Bandwidth and 99% Bandwidth for U-NII-2C (5470MHz~5725MHz)

| Test Mode     | Test Channel (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------------|--------------------|----------------------|---------------------|
| 802.11a       | 5500               | 21.18                | 16.537              |
|               | 5580               | 20.62                | 16.562              |
|               | 5700               | 21.91                | 16.625              |
| 802.11n(HT20) | 5500               | 21.43                | 17.696              |
|               | 5580               | 21.24                | 17.738              |
|               | 5700               | 21.66                | 17.780              |
| 802.11n(HT40) | 5510               | 38.58                | 35.843              |
|               | 5590               | 38.48                | 35.852              |
|               | 5670               | 38.56                | 35.860              |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 19 of 52

## 4.1.4 6dB Bandwidth and 99% Bandwidth

RESULT:

PASS

Test standard : FCC Part 15.407(e)

Requirement : ANSI C63.10-2013 clause 12.4, KDB 789033

Kind of test site : Shielded room

### Test setup

Test Channel : Low/Middle/High

Operation Mode : A.1.a

Ambient temperature : 23.4°C

Relative humidity : 45%

Table 8: 6dB Bandwidth and 99% Occupied Bandwidth

| Test Mode     | Test Channel (MHz) | 6dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) | Applicable Limit (MHz) |
|---------------|--------------------|---------------------|------------------------------|------------------------|
| 802.11a       | 5745               | 16.51               | 17.990                       | >0.5                   |
|               | 5785               | 16.59               | 17.352                       |                        |
|               | 5825               | 16.52               | 17.646                       |                        |
| 802.11n(HT20) | 5745               | 17.72               | 17.978                       |                        |
|               | 5785               | 17.70               | 18.151                       |                        |
|               | 5825               | 17.68               | 19.062                       |                        |
| 802.11n(HT40) | 5755               | 36.42               | 36.028                       |                        |
|               | 5795               | 36.43               | 36.192                       |                        |

# TEST REPORT

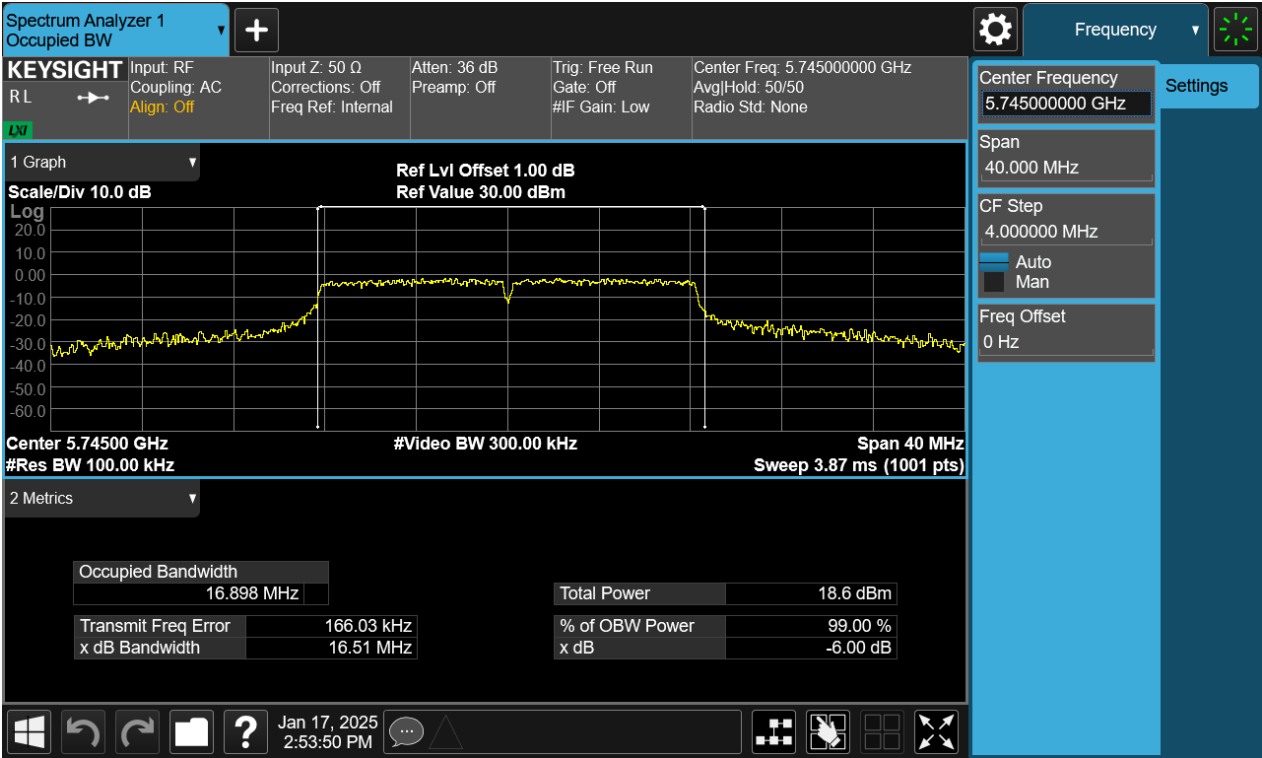
Report No.: SHE24120036-02FE

Date: 2025-04-14

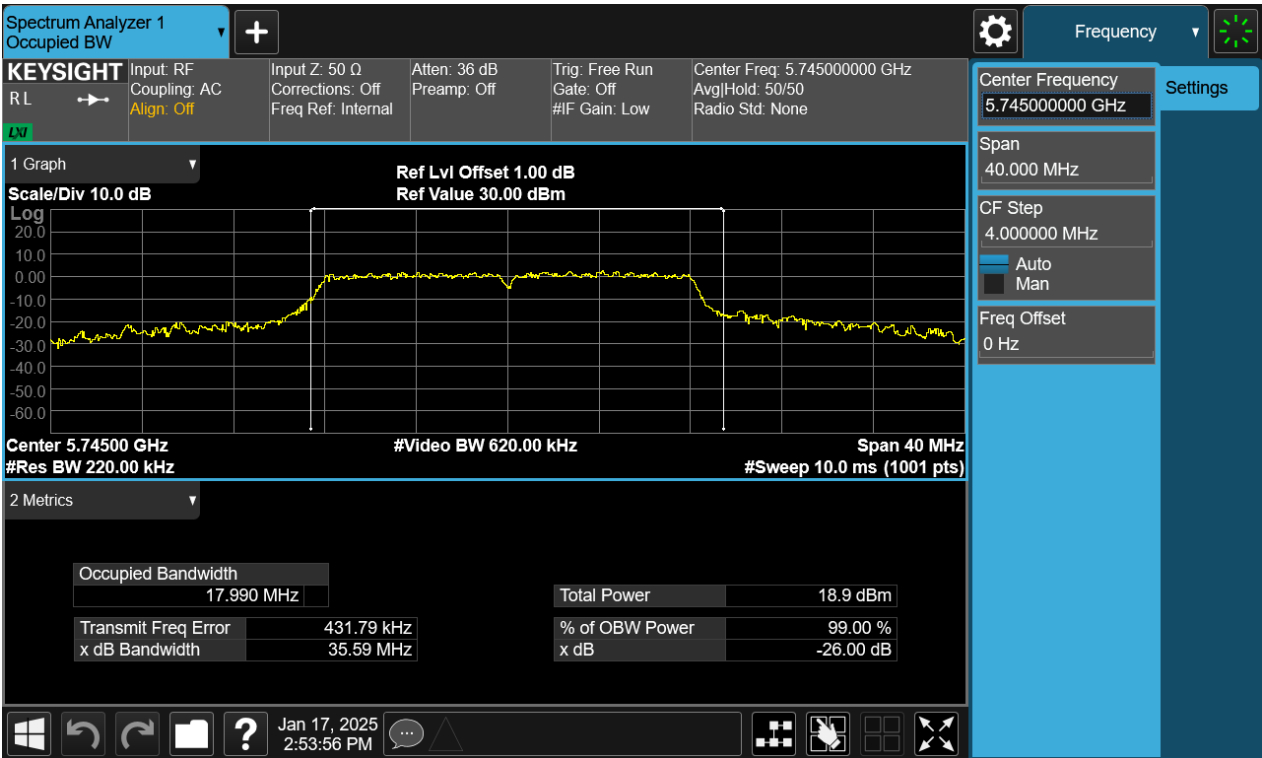
Page 20 of 52

Figure 1: 802.11a, 5745MHz

Test Plot of -6dB Bandwidth



Test Plot of 99% Occupied Bandwidth



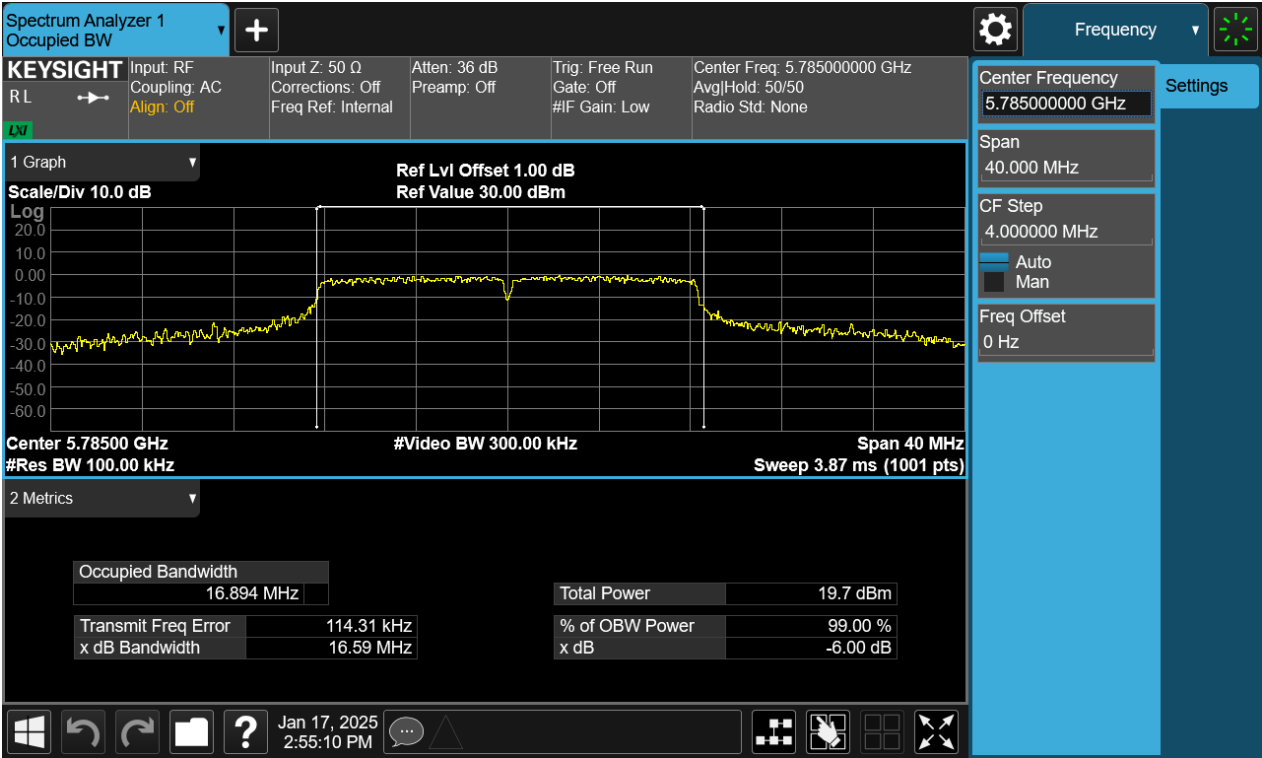
# TEST REPORT

Report No.: SHE24120036-02FE

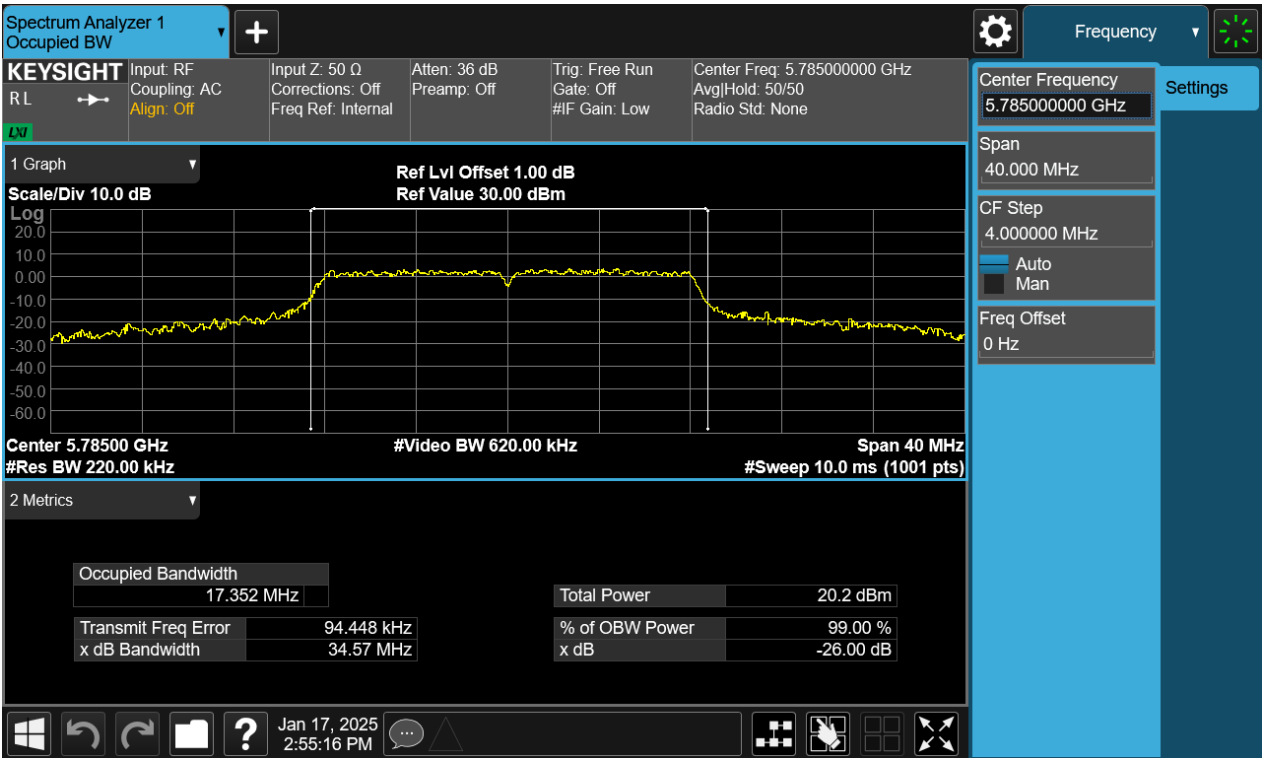
Date: 2025-04-14

Page 21 of 52

Figure 2: 802.11a, 5785MHz  
Test Plot of -6dB Bandwidth



Test Plot of 99% Occupied Bandwidth



# TEST REPORT

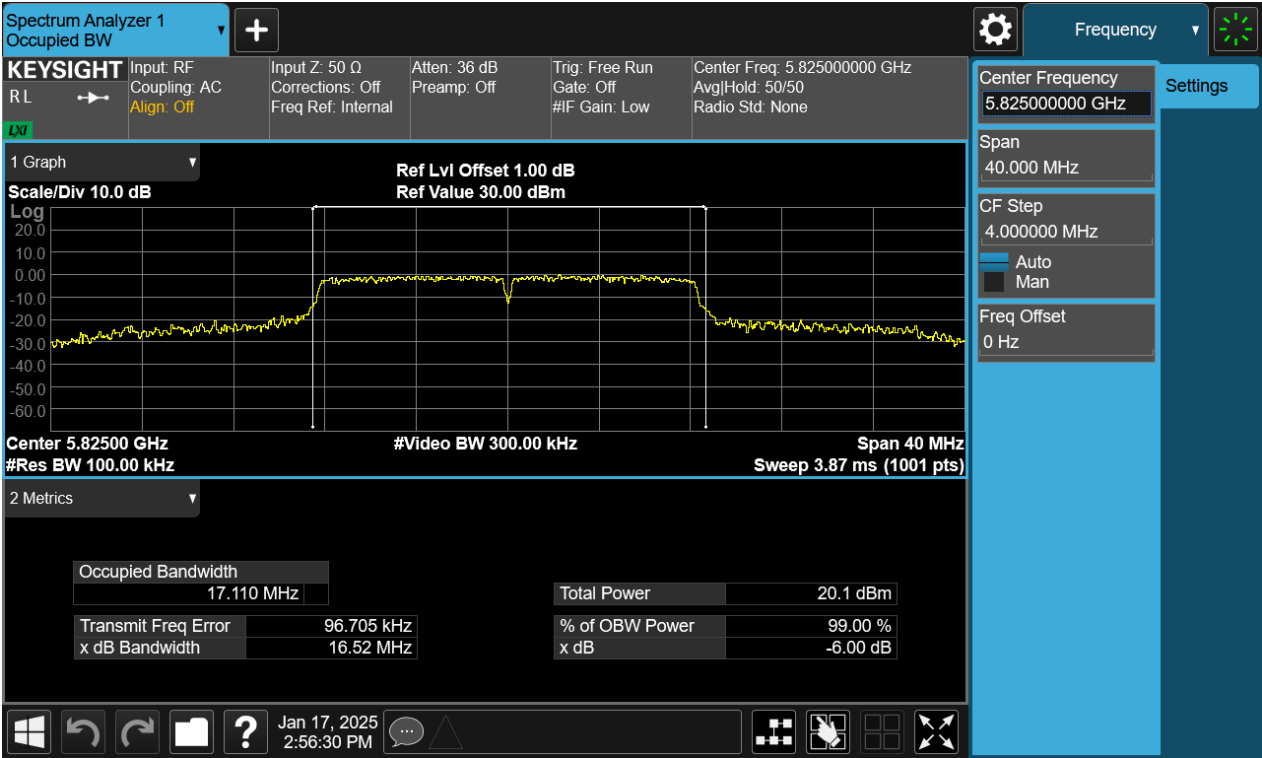
Report No.: SHE24120036-02FE

Date: 2025-04-14

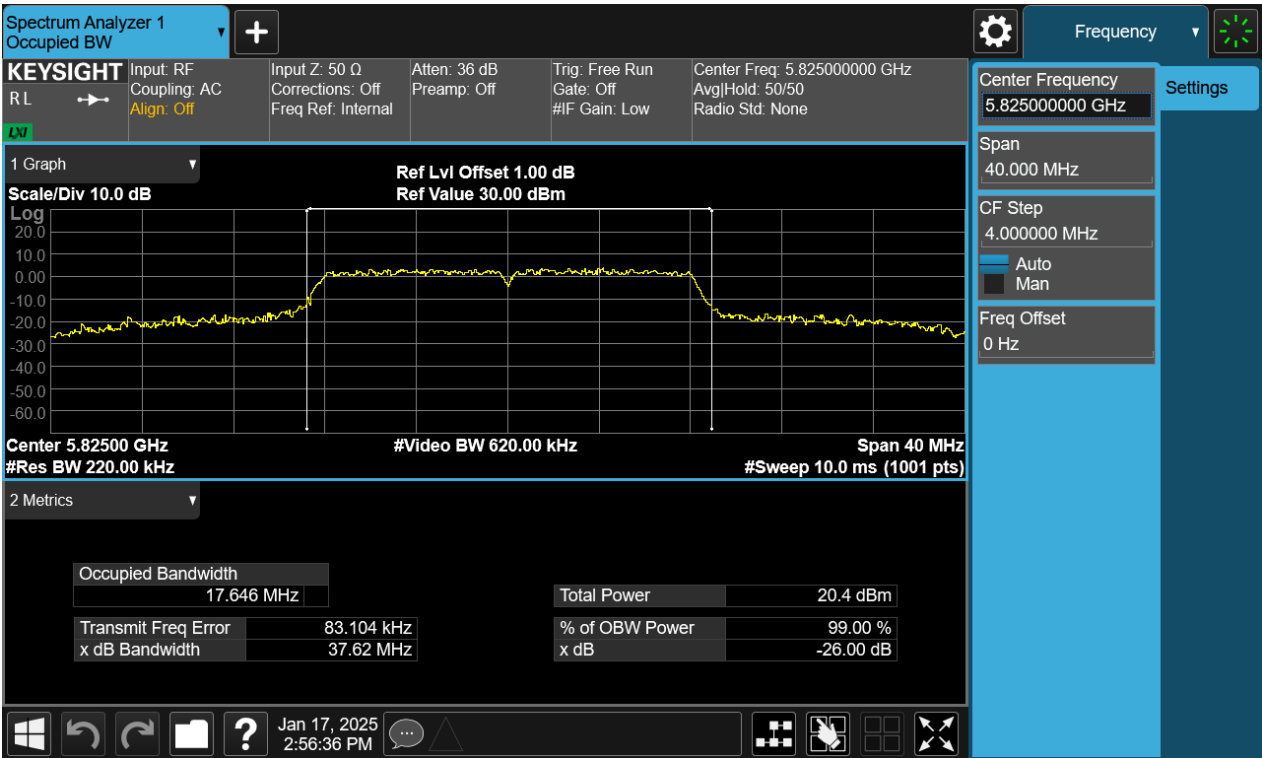
Page 22 of 52

Figure 3: 802.11a, 5825MHz

Test Plot of -6dB Bandwidth



Test Plot of 99% Occupied Bandwidth



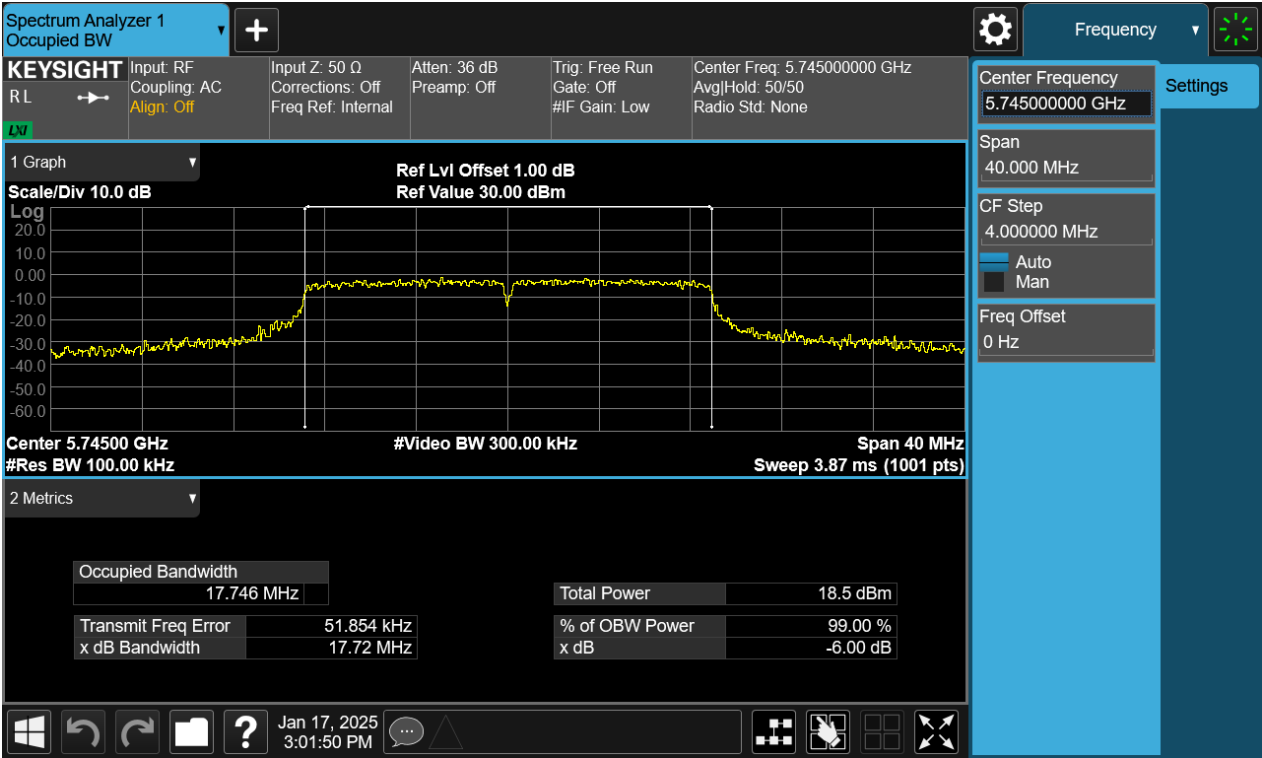
# TEST REPORT

Report No.: SHE24120036-02FE

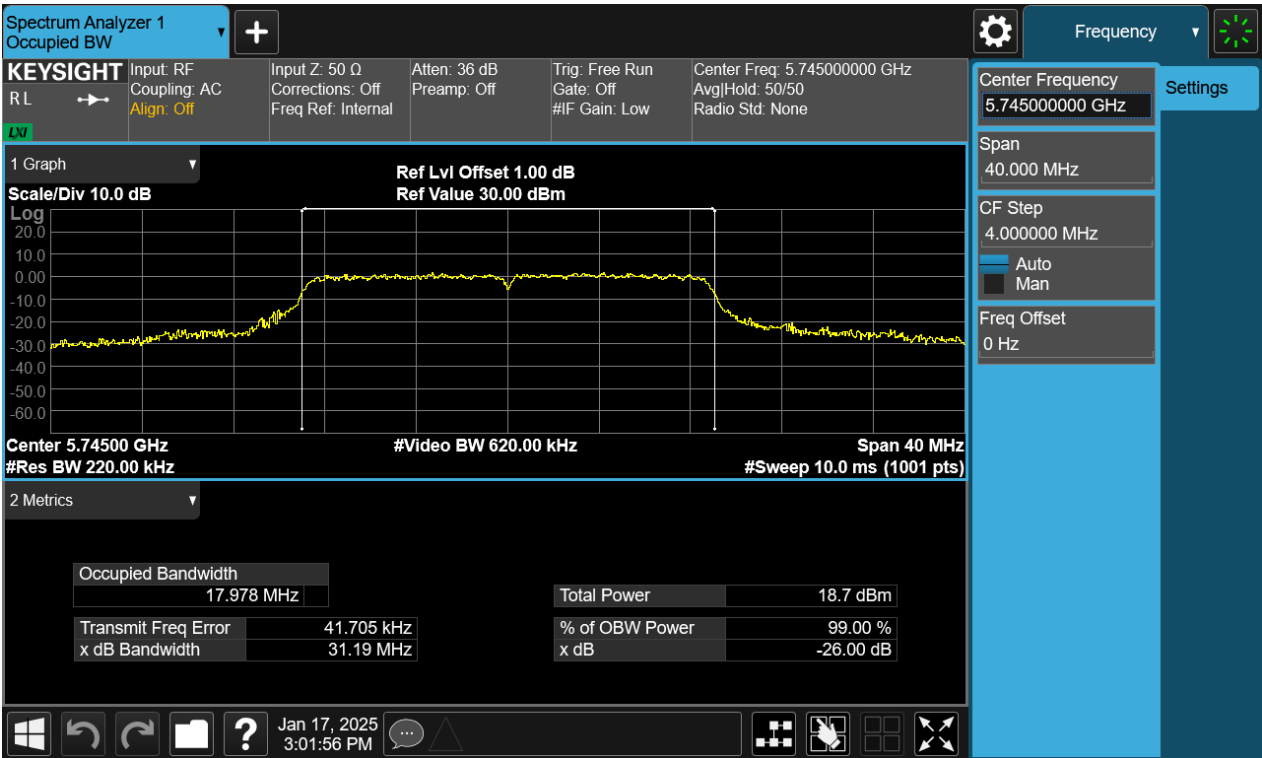
Date: 2025-04-14

Page 23 of 52

Figure 4: 802.11n(HT20), 5745MHz  
Test Plot of -6dB Bandwidth



Test Plot of 99% Occupied Bandwidth



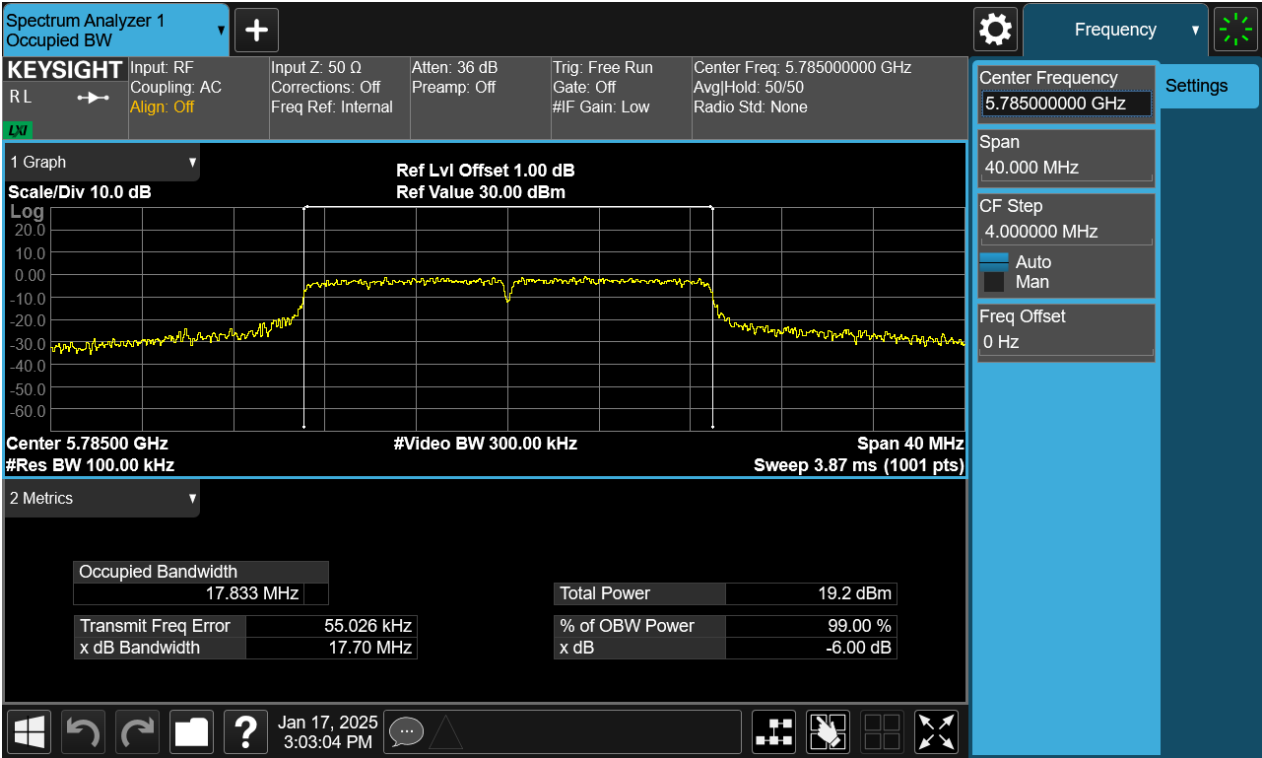
# TEST REPORT

Report No.: SHE24120036-02FE

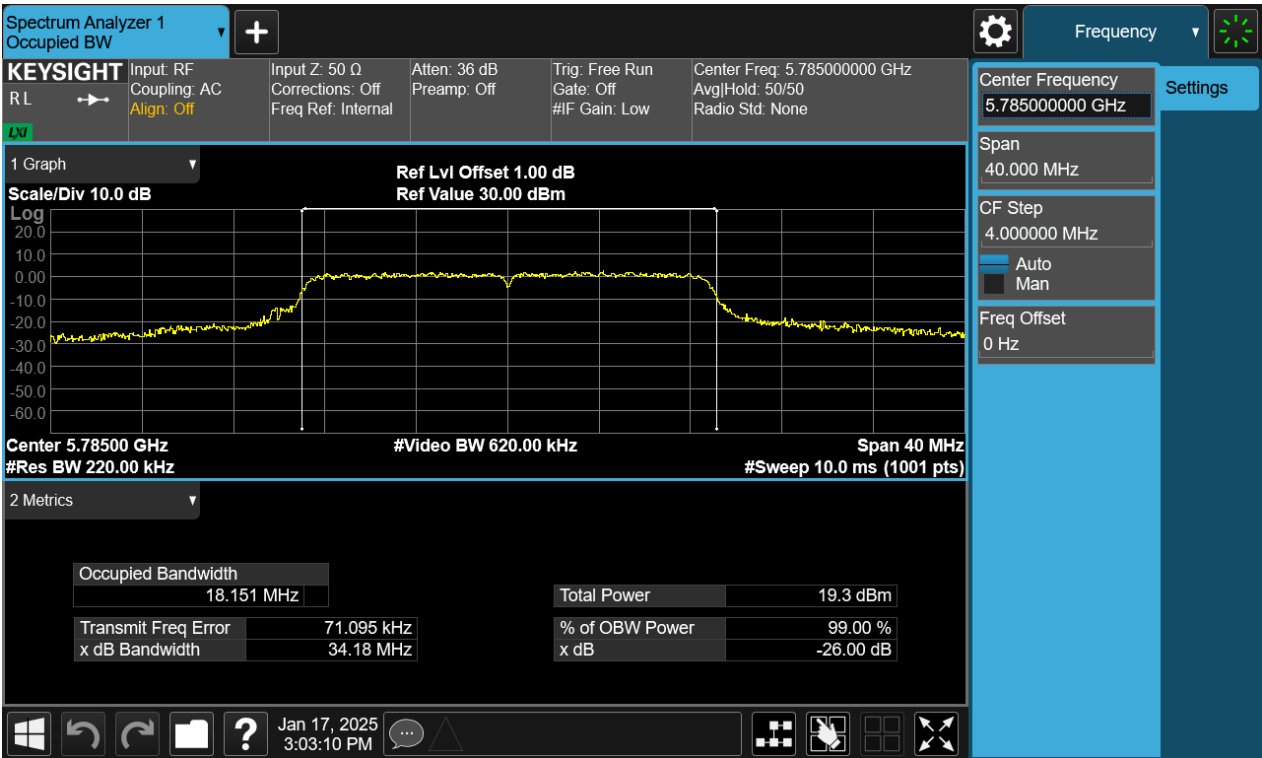
Date: 2025-04-14

Page 24 of 52

Figure 5: 802.11n(HT20), 5785MHz  
Test Plot of -6dB Bandwidth

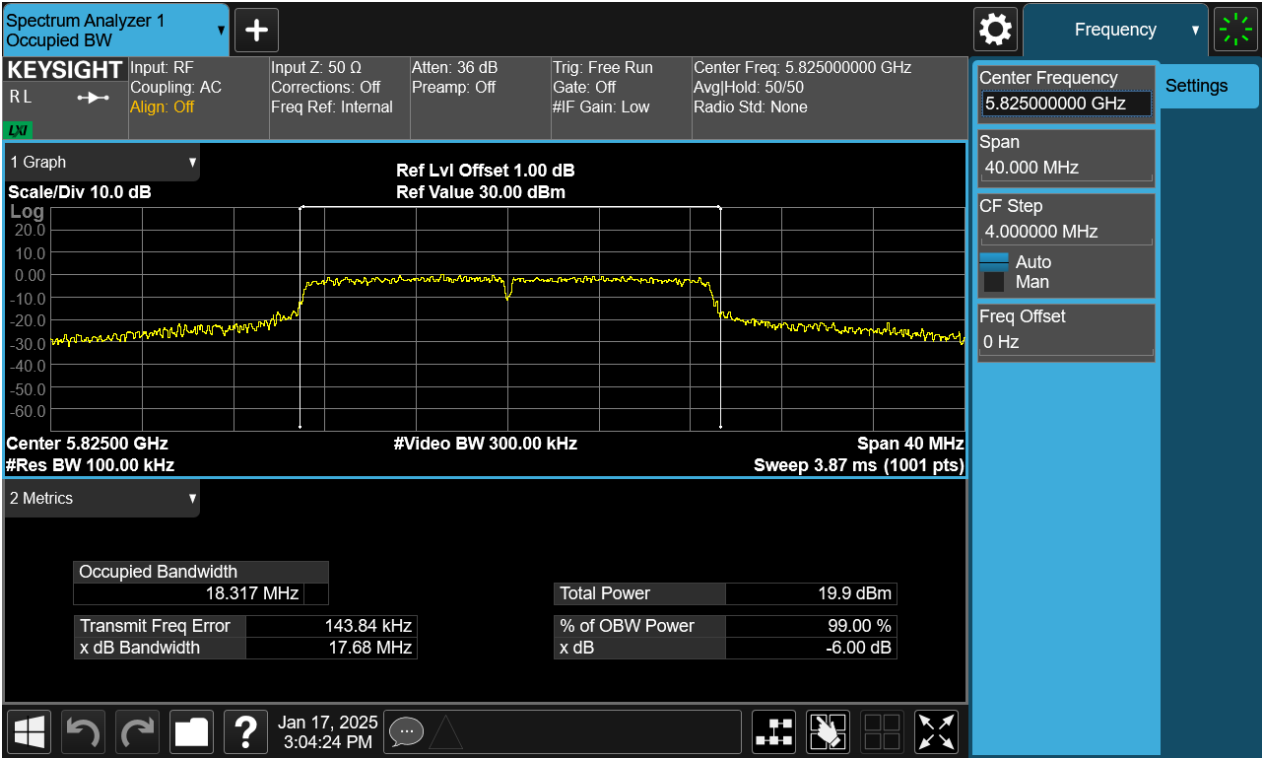


Test Plot of 99% Occupied Bandwidth

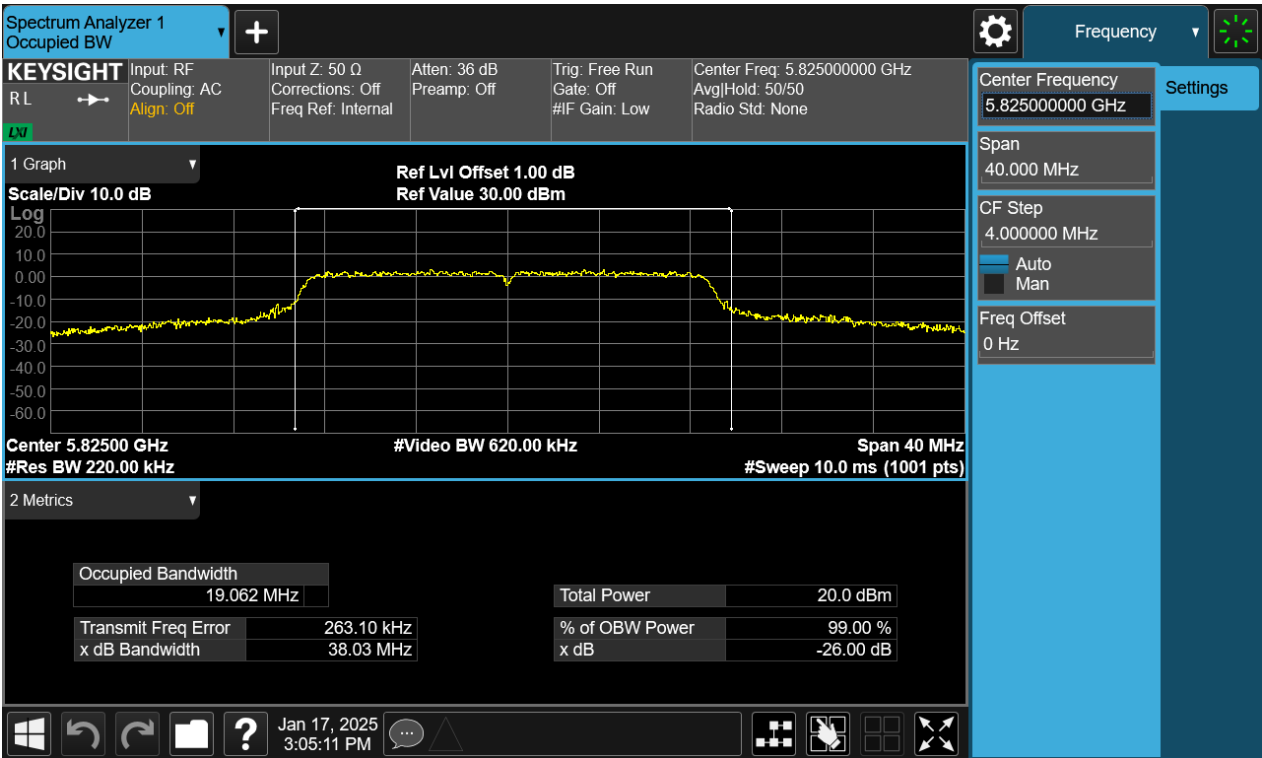


# TEST REPORT

Figure 6: 802.11n(HT20), 5825MHz  
Test Plot of -6dB Bandwidth



Test Plot of 99% Occupied Bandwidth



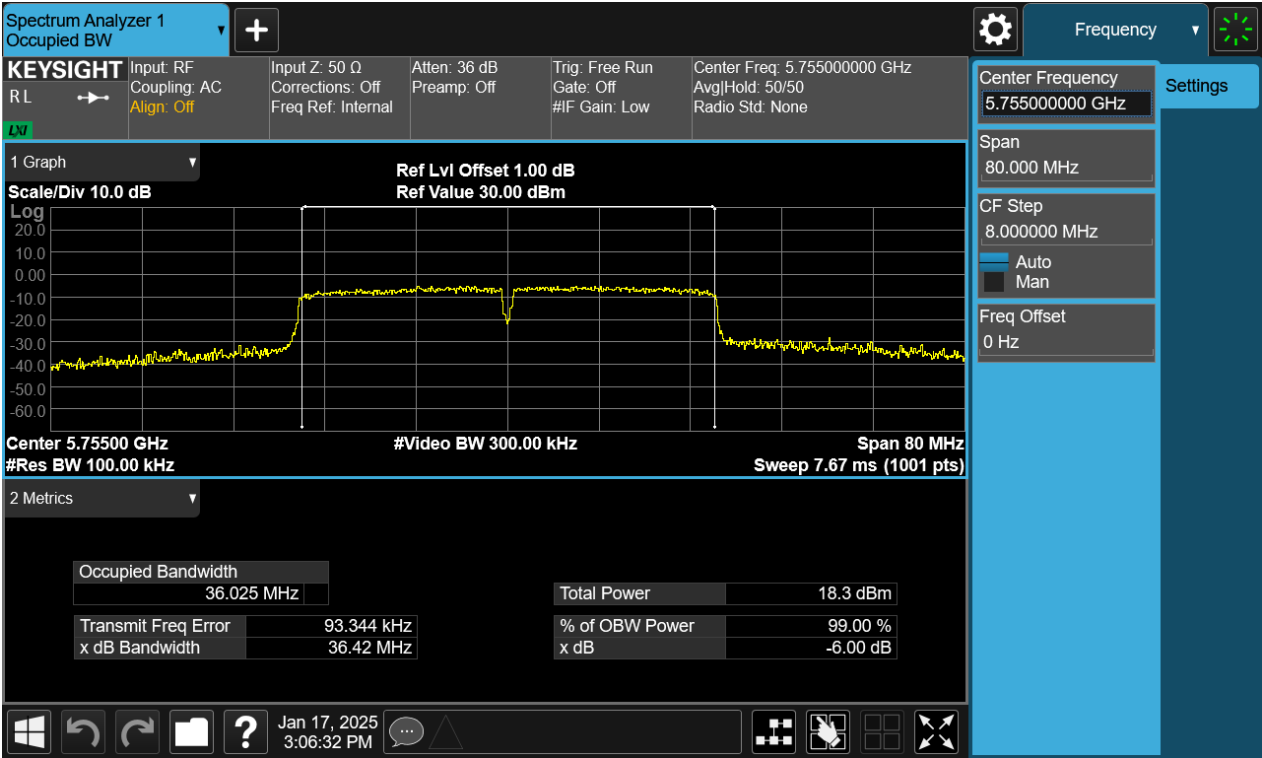
# TEST REPORT

Report No.: SHE24120036-02FE

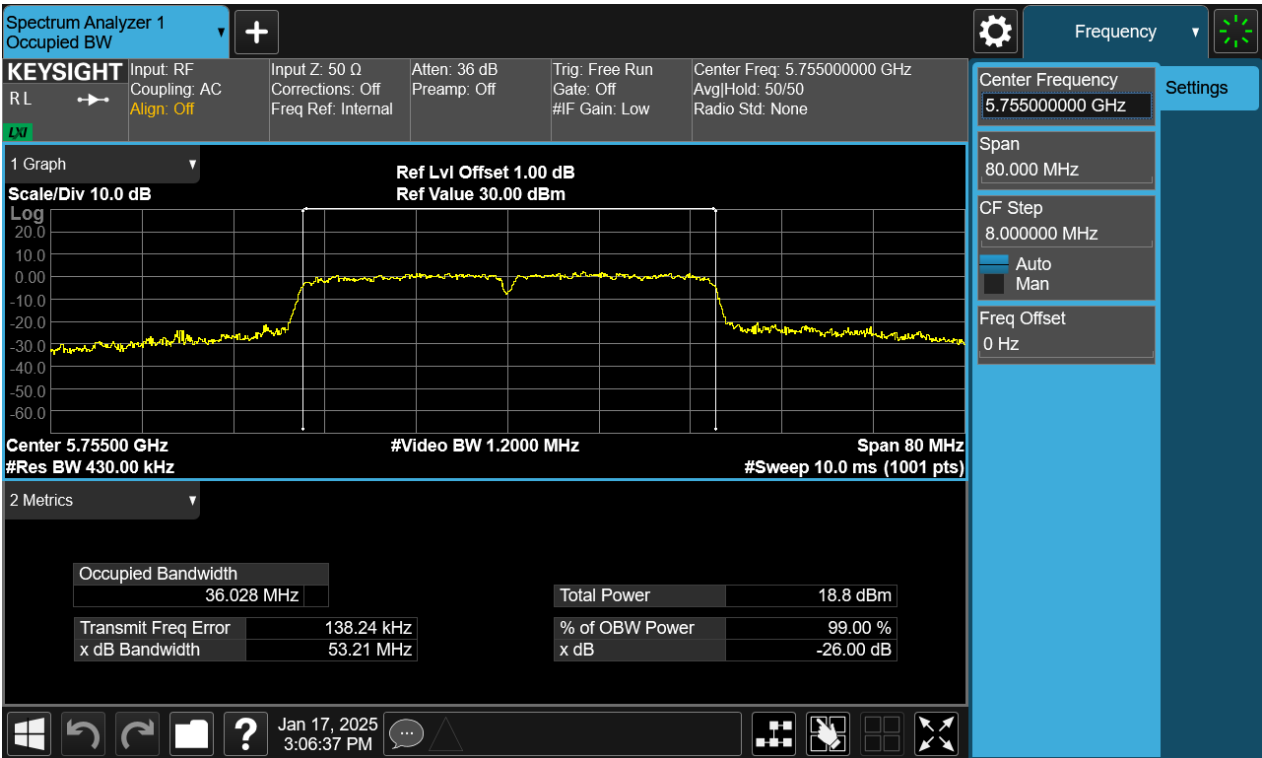
Date: 2025-04-14

Page 26 of 52

Figure 7: 802.11n(HT40), 5755MHz  
Test Plot of -6dB Bandwidth



Test Plot of 99% Occupied Bandwidth



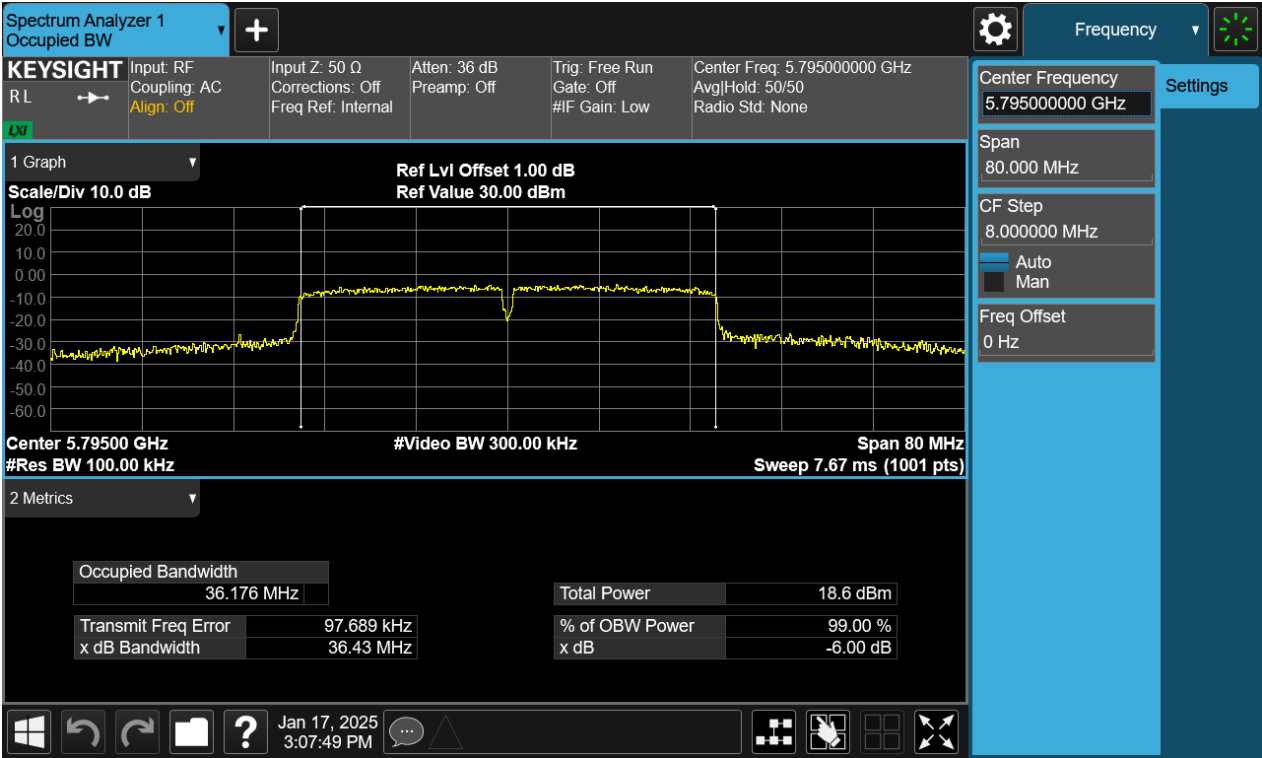
# TEST REPORT

Report No.: SHE24120036-02FE

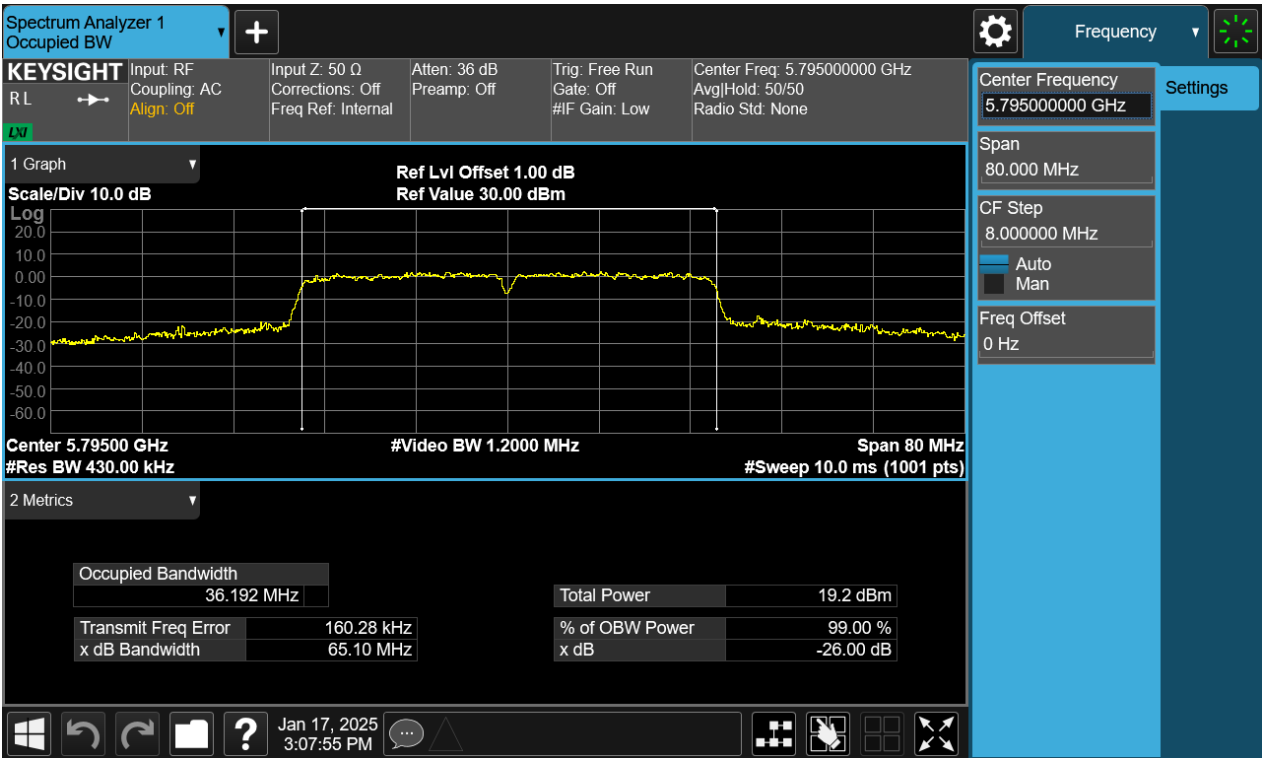
Date: 2025-04-14

Page 27 of 52

Figure 8: 802.11n(HT40), 5795MHz  
Test Plot of -6dB Bandwidth



Test Plot of 99% Occupied Bandwidth



# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 28 of 52

## 4.1.5 Maximum Conducted Output Power Spectral Density

RESULT:

PASS

Test standard : FCC Part 15.407(a)  
Requirement : ANSI C63.10-2013 clause 12.5(SA-2), KDB 789033  
Kind of test site : Shielded room

### Test setup

Test Channel : Low/Middle/High  
Operation Mode : A.1.a  
Ambient temperature : 23.4°C  
Relative humidity : 45%

Notes:

Test plots please refer to the annex document "SHE24120036-02FE DATA WIFI 5GHz- Maximum Conducted Output Power Spectral Density EXHIBIT A"

Table 9: Maximum Conducted Output Power Spectral Density for U-NII-1 (5150MHz~5250MHz)

| Test Mode     | Duty Cycle | Test Channel (MHz) | Maximum PSD (dBm/MHz) | Applicable Limit (dBm/MHz) |
|---------------|------------|--------------------|-----------------------|----------------------------|
| 802.11a       | 100        | 5180               | 5.72                  | 11                         |
|               |            | 5220               | 5.38                  |                            |
|               |            | 5240               | 5.70                  |                            |
| 802.11n(HT20) | 100        | 5180               | 4.55                  |                            |
|               |            | 5220               | 4.43                  |                            |
|               |            | 5240               | 4.69                  |                            |
| 802.11n(HT40) | 100        | 5190               | 0.77                  |                            |
|               |            | 5230               | 0.63                  |                            |

Notes:

1. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.
2. 11dBm/MHz for portable client device.

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 29 of 52

**Table 10: Maximum Conducted Output Power Spectral Density for U-NII-2A (5250MHz~5350MHz)**

| Test Mode     | Duty Cycle | Test Channel (MHz) | Maximum PSD (dBm/MHz) | Applicable Limit (dBm/MHz) |
|---------------|------------|--------------------|-----------------------|----------------------------|
| 802.11a       | 100        | 5260               | 7.92                  | 11                         |
|               |            | 5300               | 8.10                  |                            |
|               |            | 5320               | 8.80                  |                            |
| 802.11n(HT20) | 100        | 5260               | 6.86                  |                            |
|               |            | 5300               | 8.14                  |                            |
|               |            | 5320               | 8.51                  |                            |
| 802.11n(HT40) | 100        | 5270               | 1.45                  |                            |
|               |            | 5310               | 2.11                  |                            |

*Notes:*

1. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

**Table 11: Maximum Conducted Output Power Spectral Density for U-NII-2C (5470MHz~5725MHz)**

| Test Mode     | Duty Cycle | Test Channel (MHz) | Maximum PSD (dBm/MHz) | Applicable Limit (dBm/MHz) |
|---------------|------------|--------------------|-----------------------|----------------------------|
| 802.11a       | 100        | 5500               | 5.27                  | 11                         |
|               |            | 5580               | 2.76                  |                            |
|               |            | 5700               | 3.71                  |                            |
| 802.11n(HT20) | 100        | 5500               | 4.95                  |                            |
|               |            | 5580               | 3.20                  |                            |
|               |            | 5700               | 3.72                  |                            |
| 802.11n(HT40) | 100        | 5510               | 1.95                  |                            |
|               |            | 5590               | -0.11                 |                            |
|               |            | 5670               | 0.20                  |                            |

*Notes:*

1. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

# TEST REPORT

Table 12: Maximum Conducted Output Power Spectral Density for U-NII-3 (5725MHz~5850MHz)

| Test Mode     | Duty Cycle | Test Channel (MHz) | Maximum PSD (dBm/500kHz) | Applicable Limit (dBm/500kHz) |
|---------------|------------|--------------------|--------------------------|-------------------------------|
| 802.11a       | 100        | 5745               | 4.45                     | 30                            |
|               |            | 5785               | 5.55                     |                               |
|               |            | 5825               | 5.79                     |                               |
| 802.11n(HT20) | 100        | 5745               | 4.31                     |                               |
|               |            | 5785               | 4.80                     |                               |
|               |            | 5825               | 5.41                     |                               |
| 802.11n(HT40) | 100        | 5755               | 0.57                     |                               |
|               |            | 5795               | 0.90                     |                               |

Notes:

1. Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 31 of 52

## 4.1.6 Conducted Spurious Emission

RESULT:

**PASS**

|                   |                                              |
|-------------------|----------------------------------------------|
| Test standard     | : FCC Part 15.407(b), 15.209,                |
| Requirement       | : ANSI C63.10-2013 clause 12.7.4, KDB 789033 |
| Kind of test site | : Shielded room                              |

### Test setup

|                     |                   |
|---------------------|-------------------|
| Test Channel        | : Low/Middle/High |
| Operation Mode      | : A.1.a           |
| Ambient temperature | : 23.4°C          |
| Relative humidity   | : 45%             |

### Notes:

*Test plots please refer to the annex document "SHE24120036-02FE DATA WIFI 5GHz-TX CSE EXHIBIT A".*

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 32 of 52

## 4.1.7 Radiated Emission

RESULT:

PASS

|                   |                                              |
|-------------------|----------------------------------------------|
| Test standard     | : FCC Part 15.407(b), 15.209, 15.205         |
| Requirement       | : ANSI C63.10-2013 clause 12.7.4, KDB 789033 |
| Kind of test site | : 3m Semi-Anechoic Chamber                   |

### Test setup

|                     |                   |
|---------------------|-------------------|
| Test Channel        | : Low/Middle/High |
| Operation Mode      | : A.1.a           |
| Ambient temperature | : 22.3-25.1°C     |
| Relative humidity   | : 42-47%          |

Notes:

*Test plots please refer to the annex document "SHE24120036-02FE DATA WIFI 5GHz-TX EXHIBIT A"*

1. For 9 kHz ~ 30 MHz, the amplitude of spurious emissions that are attenuated by more than 20dB below the permissible. The value has no need to be reported.
2. The spurious above 18GHz is noise only and 20dB below the limit. The value has no need to be reported.
3. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.
4. Factor = Antenna Factor + Cable loss - Amplifier gain, Margin= Results-Limit.

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 33 of 52

## 4.1.8 Band Edge (Restricted-band band-edge)

RESULT:

PASS

|                   |                                                |
|-------------------|------------------------------------------------|
| Test standard     | : FCC Part 15.407(b)                           |
| Requirement       | : ANSI C63.10-2013 clause 12.7.4.4, KDB 789033 |
| Kind of test site | : 3m Semi-Anechoic Chamber                     |

### Test setup

|                     |            |
|---------------------|------------|
| Test Channel        | : Low/High |
| Operation Mode      | : A.1.a    |
| Ambient temperature | : 25.1°C   |
| Relative humidity   | : 47%      |

Notes:

*Test plots please refer to the annex document "SHE24120036-02FE DATA WIFI 5GHz-TX EXHIBIT A"*

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.
2. Factor = Antenna Factor + Cable loss - Amplifier gain, Margin= Results-Limit.

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 34 of 52

## 4.1.9 Frequency Stability

RESULT:

PASS

Test standard : FCC Part 15.407(g)

Kind of test site : Shielded room

### Test setup

Test Channel : Low/Middle/High

Operation Mode : A.1.a

Ambient temperature : 23.4°C

Relative humidity : 45%

Table 13: Frequency Stability  
U-NII-1 (5150MHz – 5250MHz):  
Voltage vs. Frequency Stability (5180MHz)

| Test Conditions |             | Frequency (MHz) | Max. Deviation (ppm) | Limit (ppm)                  |
|-----------------|-------------|-----------------|----------------------|------------------------------|
| Temp (°C)       | Voltage (V) |                 |                      |                              |
| 25              | 3.23V       | 5180.019750     | 3.81                 | within the band of operation |
|                 | 3.80V       | 5180.008650     | 1.67                 |                              |
|                 | 4.37V       | 5180.008125     | 1.57                 |                              |

Temperature vs. Frequency Stability (5180MHz)

| Test Conditions |           | Frequency (MHz) | Max. Deviation (ppm) | Limit (ppm)                  |
|-----------------|-----------|-----------------|----------------------|------------------------------|
| Voltage (V)     | Temp (°C) |                 |                      |                              |
| 3.8V            | 0         | 5180.007850     | 1.52                 | within the band of operation |
|                 | 10        | 5180.007500     | 1.45                 |                              |
|                 | 20        | 5180.007375     | 1.42                 |                              |
|                 | 30        | 5180.007625     | 1.47                 |                              |
|                 | 40        | 5180.007450     | 1.44                 |                              |
|                 | 50        | 5180.007525     | 1.45                 |                              |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 35 of 52

U-NII-2A (5250MHz – 5350MHz):  
Voltage vs. Frequency Stability (5260MHz)

| Test Conditions |             | Frequency (MHz) | Max. Deviation (ppm) | Limit (ppm)                  |
|-----------------|-------------|-----------------|----------------------|------------------------------|
| Temp (°C)       | Voltage (V) |                 |                      |                              |
| 25              | 3.23V       | 5260.015        | 2.85                 | within the band of operation |
|                 | 3.80V       | 5260.013        | 2.47                 |                              |
|                 | 4.37V       | 5260.012        | 2.28                 |                              |

Temperature vs. Frequency Stability (5260MHz)

| Test Conditions |           | Frequency (MHz) | Max. Deviation (ppm) | Limit (ppm)                  |
|-----------------|-----------|-----------------|----------------------|------------------------------|
| Voltage (V)     | Temp (°C) |                 |                      |                              |
| 3.8V            | 0         | 5260.011        | 2.09                 | within the band of operation |
|                 | 10        | 5260.021        | 3.99                 |                              |
|                 | 20        | 5260.034        | 6.46                 |                              |
|                 | 30        | 5260.026        | 4.94                 |                              |
|                 | 40        | 5260.035        | 6.65                 |                              |
|                 | 50        | 5260.018        | 3.42                 |                              |

U-NII-2C (5470MHz – 5725MHz):  
Voltage vs. Frequency Stability (5500MHz)

| Test Conditions |             | Frequency (MHz) | Max. Deviation (ppm) | Limit (ppm)                  |
|-----------------|-------------|-----------------|----------------------|------------------------------|
| Temp (°C)       | Voltage (V) |                 |                      |                              |
| 25              | 3.23V       | 5500.010725     | 1.95                 | within the band of operation |
|                 | 3.80V       | 5500.009275     | 1.69                 |                              |
|                 | 4.37V       | 5500.008900     | 1.62                 |                              |

Temperature vs. Frequency Stability (5500MHz)

| Test Conditions |           | Frequency (MHz) | Max. Deviation (ppm) | Limit (ppm)                  |
|-----------------|-----------|-----------------|----------------------|------------------------------|
| Voltage (V)     | Temp (°C) |                 |                      |                              |
| 3.8V            | 0         | 5500.008825     | 1.60                 | within the band of operation |
|                 | 10        | 5500.009050     | 1.65                 |                              |
|                 | 20        | 5500.009525     | 1.73                 |                              |
|                 | 30        | 5500.009700     | 1.76                 |                              |
|                 | 40        | 5500.009800     | 1.78                 |                              |
|                 | 50        | 5500.009975     | 1.81                 |                              |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 36 of 52

U-NII-3 (5725MHz – 5850MHz):  
Voltage vs. Frequency Stability (5745MHz)

| Test Conditions |             | Frequency (MHz) | Max. Deviation (ppm) | Limit (ppm)                  |
|-----------------|-------------|-----------------|----------------------|------------------------------|
| Temp (°C)       | Voltage (V) |                 |                      |                              |
| 25              | 3.23V       | 5,745.0175      | 3.05                 | within the band of operation |
|                 | 3.80V       | 5,745.0150      | 2.61                 |                              |
|                 | 4.37V       | 5,745.0160      | 2.79                 |                              |

Temperature vs. Frequency Stability (5745MHz)

| Test Conditions |           | Frequency (MHz) | Max. Deviation (ppm) | Limit (ppm)                  |
|-----------------|-----------|-----------------|----------------------|------------------------------|
| Voltage (V)     | Temp (°C) |                 |                      |                              |
| 3.8V            | 0         | 5,745.0172      | 2.99                 | within the band of operation |
|                 | 10        | 5,745.0168      | 2.92                 |                              |
|                 | 20        | 5,745.0162      | 2.82                 |                              |
|                 | 30        | 5,745.0142      | 2.47                 |                              |
|                 | 40        | 5,745.0138      | 2.40                 |                              |
|                 | 50        | 5,745.0148      | 2.58                 |                              |

Note: All configurations were tested respectively, but only the worst channel shown here.

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 37 of 52

## 4.2 Mains Emissions

### 4.2.1 Conducted Emission on AC Mains

RESULT:

PASS

|                   |                               |
|-------------------|-------------------------------|
| Test standard     | : FCC Part 15.207             |
| Requirement       | : ANSI C63.10-2013 clause 6.2 |
| Kind of test site | : Shielded room               |

#### Test setup

|                     |                                      |
|---------------------|--------------------------------------|
| Input Voltage       | : Which received AC 120V, 60Hz Power |
| Operation Mode      | : A.1.a                              |
| Earthing            | : Not Connected                      |
| Ambient temperature | : 24.5°C                             |
| Relative humidity   | : 54%                                |

For details refer to following test plot.

# TEST REPORT

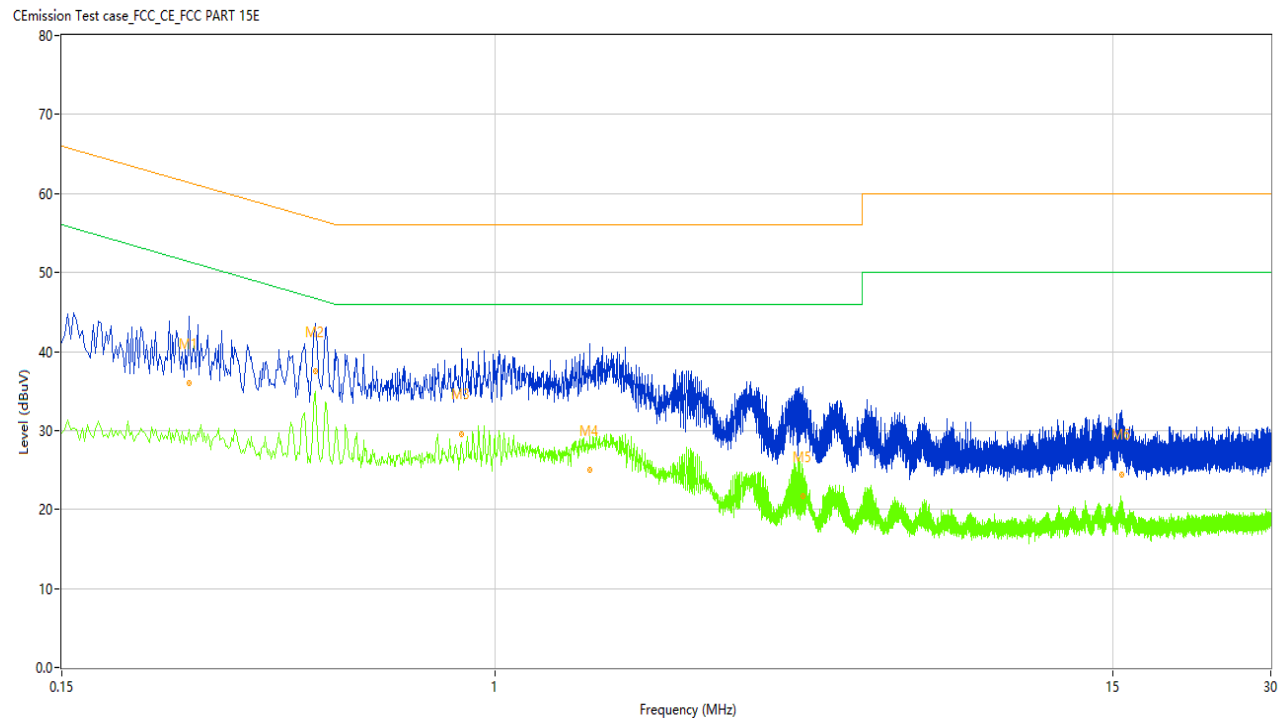
Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 38 of 52

Note: The all configurations were tested respectively, but only the worst configuration shown here.

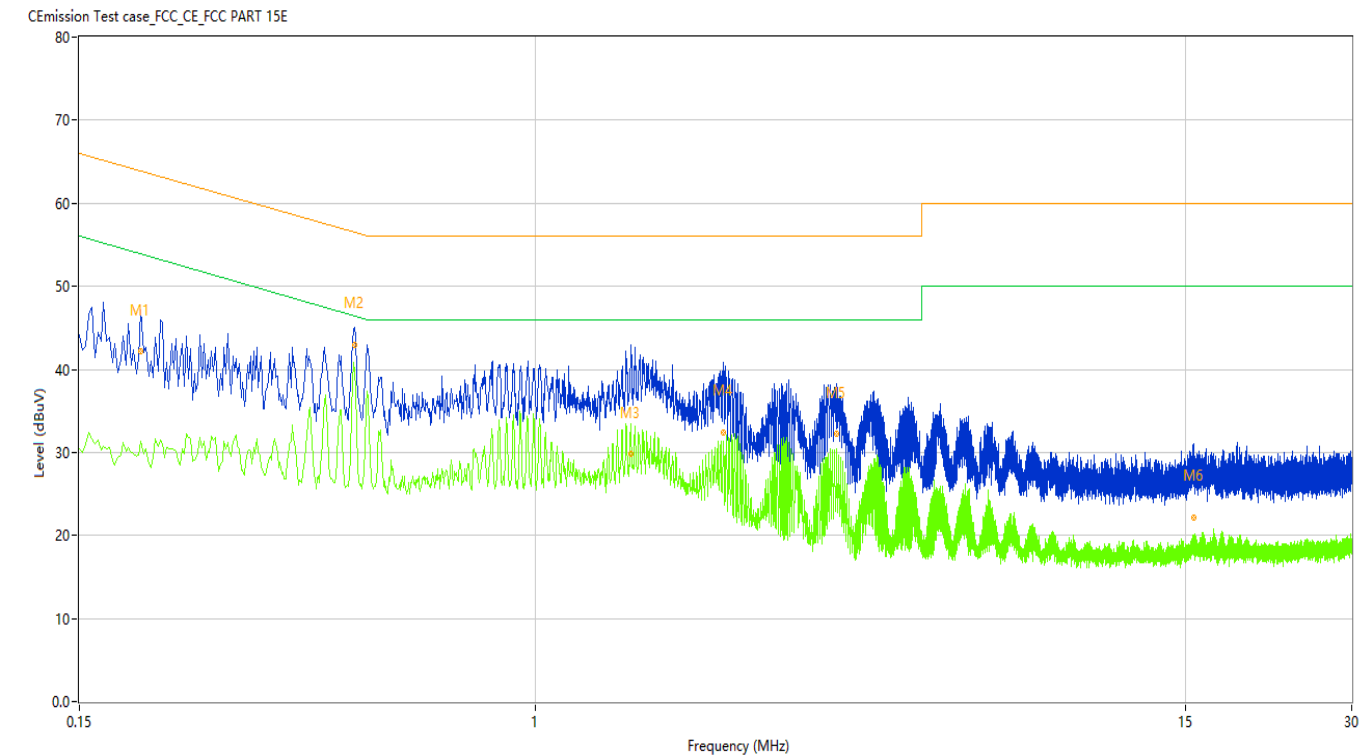
Figure 9: Conducted Emission on AC Mains, L Phase



| No. | Frequency (MHz) | Results (dBuV) | Factor (dB) | Limit (dBuV) | Margin (dB) | Detector | Line | Verdict |
|-----|-----------------|----------------|-------------|--------------|-------------|----------|------|---------|
| 1   | 0.262           | 41.93          | 10.12       | 61.37        | 19.44       | Peak     | L    | Pass    |
| 1*  | 0.262           | 35.94          | 10.12       | 61.37        | 25.43       | QP       | L    | Pass    |
| 1** | 0.262           | 30.09          | 10.12       | 51.37        | 21.28       | AV       | L    | Pass    |
| 2   | 0.456           | 41.92          | 10.10       | 56.77        | 14.85       | Peak     | L    | Pass    |
| 2*  | 0.456           | 37.45          | 10.10       | 56.77        | 19.32       | QP       | L    | Pass    |
| 2** | 0.456           | 34.89          | 10.10       | 46.77        | 11.88       | AV       | L    | Pass    |
| 3   | 0.866           | 38.49          | 10.10       | 56.00        | 17.51       | Peak     | L    | Pass    |
| 3*  | 0.866           | 29.46          | 10.10       | 56.00        | 26.54       | QP       | L    | Pass    |
| 3** | 0.866           | 28.35          | 10.10       | 46.00        | 17.65       | AV       | L    | Pass    |
| 4   | 1.516           | 32.37          | 9.94        | 56.00        | 23.63       | Peak     | L    | Pass    |
| 4*  | 1.516           | 24.96          | 9.94        | 56.00        | 31.04       | QP       | L    | Pass    |
| 4** | 1.516           | 29.28          | 9.94        | 46.00        | 16.72       | AV       | L    | Pass    |
| 5   | 3.864           | 28.07          | 10.10       | 56.00        | 27.93       | Peak     | L    | Pass    |
| 5*  | 3.864           | 21.65          | 10.10       | 56.00        | 34.35       | QP       | L    | Pass    |
| 5** | 3.864           | 25.12          | 10.10       | 46.00        | 20.88       | AV       | L    | Pass    |
| 6   | 15.586          | 30.60          | 10.72       | 60.00        | 29.40       | Peak     | L    | Pass    |
| 6*  | 15.586          | 24.44          | 10.72       | 60.00        | 35.56       | QP       | L    | Pass    |
| 6** | 15.586          | 19.71          | 10.72       | 50.00        | 30.29       | AV       | L    | Pass    |

# TEST REPORT

Figure 10: Conducted Emission on AC Mains, N Phase



| No. | Frequency (MHz) | Results (dBuV) | Factor (dB) | Limit (dBuV) | Margin (dB) | Detector | Line | Verdict |
|-----|-----------------|----------------|-------------|--------------|-------------|----------|------|---------|
| 1   | 0.194           | 48.57          | 10.21       | 63.86        | 15.29       | Peak     | N    | Pass    |
| 1*  | 0.194           | 42.25          | 10.21       | 63.86        | 21.61       | QP       | N    | Pass    |
| 1** | 0.194           | 31.40          | 10.21       | 53.86        | 22.46       | AV       | N    | Pass    |
| 2   | 0.472           | 44.96          | 10.13       | 56.48        | 11.52       | Peak     | N    | Pass    |
| 2*  | 0.472           | 42.93          | 10.13       | 56.48        | 13.55       | QP       | N    | Pass    |
| 2** | 0.472           | 39.93          | 10.13       | 46.48        | 6.55        | AV       | N    | Pass    |
| 3   | 1.490           | 37.49          | 9.97        | 56.00        | 18.51       | Peak     | N    | Pass    |
| 3*  | 1.490           | 29.76          | 9.97        | 56.00        | 26.24       | QP       | N    | Pass    |
| 3** | 1.490           | 33.44          | 9.97        | 46.00        | 12.56       | AV       | N    | Pass    |
| 4   | 2.196           | 36.79          | 10.07       | 56.00        | 19.21       | Peak     | N    | Pass    |
| 4*  | 2.196           | 32.39          | 10.07       | 56.00        | 23.61       | QP       | N    | Pass    |
| 4** | 2.196           | 30.70          | 10.07       | 46.00        | 15.30       | AV       | N    | Pass    |
| 5   | 3.518           | 36.77          | 10.12       | 56.00        | 19.23       | Peak     | N    | Pass    |
| 5*  | 3.518           | 32.22          | 10.12       | 56.00        | 23.78       | QP       | N    | Pass    |
| 5** | 3.518           | 27.00          | 10.12       | 46.00        | 19.00       | AV       | N    | Pass    |
| 6   | 15.530          | 29.60          | 10.77       | 60.00        | 30.40       | Peak     | N    | Pass    |
| 6*  | 15.530          | 22.09          | 10.77       | 60.00        | 37.91       | QP       | N    | Pass    |
| 6** | 15.530          | 18.74          | 10.77       | 50.00        | 31.26       | AV       | N    | Pass    |

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

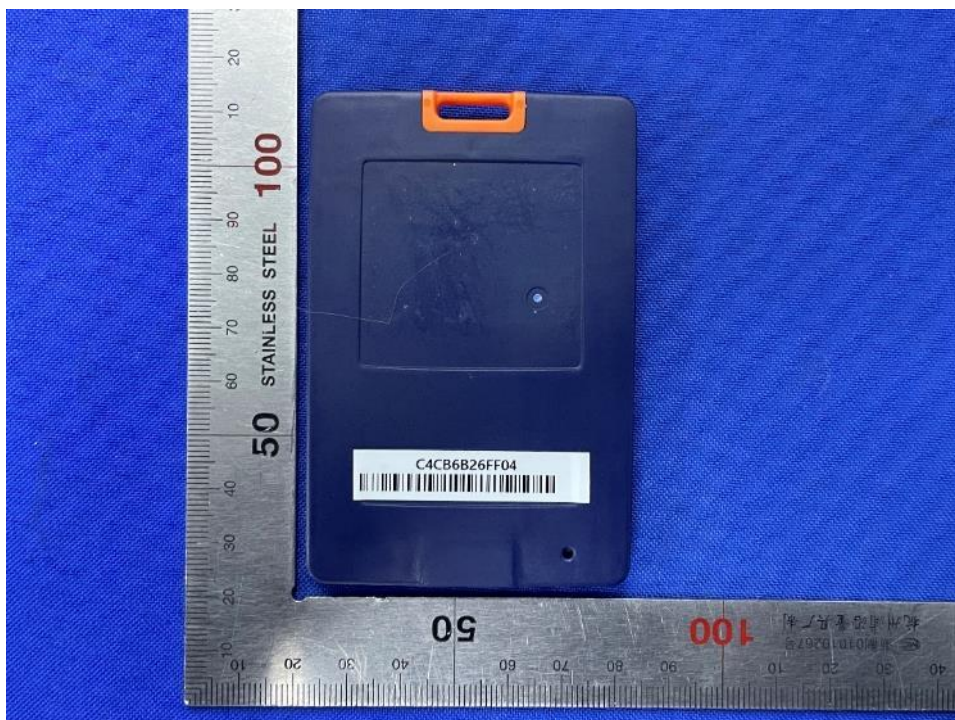
Page 40 of 52

## 5 Appendixes

### 5.1 Photographs of the Sample



Front of the sample



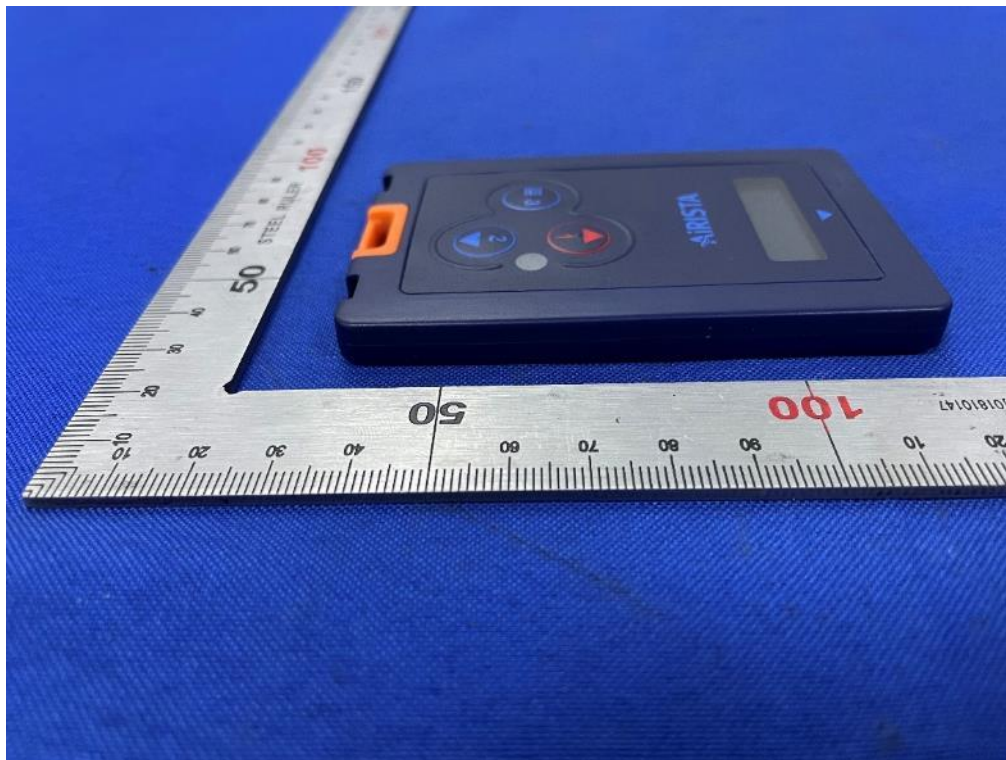
Rear of the sample

# TEST REPORT

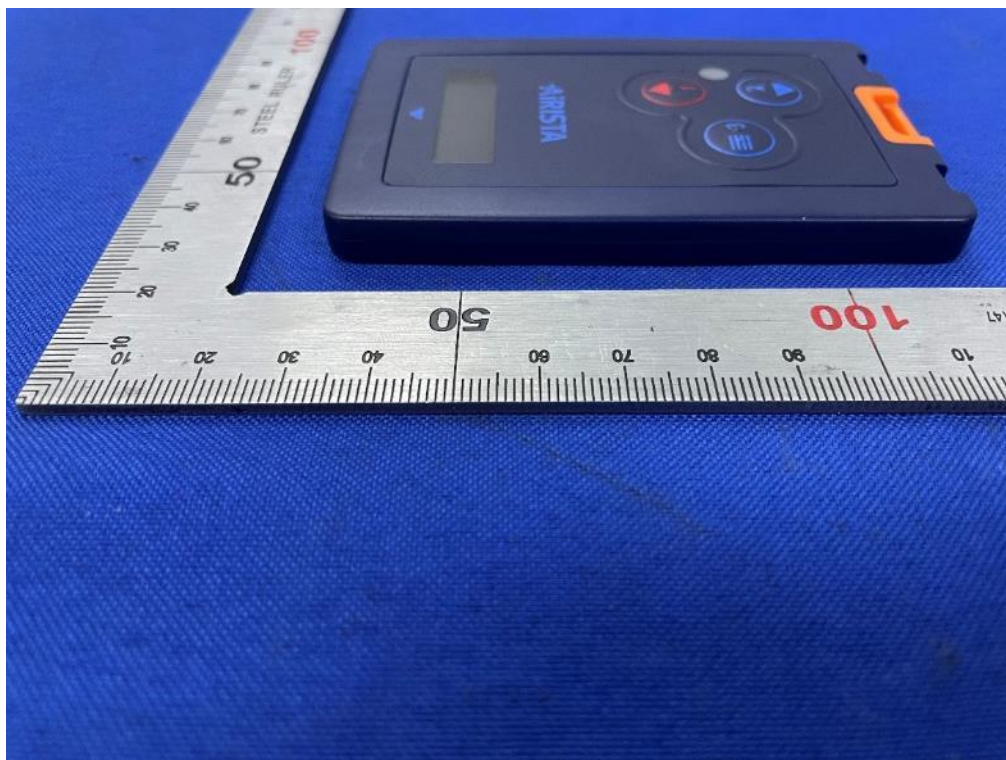
Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 41 of 52



Left of the sample



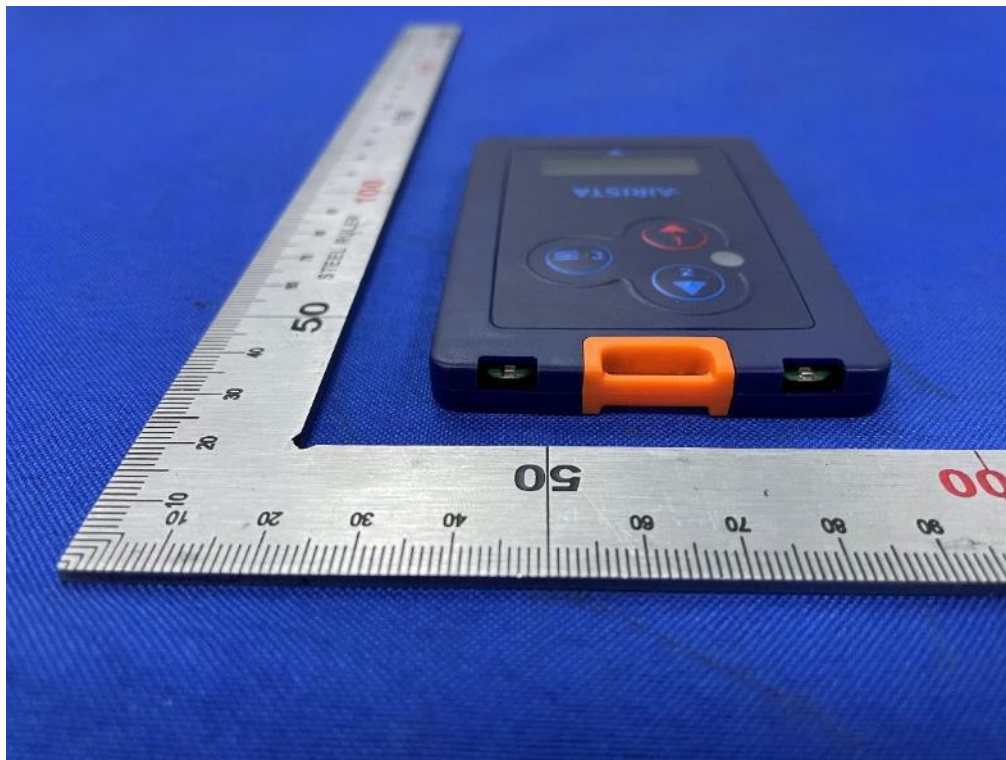
Right of the sample

# TEST REPORT

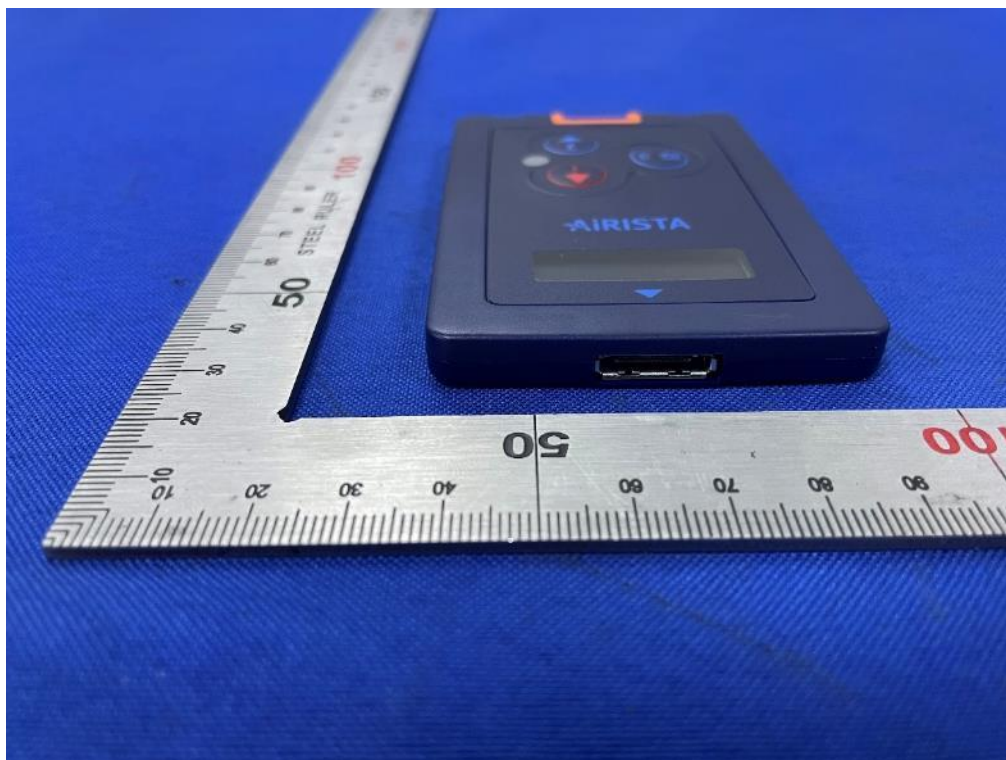
Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 42 of 52



Top of the sample



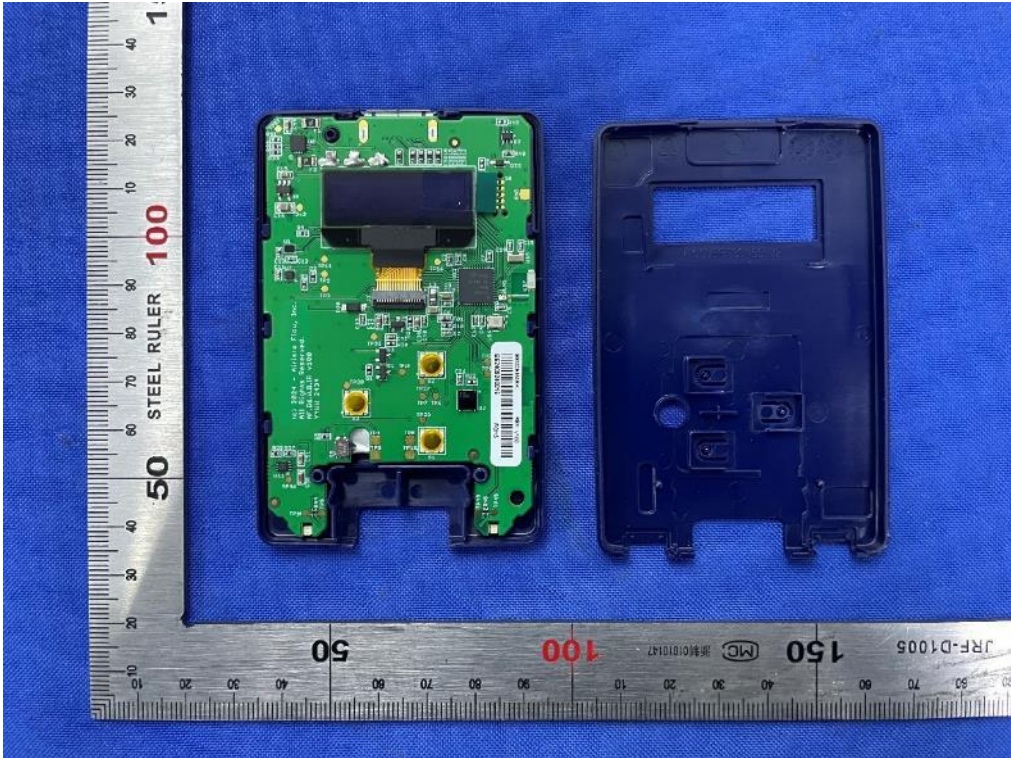
Bottom of the sample

# TEST REPORT

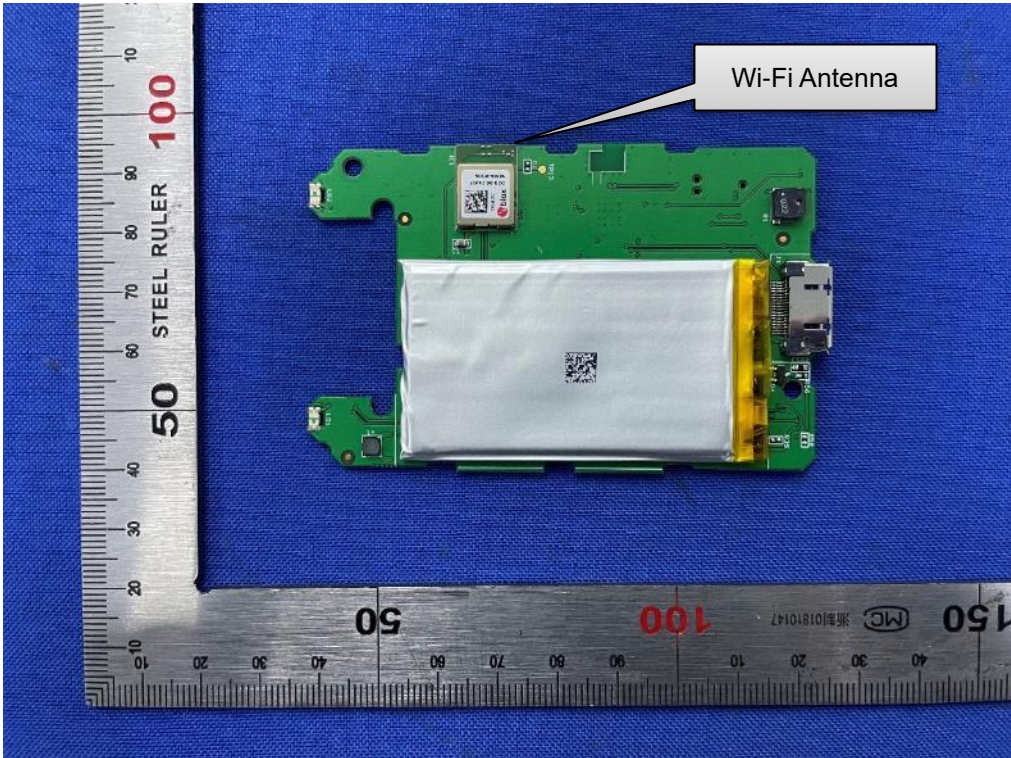
Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 43 of 52



Open of the sample



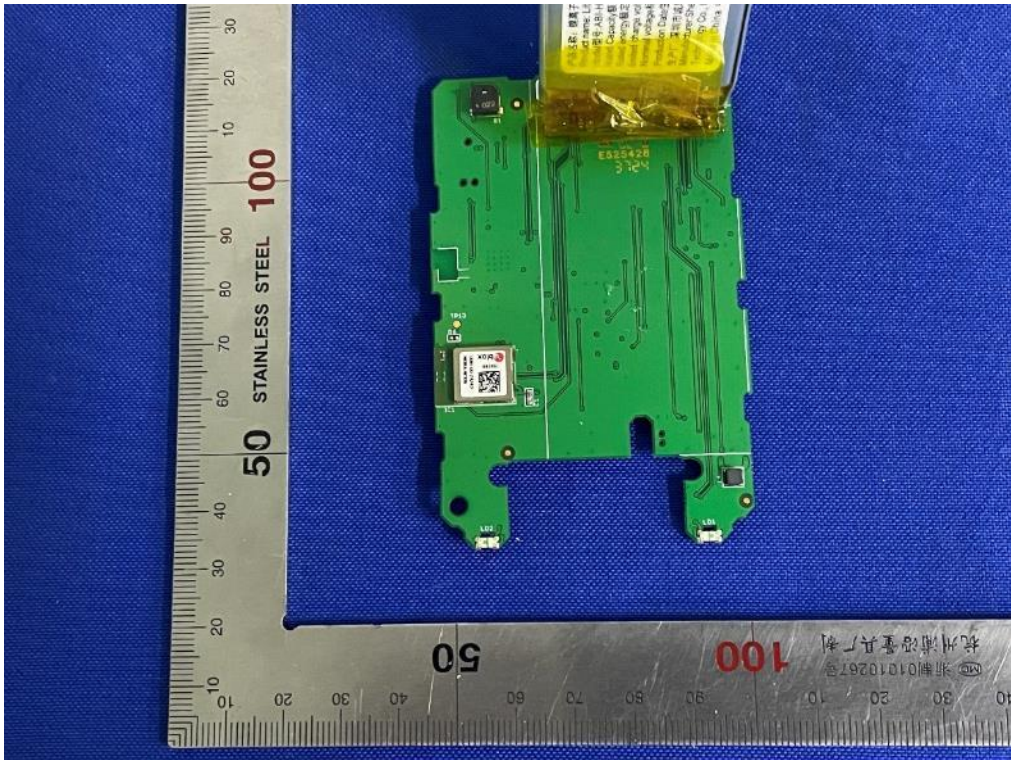
Internal-1 of the sample

# TEST REPORT

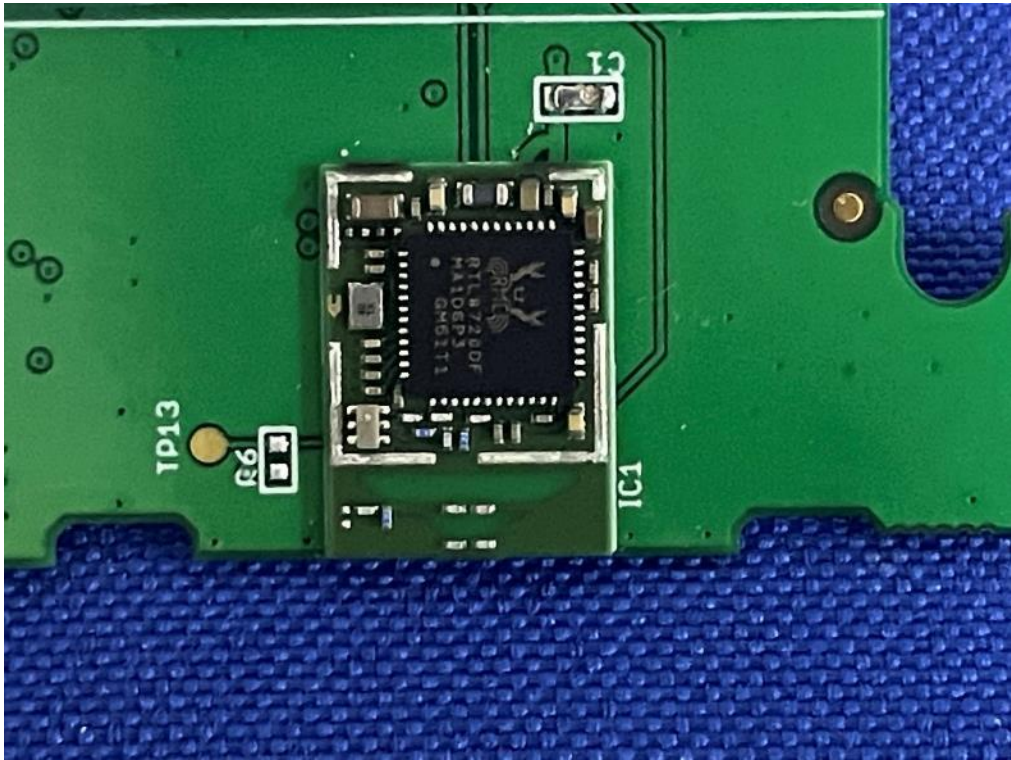
Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 44 of 52



Internal-2 of the sample



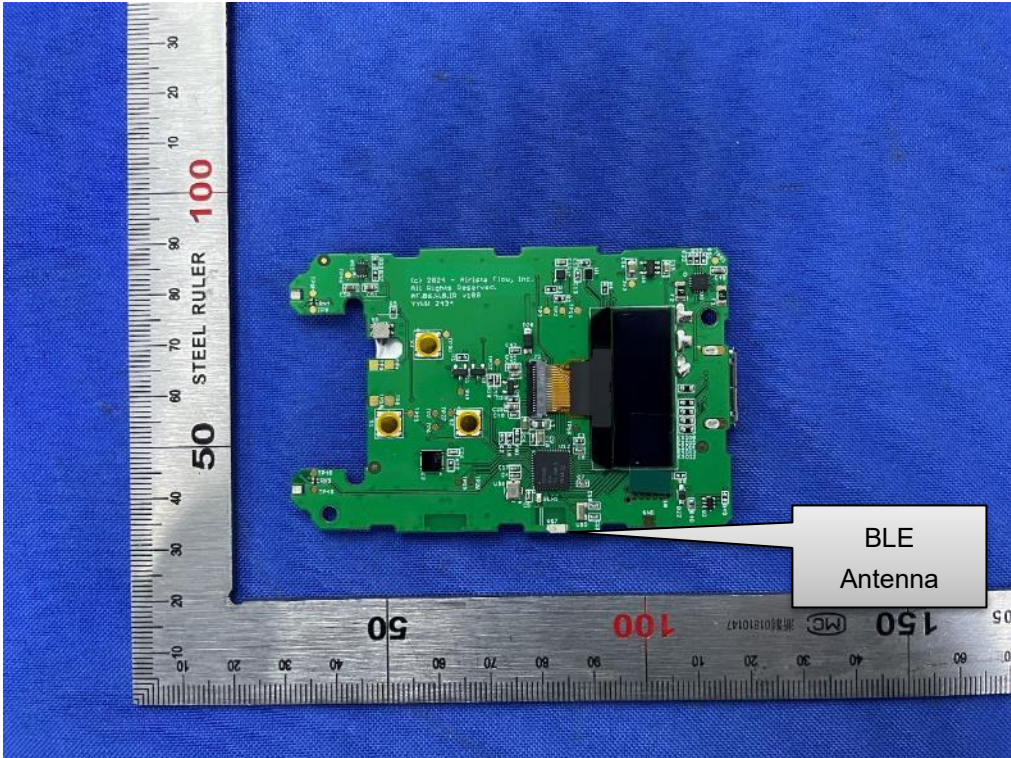
NORA-W306 Module

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 45 of 52



Internal-3 of the sample

Add a B6 model with a white shell

(Note: The difference is that only the shell color is different, everything else is the same)



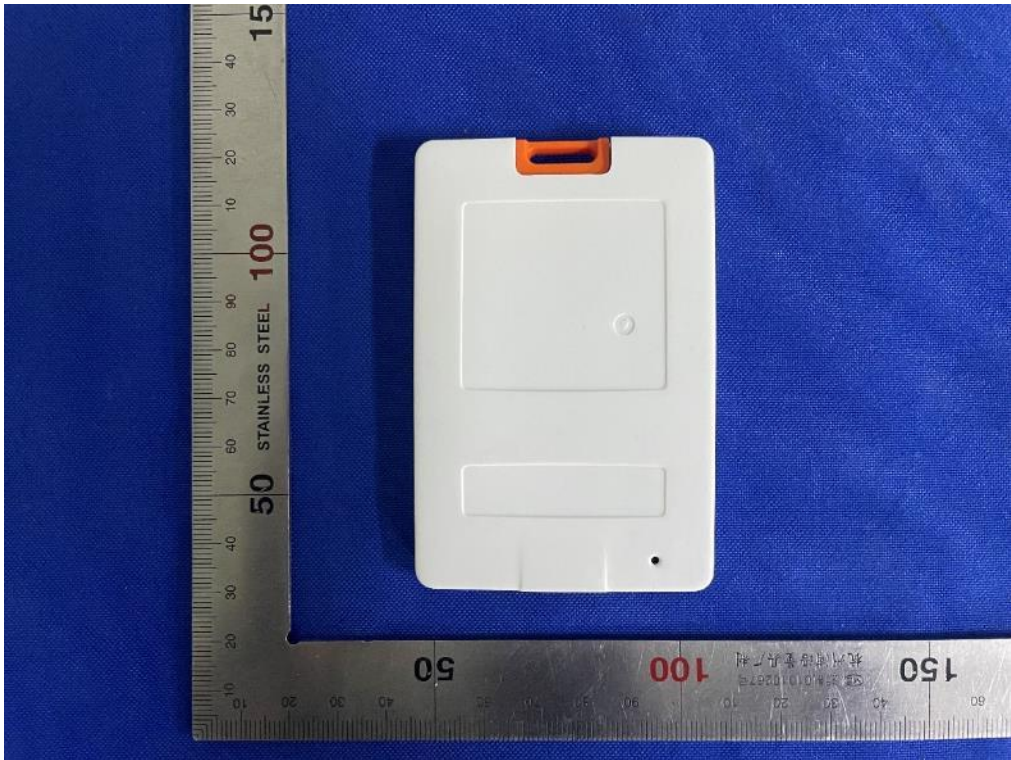
Front of the sample

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 46 of 52



Rear of the sample



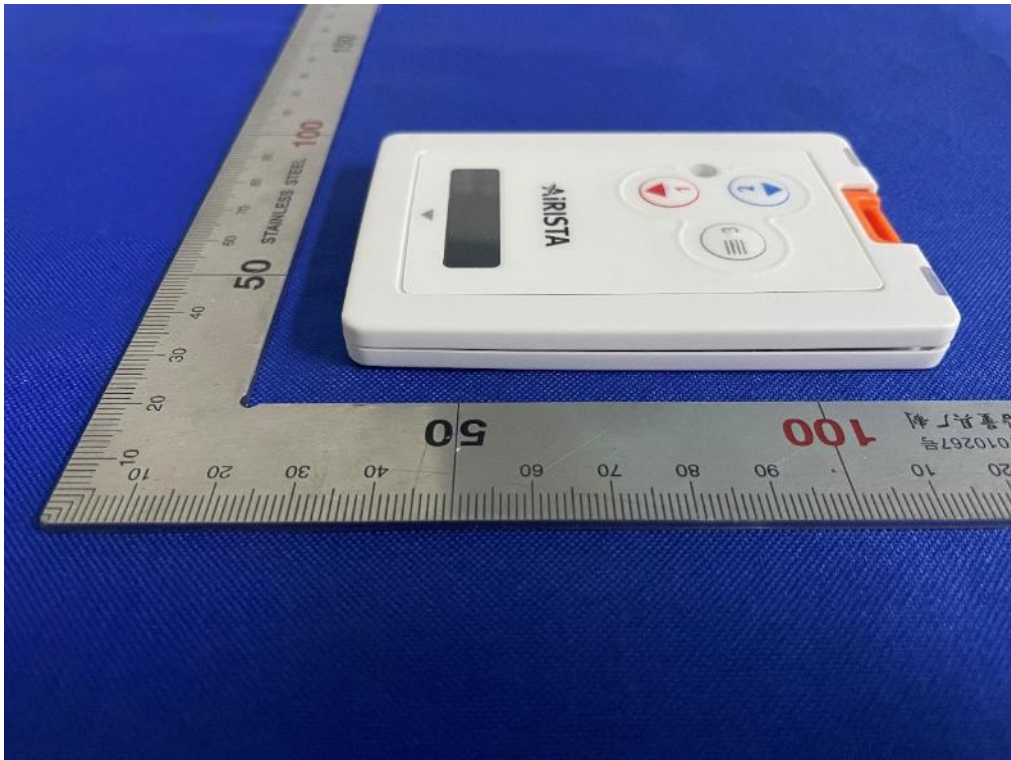
Left of the sample

# TEST REPORT

Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 47 of 52



Right of the sample



Top of the sample

# TEST REPORT

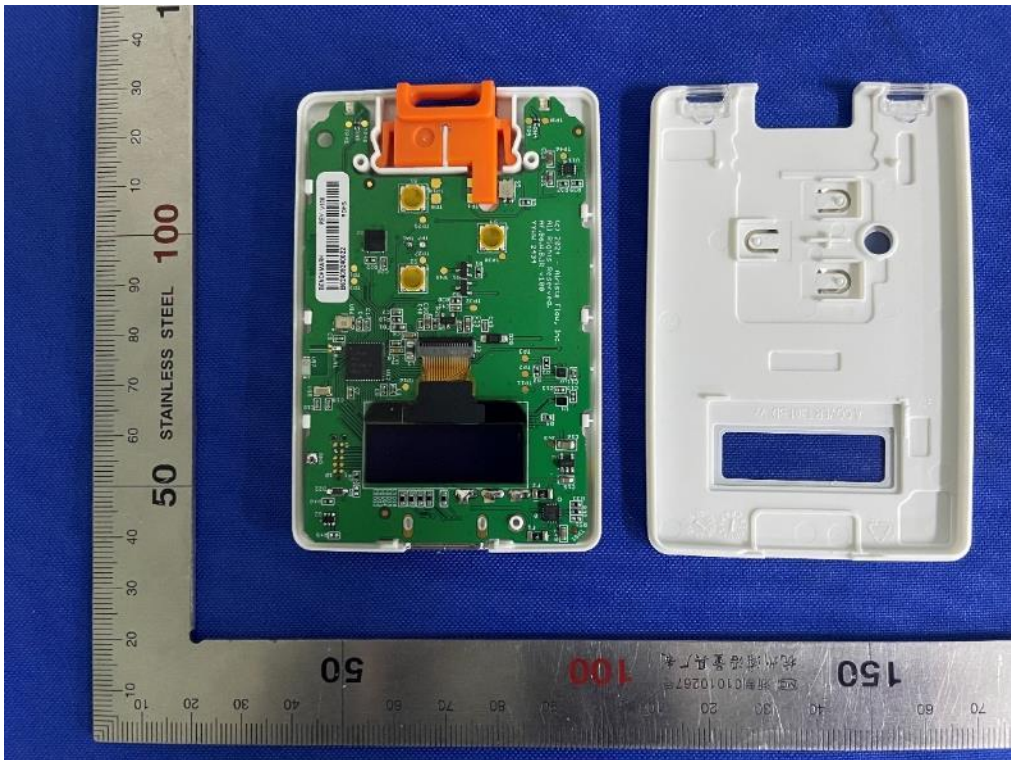
Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 48 of 52



Bottom of the sample



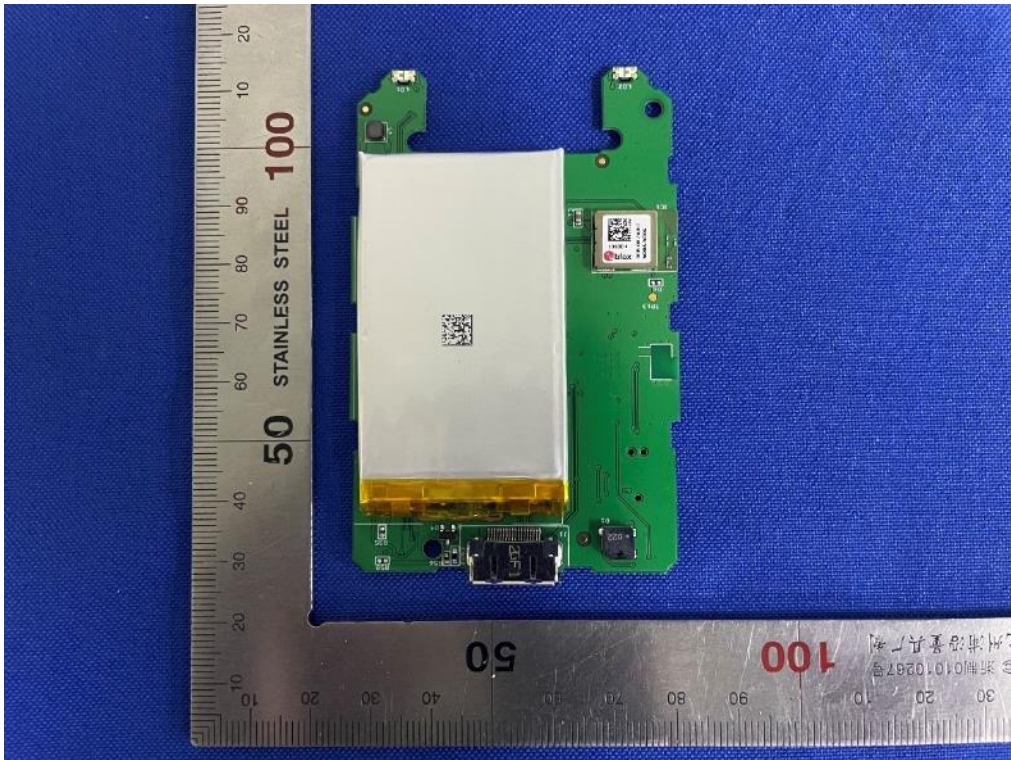
Open of the sample

# TEST REPORT

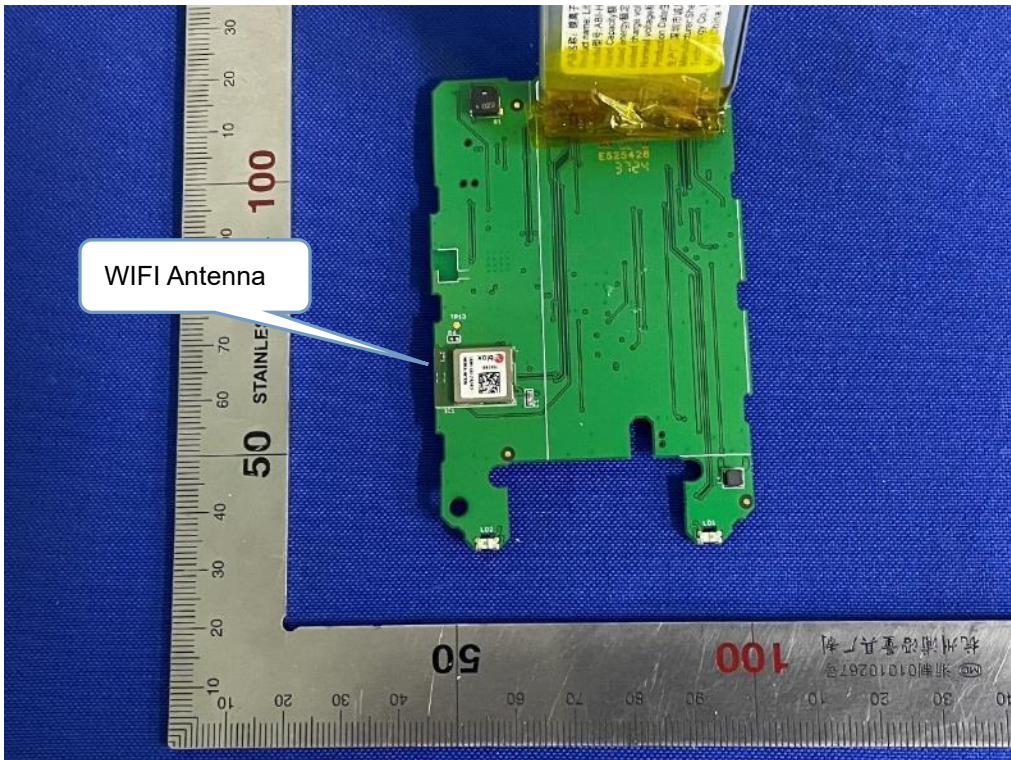
Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 49 of 52



Internal-1 of the sample



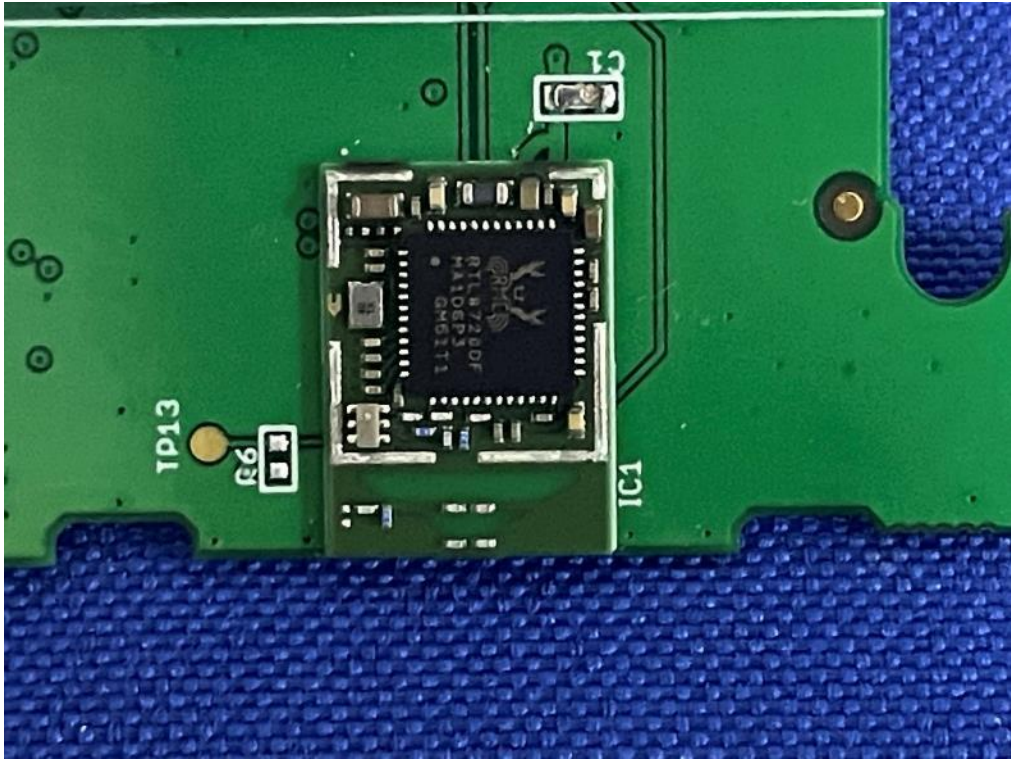
Internal-2 of the sample

# TEST REPORT

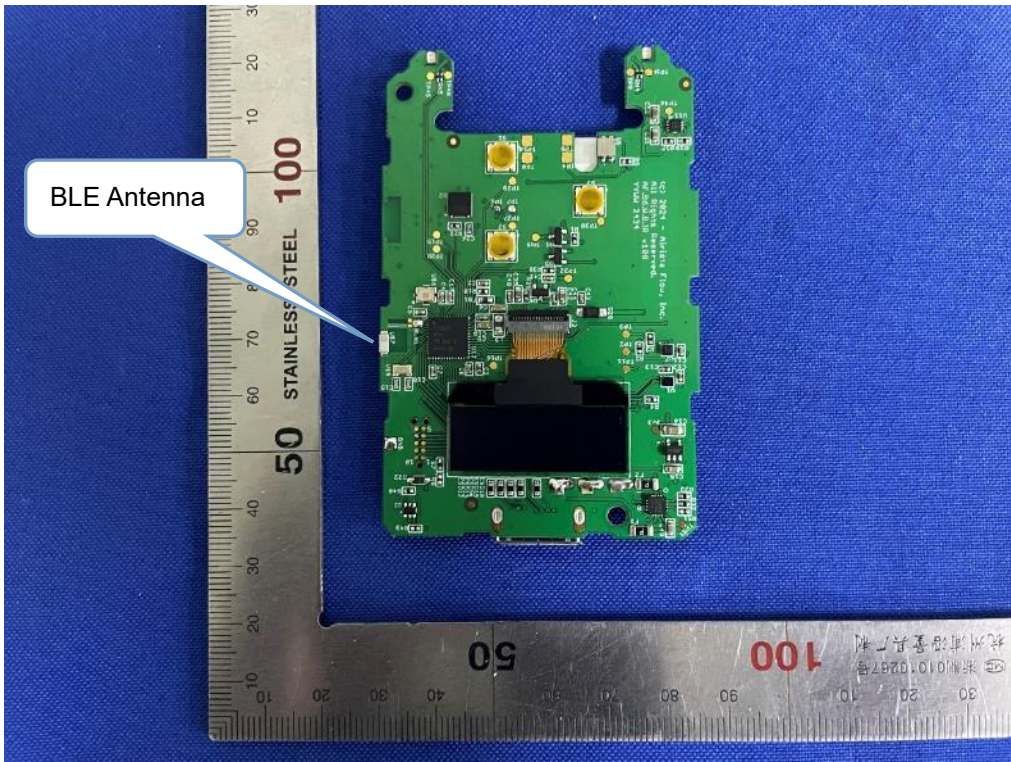
Report No.: SHE24120036-02FE

Date: 2025-04-14

Page 50 of 52



NORA-W306 Module



Internal-3 of the sample

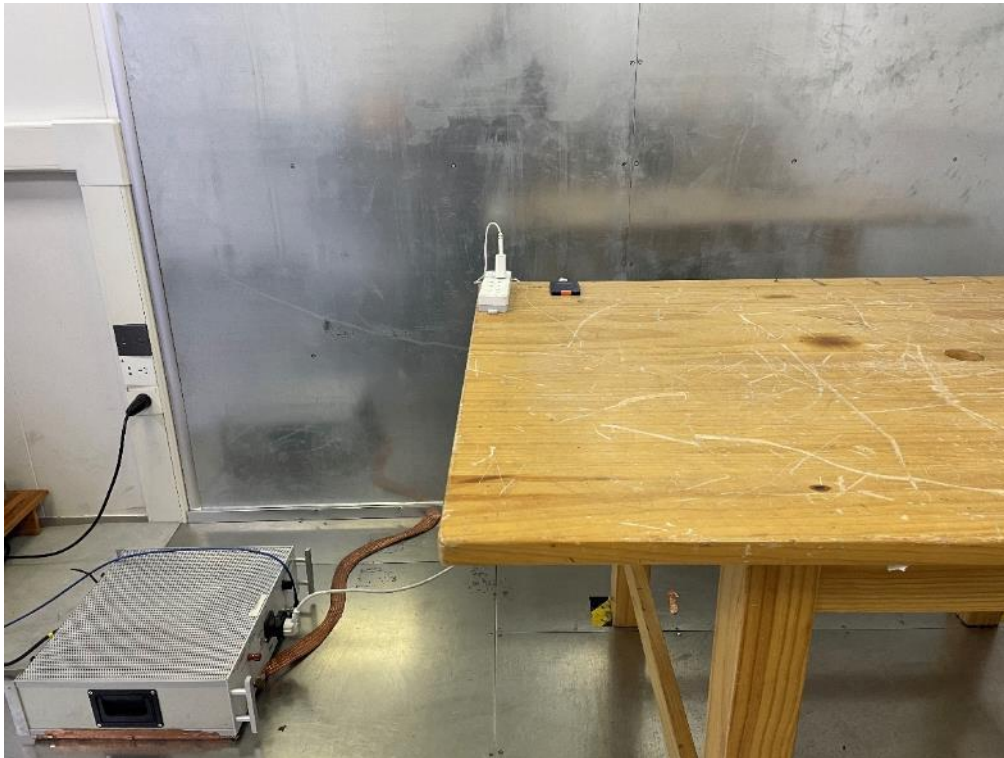
# TEST REPORT

Report No.: SHE24120036-02FE

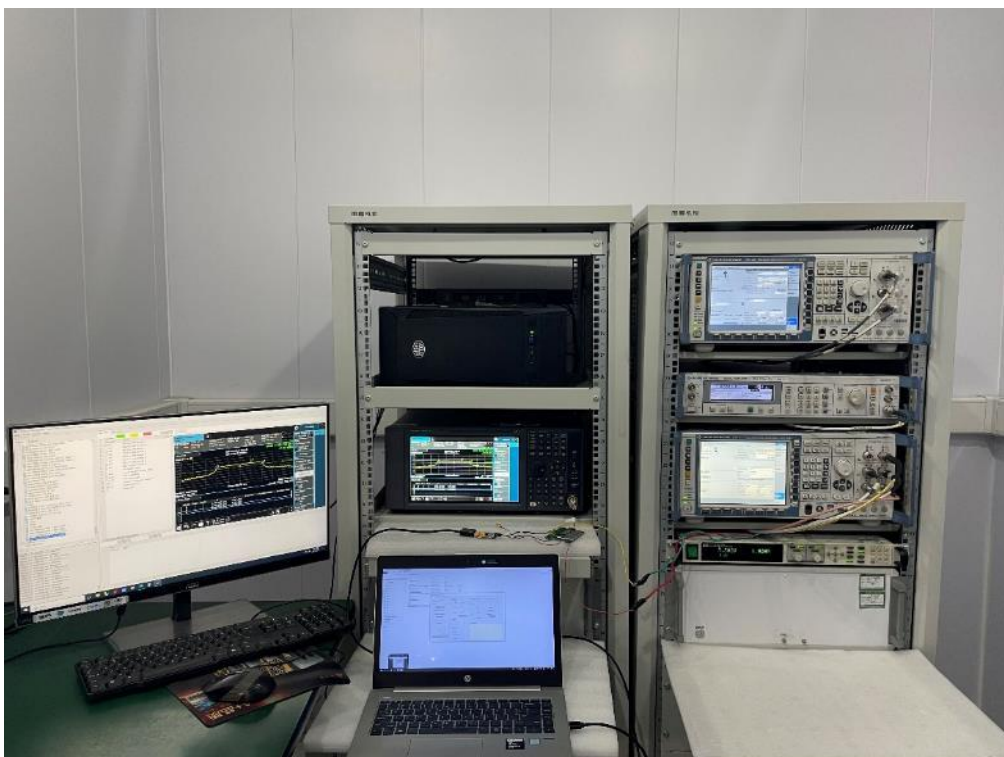
Date: 2025-04-14

Page 51 of 52

## 5.2 Set-up for Conducted Emissions



## 5.3 Set-up for Conducted RF test at Antenna Port



# TEST REPORT

Report No.: SHE24120036-02FE

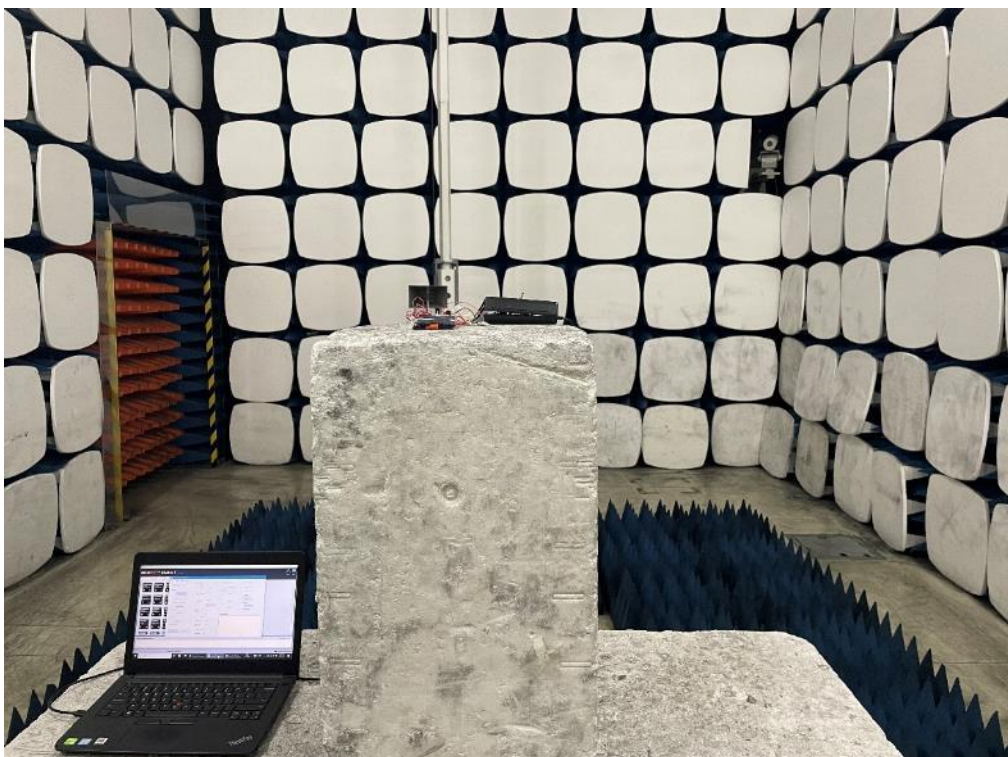
Date: 2025-04-14

Page 52 of 52

## 5.4 Set-up for Spurious Emissions below 1GHz



## 5.5 Set-up for Spurious Emissions above 1GHz



\*\*\*End of the report\*\*\*