

**MEASUREMENT REPORT****FCC PART 15.407 802.11ax/be WiFi 6E (OFDMA)****Applicant Name:**

Samsung Electronics Co., Ltd.  
129, Samsung-ro,  
Yeongtong-gu, Suwon-si  
Gyeonggi-do, 16677, Korea

**Date of Testing:**

03/14/2024 – 04/25/2024

**Test Report Issue Date:**

04/26/2024

**Test Site/Location:**

Element lab., Columbia, MD, USA

**Test Report Serial No.:**

1M2403190019-10.A3L

**FCC ID:**

**A3LNP940XMA**

**APPLICANT:**

**Samsung Electronics Co., Ltd.**

**Application Type:**

Certification

**Model:**

NP940XMA

**Additional Model:**

NP944XMA

**EUT Type:**

Portable Computing Device

**Frequency Range:**

5935 – 7115MHz

**Modulation Type:**

OFDMA

**FCC Classification:**

15E 6GHz Low Power Dual Client (6CD)

**FCC Rule Part(s):**

Part 15 Subpart E (15.407)

**Test Procedure(s):**

ANSI C63.10-2013, KDB 987594 D02 v02r01

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.



RJ Ortanez  
Executive Vice President



|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LNP940XMA                     | <b>MEASUREMENT REPORT</b>                     |                                               | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2403190019-10.A3L | <b>Test Dates:</b><br>03/14/2024 – 04/25/2024 | <b>EUT Type:</b><br>Portable Computing Device | Page 1 of 261                            |

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| Channel Bandwidth [MHz] | UNII Band | Tx Frequency [MHz] | MIMO            |                  |
|-------------------------|-----------|--------------------|-----------------|------------------|
|                         |           |                    | Max. Power [mW] | Max. Power [dBm] |
| 20                      | 5         | 5935 - 6415        | 9.82            | 9.92             |
|                         | 6         | 6435 - 6515        | 10.95           | 10.39            |
|                         | 7         | 6535 - 6875        | 9.89            | 9.95             |
|                         | 8         | 6895 - 7115        | 7.69            | 8.86             |
| 40                      | 5         | 5965 - 6405        | 19.80           | 12.97            |
|                         | 6         | 6445 - 6525        | 20.30           | 13.07            |
|                         | 7         | 6565 - 6845        | 17.35           | 12.39            |
|                         | 8         | 6885 - 7085        | 13.21           | 11.21            |
| 80                      | 5         | 5985 - 6385        | 28.82           | 14.60            |
|                         | 6         | 6465               | 29.93           | 14.76            |
|                         | 7         | 6545 - 6865        | 26.88           | 14.29            |
|                         | 8         | 6945 - 7025        | 18.95           | 12.78            |
| 160                     | 5         | 6025 - 6345        | 29.45           | 14.69            |
|                         | 6         | 6505               | 30.92           | 14.90            |
|                         | 7         | 6665 - 6825        | 25.82           | 14.12            |
|                         | 8         | 6985               | 20.51           | 13.12            |
| 320                     | 5         | 6105 - 6265        | 32.09           | 15.06            |
|                         | 6         | 6425               | 29.63           | 14.72            |
|                         | 7         | 6585 - 6745        | 25.31           | 14.03            |
|                         | 8         | 6905               | 19.61           | 12.93            |

### EUT Overview – Low Power Indoor Client – EIRP

| Channel Bandwidth [MHz] | UNII Band | Tx Frequency [MHz] | MIMO            |                  |
|-------------------------|-----------|--------------------|-----------------|------------------|
|                         |           |                    | Max. Power [mW] | Max. Power [dBm] |
| 20                      | 5         | 5935 - 6415        | 30.14           | 14.79            |
|                         | 7         | 6535 - 6875        | 26.80           | 14.28            |
| 40                      | 5         | 5965 - 6405        | 30.27           | 14.81            |
|                         | 7         | 6565 - 6845        | 24.38           | 13.87            |
| 80                      | 5         | 5985 - 6385        | 29.13           | 14.64            |
|                         | 7         | 6545 - 6865        | 26.63           | 14.25            |
| 160                     | 5         | 6025 - 6345        | 29.45           | 14.69            |
|                         | 7         | 6665 - 6825        | 25.82           | 14.12            |
| 320                     | 5         | 6105 - 6265        | 32.09           | 15.06            |
|                         | 7         | 6585 - 6745        | 25.07           | 13.99            |

### EUT Overview – Standard Power Client - EIRP

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
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## 1 INTRODUCTION

### 1.1 Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

### 1.2 Element Test Location

These measurement tests were conducted at the Element laboratory located at 7185 Oakland Mills Road, Columbia, MD 21046. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014.

### 1.3 Test Facility / Accreditations

Measurements were performed at Element lab located in Columbia, MD 21046, U.S.A.

- Element Washington DC LLC is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.01 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.
- Element Washington DC LLC TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISED Standards (RSS).
- Element Washington DC LLC facility is a registered (2451B) test laboratory with the site description on file with ISED.
- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB # US0110) for ISED Canada as designated by NIST under the U.S. and Canada Mutual Recognition Agreements (MRAs).

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
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## 2 PRODUCT INFORMATION

### 2.1 Equipment Description

The Equipment Under Test (EUT) is the **Samsung Electronics Co., Ltd. Portable Computing Device FCC ID: A3LNP940XMA**. The test data contained in this report pertains only to the emissions due to the EUT's UNII transmitter while operating in the 6GHz band.

**Test Device Serial No.:** 0260A, 0019H, 0270X, 0015V

### 2.2 Device Capabilities

This device contains the following capabilities:

802.11b/g/n/ax/be WLAN, 802.11a/n/ac/ax/be UNII (5GHz and 6GHz), Bluetooth (1x, EDR, LE)

| Band 5 |                 | Band 6 |                 | Band 7 |                 | Band 8 |                 |
|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|
| Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) |
| 2      | 5935            | 97     | 6435            | 117    | 6535            | 189    | 6895            |
| :      | :               | :      | :               | :      | :               | :      | :               |
| 45     | 6175            | 105    | 6475            | 149    | 6695            | 209    | 6995            |
| :      | :               | :      | :               | :      | :               | :      | :               |
| 93     | 6415            | 113    | 6515            | 185    | 6875            | 233    | 7115            |

Table 2-1. 802.11ax/be (20MHz) Frequency / Channel Operations

| Band 5 |                 | Band 6 |                 | Band 7 |                 | Band 8 |                 |
|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|
| Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) |
| 3      | 5965            | 99     | 6445            | 123    | 6565            | 187    | 6885            |
| :      | :               | :      | :               | :      | :               | :      | :               |
| 43     | 6165            | 107    | 6485            | 155    | 6725            | 211    | 7005            |
| :      | :               | :      | :               | :      | :               | :      | :               |
| 91     | 6405            | 115    | 6525            | 179    | 6845            | 227    | 7085            |

Table 2-2. 802.11 ax/be (40MHz BW) Frequency / Channel Operations

| Band 5 |                 | Band 6 |                 | Band 7 |                 | Band 8 |                 |
|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|
| Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) |
| 7      | 5985            | 103    | 6465            | 119    | 6545            | 199    | 6945            |
| :      | :               |        |                 | :      | :               | :      | :               |
| 39     | 6145            |        |                 | 151    | 6705            | 215    | 7025            |
| :      | :               |        |                 | :      | :               |        |                 |
| 87     | 6385            |        |                 | 183    | 6865            |        |                 |

Table 2-3. 802.11 ax/be (80MHz BW) Frequency / Channel Operations

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
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| Band 5 |                 | Band 6 |                 | Band 7 |                 | Band 8 |                 |
|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|
| Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) |
| 15     | 6025            | 111    | 6505            | 143    | 6665            | 207    | 6985            |
| :      | :               |        |                 | :      | :               |        |                 |
| 47     | 6185            |        |                 | 175    | 6825            |        |                 |
| :      | :               |        |                 |        |                 |        |                 |
| 79     | 6345            |        |                 |        |                 |        |                 |

**Table 2-4. 802.11ax/be (160MHz BW) Frequency / Channel Operations**

| Band 5 |                 | Band 6 |                 | Band 7 |                 | Band 8 |                 |
|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|
| Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) | Ch.    | Frequency (MHz) |
| 31     | 6105            | 95     | 6425            | 127    | 6585            | 191    | 6905            |
| 63     | 6265            |        |                 | 159    | 6745            |        |                 |

**Table 2-5. 802.11be (320MHz BW) Frequency / Channel Operations**

**Notes:**

- 6GHz NII operation is possible in 20MHz, 40MHz, 80MHz, 160MHz, and 320MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = peak per the guidance of Section B)2)b) of ANSI C63.10-2013. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
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| Band | Bandwidth | Tone Type | Tone Size  | Duty Cycle [%] |
|------|-----------|-----------|------------|----------------|
| 6GHz | 20MHz     | RU        | 26T        | 99.65          |
|      |           |           | 52T        | 99.65          |
|      |           |           | 106T       | 99.35          |
|      |           |           | 242T       | 98.50          |
|      |           | MRU       | 52+26T     | 99.51          |
|      |           |           | 106+26T    | 99.08          |
|      | 40MHz     | RU        | 26T        | 99.67          |
|      |           |           | 52T        | 99.67          |
|      |           |           | 106T       | 99.35          |
|      |           |           | 242T       | 98.66          |
|      |           |           | 484T       | 97.39          |
|      | 80MHz     | RU        | 26T        | 99.65          |
|      |           |           | 52T        | 99.65          |
|      |           |           | 106T       | 99.32          |
|      |           |           | 242T       | 98.58          |
|      |           |           | 484T       | 97.41          |
|      |           |           | 996T       | 97.38          |
|      |           | MRU       | 484+242T   | 98.05          |
|      | 160MHz    | RU        | 26T        | 99.63          |
|      |           |           | 52T        | 99.65          |
|      |           |           | 106T       | 99.35          |
|      |           |           | 242T       | 98.58          |
|      |           |           | 484T       | 97.41          |
|      |           |           | 996T       | 97.38          |
|      |           |           | 2x996T     | 99.67          |
|      |           | MRU       | 966+484T   | 98.02          |
|      | 320MHz    | RU        | 26T        | 99.65          |
|      |           |           | 52T        | 99.65          |
|      |           |           | 106T       | 99.35          |
|      |           |           | 242T       | 98.58          |
|      |           |           | 484T       | 98.15          |
|      |           |           | 996T       | 97.37          |
|      |           |           | 2x996T     | 97.36          |
|      |           |           | 4x996T     | 97.98          |
|      |           | MRU       | 2x996+484T | 97.14          |
|      |           |           | 3x996T     | 96.64          |
|      |           |           | 3x996+484T | 96.23          |

**Table 2-6. Measured Duty Cycle**

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
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2. The device employs MIMO technology. Below are the possible configurations.

| WiFi Configurations |      | SISO |      | CDD  |      | SDM  |      |
|---------------------|------|------|------|------|------|------|------|
|                     |      | ANT1 | ANT2 | ANT1 | ANT2 | ANT1 | ANT2 |
| 6 GHz               | 11a  | ✗    | ✗    | ✓    | ✓    | ✗    | ✗    |
|                     | 11ax | ✗    | ✗    | ✓    | ✓    | ✓    | ✓    |
|                     | 11be | ✗    | ✗    | ✓    | ✓    | ✓    | ✓    |

**Table 2-7. Frequency / Channel Operations**

✓ = Support; ✗ = NOT Support

**SISO** = Single Input Single Output

**SDM** = Spatial Diversity Multiplexing – MIMO function

**CDD** = Cyclic Delay Diversity - 2Tx Function

3. The device supports the following data rates (shown in Mbps):

| MCS Index | Spatial Stream | OFDMA (802.11ax) |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|-----------|----------------|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|           |                | 26T              |          |          |          |          |          | 52T      |          |          |          |          |          | 106T     |          |          |          |          |          | 242T     |          |          |          |          |          |
|           |                | 0.8μs GI         | 1.6μs GI | 3.2μs GI | 0.8μs GI | 1.6μs GI | 3.2μs GI | 0.8μs GI | 1.6μs GI | 3.2μs GI | 0.8μs GI | 1.6μs GI | 3.2μs GI | 0.8μs GI | 1.6μs GI | 3.2μs GI | 0.8μs GI | 1.6μs GI | 3.2μs GI | 0.8μs GI | 1.6μs GI | 3.2μs GI | 0.8μs GI | 1.6μs GI | 3.2μs GI |
| 0         | 1              | 0.9              | 0.8      | 0.8      | 1.8      | 1.7      | 1.5      | 3.8      | 3.5      | 3.2      | 8.6      | 8.1      | 7.3      | 17.2     | 16.3     | 14.6     | 34.4     | 32.5     | 29.3     | 72.1     | 68.1     | 61.3     | 144.1    | 136.1    | 122.5    |
| 1         | 1              | 1.8              | 1.7      | 1.5      | 3.5      | 3.3      | 3        | 7.5      | 7.1      | 6.4      | 17.2     | 16.3     | 14.6     | 34.4     | 32.5     | 29.3     | 72.1     | 68.1     | 61.3     | 144.1    | 136.1    | 122.5    | 216.2    | 204.2    | 183.8    |
| 2         | 1              | 2.6              | 2.5      | 2.3      | 5.3      | 5        | 4.5      | 11.3     | 10.6     | 9.6      | 25.8     | 24.4     | 21.9     | 51.6     | 48.8     | 43.9     | 108.1    | 102.1    | 91.9     | 216.2    | 204.2    | 183.8    | 432.4    | 408.3    | 367.5    |
| 3         | 1              | 3.5              | 3.3      | 3        | 7.1      | 6.7      | 6        | 15       | 14.2     | 12.8     | 34.4     | 32.5     | 29.3     | 68.8     | 65       | 58.5     | 144.1    | 136.1    | 122.5    | 288.2    | 272.2    | 245      | 576.5    | 544.4    | 490      |
| 4         | 1              | 5.3              | 5        | 4.5      | 10.6     | 10       | 9        | 22.5     | 21.3     | 19.1     | 51.6     | 48.8     | 43.9     | 103.2    | 97.5     | 87.8     | 216.2    | 204.2    | 183.8    | 432.4    | 408.3    | 367.5    | 864.7    | 816.7    | 735      |
| 5         | 1              | 7.1              | 6.7      | 6        | 14.1     | 13.3     | 12       | 30       | 28.3     | 25.5     | 68.8     | 65       | 58.5     | 137.6    | 130      | 117      | 288.2    | 272.2    | 245      | 576.5    | 544.4    | 490      | 1152.9   | 1088.9   | 980      |
| 6         | 1              | 7.9              | 7.5      | 6.8      | 15.9     | 15       | 13.5     | 33.8     | 31.9     | 28.7     | 77.4     | 73.1     | 65.8     | 154.9    | 146.3    | 131.6    | 324.3    | 306.3    | 275.6    | 648.5    | 612.5    | 551.3    | 1297.1   | 1225     | 1102.5   |
| 7         | 1              | 8.8              | 8.3      | 7.5      | 17.6     | 16.7     | 15       | 37.5     | 35.4     | 31.9     | 86       | 81.3     | 73.1     | 172.1    | 162.5    | 146.3    | 360.3    | 340.3    | 306.3    | 720.6    | 680.6    | 612.5    | 1441.2   | 1361.1   | 1225     |
| 8         | 1              | 10.6             | 10       | 9        | 21.2     | 20       | 18       | 45       | 42.5     | 38.3     | 103.2    | 97.5     | 87.8     | 206.5    | 195      | 175.5    | 432.4    | 408.3    | 367.5    | 864.7    | 816.7    | 735      | 1729.4   | 1633.3   | 1470     |
| 9         | 1              | 11.8             | 11.1     | 10       | 23.5     | 22.2     | 20       | 50       | 47.2     | 42.5     | 114.7    | 108.3    | 97.5     | 229.4    | 216.7    | 195      | 480.4    | 453.7    | 408.3    | 960.8    | 907.4    | 816.7    | 1921.6   | 1814.8   | 1633.3   |
| 10        | 1              | 13.2             | 12.5     | 11.3     | 26.5     | 25       | 22.5     | 56.3     | 53.1     | 47.8     | 129      | 121.9    | 109.7    | 258.1    | 243.8    | 219.4    | 540.4    | 510.4    | 459.4    | 1080.9   | 1020.8   | 918.8    | 2161.8   | 2041.7   | 1837.5   |
| 11        | 1              | 14.7             | 13.9     | 12.5     | 29.4     | 27.8     | 25       | 62.5     | 59       | 53.1     | 143.4    | 135.4    | 121.9    | 286.8    | 270.8    | 243.8    | 600.5    | 567.1    | 510.4    | 1201     | 1134.3   | 1020.8   | 2402     | 2268.5   | 2041.7   |
| 0         | 2              | 1.8              | 1.7      | 1.5      | 3.5      | 3.3      | 3        | 7.5      | 7.1      | 6.4      | 17.2     | 16.3     | 14.6     | 34.4     | 32.5     | 29.3     | 72.1     | 68.1     | 61.3     | 144.1    | 136.1    | 122.5    | 288.2    | 272.2    | 245      |
| 1         | 2              | 3.5              | 3.3      | 3        | 7.1      | 6.7      | 6        | 15       | 14.2     | 12.8     | 34.4     | 32.5     | 29.3     | 68.8     | 65       | 58.5     | 144.1    | 136.1    | 122.5    | 288.2    | 272.2    | 245      | 576.5    | 544.4    | 490      |
| 2         | 2              | 5.3              | 5        | 4.5      | 10.6     | 10       | 9        | 22.5     | 21.3     | 19.1     | 51.6     | 48.8     | 43.9     | 103.2    | 97.5     | 87.8     | 216.2    | 204.2    | 183.8    | 432.4    | 408.3    | 367.5    | 864.7    | 816.7    | 735      |
| 3         | 2              | 7.1              | 6.7      | 6        | 14.1     | 13.3     | 12       | 30       | 28.3     | 25.5     | 68.8     | 65       | 58.5     | 137.6    | 130      | 117      | 288.2    | 272.2    | 245      | 576.5    | 544.4    | 490      | 1152.9   | 1088.9   | 980      |
| 4         | 2              | 10.6             | 10       | 9        | 21.2     | 20       | 18       | 45       | 42.5     | 38.3     | 103.2    | 97.5     | 87.8     | 206.5    | 195      | 175.5    | 432.4    | 408.3    | 367.5    | 864.7    | 816.7    | 735      | 1729.4   | 1633.3   | 1470     |
| 5         | 2              | 14.1             | 13.3     | 12       | 28.2     | 26.7     | 24       | 60       | 56.7     | 51       | 137.6    | 130      | 117      | 275.3    | 260      | 234      | 576.5    | 544.4    | 490      | 1152.9   | 1088.9   | 980      | 2305.8   | 2161.8   | 1921.6   |
| 6         | 2              | 15.9             | 15       | 13.5     | 31.8     | 30       | 27       | 67.5     | 63.8     | 57.4     | 154.9    | 146.3    | 131.6    | 309.7    | 292.5    | 263.3    | 648.5    | 612.5    | 551.3    | 1297.1   | 1225     | 1102.5   | 2882.2   | 2722.2   | 2450     |
| 7         | 2              | 17.6             | 16.7     | 15       | 35.3     | 33.3     | 30       | 75       | 70.8     | 63.8     | 172.1    | 162.5    | 146.3    | 344.1    | 325      | 292.5    | 720.6    | 680.6    | 612.5    | 1441.2   | 1361.1   | 1225     | 3243.3   | 3063.3   | 2756.3   |
| 8         | 2              | 21.2             | 20       | 18       | 42.4     | 40       | 36       | 90       | 85       | 76.5     | 206.5    | 195      | 175.5    | 412.9    | 390      | 351      | 864.7    | 816.7    | 735      | 1729.4   | 1633.3   | 1470     | 4083.3   | 3863.3   | 3470     |
| 9         | 2              | 23.5             | 22.2     | 20       | 47.1     | 44.4     | 40       | 100      | 94.4     | 85       | 229.4    | 216.7    | 195      | 458.8    | 433.3    | 390      | 960.8    | 907.4    | 816.7    | 1921.6   | 1814.8   | 1633.3   | 4324.4   | 4083.3   | 3675.3   |
| 10        | 2              | 26.5             | 25       | 22.5     | 52.9     | 50       | 45       | 112.5    | 106.3    | 95.6     | 258.1    | 243.8    | 219.4    | 516.2    | 487.5    | 438.8    | 1080.9   | 1020.8   | 918.8    | 2161.8   | 2041.7   | 1837.5   | 4804.4   | 4537.7   | 4083.3   |
| 11        | 2              | 29.4             | 27.8     | 25       | 58.8     | 55.6     | 50       | 125      | 118.1    | 106.3    | 286.8    | 270.8    | 243.8    | 573.5    | 541.7    | 487.5    | 1201     | 1134.3   | 1020.8   | 2402     | 2268.5   | 2041.7   | 5005.8   | 4737.7   | 4242.5   |

**Table 2-8. Supported Data Rates**

4. The device supports either Standard Power (SP) or Low Power Indoor (LPI) operation in the following UNII bands:

| UNII Band | Standard Power (SP) | Low Power Indoor (LPI) |
|-----------|---------------------|------------------------|
| UNII 5    | ✓                   | ✓                      |
| UNII 6    | ✗                   | ✓                      |
| UNII 7    | ✓                   | ✓                      |
| UNII 8    | ✗                   | ✓                      |

**Table 2-9. Power Operation**

✓ = Support; ✗ = NOT Support

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
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## 2.3 Antenna Description

The following antenna gains are used in this device per the "Antenna Gain" document provided by the client. This document is also included in the filing as a public exhibit.

|                 | Ant1<br>Peak Gain<br>[dBi] | Ant2<br>Peak Gain<br>[dBi] | Directional<br>Gain [dBi] |
|-----------------|----------------------------|----------------------------|---------------------------|
| 5925 – 6425 MHz | 0.55                       | -0.74                      | 3.17                      |
| 6425 – 6525 MHz | 0.02                       | 0.36                       | 3.19                      |
| 6525 – 6875 MHz | -0.56                      | -0.44                      | 2.51                      |
| 6875 – 7125 MHz | -1.65                      | -1.62                      | 1.38                      |

**Table 2-10. Antenna Peak Gain**

|                 | Ant1<br>Peak Gain<br>[dBi] | Ant2<br>Peak Gain<br>[dBi] | Directional<br>Gain [dBi] |
|-----------------|----------------------------|----------------------------|---------------------------|
| 5925 – 6425 MHz | -0.01                      | -1.58                      | 2.25                      |
| 6425 – 6525 MHz | 0.00                       | -1.75                      | 2.18                      |
| 6525 – 6875 MHz | -1.33                      | -0.86                      | 1.92                      |
| 6875 – 7125 MHz | -2.26                      | -3.96                      | -0.06                     |

**Table 2-11. Antenna Peak Gain (Lowest gain)**

## 2.4 Test Configuration

ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing. See Sections 3.2 for AC line conducted emissions test setups, 3.3 for radiated emissions test setups, and 7.2, 7.3, 7.4, 7.5 and 7.6 for antenna port conducted emissions test setups.

This device supports operation under control of either a low-power indoor access point or standard power access point for frequency ranges 5925 – 6425 MHz and 6525 – 6875 MHz. Power for the EUT may vary depending on whether the device is connected to a standard access point (SP Operation) or a low-power indoor access point (LPI Operation). In cases where these targets differ two data sets have been provided to demonstrate compliance. The worst-case emissions data is shown in this report.

## 2.5 Software and Firmware

The test was conducted with firmware version REV 1.0 and software version Windows 11 installed on the EUT.

## 2.6 EMI Suppression Device(s) / Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
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### 3 DESCRIPTION OF TESTS

#### 3.1 Evaluation Procedure

The measurement procedures described in the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices (ANSI C63.10-2013) and the guidance provided in KDB 987594 D02 v01r01 were used in the measurement of the EUT.

Deviation from measurement procedure.....None

#### 3.2 AC Line Conducted Emissions

The line-conducted facility is located inside a 10'x16'x9' shielded enclosure. The shielded enclosure is manufactured by ETS Lindgren RF Enclosures. The shielding effectiveness of the shielded room is in accordance with MIL-Std-285 or NSA 65-5. A 1m x 1.5m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50μH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. The external power line filter is an ETS Lindgren Model LPRX-4X30 (100dB Attenuation, 14kHz-18GHz) and the two EMI/RFI filters are ETS Lindgren Model LRW-2030-S1 (100dB Minimum Insertion Loss, 14kHz – 10GHz). These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply line(s) will be connected to the second LISN. All interconnecting cables more than 1 meter were shortened to a 1-meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference groundplane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the spectrum analyzer and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The spectrum was scanned from 150kHz to 30MHz with a spectrum analyzer. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 10kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Once the worst-case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions is used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
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### 3.3 Radiated Emissions

The radiated test facilities consisted of an indoor 3-meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. The test site inside the chamber is a 6m x 5.2m elliptical, obstruction-free area in accordance with Figure 5.7 of Clause 5 in ANSI C63.4-2014. Absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections for measurements above 1GHz. An 80cm tall test table made of Styrodur is placed on top of the turn table. For measurements above 1GHz, an additional Styrodur pedestal is placed on top of the test table to bring the total table height to 1.5m.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33 depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up was placed on top of the 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, mode of operation, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions.

All radiated measurements are performed in a chamber that meets the site requirements per ANSI C63.4-2014. Additionally, radiated emissions below 30MHz are also validated on an Open Area Test Site to assert correlation with the chamber measurements per the requirements of KDB 414788 D01 v01r01.

### 3.4 Environmental Conditions

The temperature is controlled within range of 15°C to 35°C. The relative humidity is controlled within range of 10% to 75%. The atmospheric pressure is monitored within the range 86-106kPa (860-1060mbar).

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
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## 4 ANTENNA REQUIREMENTS

### Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 antennas of the EUT are **permanently attached**.
- There are no provisions for connection to an external antenna.

### Conclusion:

The EUT complies with the requirement of §15.203.

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
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## 5 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All measurement uncertainty values are shown with a coverage factor of  $k = 2$  to indicate a 95% level of confidence. The measurement uncertainty shown below meets or exceeds the  $U_{\text{CISPR}}$  measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

| Contribution                                     | Expanded Uncertainty ( $\pm$ dB) |
|--------------------------------------------------|----------------------------------|
| Contention Based Protocol Conducted Measurements | 0.86                             |
| Conducted Bench Top Measurements                 | 1.13                             |
| Line Conducted Disturbance                       | 3.09                             |
| Radiated Disturbance (<1GHz)                     | 4.98                             |
| Radiated Disturbance (>1GHz)                     | 5.07                             |
| Radiated Disturbance (>18GHz)                    | 5.09                             |

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
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## 6 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST). Measurements antennas used during testing were calibrated in accordance to the requirements of ANSI C63.5-2017.

| Manufacturer          | Model     | Description                         | Cal Date   | Cal Interval | Cal Due    | Serial Number |
|-----------------------|-----------|-------------------------------------|------------|--------------|------------|---------------|
| N/A                   | WL25-1    | Conducted Cable Set (25GHz)         | 11/15/2023 | Annual       | 11/15/2024 | WL25-1        |
| N/A                   | WL25-2    | WLAN Cable Set (25GHz)              | 11/15/2023 | Annual       | 11/15/2024 | WL25-2        |
| N/A                   | WL40-1    | WLAN Cable Set (40GHz)              | 11/15/2023 | Annual       | 11/15/2024 | WL40-1        |
| N/A                   | ETS-001   | EMC Cable and Switch System         | 11/15/2023 | Annual       | 11/15/2024 | ETS-001       |
| N/A                   | ETS-002   | EMC Cable and Switch System         | 11/15/2023 | Annual       | 11/15/2024 | ETS-002       |
| N/A                   | AP1-002   | EMC Cable and Switch System         | 11/15/2023 | Annual       | 11/15/2024 | AP1-002       |
| N/A                   | AP2-001   | EMC Cable and Switch System         | 11/15/2023 | Annual       | 11/15/2024 | AP2-001       |
| N/A                   | AP2-002   | EMC Cable and Switch System         | 11/15/2023 | Annual       | 11/15/2024 | AP2-002       |
| Anritsu               | MA2411B   | Pulse Power Sensor                  | 11/8/2023  | Annual       | 11/8/2024  | 1027293       |
| Anritsu               | MA2411B   | Pulse Power Sensor                  | 6/14/2023  | Annual       | 6/14/2024  | 1911105       |
| Keysight Technologies | N9038A    | MXE EMI Receiver                    | 8/30/2023  | Annual       | 8/30/2024  | MY51210133    |
| Keysight Technologies | N9030A    | PXA Signal Analyzer                 | 2/29/2024  | Annual       | 3/1/2025   | MY55410501    |
| Keysight Technologies | N9020A    | MXA Signal Analyzer                 | 4/11/2024  | Annual       | 4/11/2025  | MY54500644    |
| Pasternack            | NMLC-2    | Line Conducted Emissions Cable (NM) | 11/15/2023 | Annual       | 11/15/2024 | NMLC-2        |
| Rohde & Schwarz       | ESU26     | EMI Test Receiver (26.5GHz)         | 9/25/2023  | Annual       | 9/25/2024  | 100342        |
| Rohde & Schwarz       | ESU40     | EMI Test Receiver (40GHz)           | 9/11/2023  | Annual       | 9/11/2024  | 100348        |
| Rohde & Schwarz       | FSW67     | Signal / Spectrum Analyzer          | 2/15/2024  | Annual       | 2/15/2025  | 103200        |
| Rohde & Schwarz       | SFUNIT-Rx | Shielded Filter Unit                | 3/15/2023  | Biennial     | 3/15/2025  | 102136        |
| Rohde & Schwarz       | SFUNIT-Rx | Shielded Filter Unit                | 3/15/2023  | Biennial     | 3/15/2025  | 102132        |
| Rohde & Schwarz       | SFUNIT-Rx | Shielded Filter Unit                | 1/11/2024  | Annual       | 1/11/2025  | 102151        |
| Sunol Sciences        | DRH-118   | Horn (Small)                        | 2/21/2024  | Biennial     | 2/21/2026  | A050307       |
| Sunol Sciences        | JB5       | Bi-Log Antenna (30M-5GHz)           | 8/30/2022  | Biennial     | 8/30/2024  | A051107       |

**Table 6-1. Annual Test Equipment Calibration Schedule**

**Note:**

For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.

|                                                |                                               |                                               |                                          |
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## 7 TEST RESULTS

### 7.1 Summary

Company Name: Samsung Electronics Co., Ltd.  
FCC ID: A3LNP940XMA  
FCC Classification: 15E 6GHz Low Power Dual Client (6CD)

| FCC Part Section(s)   | Test Description                                                              | Test Limit                                                                                                                                                                                                              | Test Condition | Test Result | Reference               |
|-----------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|-------------------------|
| 2.1046, 15.407(a)(12) | Maximum Conducted Output Power                                                | N/A                                                                                                                                                                                                                     | CONDUCTED      | PASS        | Section 7.3             |
| 15.407(a)(8)          | Maximum Radiated Output Power (LPI)                                           | < 24dBm over the frequency band of operation                                                                                                                                                                            |                | PASS        | Section 7.3             |
| 15.407(a)(7)          | Maximum Radiated Output Power (SP)                                            | < 30dBm over the frequency band of operation                                                                                                                                                                            |                | PASS        | Section 7.3             |
| 2.1049, 15.407(a)(11) | Occupied Bandwidth/ 26dB Bandwidth                                            | 99% of the occupied bandwidth of any channel must be contained within each of its respective U-NII sub bands. The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz. |                | PASS        | Section 7.2             |
| 15.407(a)(8)          | Maximum Power Spectral Density (LPI)                                          | < -1dBm/MHz e.i.r.p.                                                                                                                                                                                                    |                | PASS        | Section 7.4             |
| 15.407(a)(7)          | Maximum Power Spectral Density (SP)                                           | < 17dBm/MHz e.i.r.p.                                                                                                                                                                                                    |                | PASS        | Section 7.4             |
| 15.407(a)(7)          | Power Reduction Verification for standard client device                       | EUT must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power                                                                                              |                | PASS        | Attestation             |
| 15.407(b)(7)          | In-Band Emissions                                                             | EUT must meet the limits detailed in RSS-248 [4.6.2]                                                                                                                                                                    |                | PASS        | Section 7.5             |
| 15.407(d)(6)          | Contention Based Protocol                                                     | EUT must detect AWGN signal with 90% (or better) certainty                                                                                                                                                              |                | PASS        | Section 7.6             |
| 15.407(b)(6)          | Undesirable Emissions                                                         | < -27dBm/MHz e.i.r.p. outside of the 5.925 – 7.125GHz band                                                                                                                                                              | RADIATED       | PASS        | Section 7.7             |
| 15.205, 15.209        | General Field Strength Limits (Restricted Bands and Radiated Emission Limits) | Emissions shall comply with RSS-Gen (8.9) limits                                                                                                                                                                        |                | PASS        | Section 7.7             |
| 15.407(b)(9)          | AC Conducted Emissions (150kHz – 30MHz)                                       | < RSS-Gen [8.8] limits                                                                                                                                                                                                  | LINE CONDUCTED | PASS        | See UNII 6E OFDM Report |

**Table 7-1. Summary of Test Results**

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
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**Notes:**

- 1) All channels, modes, and modulations/data rates were investigated among all UNII bands. The test results shown in the following sections represent the worst case emissions.
- 2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.
- 4) For conducted spurious emissions, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is Element "UNII Automation," Version 4.7.
- 5) For radiated band edge, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is Element "Chamber Automation," Version 1.3.1.
- 6) Per 15.407(a)(7), a device operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands must not have the maximum power spectral density exceed 17 dBm/MHz e.i.r.p., must limit the maximum e.i.r.p. over the frequency band of operation not exceed 30 dBm, and must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power. Compliance to this clause is addressed via submission of an attestation following Appendix B of KDB 987594 D01 v01r03.
- 7) 802.11be OFDMA testing was performed for all signal tone configurations as specified by the 802.11be standard. Worst case results are determined and reported per the guidance provided at the October 2018 TCB Workshop.

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LNP940XMA                     | <b>MEASUREMENT REPORT</b>                     |                                               | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2403190019-10.A3L | <b>Test Dates:</b><br>03/14/2024 – 04/25/2024 | <b>EUT Type:</b><br>Portable Computing Device | Page 17 of 261                           |

## 7.2 26dB Bandwidth Measurement

### Test Overview and Limit

The bandwidth at 26dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 26dB bandwidth.

### Test Procedure Used

ANSI C63.10-2013 – Section 12.4

### Test Settings

1. The signal analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to  $X = 26$ . The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = approximately 1% of the emission bandwidth
3. VBW  $\geq 3 \times$  RBW
4. Detector = Peak
5. Trace mode = max hold

### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



**Figure 7-1. Test Instrument & Measurement Setup**

### Test Notes

- 1) In this section, the bandwidth data tables (Tables 7-2 and 7-3) include mainly the 26dB bandwidth measurements. For partial tone operation, all values in Table 7-2 are 26dB bandwidth measurements. For full-tone operation in Table 7-3, in case of 320MHz operation, an occupied bandwidth measurement was included in the table to demonstrate compliance. Thus, all measurements in the tables are 26dB bandwidth measurements except for the 320MHz bandwidth cases for full-tone operation which are occupied bandwidth measurements.
- 2) For 320MHz operation, the EUT is limited to a maximum bandwidth of 160MHz (2x9996T).

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
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|            | Frequency<br>[MHz] | Channel | 802.11<br>MODE | Antenna-1<br>26dB Bandwidth<br>[MHz] | Antenna-2<br>26dB Bandwidth<br>[MHz] |
|------------|--------------------|---------|----------------|--------------------------------------|--------------------------------------|
| Band 5     | 5935               | 2       | be (20MHz)     | 19.95                                | 19.92                                |
|            | 6175               | 45      | be (20MHz)     | 19.76                                | 20.00                                |
|            | 6415               | 93      | be (20MHz)     | 19.75                                | 20.10                                |
|            | 5965               | 3       | be (40MHz)     | 23.38                                | 26.17                                |
|            | 6165               | 43      | be (40MHz)     | 26.03                                | 25.07                                |
|            | 6405               | 91      | be (40MHz)     | 25.51                                | 24.90                                |
|            | 5985               | 7       | be (80MHz)     | 35.07                                | 36.42                                |
|            | 6145               | 39      | be (80MHz)     | 33.10                                | 32.03                                |
|            | 6385               | 87      | be (80MHz)     | 35.76                                | 37.01                                |
|            | 6025               | 15      | be (160MHz)    | 40.32                                | 37.97                                |
|            | 6185               | 47      | be (160MHz)    | 37.22                                | 33.15                                |
|            | 6345               | 79      | be (160MHz)    | 38.18                                | 37.31                                |
|            | 6105               | 31      | be (320MHz)    | 44.67                                | 28.84                                |
|            | 6265               | 63      | be (320MHz)    | 41.64                                | 33.67                                |
| Band 6     | 6435               | 97      | be (20MHz)     | 20.13                                | 20.02                                |
|            | 6475               | 105     | be (20MHz)     | 19.85                                | 19.97                                |
|            | 6515               | 113     | be (20MHz)     | 20.01                                | 19.91                                |
|            | 6445               | 99      | be (40MHz)     | 24.87                                | 25.40                                |
|            | 6485               | 107     | be (40MHz)     | 25.16                                | 24.44                                |
|            | 6525               | 115     | be (40MHz)     | 25.37                                | 25.75                                |
|            | 6465               | 103     | be (80MHz)     | 34.13                                | 37.18                                |
|            | 6505               | 111     | be (160MHz)    | 35.95                                | 40.56                                |
| Band 5/6/7 | 6425               | 95      | be (320MHz)    | 40.97                                | 44.38                                |
| Band 7     | 6695               | 117     | be (20MHz)     | 20.15                                | 19.89                                |
|            | 6695               | 149     | be (20MHz)     | 19.82                                | 20.08                                |
|            | 6875               | 185     | be (20MHz)     | 19.85                                | 19.95                                |
|            | 6565               | 123     | be (40MHz)     | 25.57                                | 25.40                                |
|            | 6685               | 155     | be (40MHz)     | 25.46                                | 25.18                                |
|            | 6845               | 179     | be (40MHz)     | 24.21                                | 24.78                                |
|            | 6545               | 119     | be (80MHz)     | 34.34                                | 32.46                                |
|            | 6705               | 151     | be (80MHz)     | 35.05                                | 35.18                                |
|            | 6865               | 183     | be (80MHz)     | 31.43                                | 37.08                                |
|            | 6665               | 143     | be (160MHz)    | 37.77                                | 34.43                                |
|            | 6825               | 175     | be (160MHz)    | 35.45                                | 32.62                                |
| Band 6/7   | 6585               | 127     | be (320MHz)    | 38.43                                | 35.45                                |
| Band 7/8   | 6745               | 159     | be (320MHz)    | 36.54                                | 36.05                                |
| Band 8     | 6895               | 189     | be (20MHz)     | 19.99                                | 20.01                                |
|            | 6995               | 209     | be (20MHz)     | 19.94                                | 19.83                                |
|            | 7115               | 233     | be (20MHz)     | 19.76                                | 19.99                                |
|            | 6885               | 187     | be (40MHz)     | 25.40                                | 24.88                                |
|            | 6965               | 211     | be (40MHz)     | 25.17                                | 25.64                                |
|            | 7085               | 227     | be (40MHz)     | 26.08                                | 26.57                                |
|            | 6945               | 199     | be (80MHz)     | 34.18                                | 34.58                                |
|            | 7025               | 215     | be (80MHz)     | 37.01                                | 34.73                                |
| Band 7/8   | 6985               | 207     | be (160MHz)    | 40.50                                | 35.51                                |
| Band 7/8   | 6905               | 191     | be (320MHz)    | 43.39                                | 37.30                                |

Table 7-2. Occupied Bandwidth Measurements – 26T

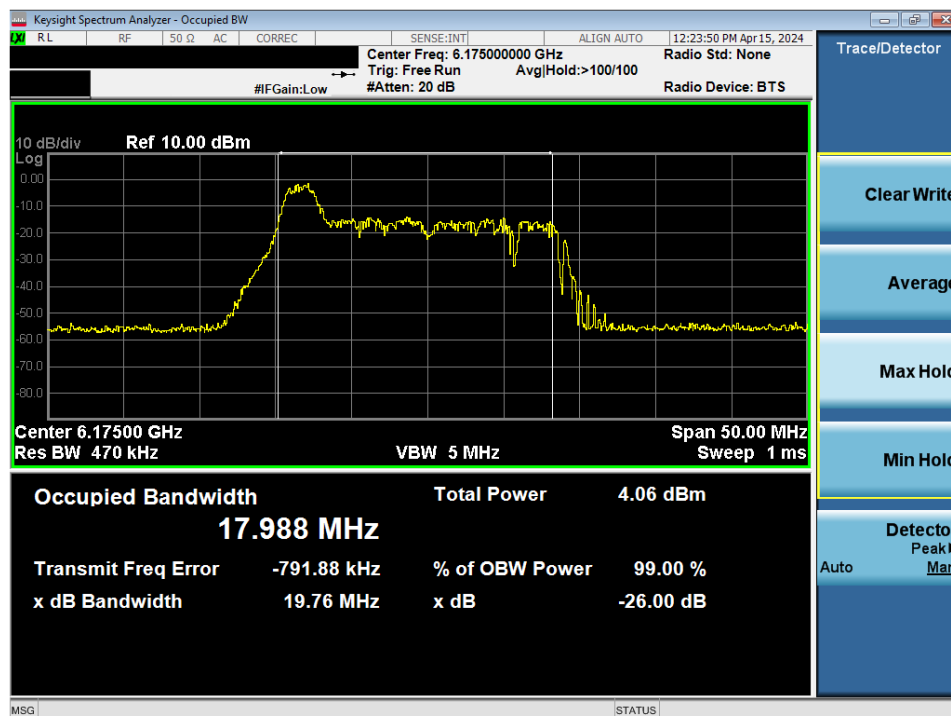
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 19 of 261                    |

|            | Frequency [MHz] | Channel | 802.11 MODE     | Antenna-1 26dB Bandwidth [MHz] | Antenna-2 6dB Bandwidth [MHz] | Antenna-1 Occupied Bandwidth [MHz] | Antenna-2 Occupied Bandwidth [MHz] |
|------------|-----------------|---------|-----------------|--------------------------------|-------------------------------|------------------------------------|------------------------------------|
| Band 5     | 5935            | 2       | be (20MHz)      | 21.37                          | 21.28                         | -                                  | -                                  |
|            | 6175            | 45      | be (20MHz)      | 21.37                          | 21.15                         | -                                  | -                                  |
|            | 6415            | 93      | be (20MHz)      | 21.47                          | 21.23                         | -                                  | -                                  |
|            | 5965            | 3       | be (40MHz)      | 42.37                          | 42.32                         | -                                  | -                                  |
|            | 6165            | 43      | be (40MHz)      | 42.21                          | 42.05                         | -                                  | -                                  |
|            | 6405            | 91      | be (40MHz)      | 43.41                          | 42.07                         | -                                  | -                                  |
|            | 5985            | 7       | be (80MHz)      | 84.98                          | 86.19                         | -                                  | -                                  |
|            | 6145            | 39      | be (80MHz)      | 87.02                          | 90.10                         | -                                  | -                                  |
|            | 6385            | 87      | be (80MHz)      | 92.19                          | 89.62                         | -                                  | -                                  |
|            | 6025            | 15      | be (160MHz)     | 172.26                         | 173.08                        | -                                  | -                                  |
|            | 6185            | 47      | be (160MHz)     | 175.94                         | 173.36                        | -                                  | -                                  |
|            | 6345            | 79      | be (160MHz)     | 173.73                         | 173.75                        | -                                  | -                                  |
|            | 6105            | 31      | be (320MHz)(L)* | -                              | -                             | 234.73                             | 229.16                             |
|            | 6105            | 31      | be (320MHz)(U)* | -                              | -                             | 210.14                             | 230.30                             |
|            | 6265            | 63      | be (320MHz)(L)* | -                              | -                             | 235.32                             | 233.83                             |
|            | 6265            | 63      | be (320MHz)(U)* | -                              | -                             | 211.45                             | 219.74                             |
| Band 6     | 6435            | 97      | be (20MHz)      | 21.23                          | 21.08                         | -                                  | -                                  |
|            | 6475            | 105     | be (20MHz)      | 21.34                          | 21.63                         | -                                  | -                                  |
|            | 6515            | 113     | be (20MHz)      | 21.39                          | 21.37                         | -                                  | -                                  |
|            | 6445            | 99      | be (40MHz)      | 43.09                          | 42.14                         | -                                  | -                                  |
|            | 6485            | 107     | be (40MHz)      | 43.01                          | 42.06                         | -                                  | -                                  |
|            | 6525            | 115     | be (40MHz)      | 42.04                          | 42.08                         | -                                  | -                                  |
|            | 6465            | 103     | be (80MHz)      | 86.04                          | 88.99                         | -                                  | -                                  |
|            | 6505            | 111     | be (160MHz)     | 172.93                         | 175.15                        | -                                  | -                                  |
| Band 5/6/7 | 6425            | 95      | be (320MHz)(L)* | -                              | -                             | 232.11                             | 226.92                             |
|            | 6425            | 95      | be (320MHz)(U)* | -                              | -                             | 213.30                             | 212.74                             |
| Band 7     | 6695            | 117     | be (20MHz)      | 21.39                          | 21.46                         | -                                  | -                                  |
|            | 6695            | 149     | be (20MHz)      | 21.20                          | 21.03                         | -                                  | -                                  |
|            | 6875            | 185     | be (20MHz)      | 21.67                          | 21.40                         | -                                  | -                                  |
|            | 6565            | 123     | be (40MHz)      | 42.81                          | 43.07                         | -                                  | -                                  |
|            | 6685            | 155     | be (40MHz)      | 42.30                          | 41.96                         | -                                  | -                                  |
|            | 6845            | 179     | be (40MHz)      | 42.75                          | 42.13                         | -                                  | -                                  |
|            | 6545            | 119     | be (80MHz)      | 91.62                          | 89.12                         | -                                  | -                                  |
|            | 6705            | 151     | be (80MHz)      | 86.61                          | 85.56                         | -                                  | -                                  |
|            | 6865            | 183     | be (80MHz)      | 92.21                          | 84.81                         | -                                  | -                                  |
|            | 6665            | 143     | be (160MHz)     | 171.56                         | 173.50                        | -                                  | -                                  |
|            | 6825            | 175     | be (160MHz)     | 174.25                         | 171.80                        | -                                  | -                                  |
| Band 6/7   | 6585            | 127     | be (320MHz)(L)* | -                              | -                             | 228.04                             | 228.30                             |
|            | 6585            | 127     | be (320MHz)(U)* | -                              | -                             | 226.17                             | 228.10                             |
| Band 7/8   | 6745            | 159     | be (320MHz)(L)* | -                              | -                             | 228.31                             | 226.69                             |
|            | 6745            | 159     | be (320MHz)(U)* | -                              | -                             | 232.06                             | 231.45                             |
| Band 8     | 7115            | 189     | be (20MHz)      | 21.73                          | 21.11                         | -                                  | -                                  |
|            | 6995            | 209     | be (20MHz)      | 21.11                          | 20.97                         | -                                  | -                                  |
|            | 7115            | 233     | be (20MHz)      | 21.42                          | 21.19                         | -                                  | -                                  |
|            | 6885            | 187     | be (40MHz)      | 41.99                          | 42.98                         | -                                  | -                                  |
|            | 6965            | 211     | be (40MHz)      | 42.04                          | 42.27                         | -                                  | -                                  |
|            | 7085            | 227     | be (40MHz)      | 42.16                          | 42.41                         | -                                  | -                                  |
|            | 6945            | 199     | be (80MHz)      | 91.86                          | 85.69                         | -                                  | -                                  |
|            | 7025            | 215     | be (80MHz)      | 86.70                          | 85.32                         | -                                  | -                                  |
| Band 7/8   | 6985            | 207     | be (160MHz)     | 174.54                         | 173.92                        | -                                  | -                                  |
|            | 6905            | 191     | be (320MHz)(L)* | -                              | -                             | 231.00                             | 226.00                             |
|            | 6905            | 191     | be (320MHz)(U)* | -                              | -                             | 228.58                             | 229.07                             |

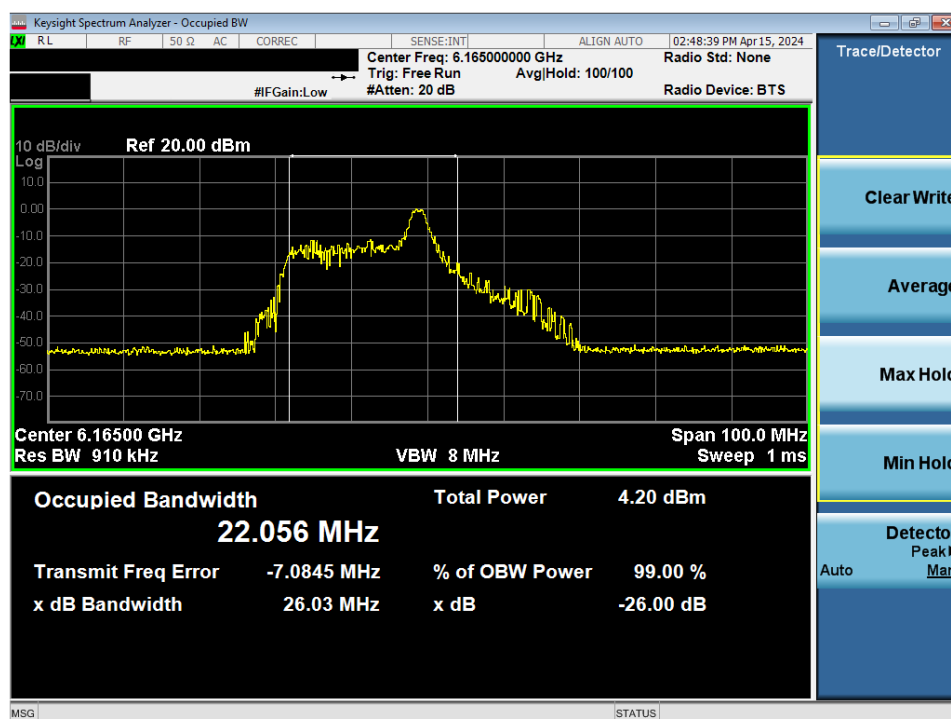
**Table 7-3. Occupied Bandwidth Measurements – Full Tones**

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 20 of 261                    |

## 7.2.1 MIMO Antenna-1 Bandwidth Measurements - (Partial Tones)

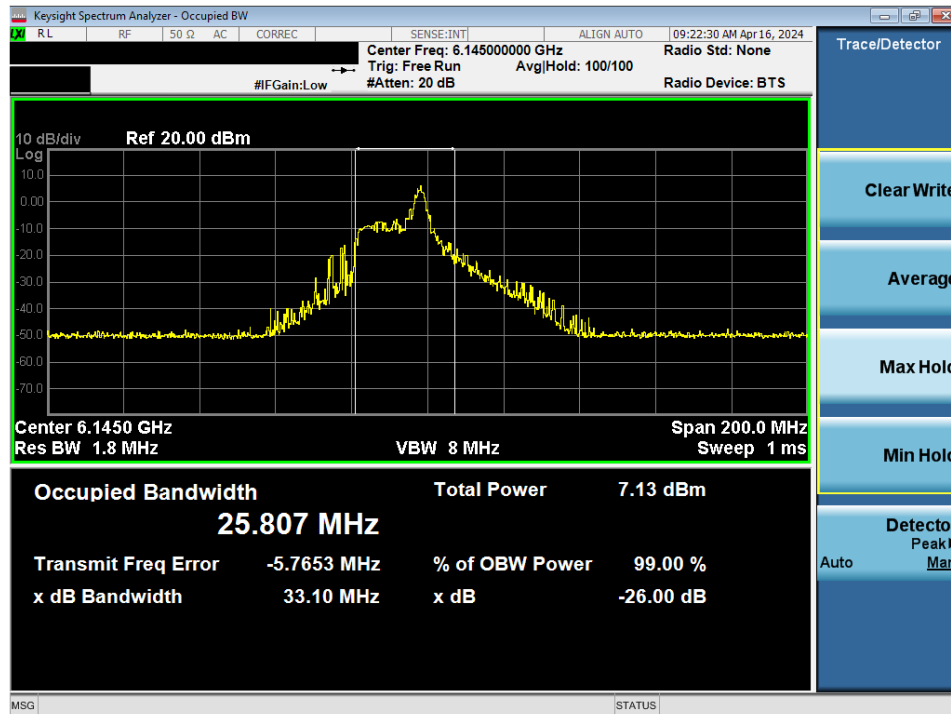


Plot 7-1. Occupied Bandwidth Plot MIMO ANT1 (20MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 45)

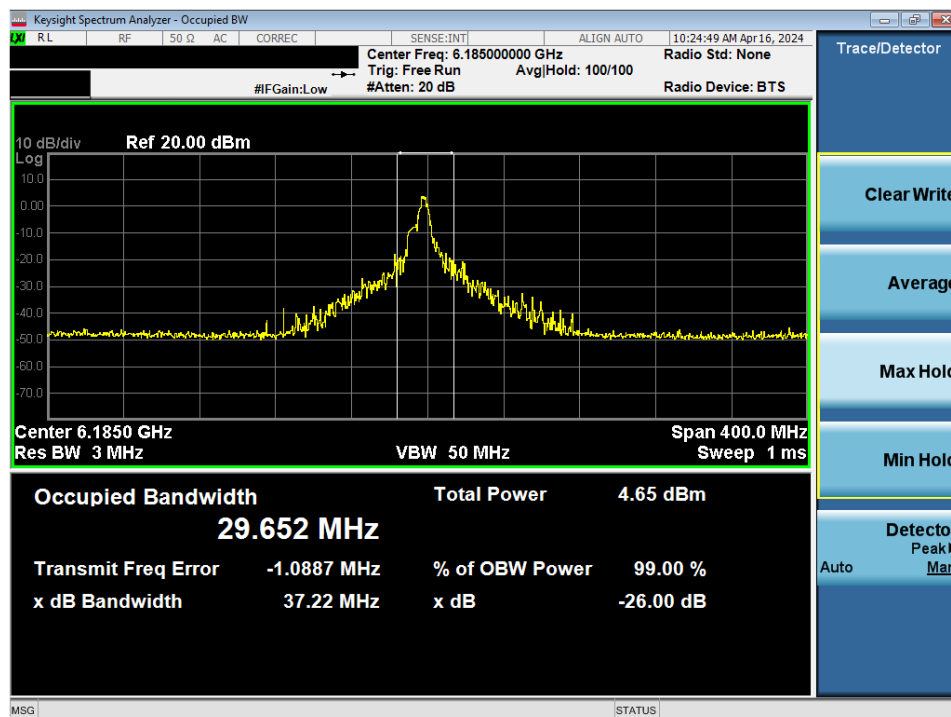


Plot 7-2. Occupied Bandwidth Plot MIMO ANT1 (40MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 43)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 21 of 261                    |

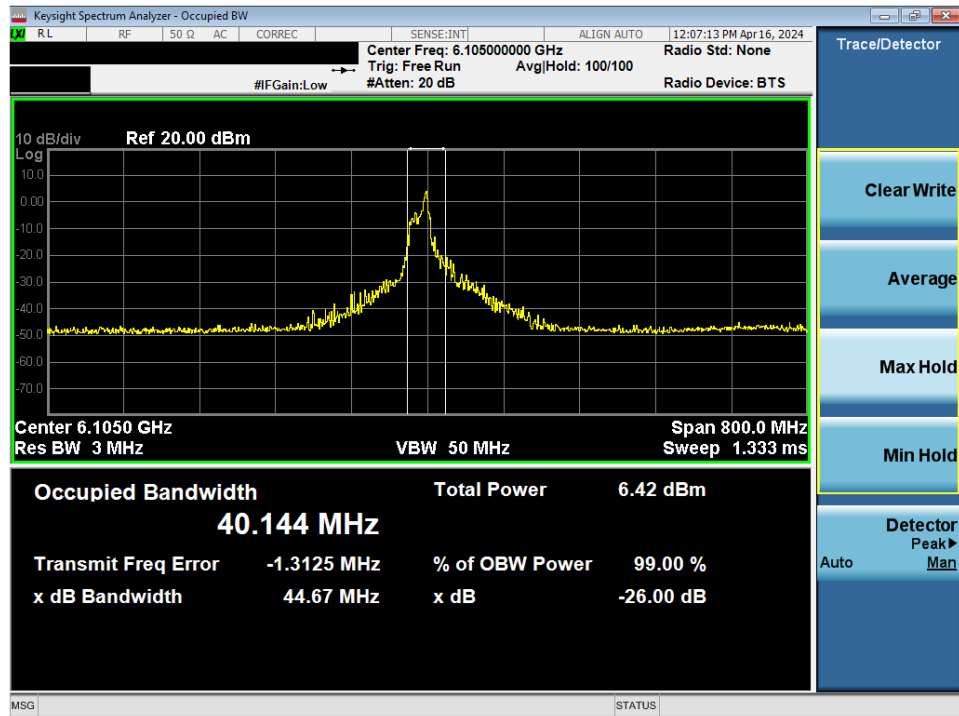


Plot 7-3. Occupied Bandwidth Plot MIMO ANT1 (80MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 39)



Plot 7-4. Occupied Bandwidth Plot MIMO ANT1 (160MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 47)

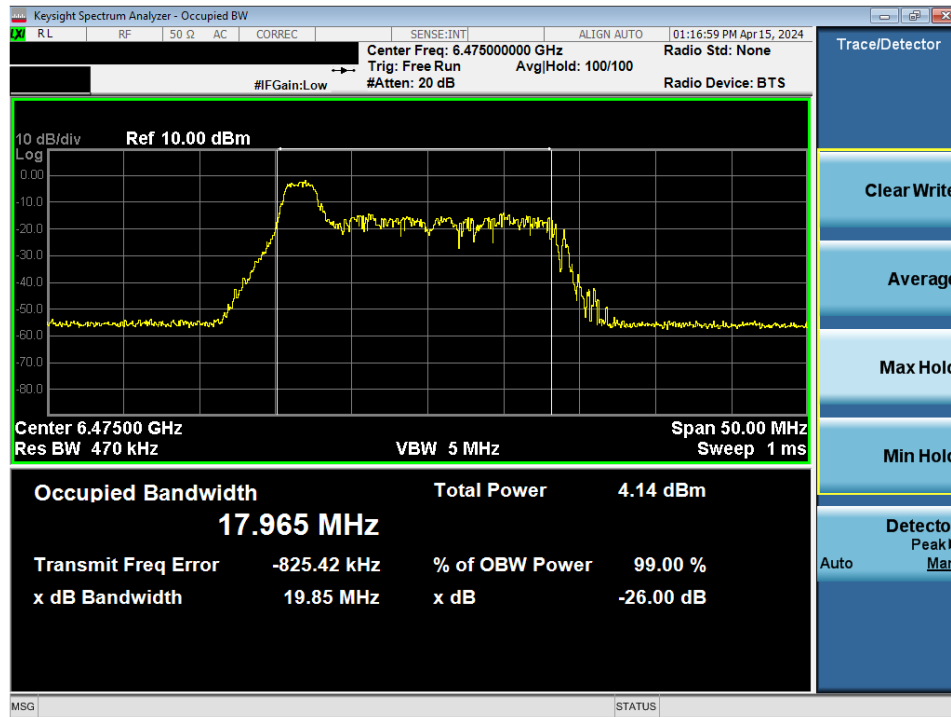
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 22 of 261                    |



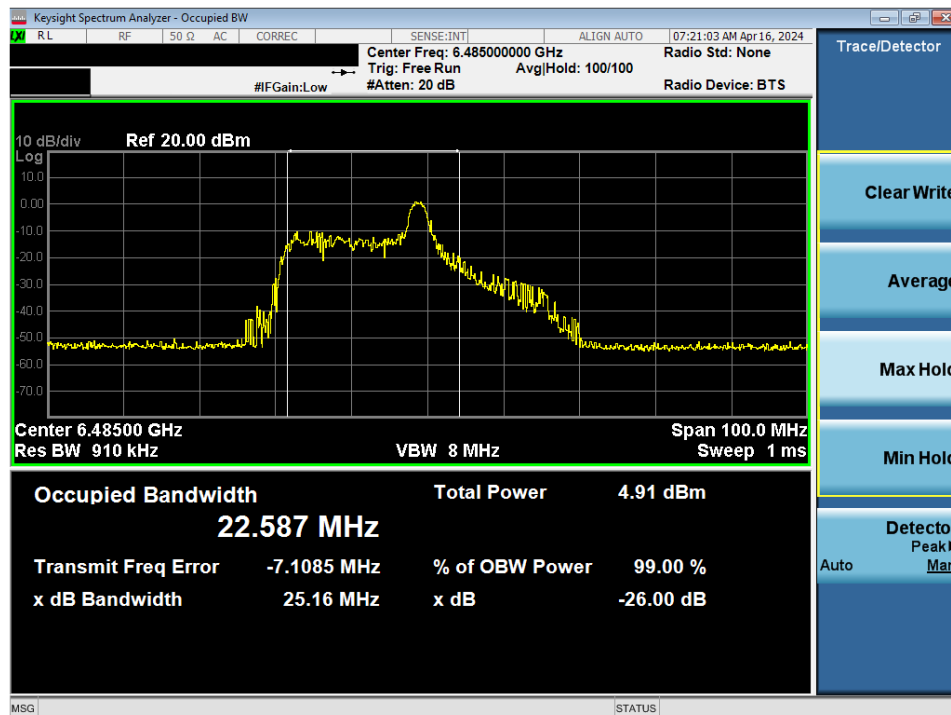
Plot 7-5. Occupied Bandwidth Plot MIMO ANT1 (320MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 31)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 23 of 261                    |

## MIMO Antenna-1 Bandwidth Measurements - (Partial Tones)

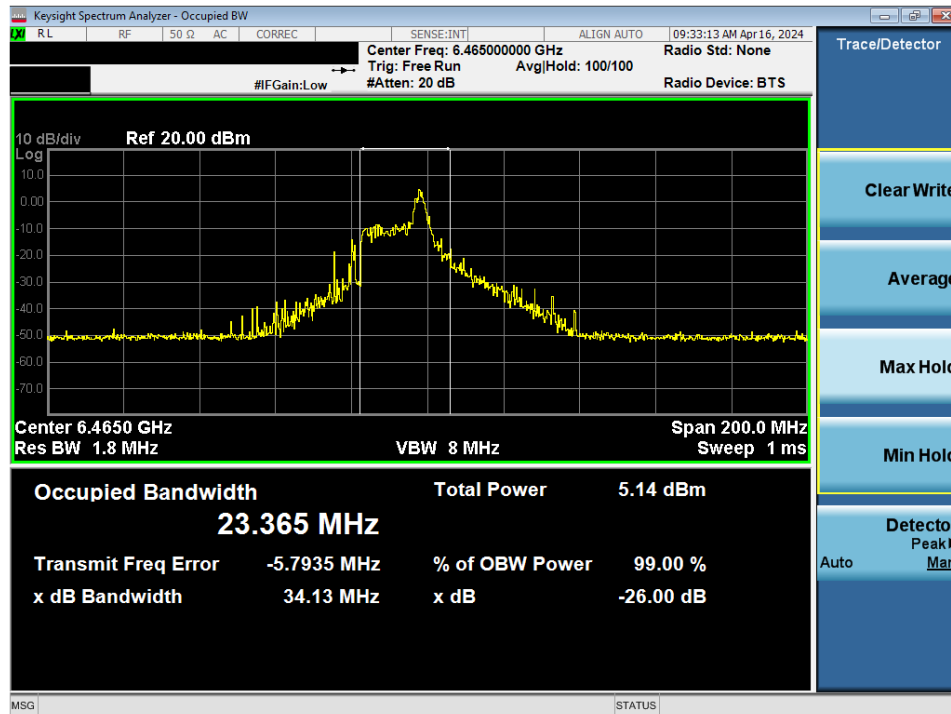


Plot 7-6. Occupied Bandwidth Plot MIMO ANT1 (20MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 105)

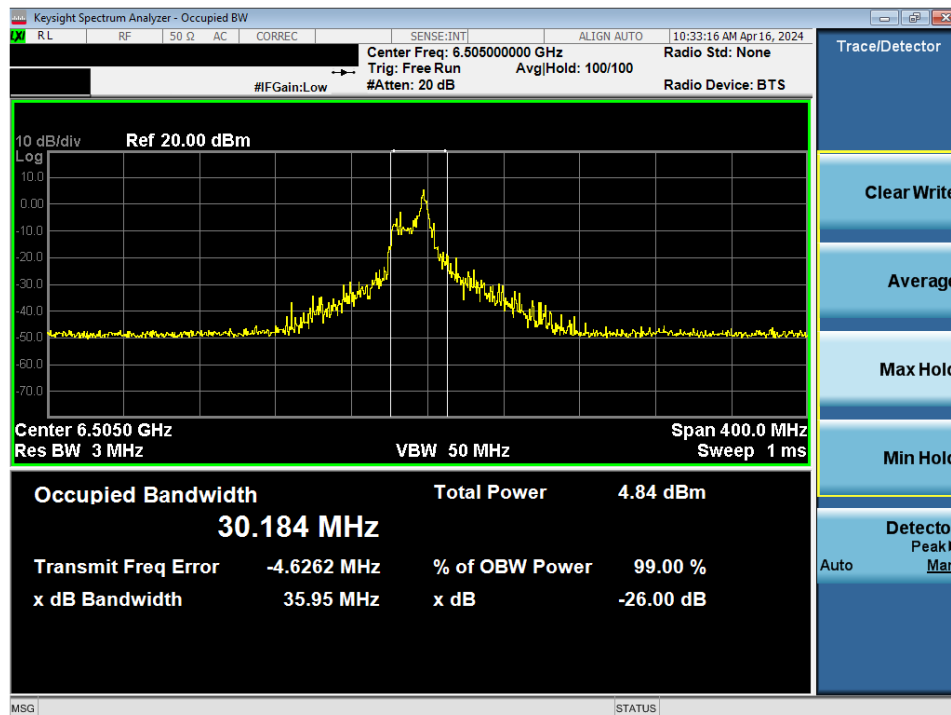


Plot 7-7. Occupied Bandwidth Plot MIMO ANT1 (40MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 107)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 24 of 261                    |

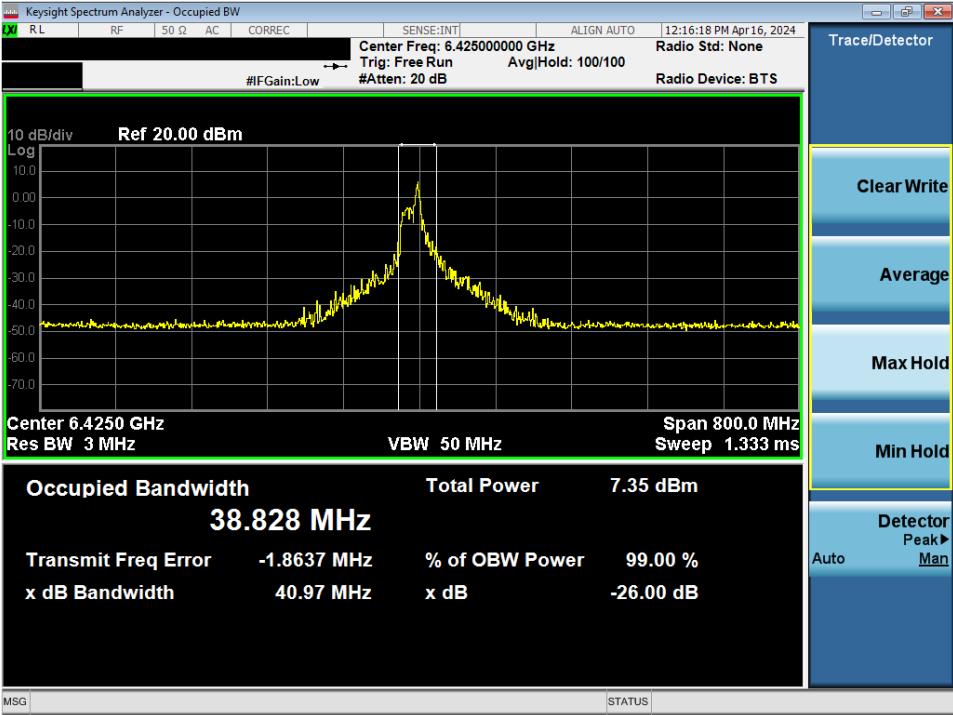


Plot 7-8. Occupied Bandwidth Plot MIMO ANT1 (80MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 103)



Plot 7-9. Occupied Bandwidth Plot MIMO ANT1 (160MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 111)

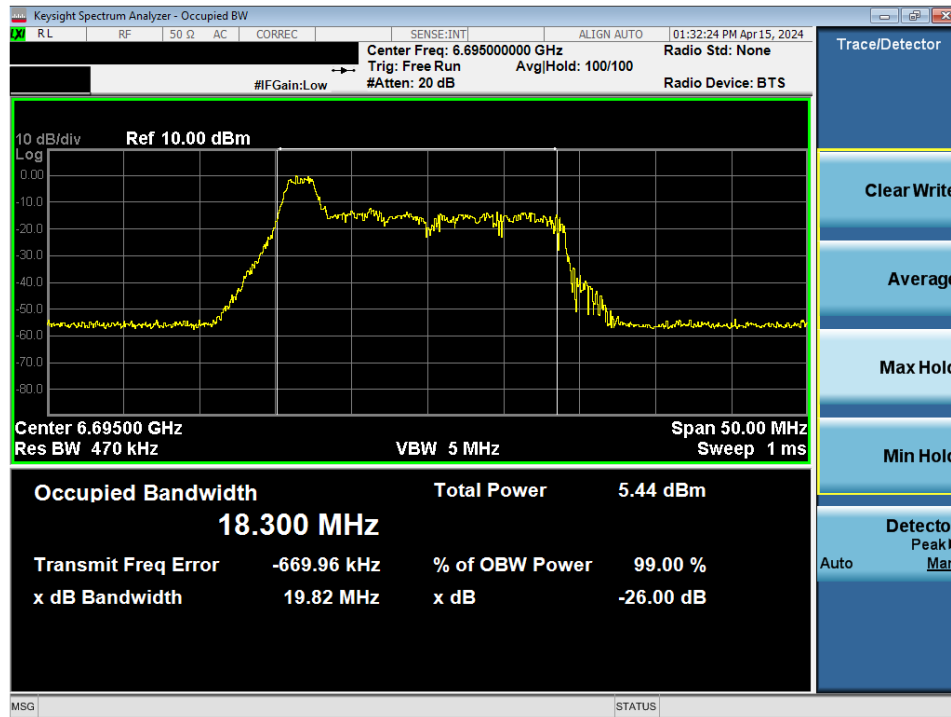
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 25 of 261                    |



Plot 7-10. Occupied Bandwidth Plot MIMO ANT1 (320MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 95)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 26 of 261                    |

## MIMO Antenna-1 Bandwidth Measurements - (Partial Tones)

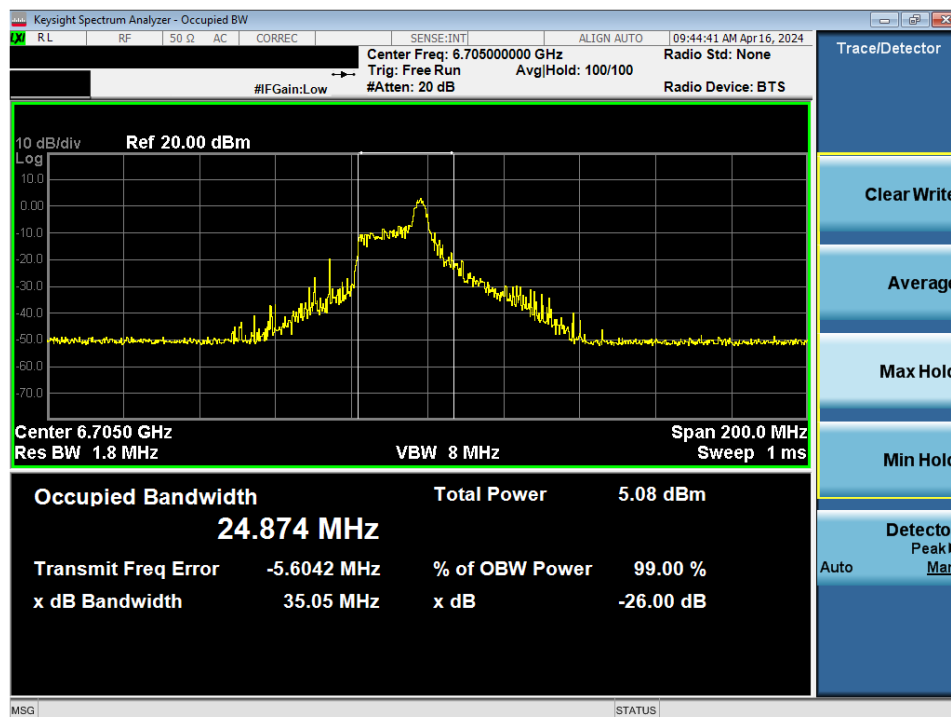


Plot 7-11. Occupied Bandwidth Plot MIMO ANT1 (20MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 149)

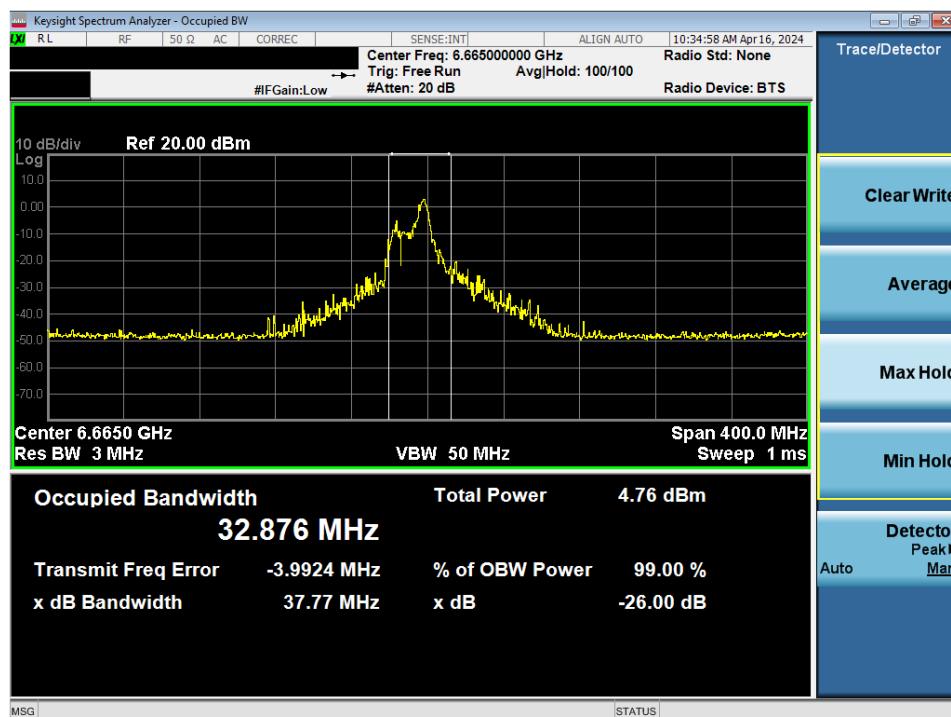


Plot 7-12. Occupied Bandwidth Plot MIMO ANT1 (40MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 155)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 27 of 261                    |

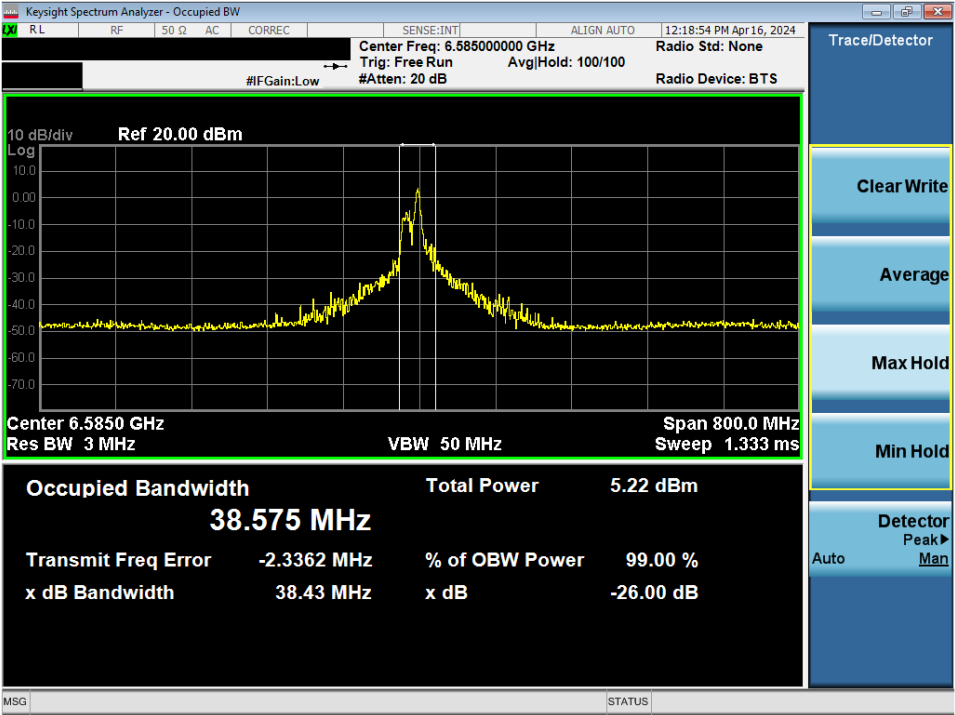


Plot 7-13. Occupied Bandwidth Plot MIMO ANT1 (80MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 151)



Plot 7-14. Occupied Bandwidth Plot MIMO ANT1 (160MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 143)

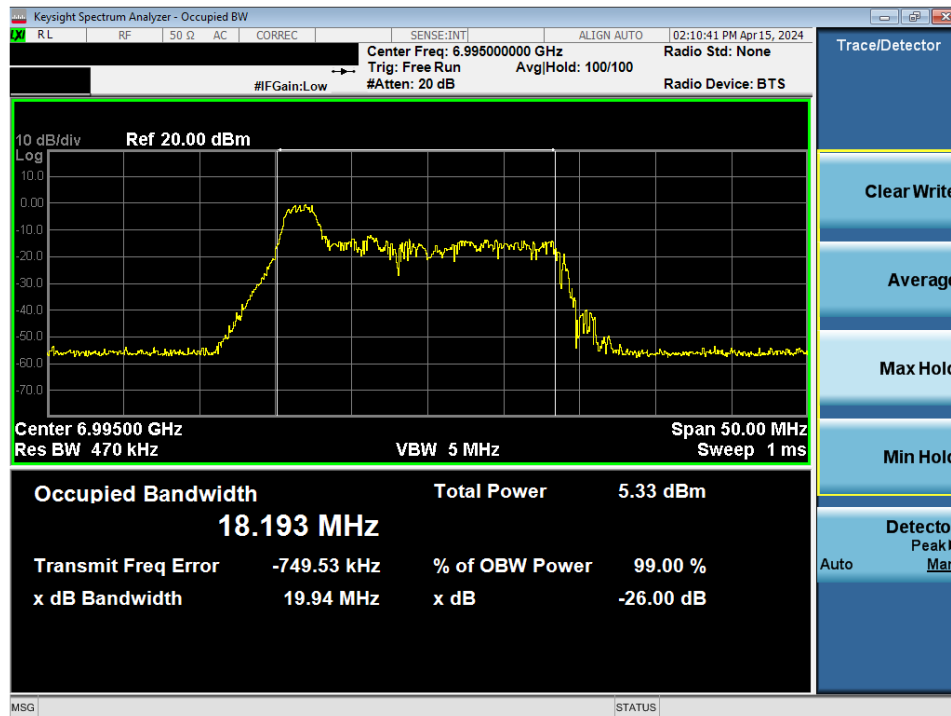
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 28 of 261                    |



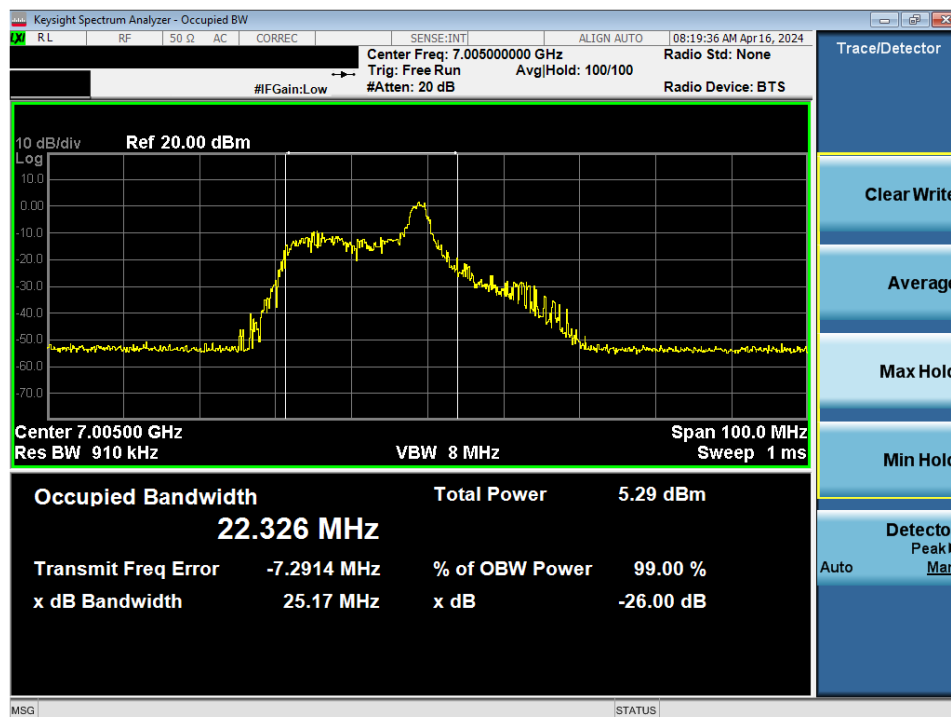
Plot 7-15. Occupied Bandwidth Plot MIMO ANT1 (320MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 127)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 29 of 261                    |

## MIMO Antenna-1 Bandwidth Measurements - (Partial Tones)

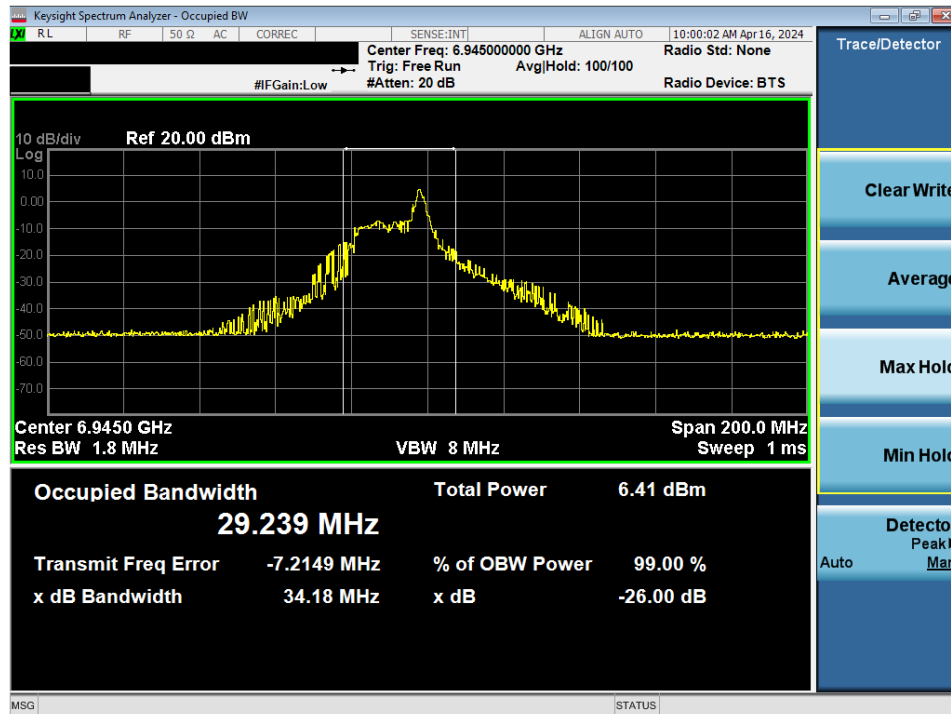


Plot 7-16. Occupied Bandwidth Plot MIMO ANT1 (20MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 209)

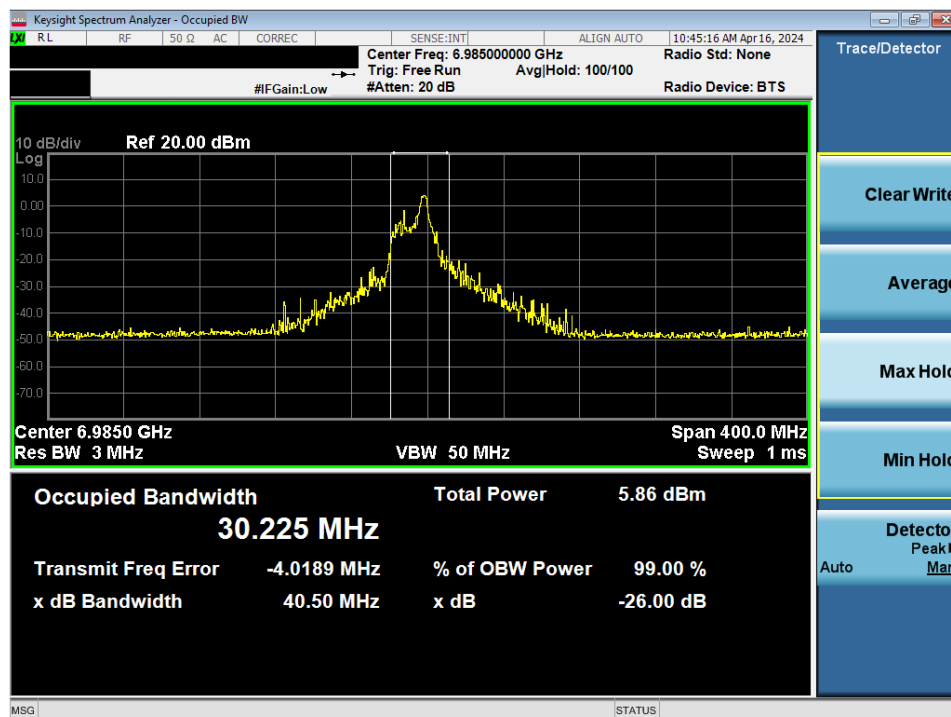


Plot 7-17. Occupied Bandwidth Plot MIMO ANT1 (40MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 211)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 30 of 261                    |

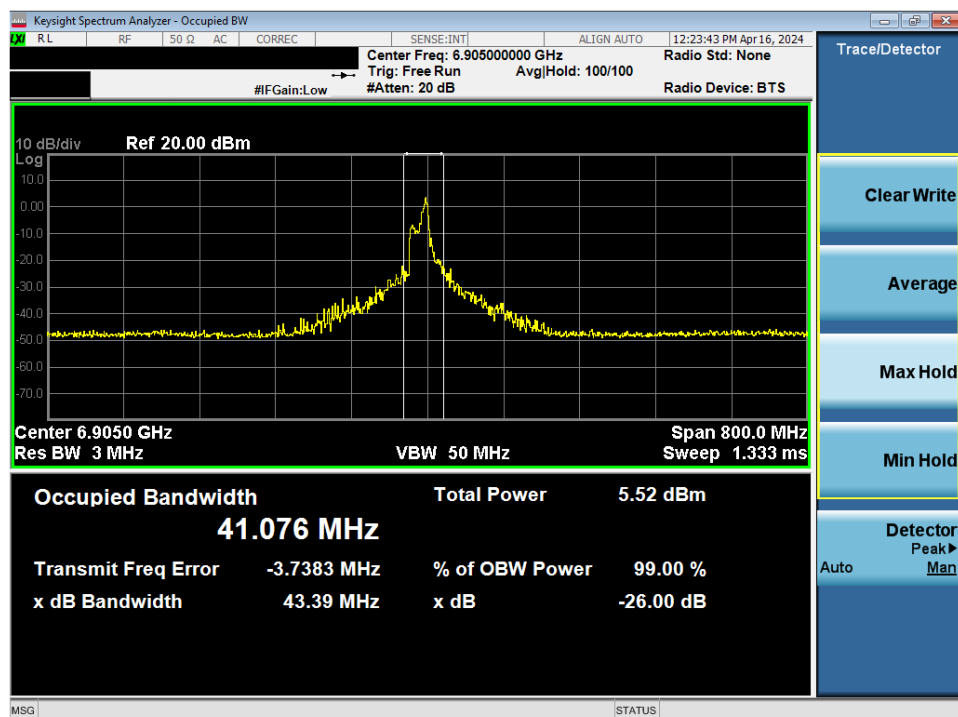


Plot 7-18. Occupied Bandwidth Plot MIMO ANT1 (80MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 199)



Plot 7-19. Occupied Bandwidth Plot MIMO ANT1 (160MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 207)

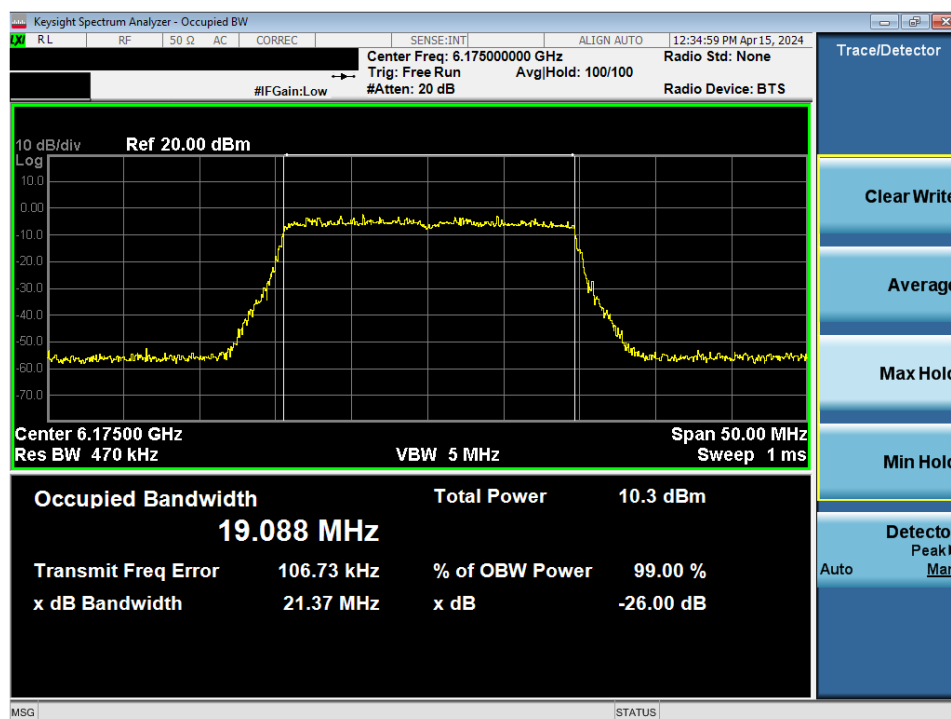
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 31 of 261                    |



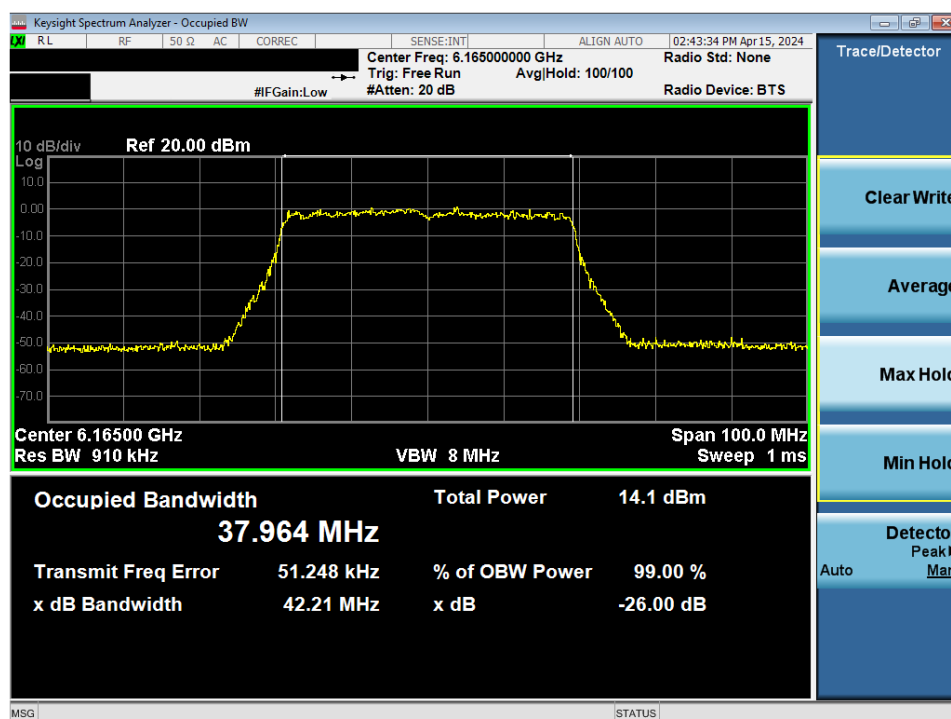
Plot 7-20. Occupied Bandwidth Plot MIMO ANT1 (320MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 191)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 32 of 261                    |

## 7.2.2 MIMO Antenna-1 Bandwidth Measurements - (Full Tones)

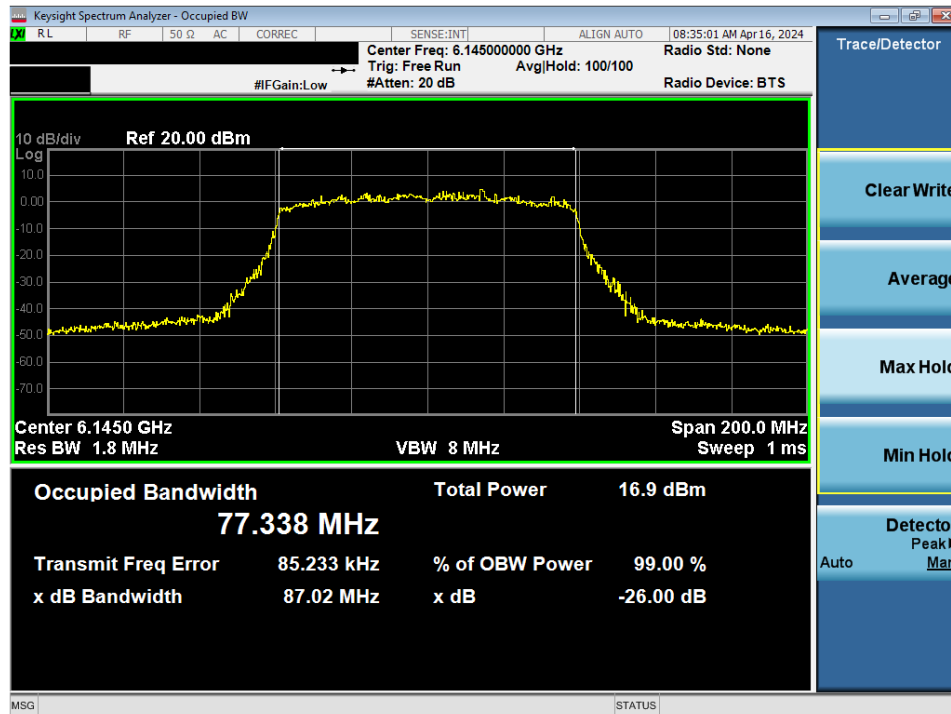


Plot 7-21. Occupied Bandwidth Plot MIMO ANT1 (20MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 45)

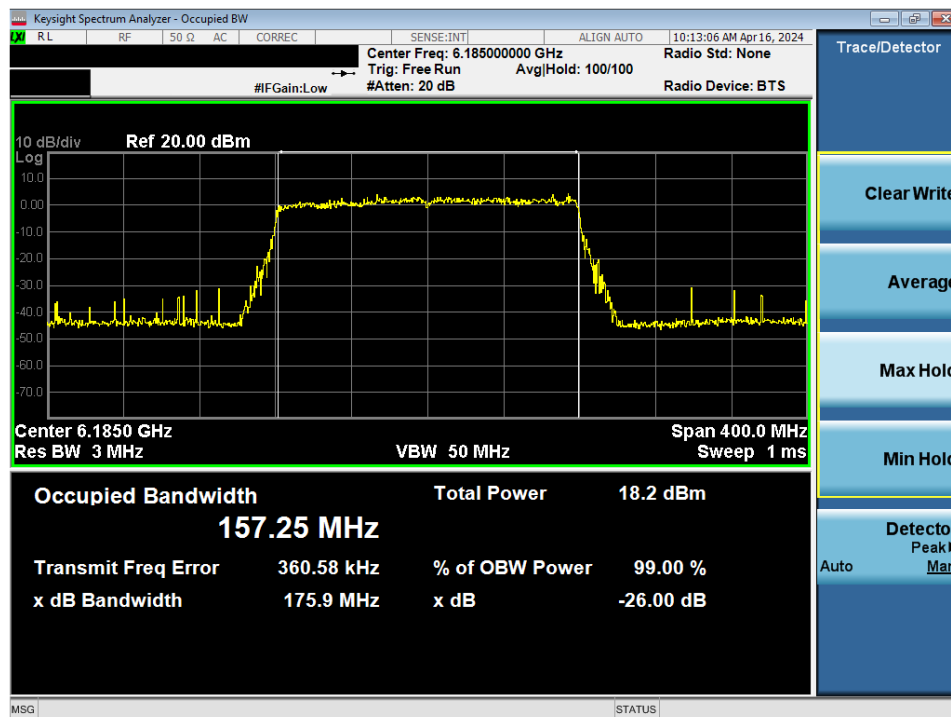


Plot 7-22. Occupied Bandwidth Plot MIMO ANT1 (40MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 43)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 33 of 261                    |

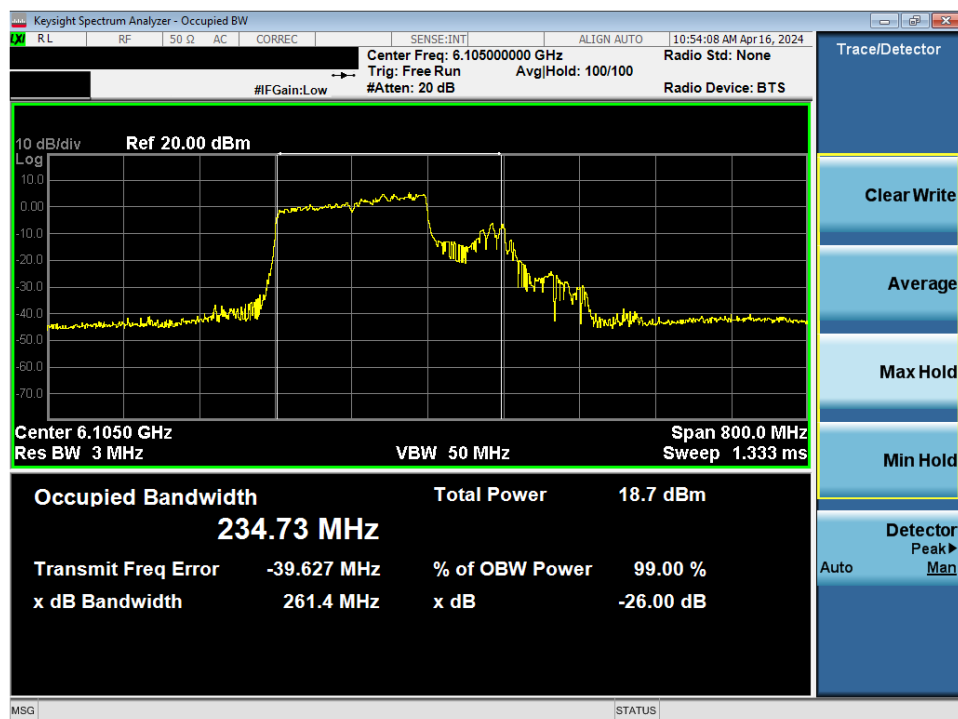


Plot 7-23. Occupied Bandwidth Plot MIMO ANT1 (80MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 39)



Plot 7-24. Occupied Bandwidth Plot MIMO ANT1 (160MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 47)

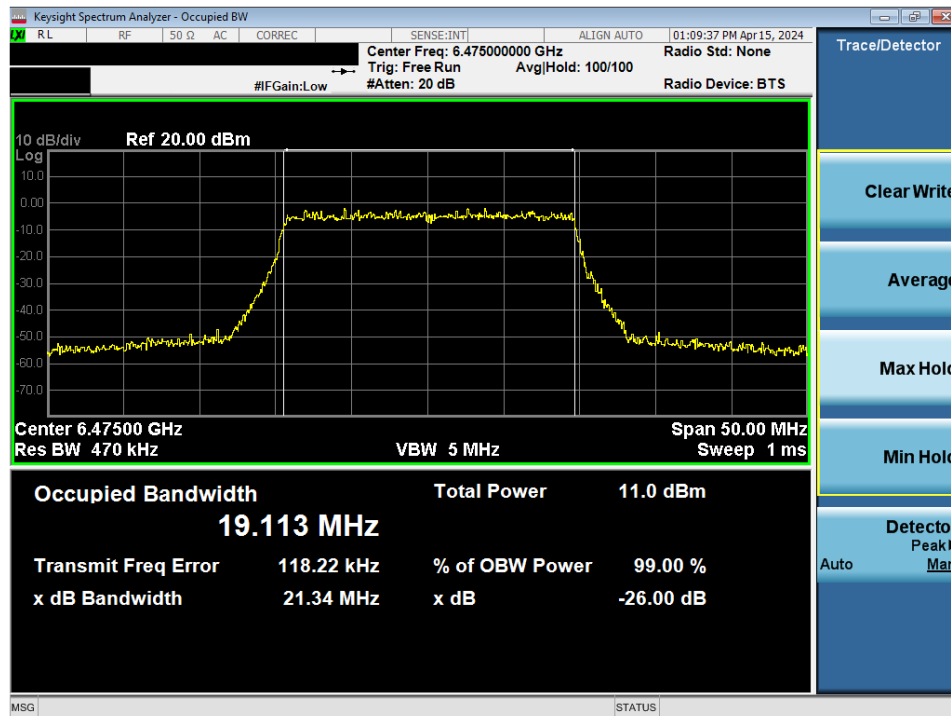
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 34 of 261                    |



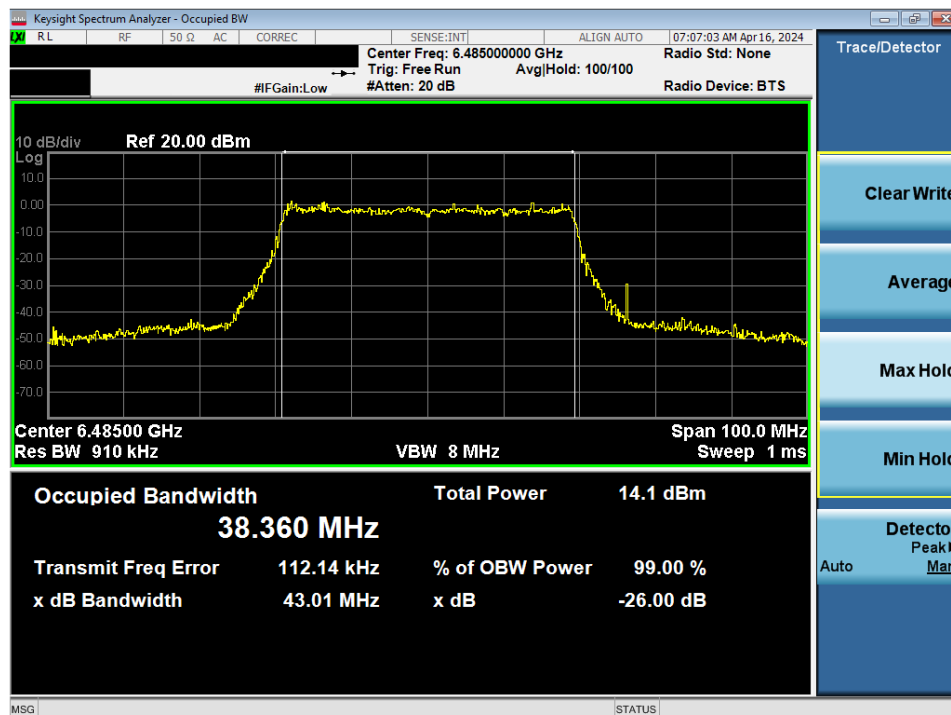
Plot 7-25. Occupied Bandwidth Plot MIMO ANT1 (320MHz BW 802. 11be (Full Tones) (UNII Band 5) – Ch. 31)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 35 of 261                    |

## MIMO Antenna-1 Bandwidth Measurements - (Full Tones)

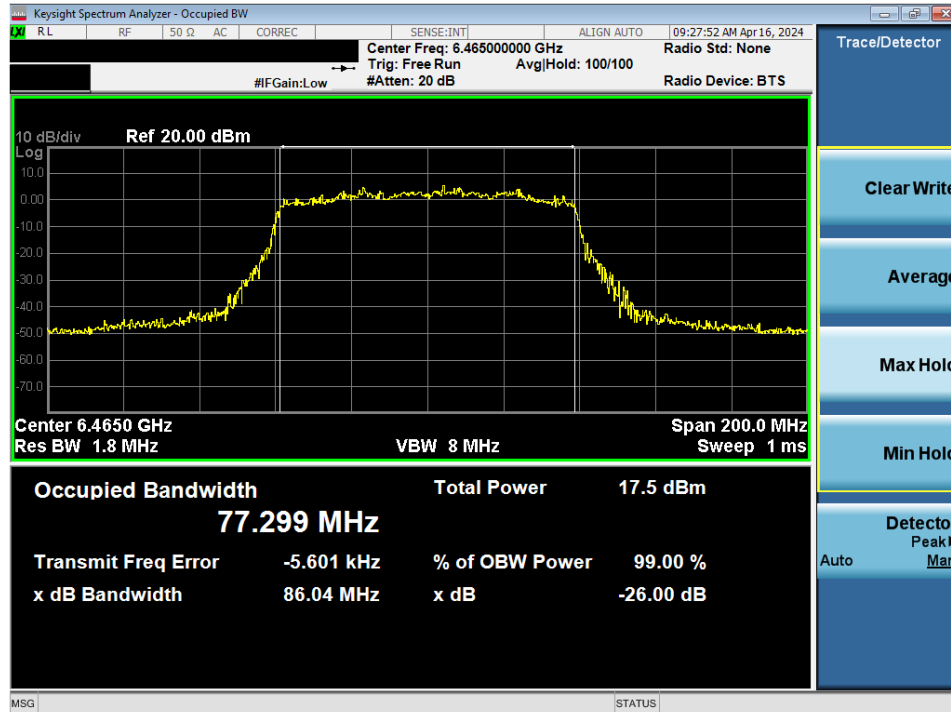


Plot 7-26. Occupied Bandwidth Plot MIMO ANT1 (20MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 105)

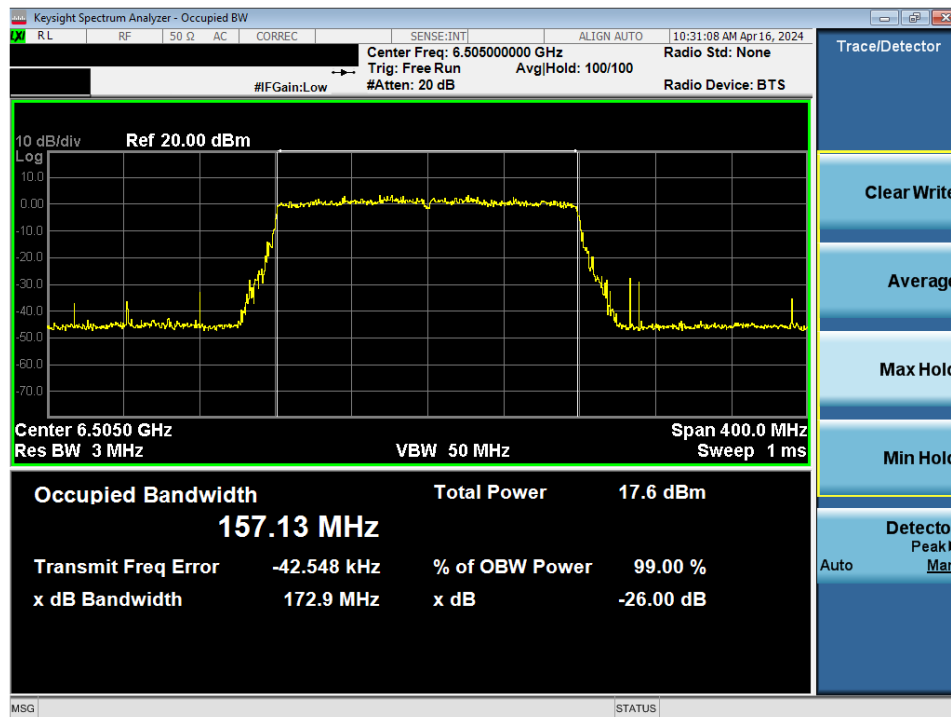


Plot 7-27. Occupied Bandwidth Plot MIMO ANT1 (40MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 107)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 36 of 261                    |

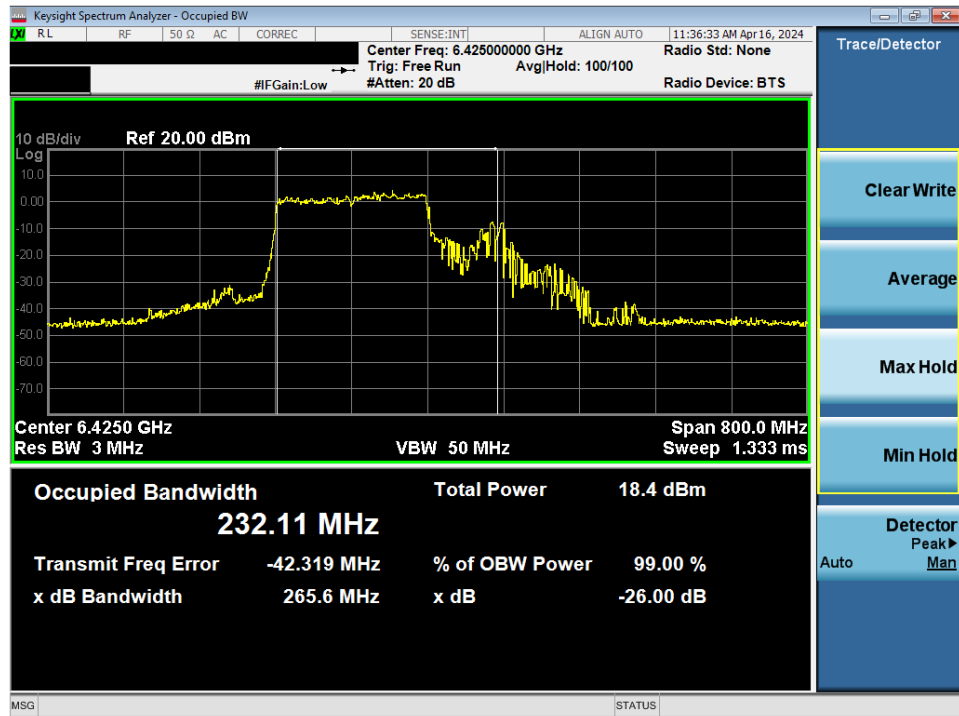


Plot 7-28. Occupied Bandwidth Plot MIMO ANT1 (80MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 103)



Plot 7-29. Occupied Bandwidth Plot MIMO ANT1 (160MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 111)

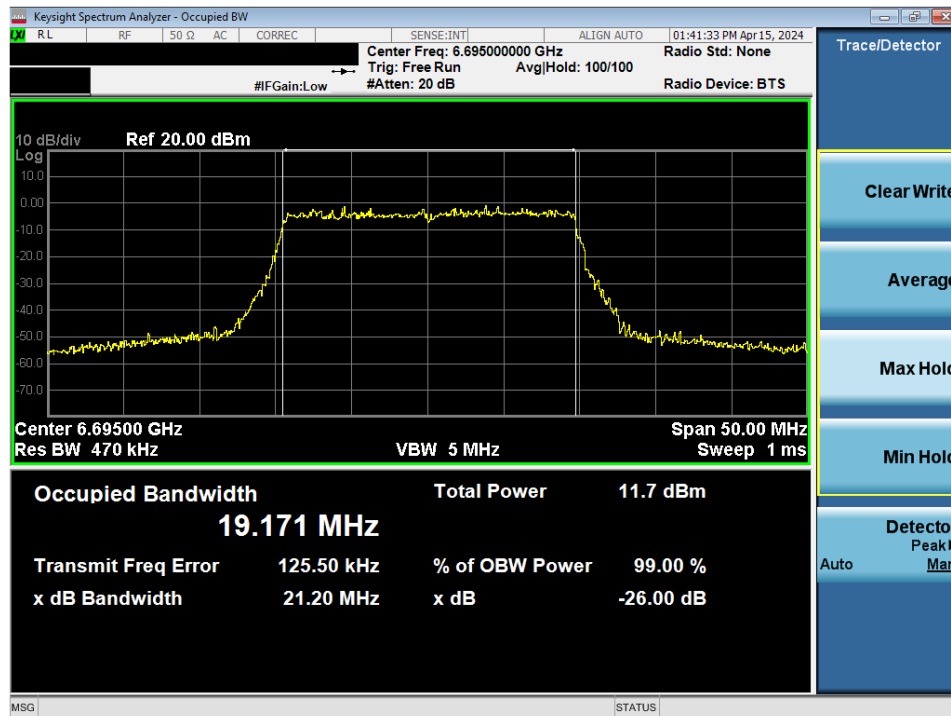
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 37 of 261                    |



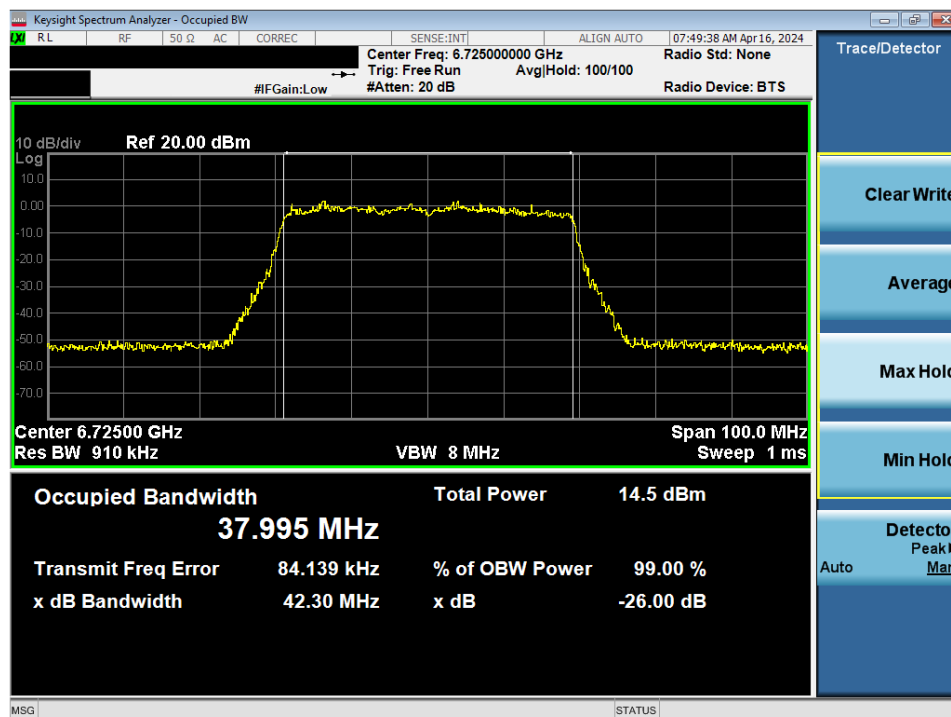
Plot 7-30. Occupied Bandwidth Plot MIMO ANT1 (320MHz BW 802. 11be (Full Tones) (UNII Band 6) – Ch. 95)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 38 of 261                    |

## MIMO Antenna-1 Bandwidth Measurements - (Full Tones)

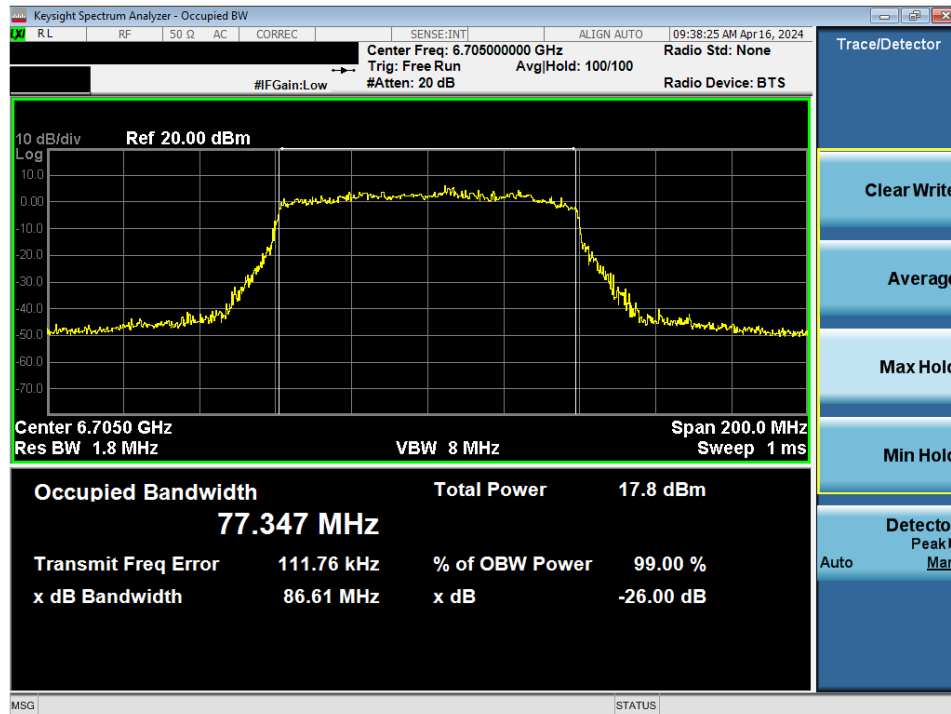


Plot 7-31. Occupied Bandwidth Plot MIMO ANT1 (20MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 149)

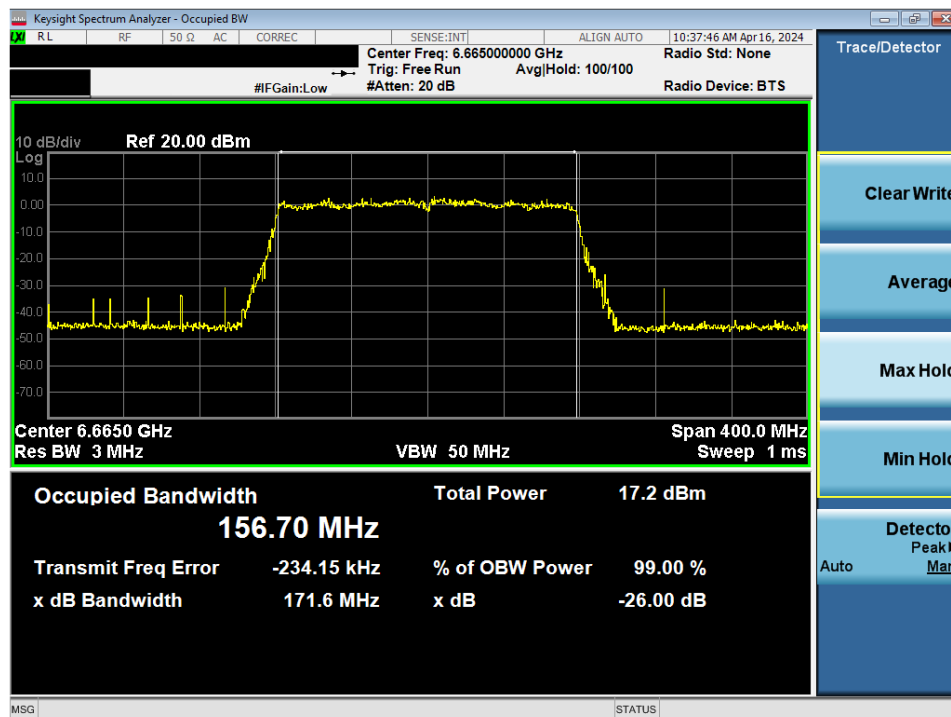


Plot 7-32. Occupied Bandwidth Plot MIMO ANT1 (40MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 155)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 39 of 261                    |

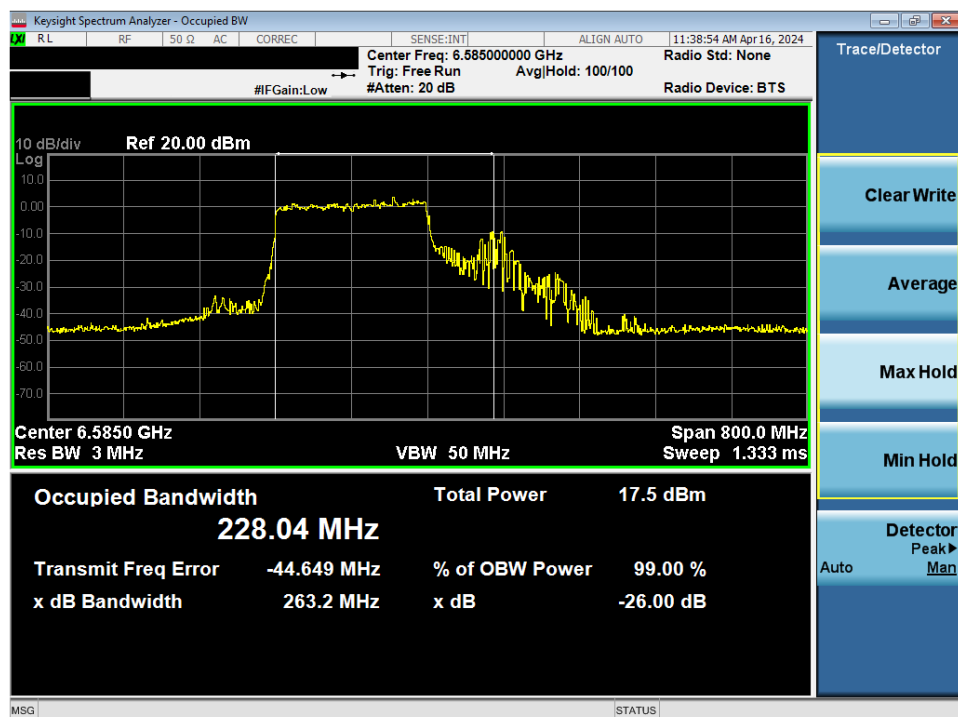


Plot 7-33. Occupied Bandwidth Plot MIMO ANT1 (80MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 151)



Plot 7-34. Occupied Bandwidth Plot MIMO ANT1 (160MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 143)

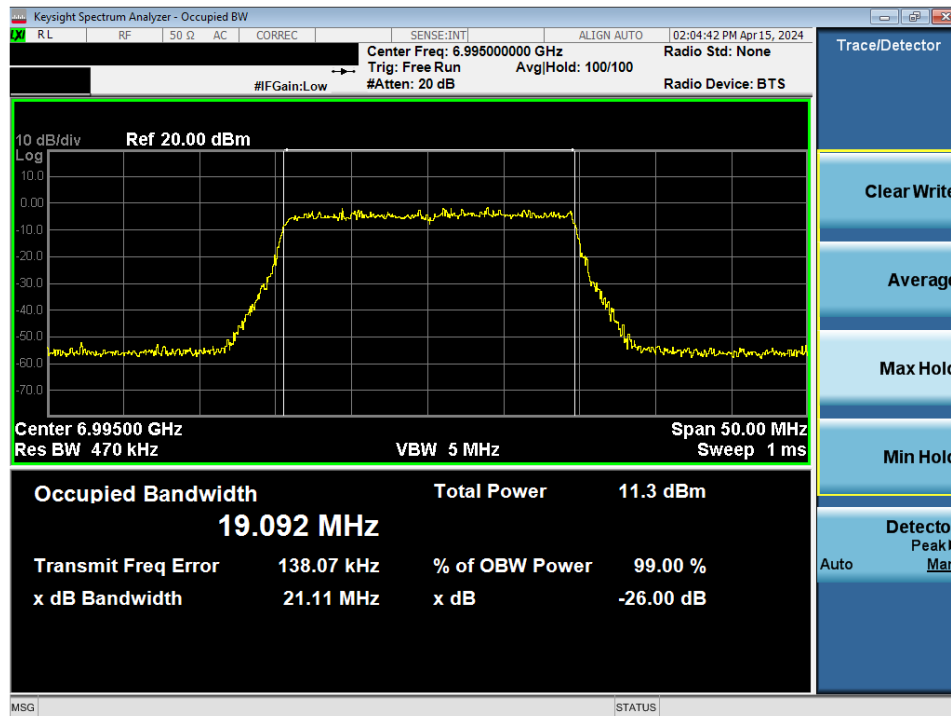
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 40 of 261                    |



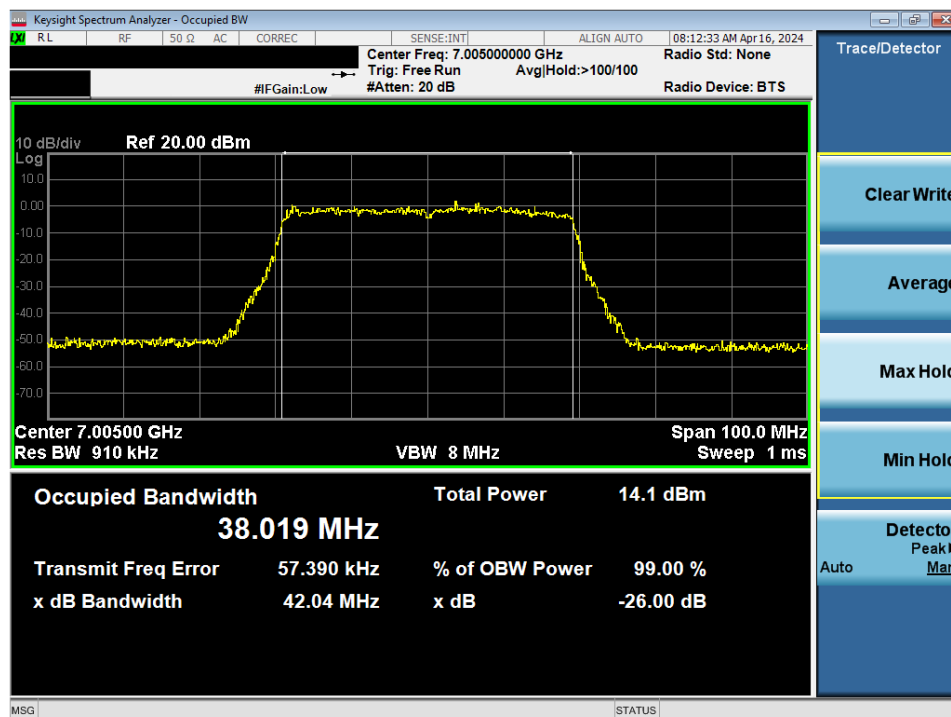
Plot 7-35. Occupied Bandwidth Plot MIMO ANT1 (320MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 127)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 41 of 261                    |

## MIMO Antenna-1 Bandwidth Measurements - (Full Tones)

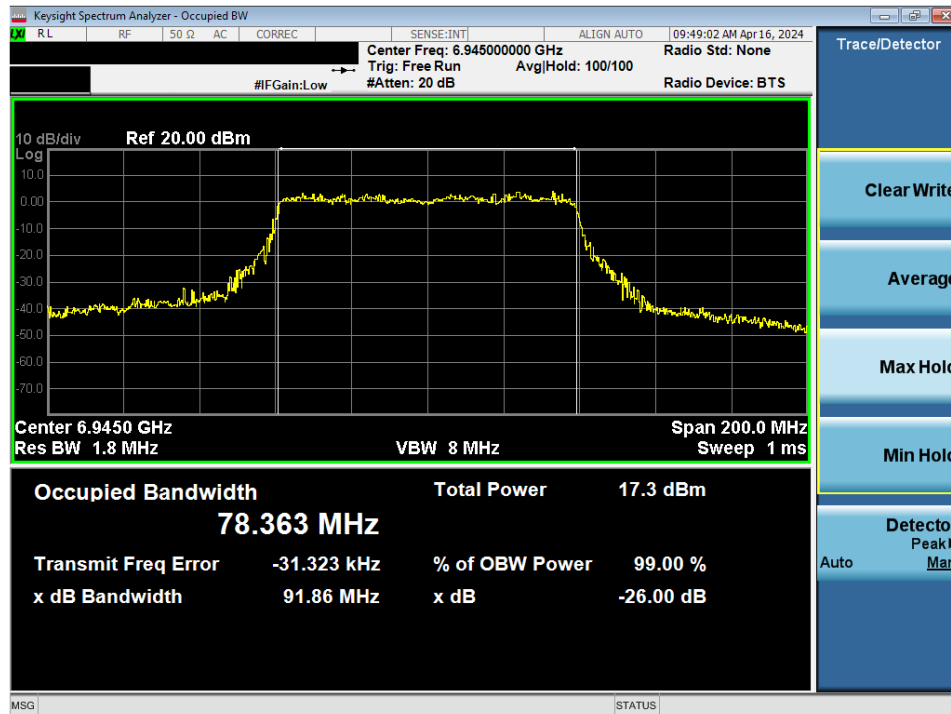


Plot 7-36. Occupied Bandwidth Plot MIMO ANT1 (20MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 209)

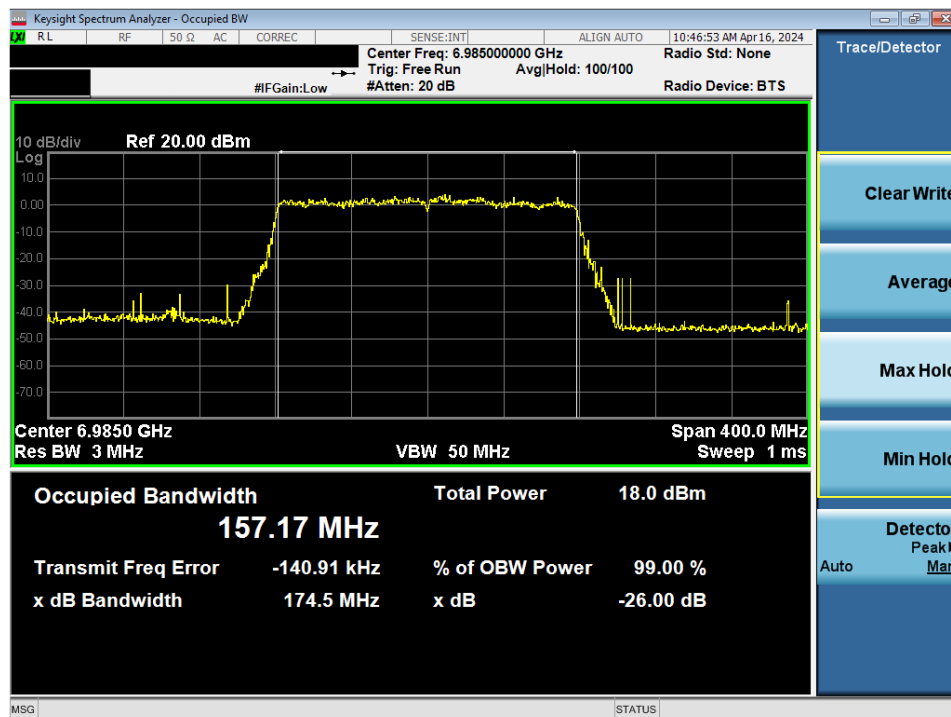


Plot 7-37. Occupied Bandwidth Plot MIMO ANT1 (40MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 211)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 42 of 261                    |

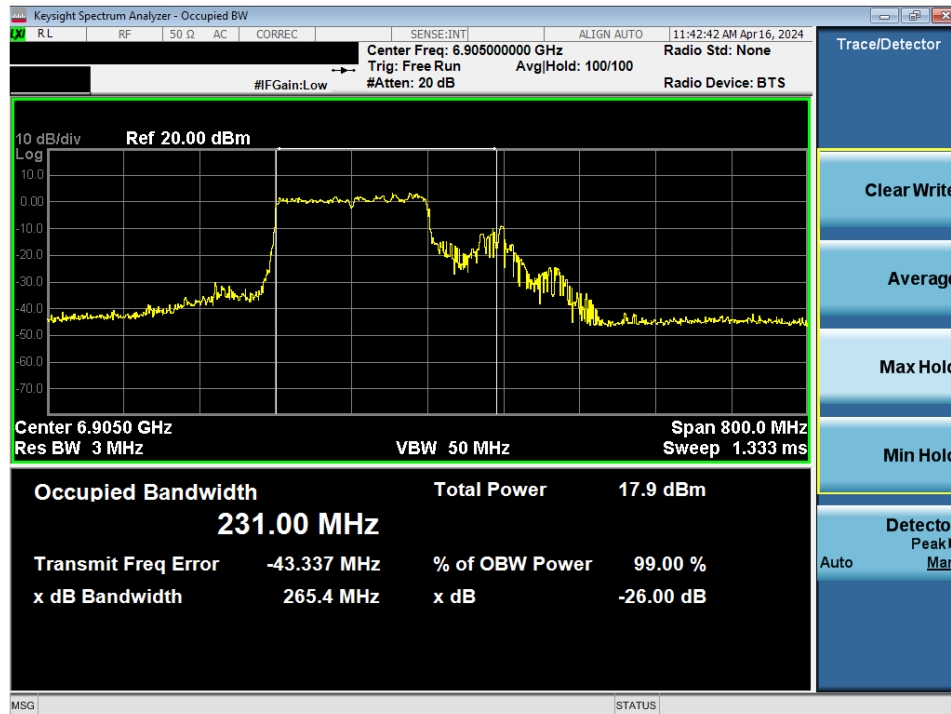


Plot 7-38. Occupied Bandwidth Plot MIMO ANT1 (80MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 199)



Plot 7-39. Occupied Bandwidth Plot MIMO ANT1 (160MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 207)

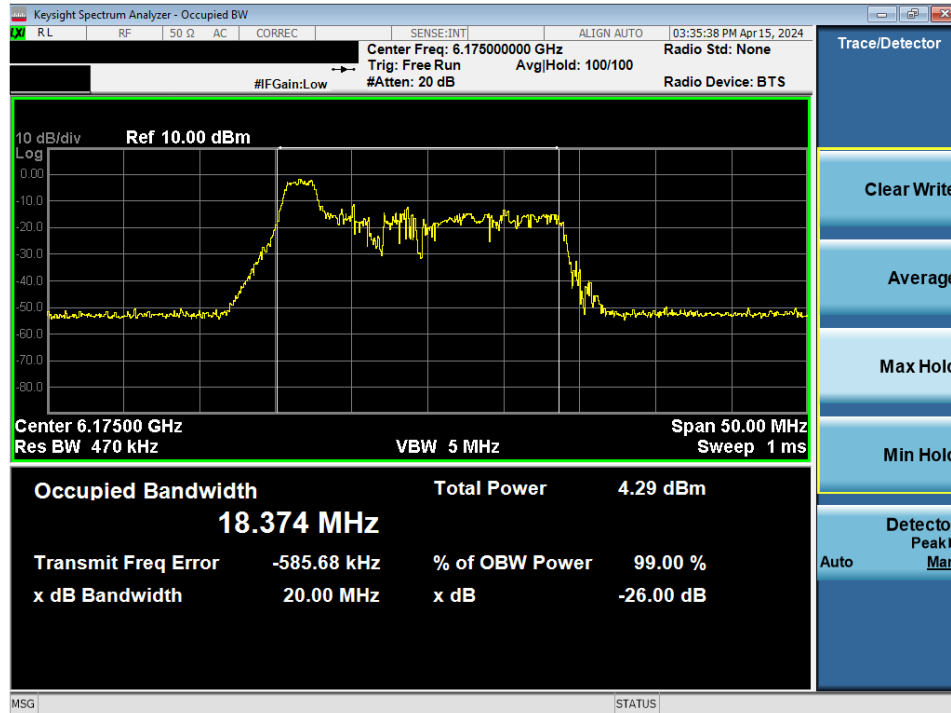
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 43 of 261                    |



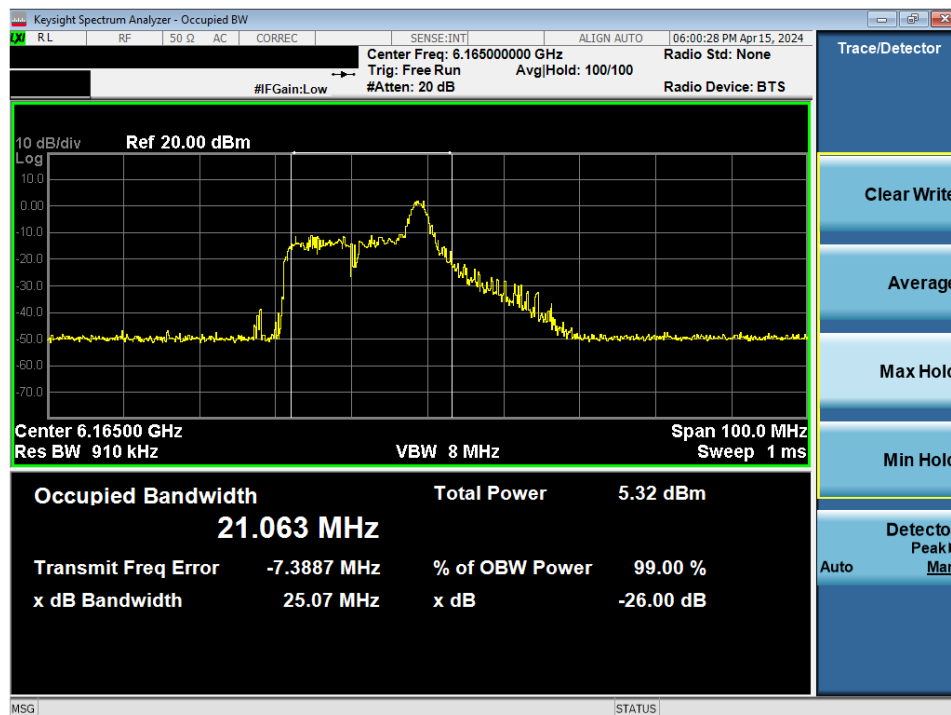
Plot 7-40. Occupied Bandwidth Plot MIMO ANT1 (320MHz BW 802. 11be (Full Tones) (UNII Band 8) – Ch. 191)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 44 of 261                    |

## 7.2.3 MIMO Antenna-2 Bandwidth Measurements - (Partial Tones)

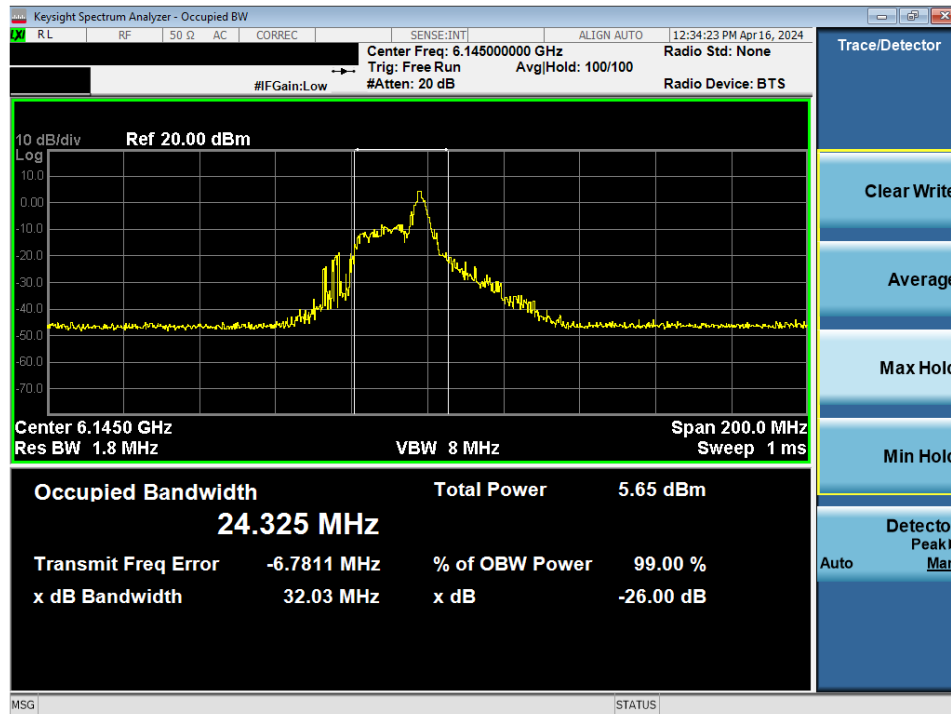


Plot 7-41. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 45)

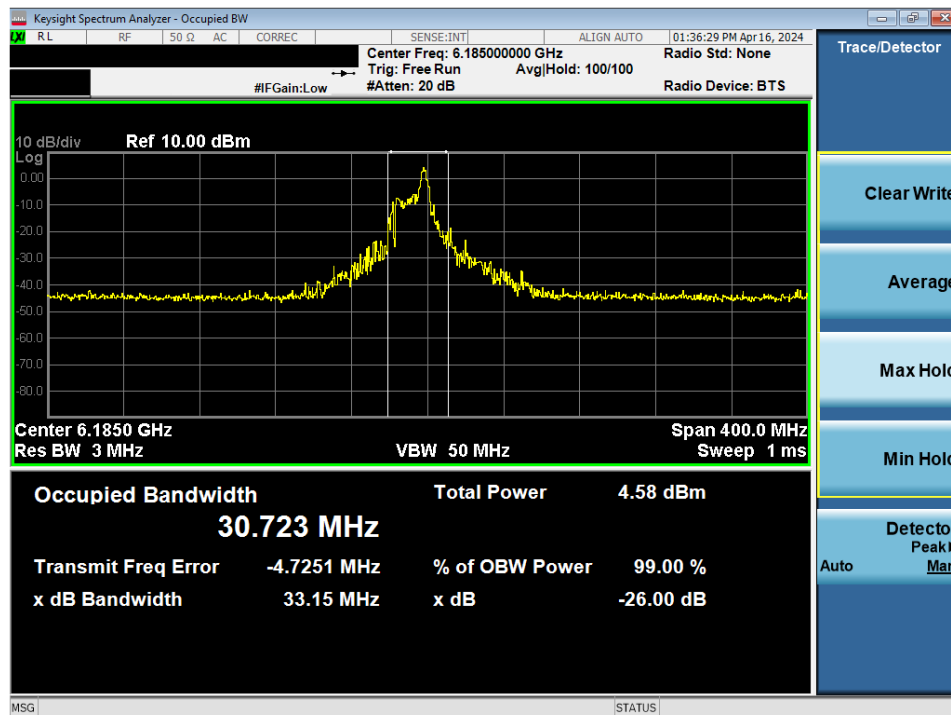


Plot 7-42. Occupied Bandwidth Plot MIMO ANT2 (40MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 43)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 45 of 261                    |

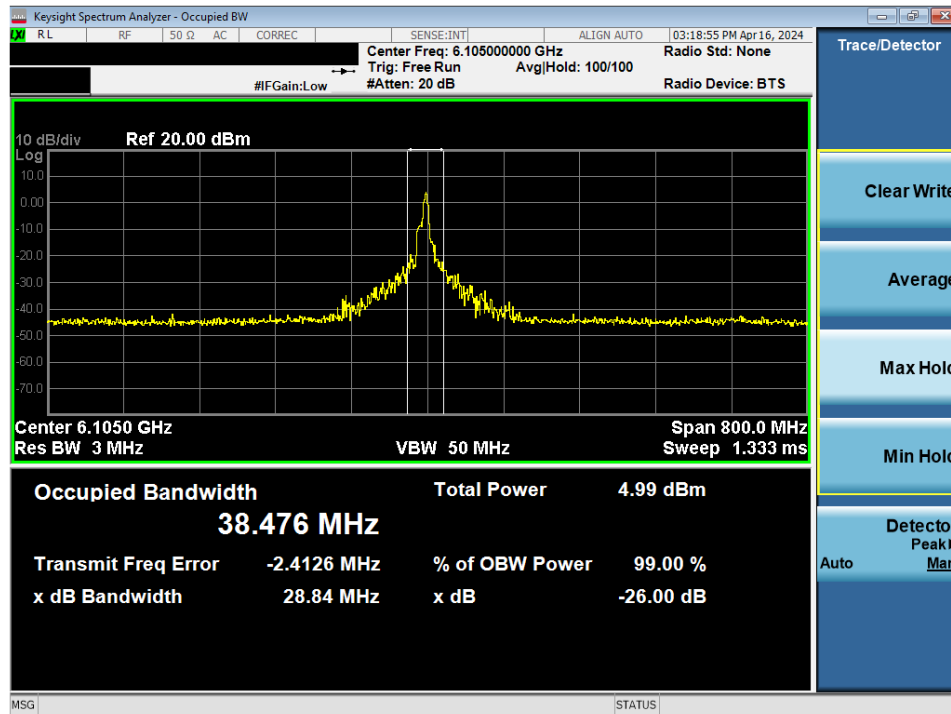


Plot 7-43. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 39)



Plot 7-44. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 47)

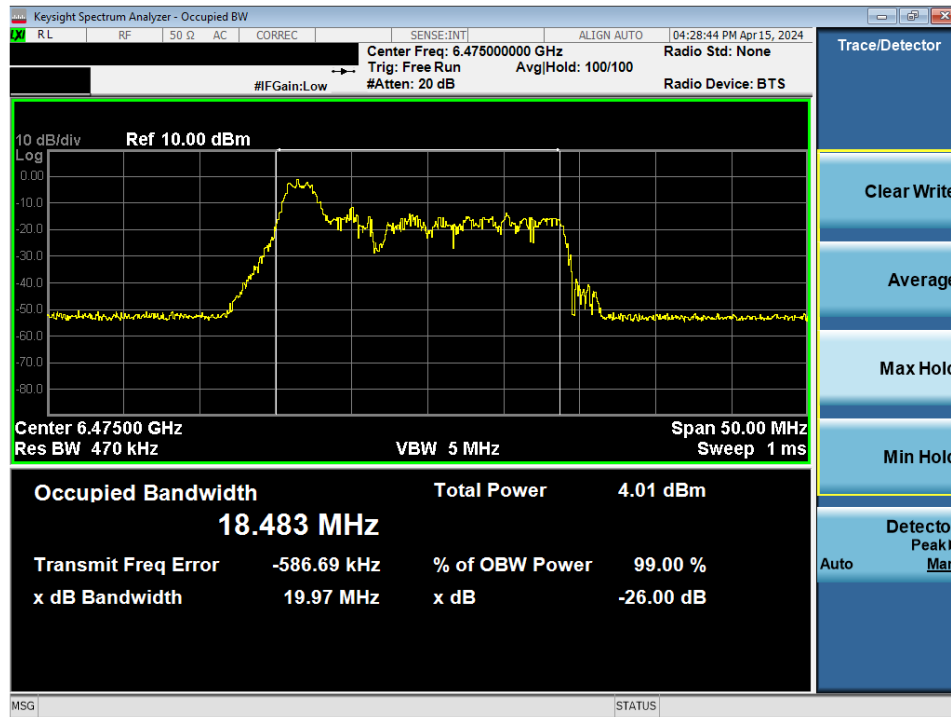
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 46 of 261                    |



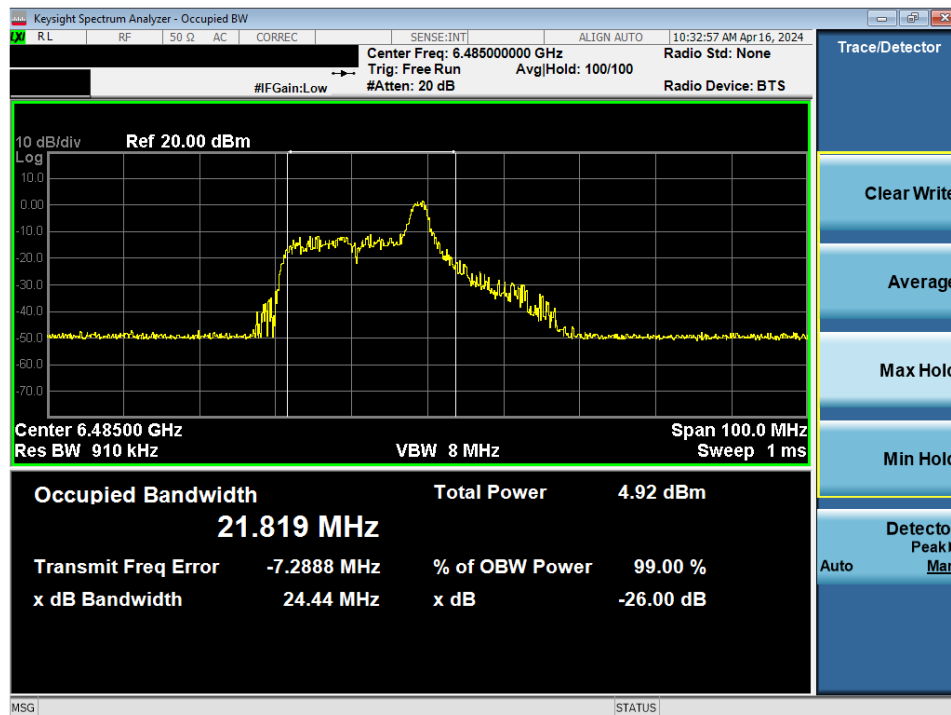
Plot 7-45. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 31)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 47 of 261                    |

## MIMO Antenna-2 Bandwidth Measurements - (Partial Tones)

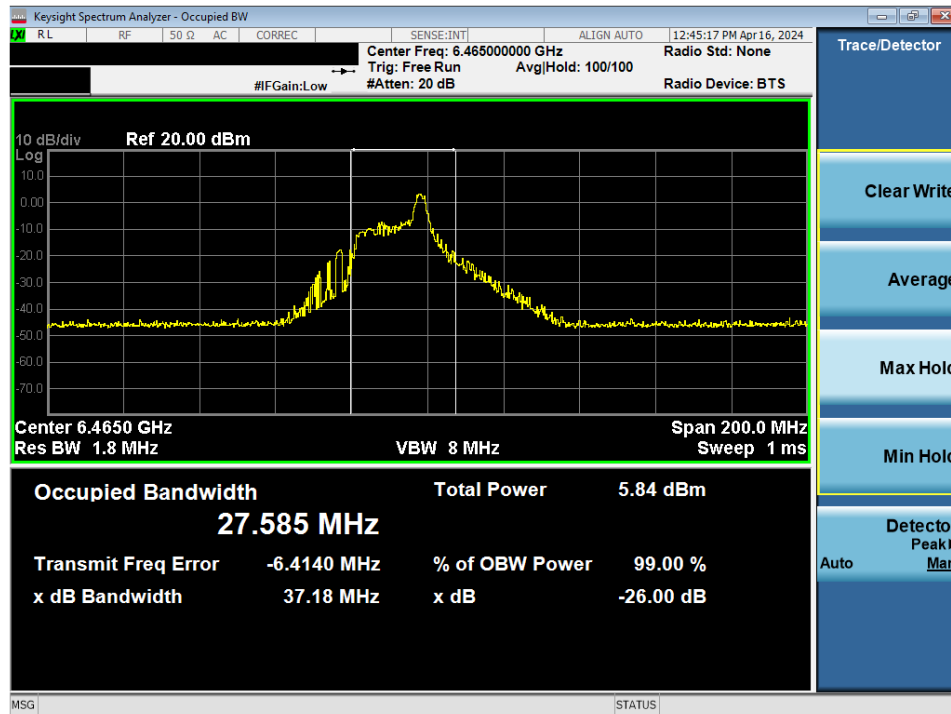


Plot 7-46. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be (26 Tones) (UNII Band 6) – Ch. 105)

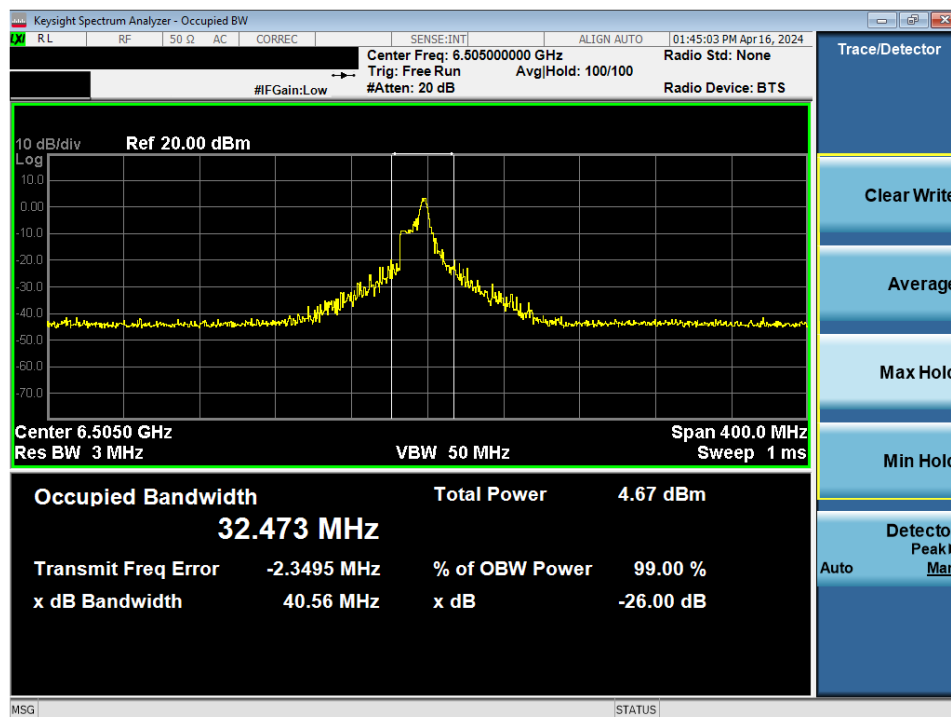


Plot 7-47. Occupied Bandwidth Plot MIMO ANT2 (40MHz BW 802.11be (26 Tones) (UNII Band 6) – Ch. 107)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 48 of 261                    |

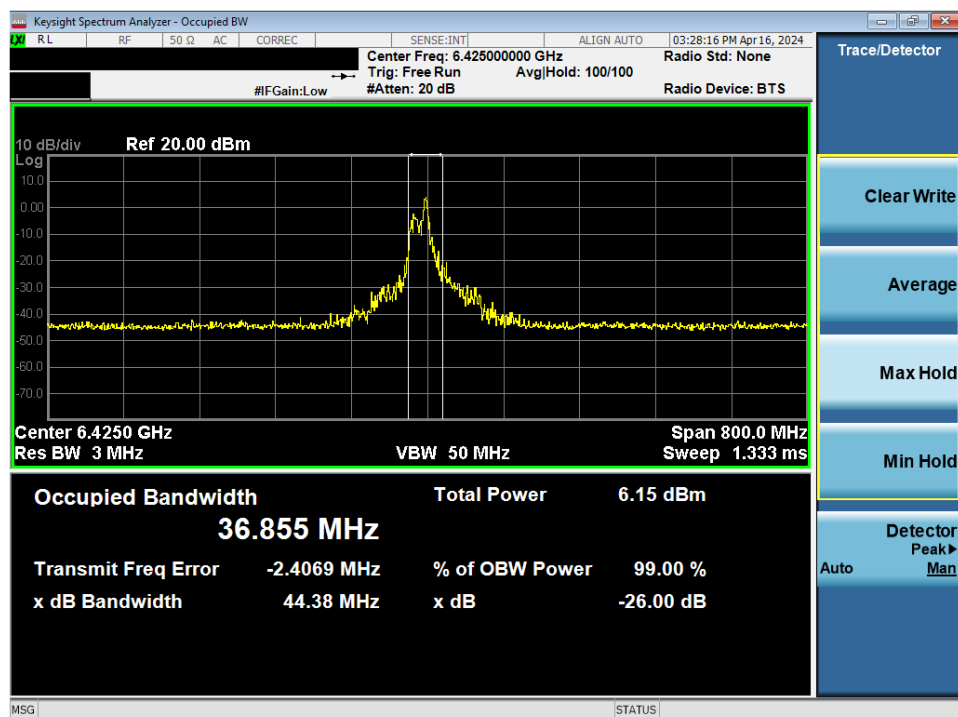


Plot 7-48. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 103)



Plot 7-49. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 111)

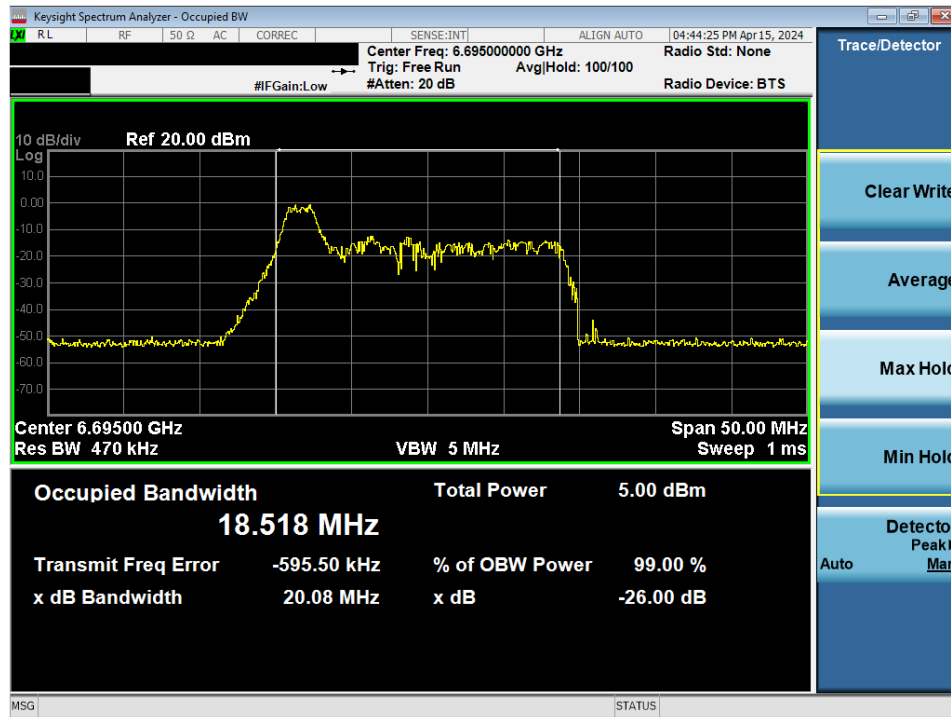
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 49 of 261                    |



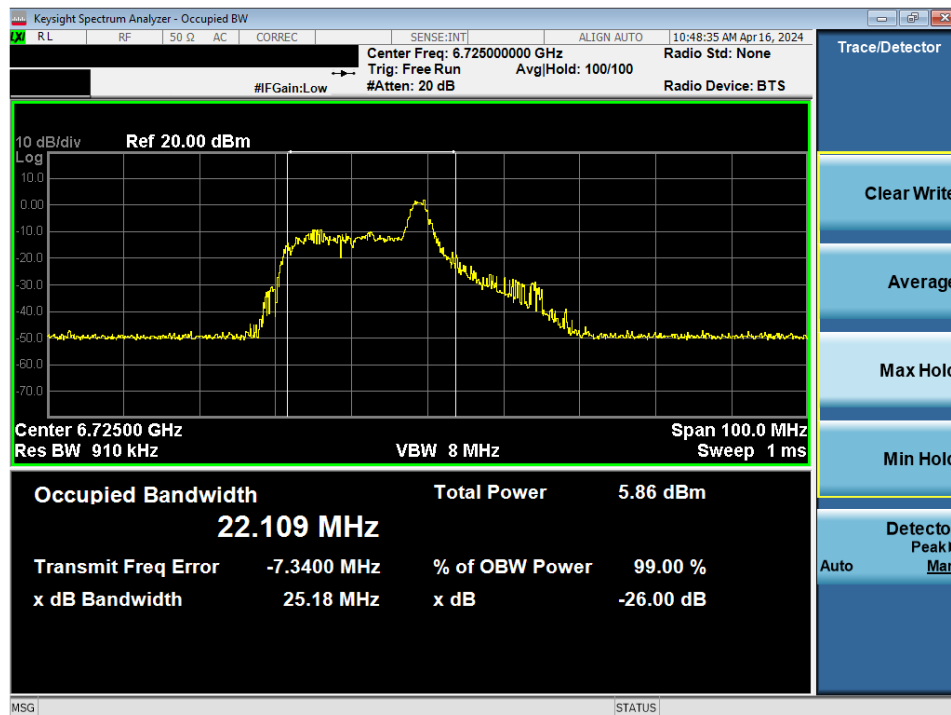
Plot 7-50. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 95)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 50 of 261                    |

## MIMO Antenna-2 Bandwidth Measurements - (Partial Tones)

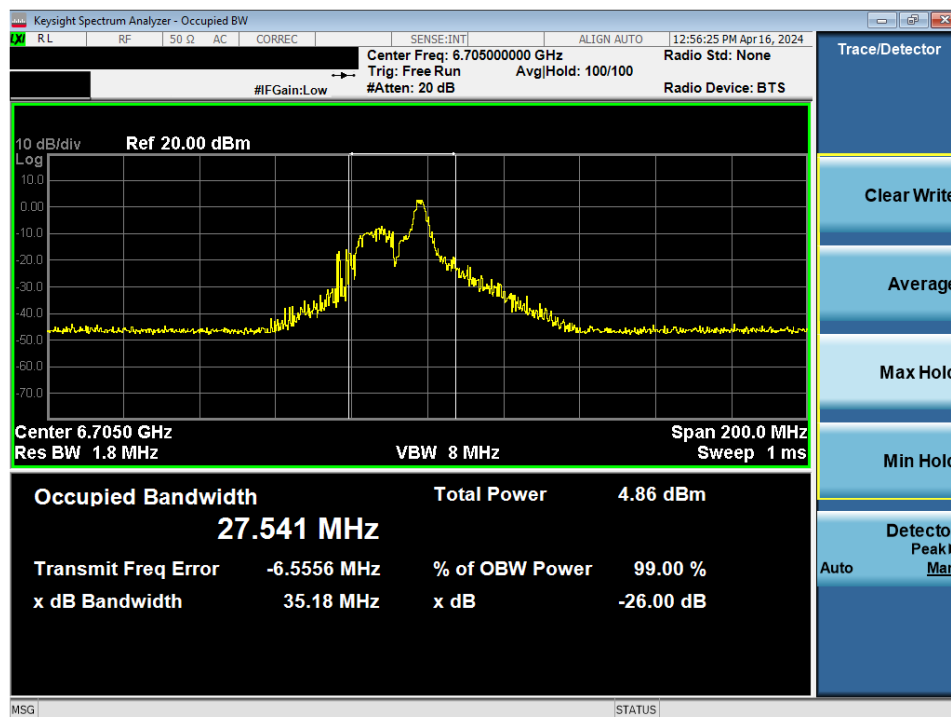


Plot 7-51. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 149)

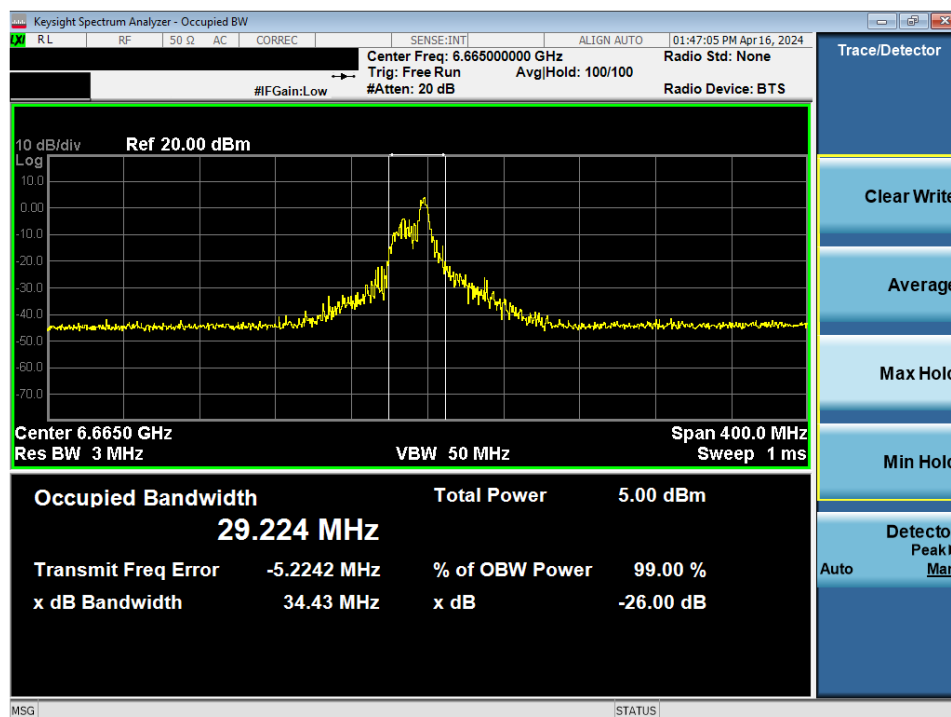


Plot 7-52. Occupied Bandwidth Plot MIMO ANT2 (40MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 155)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 51 of 261                    |

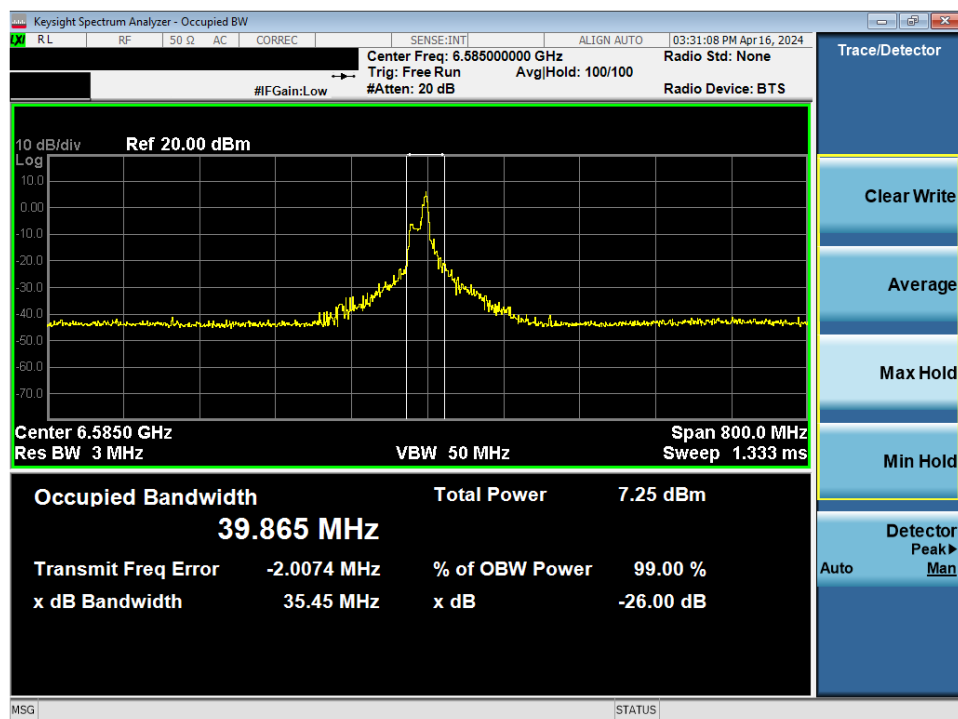


Plot 7-53. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 151)



Plot 7-54. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 143)

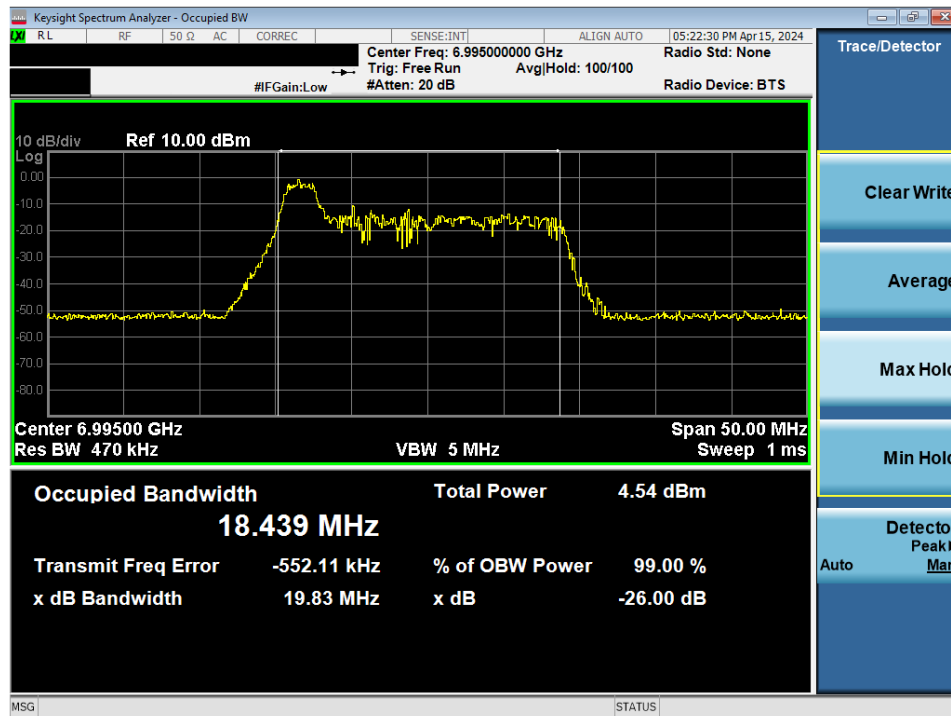
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 52 of 261                    |



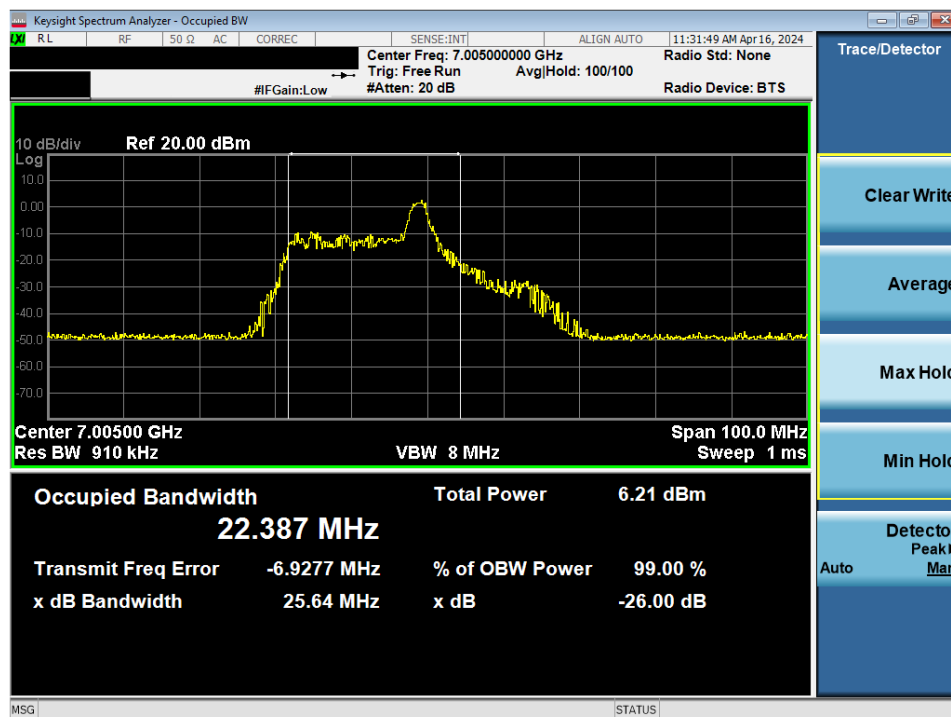
Plot 7-55. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 127)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 53 of 261                    |

## MIMO Antenna-2 Bandwidth Measurements - (Partial Tones)

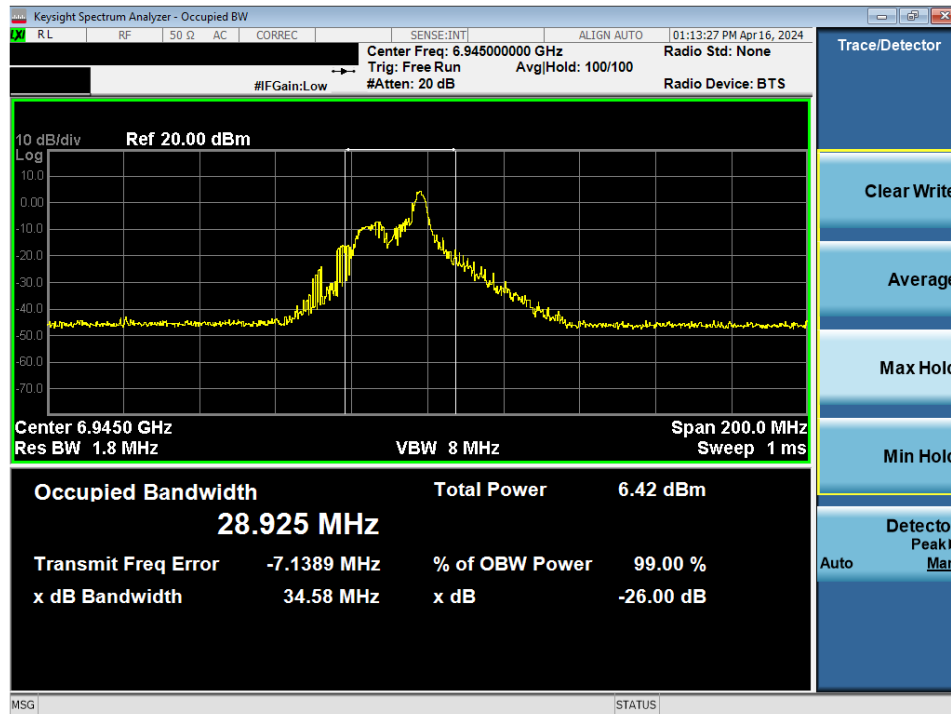


Plot 7-56. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be (26 Tones) (UNII Band 8) – Ch. 209)

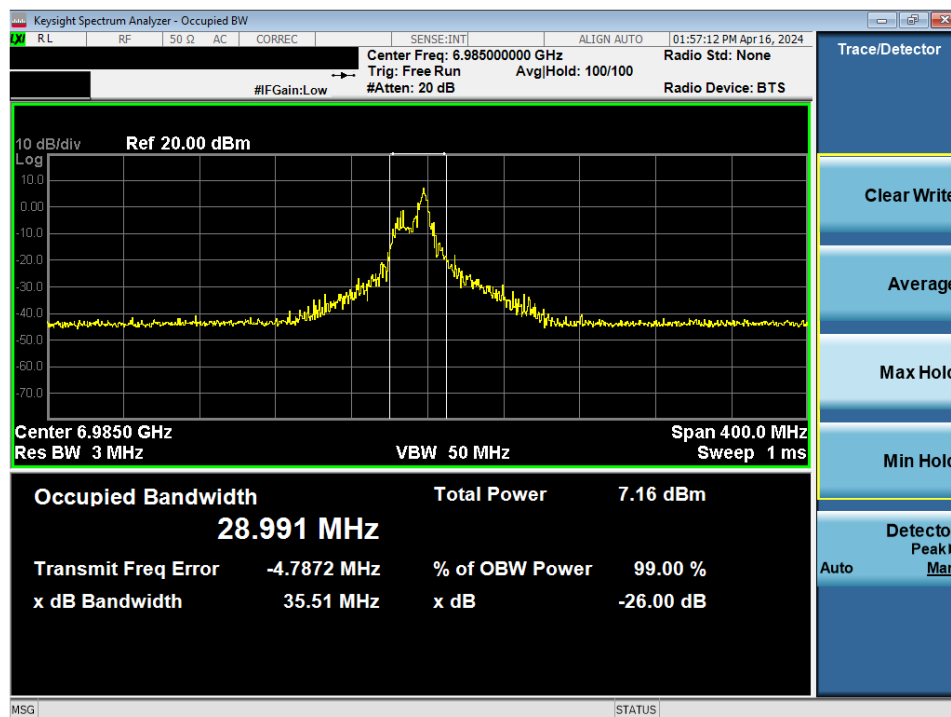


Plot 7-57. Occupied Bandwidth Plot MIMO ANT2 (40MHz BW 802.11be (26 Tones) (UNII Band 8) – Ch. 211)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 54 of 261                    |

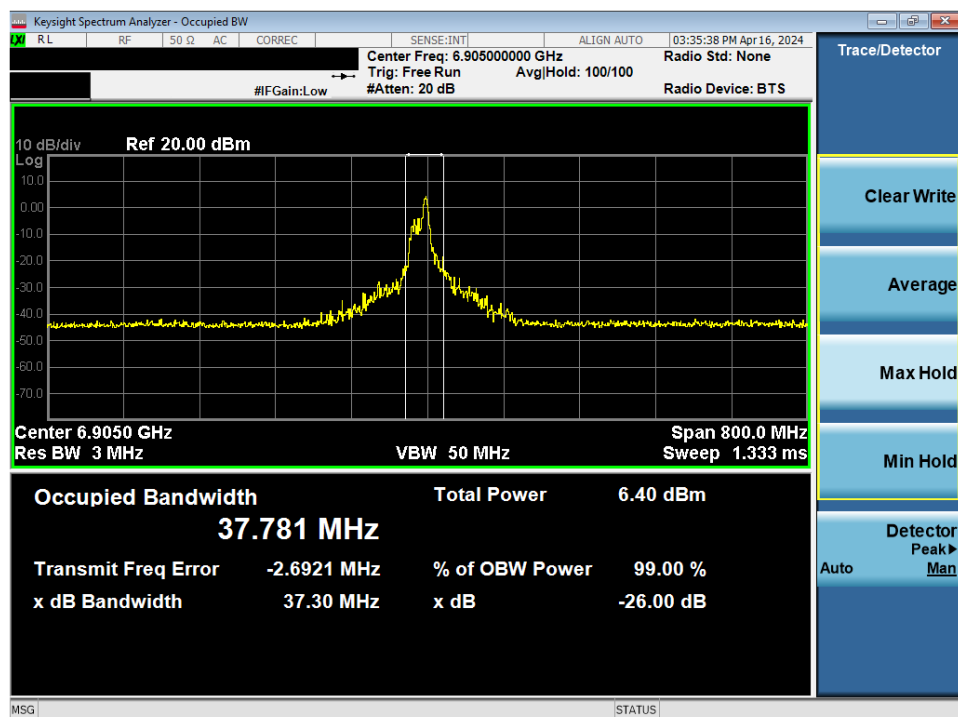


Plot 7-58. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 199)



Plot 7-59. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 207)

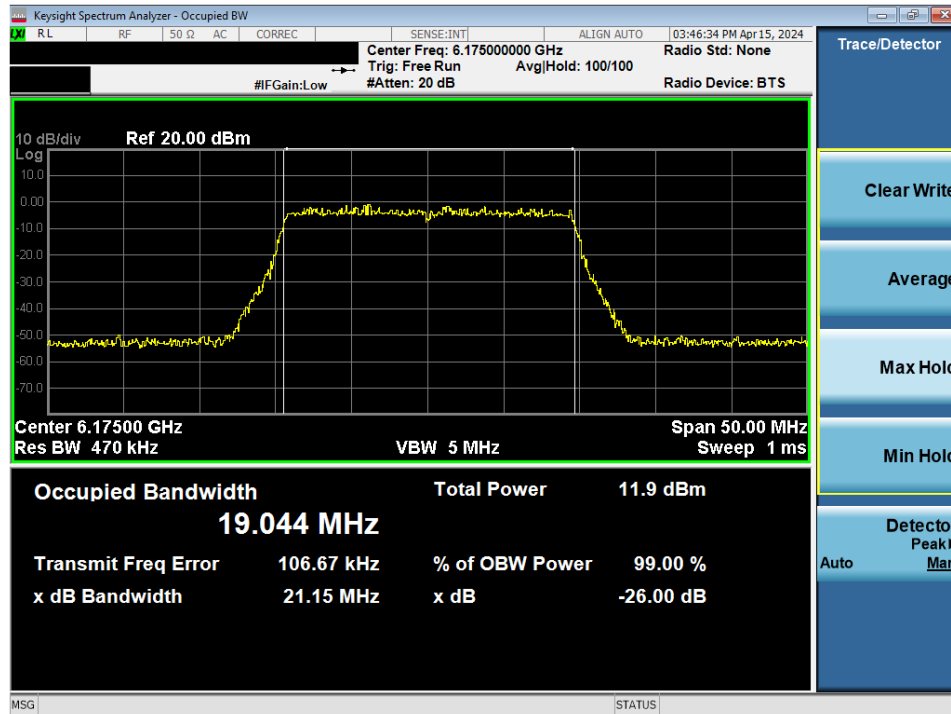
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 55 of 261                    |



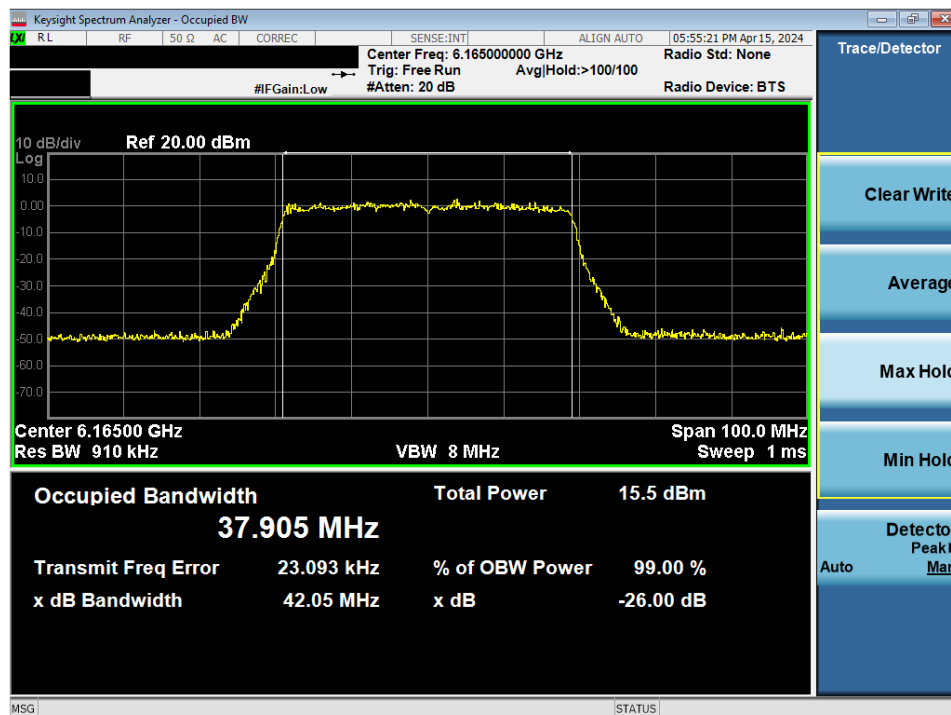
Plot 7-60. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 191)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 56 of 261                    |

## 7.2.4 MIMO Antenna-2 Bandwidth Measurements - (Full Tones)

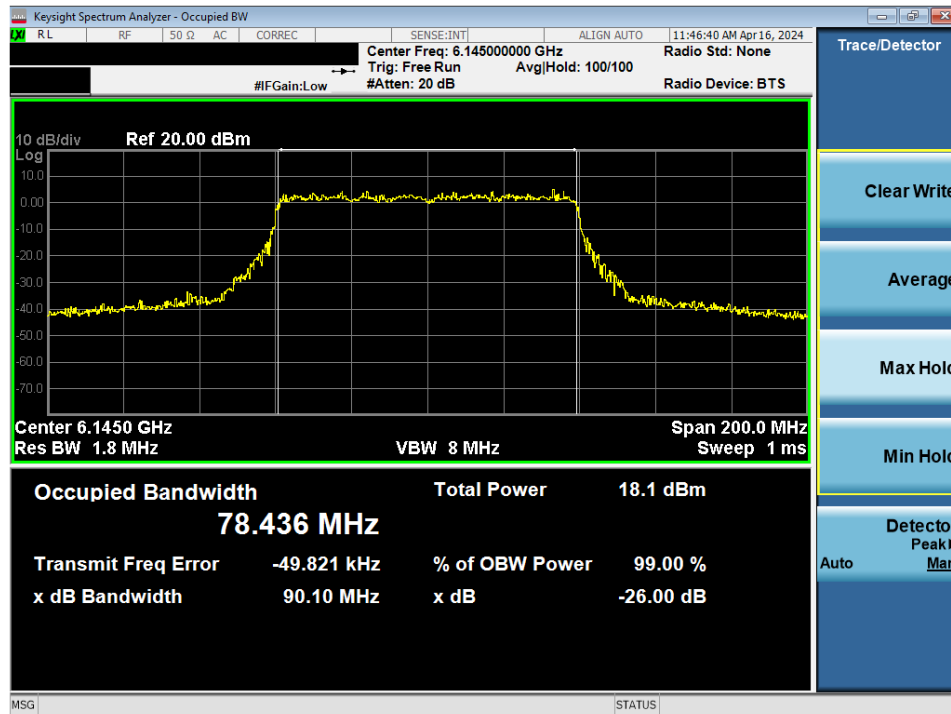


Plot 7-61. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 45)

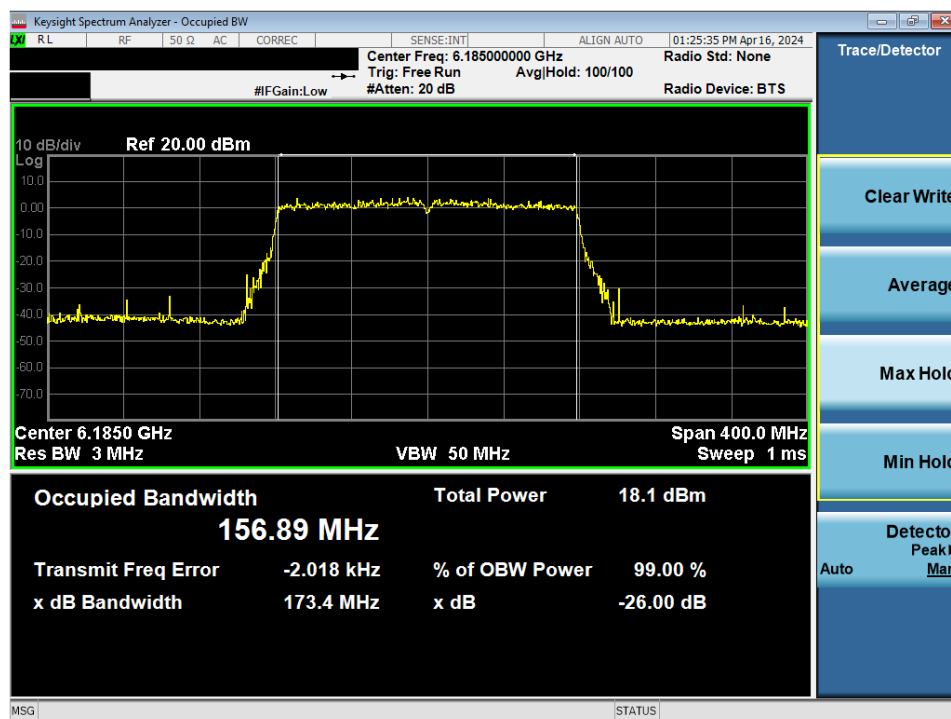


Plot 7-62. Occupied Bandwidth Plot MIMO ANT2 (40MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 43)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 57 of 261                    |

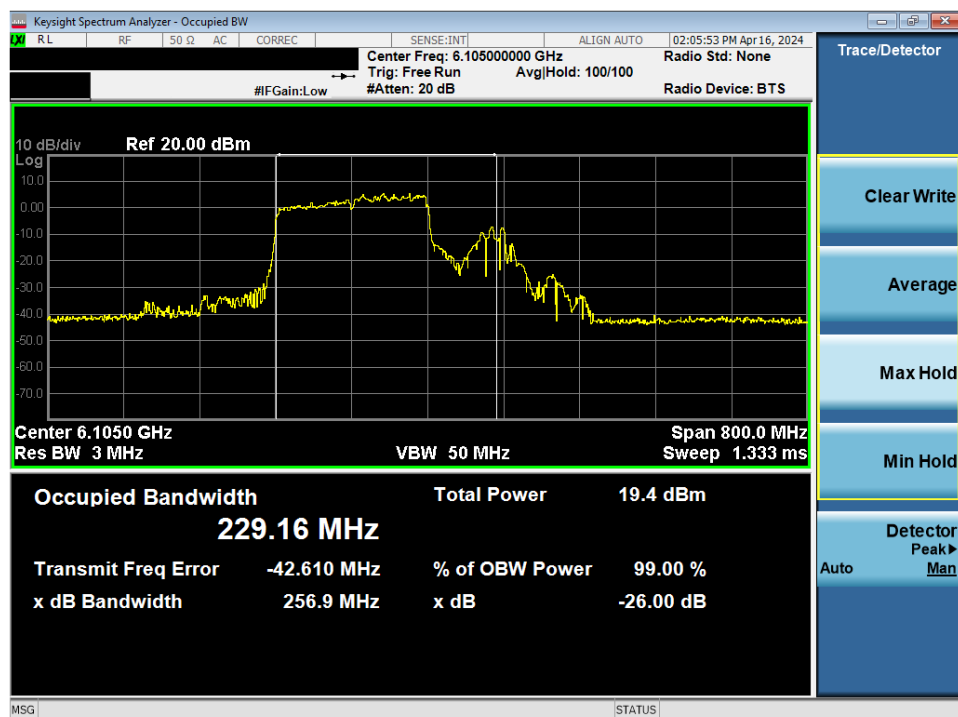


Plot 7-63. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 39)



Plot 7-64. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 47)

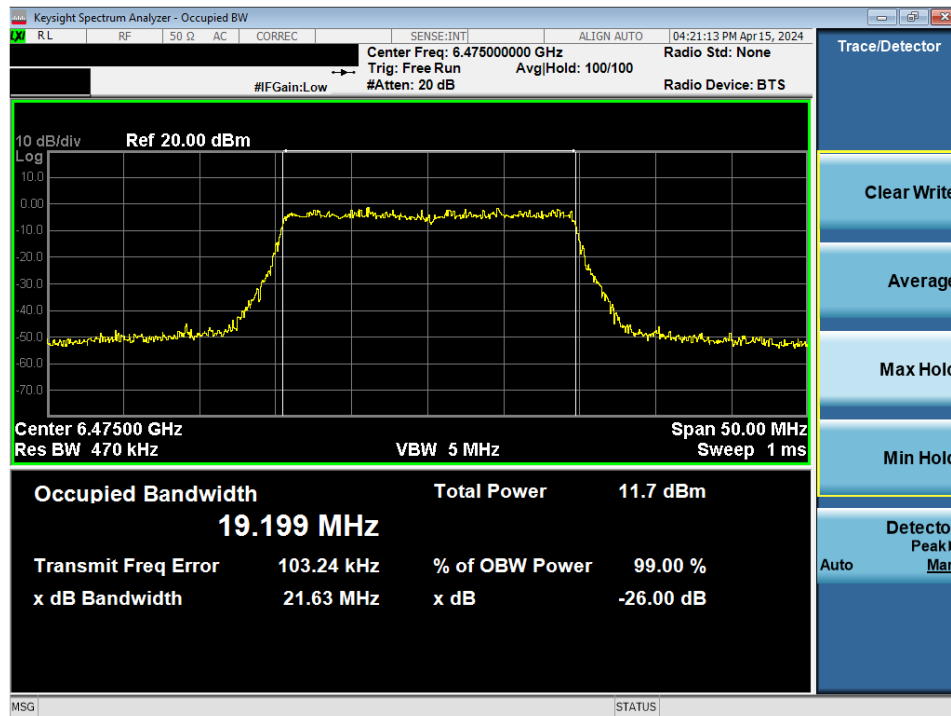
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 58 of 261                    |



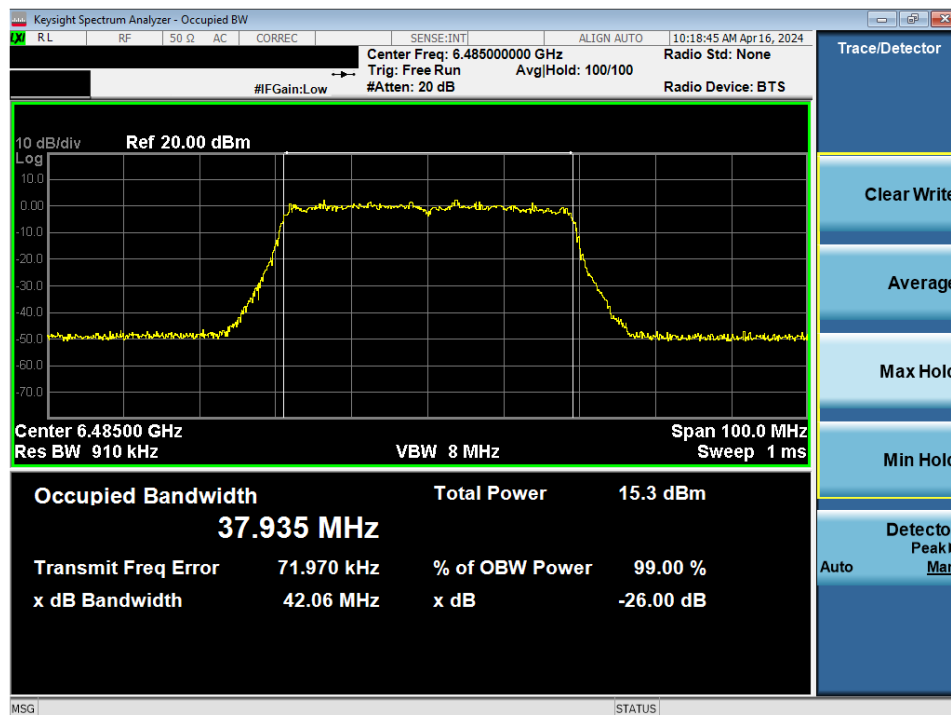
Plot 7-65. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802. 11be (Full Tones) (UNII Band 5) – Ch. 31)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 59 of 261                    |

## MIMO Antenna-2 Bandwidth Measurements - (Full Tones)

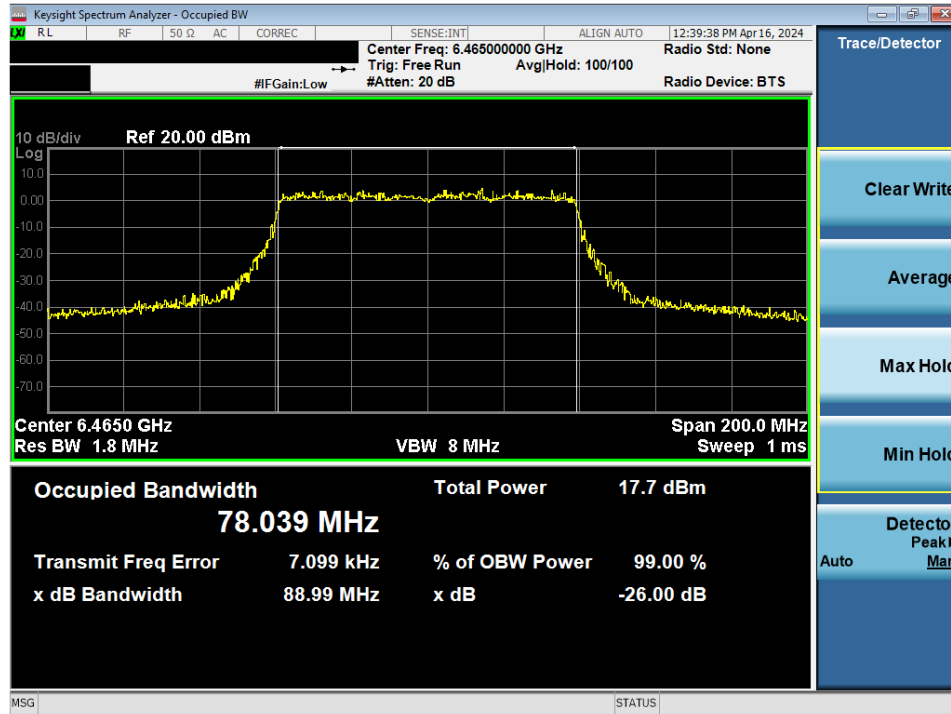


Plot 7-66. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 105)

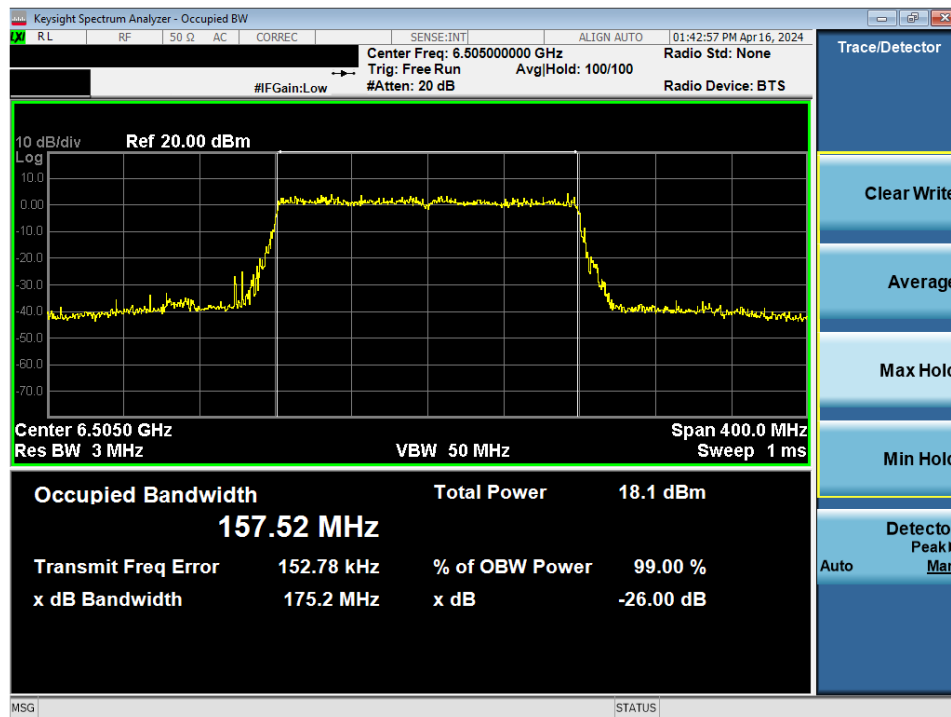


Plot 7-67. Occupied Bandwidth Plot MIMO ANT2 (40MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 107)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 60 of 261                    |

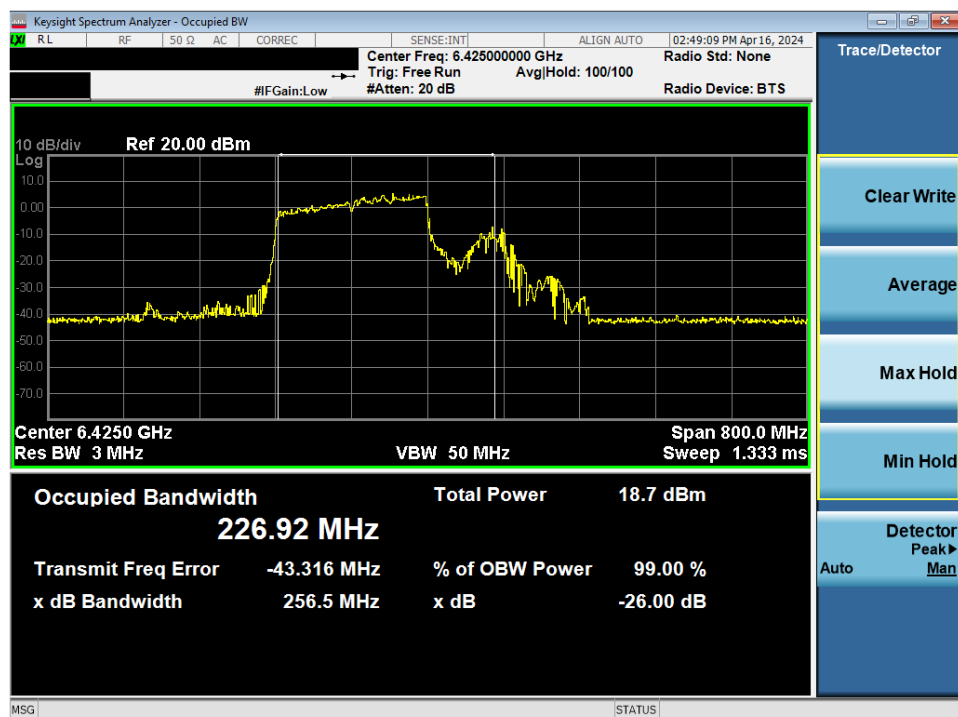


Plot 7-68. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 103)



Plot 7-69. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 111)

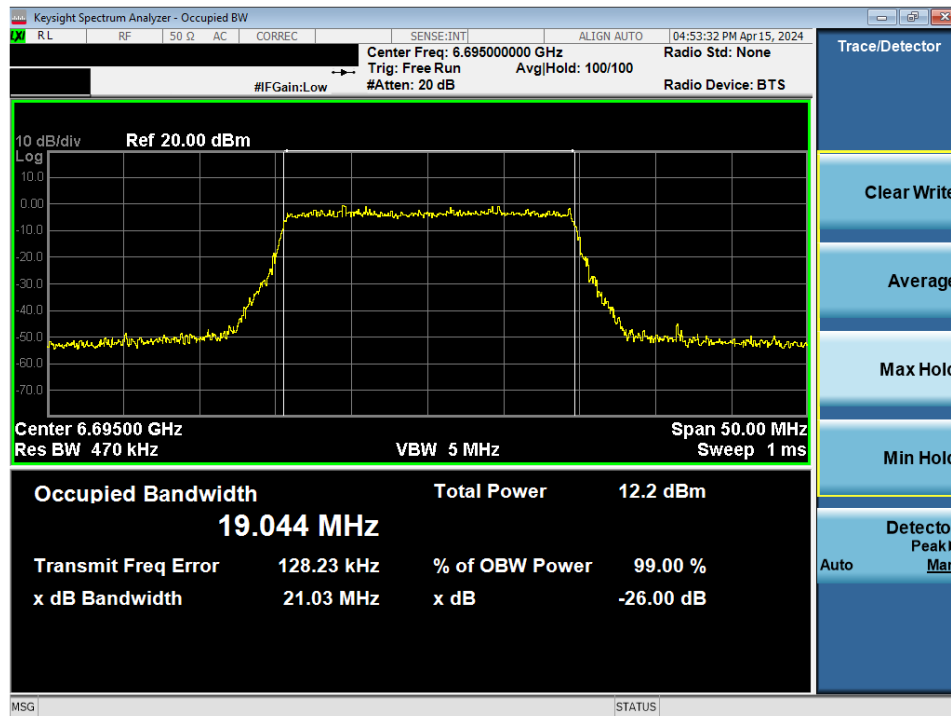
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 61 of 261                    |



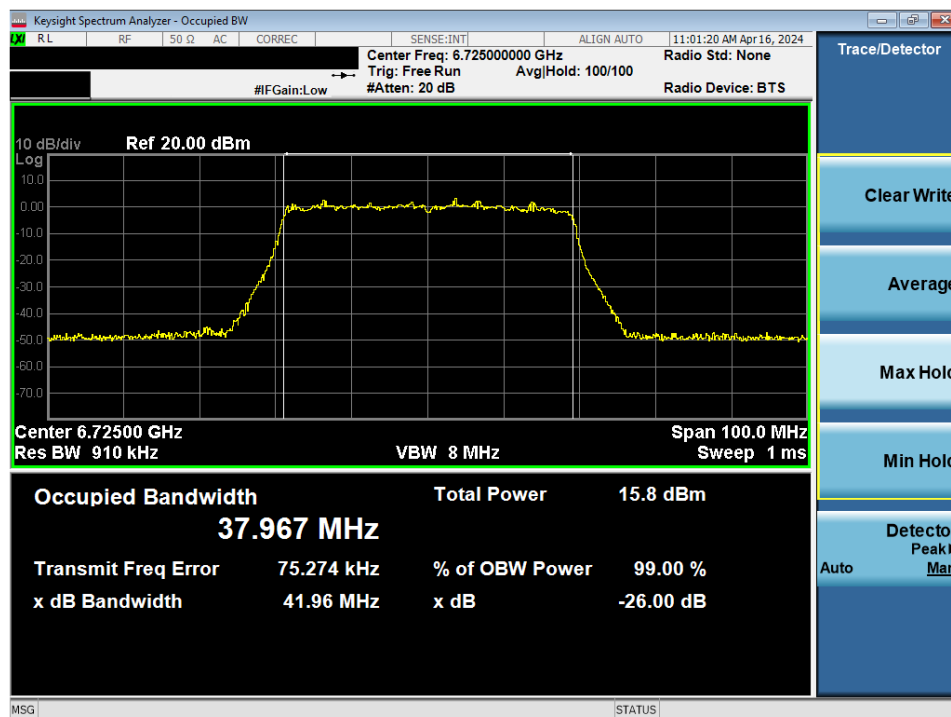
Plot 7-70. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802. 11be (Full Tones) (UNII Band 6) – Ch. 95)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 62 of 261                    |

## MIMO Antenna-2 Bandwidth Measurements - (Full Tones)

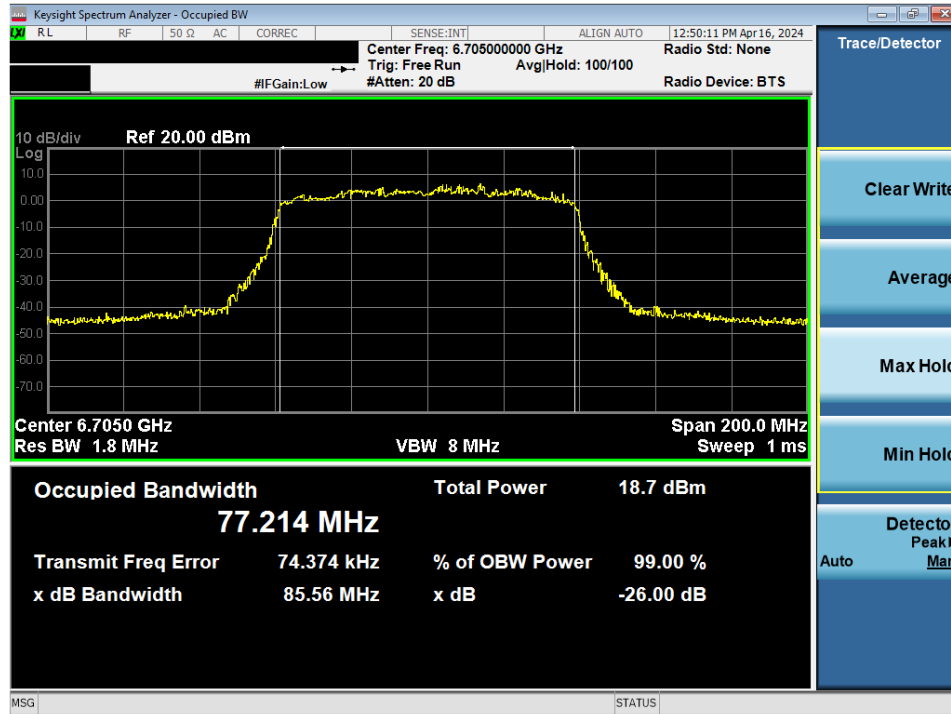


Plot 7-71. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 149)

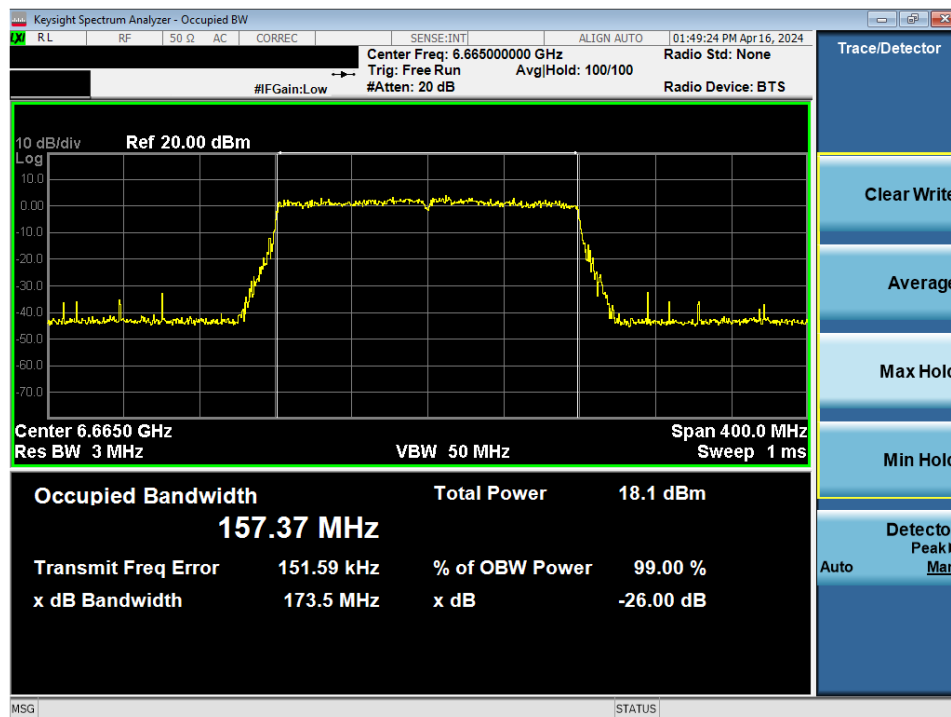


Plot 7-72. Occupied Bandwidth Plot MIMO ANT2 (40MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 155)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 63 of 261                    |

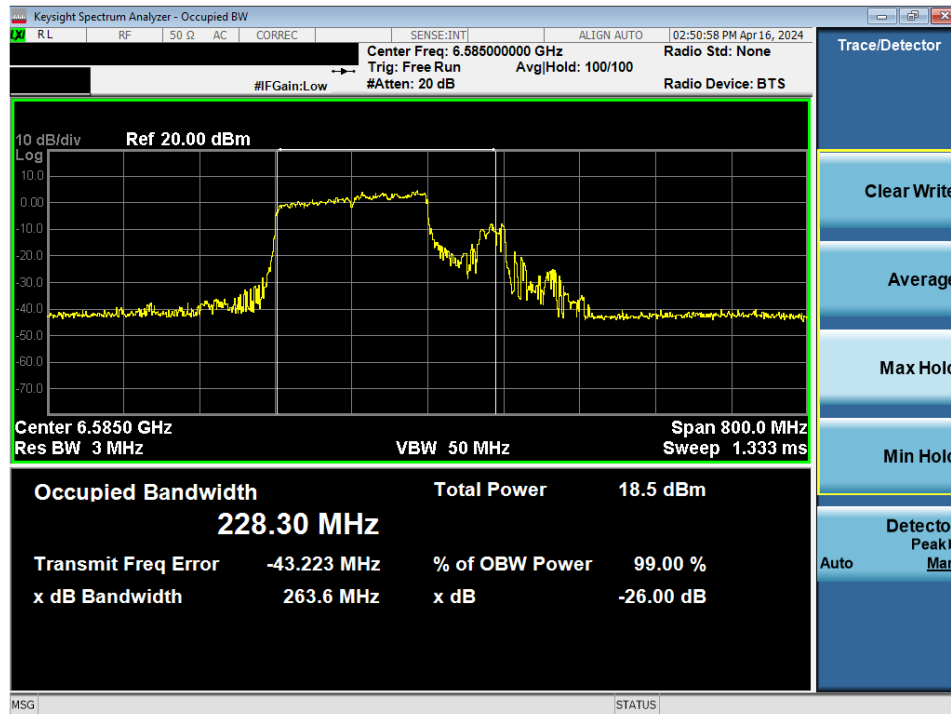


Plot 7-73. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 151)



Plot 7-74. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 143)

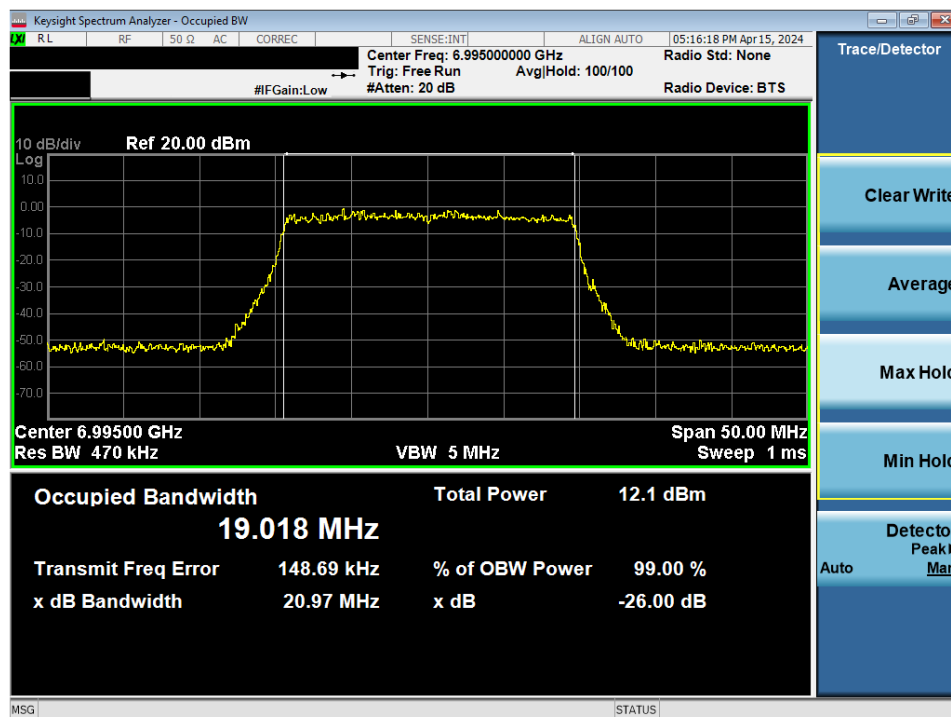
|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 64 of 261                    |



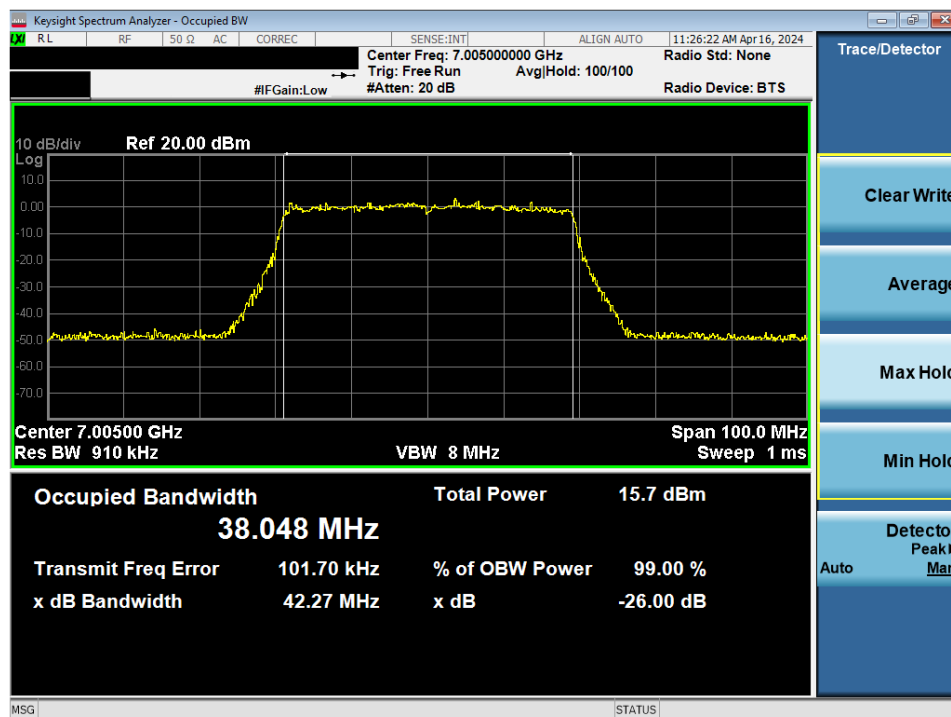
Plot 7-75. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 127)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 65 of 261                    |

## MIMO Antenna-2 Bandwidth Measurements - (Full Tones)

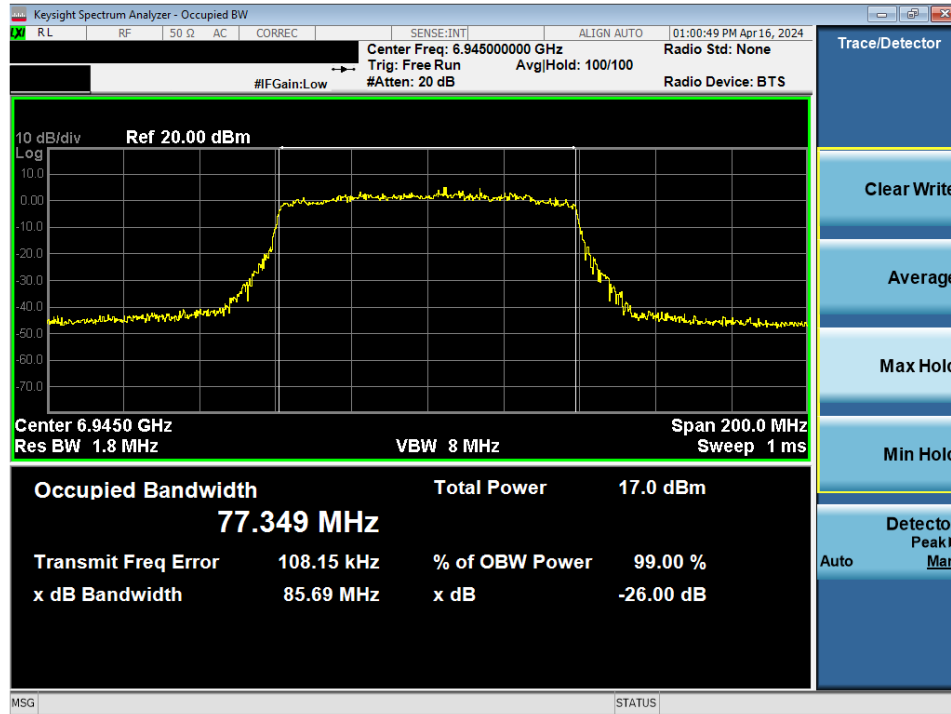


Plot 7-76. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 209)

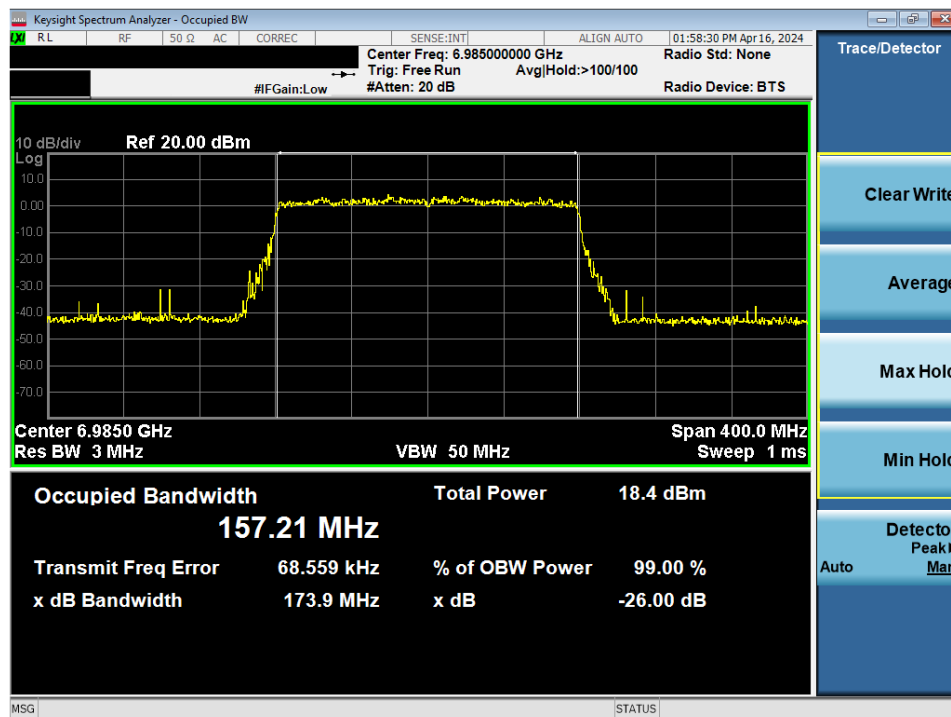


Plot 7-77. Occupied Bandwidth Plot MIMO ANT2 (40MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 211)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 66 of 261                    |



Plot 7-78. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 199)



Plot 7-79. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 207)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 67 of 261                    |



Plot 7-80. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802. 11be (Full Tones) (UNII Band 8) – Ch. 191)

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 68 of 261                    |

## 7.3 UNII Output Power Measurement

### Test Overview and Limits

A transmitter antenna terminal of the EUT is connected to the input of an RF pulse power sensor. Measurement is made using a broadband average power meter while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies.

**For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm. For client devices operating under the control of a standard power access point, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.**

### Test Procedure Used

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G  
ANSI C63.10-2013 – Section 14.2 Measure-and-Sum Technique

### Test Settings

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



**Figure 7-2. Test Instrument & Measurement Setup**

### Test Notes

Compliance for this device while operating under the control of either an indoor low power access point or a standard power access point is demonstrated by applying either the low power indoor access point limit of 24dBm e.i.r.p. or the standard power access point limit of 30dBm e.i.r.p. as shown in the tables.

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 69 of 261                    |

# MIMO Maximum Conducted Output Power Measurements – LPI

| Band      | Freq [MHz] | Channel | Tones  | Average Conducted Power (dBm) |      |        |        |       |        |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |        |        |        |
|-----------|------------|---------|--------|-------------------------------|------|--------|--------|-------|--------|-------|-------|-------|---------------------|-------------------|---------------------|---------------------|--------|--------|--------|
|           |            |         |        | RU Index                      |      |        |        |       |        |       |       |       |                     |                   |                     |                     |        |        |        |
|           |            |         |        | 0                             |      |        | 4      |       |        | 8     |       |       |                     |                   |                     |                     |        |        |        |
| ANT1      | ANT2       | MIMO    | ANT1   | ANT2                          | MIMO | ANT1   | ANT2   | MIMO  | ANT1   | ANT2  | MIMO  |       |                     |                   |                     |                     |        |        |        |
| 20MHz BW  | 5          | 2       | 26T    | -5935                         | -514 | -259   | -640   | -511  | -270   | -617  | -528  | -269  | 3.17                | 0.58              | 24.0                | -23.42              |        |        |        |
|           |            |         |        | 6175                          | 45   | 52T    | -473   | -624  | -241   | -475  | -640  | -249  | -480                | -632              | -248                | 3.17                | 0.76   | 24.0   | -23.24 |
|           |            |         |        | 6415                          | 93   | 26T    | -477   | -616  | -240   | -463  | -582  | -217  | -462                | -607              | -227                | 3.17                | 0.99   | 24.0   | -23.01 |
|           | 6          | 26T     | 26T    | 6435                          | 97   | 52T    | -495   | -517  | -205   | -459  | -571  | -210  | -468                | -514              | -189                | 3.19                | 1.30   | 24.0   | -22.70 |
|           |            |         |        | 6475                          | 105  | 26T    | -473   | -505  | -188   | -451  | -572  | -206  | -455                | -515              | -183                | 3.19                | 1.36   | 24.0   | -22.64 |
|           |            |         |        | 6515                          | 113  | 26T    | -499   | -532  | -214   | -486  | -586  | -232  | -486                | -540              | -211                | 3.19                | 1.08   | 24.0   | -22.92 |
|           | 7          | 26T     | 26T    | 6535                          | 117  | 26T    | -472   | -544  | -205   | -456  | -501  | -177  | -455                | -529              | -189                | 2.51                | 0.74   | 24.0   | -23.26 |
|           |            |         |        | 6695                          | 149  | 26T    | -561   | -517  | -205   | -459  | -534  | -197  | -494                | -536              | -208                | 2.51                | 0.70   | 24.0   | -23.30 |
|           |            |         |        | 6875                          | 185  | 26T    | -477   | -581  | -225   | -513  | -489  | -200  | -474                | -570              | -218                | 2.51                | 0.51   | 24.0   | -23.49 |
|           | 8          | 209     | 26T    | 6895                          | 189  | 26T    | -456   | -593  | -218   | -512  | -507  | -208  | -481                | -584              | -228                | 1.38                | -0.71  | 24.0   | -24.71 |
|           |            |         |        | 6995                          | 209  | 26T    | -454   | -570  | -207   | -486  | -555  | -218  | -477                | -626              | -244                | 1.38                | -0.70  | 24.0   | -24.70 |
|           |            |         |        | 7115                          | 233  | 26T    | -476   | -578  | -223   | -490  | -510  | -199  | -472                | -595              | -228                | 1.38                | -0.61  | 24.0   | -24.61 |
| 20MHz BW  | 5          | 2       | 52T    | -345                          | -241 | 0.11   | -356   | -231  | 0.12   | -367  | -258  | -0.08 | 3.17                | 3.29              | 24.0                | -20.71              |        |        |        |
|           |            |         |        | 6175                          | 45   | 52T    | -224   | -397  | -0.13  | -231  | -388  | -0.01 | -217                | -368              | 0.15                | 3.17                | 3.32   | 24.0   | -20.68 |
|           |            |         |        | 6415                          | 93   | 52T    | -246   | -305  | 0.37   | -211  | -325  | 0.37  | -225                | -296              | 0.42                | 3.17                | 3.59   | 24.0   | -20.41 |
|           | 6          | 52T     | 52T    | 6435                          | 97   | 52T    | -241   | -276  | -2.04  | -241  | -376  | -2.10 | -240                | -376              | -2.10               | 3.19                | 3.81   | 24.0   | -20.19 |
|           |            |         |        | 6475                          | 105  | 52T    | -201   | -264  | 0.70   | -218  | -345  | 0.24  | -228                | -323              | 0.28                | 3.19                | 3.89   | 24.0   | -20.11 |
|           |            |         |        | 6515                          | 113  | 52T    | -232   | -290  | 0.41   | -201  | -304  | 0.52  | -207                | -281              | 0.59                | 3.19                | 3.78   | 24.0   | -20.22 |
|           | 7          | 52T     | 52T    | 6535                          | 117  | 52T    | -214   | -228  | 0.80   | -239  | -394  | -0.09 | -228                | -268              | 0.53                | 2.51                | 3.31   | 24.0   | -20.69 |
|           |            |         |        | 6695                          | 149  | 52T    | -219   | -245  | 0.87   | -235  | -281  | 0.44  | -226                | -325              | 0.28                | 2.51                | 2.96   | 24.0   | -21.04 |
|           |            |         |        | 6875                          | 185  | 52T    | -238   | -320  | 0.24   | -210  | -236  | 0.78  | -218                | -355              | 0.20                | 2.51                | 3.29   | 24.0   | -20.71 |
|           | 8          | 209     | 52T    | 6895                          | 189  | 52T    | -227   | -334  | 0.24   | -217  | -246  | 0.70  | -223                | -368              | 0.12                | 1.38                | 2.07   | 24.0   | -21.93 |
|           |            |         |        | 6995                          | 209  | 52T    | -226   | -318  | 0.31   | -201  | -297  | 0.55  | -228                | -365              | 0.10                | 1.38                | 1.92   | 24.0   | -22.08 |
|           |            |         |        | 7115                          | 233  | 52T    | -237   | -326  | 0.22   | -201  | -277  | 0.64  | -211                | -345              | 0.28                | 1.38                | 2.01   | 24.0   | -21.99 |
| 20MHz BW  | 5          | 2       | 106T   | -0.31                         | 0.77 | 3.27   | 0.58   | 0.60  | 3.06   | 0.32  | 0.32  | 3.17  | 6.44                | 24.0              | -17.56              |                     |        |        |        |
|           |            |         |        | 6175                          | 45   | 106T   | 0.80   | -0.87 | 3.06   | 0.99  | -0.58 | 3.29  | 0.36                | 0.36              | 3.17                | 6.45                | 24.0   | -17.55 |        |
|           |            |         |        | 6415                          | 93   | 106T   | 0.55   | -0.45 | 3.09   | 0.64  | -0.40 | 3.16  | 0.36                | 0.36              | 3.17                | 6.33                | 24.0   | -17.67 |        |
|           | 6          | 106T    | 106T   | 6435                          | 97   | 106T   | 0.53   | -0.09 | 3.24   | 0.79  | -0.04 | 3.41  | 0.31                | 0.31              | 3.19                | 6.60                | 24.0   | -17.40 |        |
|           |            |         |        | 6475                          | 105  | 106T   | 0.70   | -0.17 | 3.30   | 0.96  | -0.11 | 3.47  | 0.31                | 0.31              | 3.19                | 6.66                | 24.0   | -17.34 |        |
|           |            |         |        | 6515                          | 113  | 106T   | 0.94   | 0.13  | 3.56   | 0.73  | -0.18 | 3.31  | 0.75                | 0.75              | 3.19                | 6.76                | 24.0   | -17.24 |        |
|           | 7          | 106T    | 106T   | 6535                          | 117  | 106T   | 0.60   | 0.25  | 3.44   | 0.99  | 0.43  | 3.73  | 0.31                | 0.31              | 2.51                | 6.24                | 24.0   | -17.76 |        |
|           |            |         |        | 6695                          | 149  | 106T   | 0.99   | 0.68  | 3.85   | 0.99  | 0.45  | 3.74  | 0.31                | 0.31              | 2.51                | 6.36                | 24.0   | -17.64 |        |
|           |            |         |        | 6875                          | 185  | 106T   | 0.71   | 0.42  | 3.58   | 0.81  | 0.27  | 3.56  | 0.31                | 0.31              | 2.51                | 6.09                | 24.0   | -17.91 |        |
|           | 8          | 209     | 106T   | 6895                          | 189  | 106T   | 0.80   | 0.27  | 3.55   | 0.78  | 0.14  | 3.48  | 0.31                | 0.31              | 1.38                | 4.93                | 24.0   | -19.07 |        |
|           |            |         |        | 6995                          | 209  | 106T   | 0.80   | 0.20  | 3.52   | 0.84  | -0.29 | 3.32  | 0.31                | 0.31              | 1.38                | 4.90                | 24.0   | -19.10 |        |
|           |            |         |        | 7115                          | 233  | 106T   | 0.60   | 0.14  | 3.39   | 0.90  | -0.16 | 3.41  | 0.31                | 0.31              | 1.38                | 4.79                | 24.0   | -19.21 |        |
| 20MHz BW  | 5          | 2       | 242T   | 2.03                          | 1.80 | 4.93   | 2.03   | 1.80  | 4.93   | 2.03  | 1.80  | 4.93  | 3.17                | 8.09              | 24.0                | -15.91              |        |        |        |
|           |            |         |        | 6175                          | 45   | 242T   | 3.88   | 3.49  | 6.70   | 3.88  | 3.49  | 6.70  | 3.88                | 3.49              | 3.17                | 9.87                | 24.0   | -14.13 |        |
|           |            |         |        | 6415                          | 93   | 242T   | 3.69   | 3.62  | 6.67   | 3.69  | 3.62  | 6.67  | 3.69                | 3.62              | 3.17                | 9.83                | 24.0   | -14.17 |        |
|           | 6          | 242T    | 242T   | 6435                          | 97   | 242T   | 4.15   | 3.76  | 7.07   | 4.15  | 3.76  | 7.07  | 4.15                | 3.76              | 3.19                | 10.16               | 24.0   | -13.84 |        |
|           |            |         |        | 6475                          | 105  | 242T   | 4.45   | 3.62  | 7.07   | 4.45  | 3.62  | 7.07  | 4.45                | 3.62              | 3.19                | 10.26               | 24.0   | -13.74 |        |
|           |            |         |        | 6515                          | 113  | 242T   | 4.39   | 3.98  | 7.20   | 4.39  | 3.98  | 7.20  | 4.39                | 3.98              | 3.19                | 10.39               | 24.0   | -13.61 |        |
|           | 7          | 242T    | 242T   | 6535                          | 117  | 242T   | 4.22   | 3.94  | 7.09   | 4.22  | 3.94  | 7.09  | 4.22                | 3.94              | 2.51                | 9.60                | 24.0   | -14.40 |        |
|           |            |         |        | 6695                          | 149  | 242T   | 4.21   | 4.07  | 7.15   | 4.21  | 4.07  | 7.15  | 4.21                | 4.07              | 2.51                | 9.66                | 24.0   | -14.34 |        |
|           |            |         |        | 6875                          | 185  | 242T   | 4.37   | 4.49  | 7.44   | 4.37  | 4.49  | 7.44  | 4.37                | 4.49              | 2.51                | 9.95                | 24.0   | -14.05 |        |
|           | 8          | 209     | 242T   | 6895                          | 189  | 242T   | 4.46   | 4.49  | 7.49   | 4.46  | 4.49  | 7.49  | 4.46                | 4.49              | 1.38                | 8.86                | 24.0   | -15.14 |        |
|           |            |         |        | 6995                          | 209  | 242T   | 4.49   | 4.15  | 7.33   | 4.49  | 4.15  | 7.33  | 4.49                | 4.15              | 1.38                | 8.71                | 24.0   | -15.29 |        |
|           |            |         |        | 7115                          | 233  | 242T   | 4.42   | 4.35  | 7.40   | 4.42  | 4.35  | 7.40  | 4.42                | 4.35              | 1.38                | 8.77                | 24.0   | -15.23 |        |
| 40MHz BW  | 5          | 3       | 484T   | 6.99                          | 5.98 | 9.52   | 6.99   | 5.98  | 9.52   | 6.99  | 5.98  | 9.52  | 3.17                | 12.69             | 24.0                | -11.31              |        |        |        |
|           |            |         |        | 6005                          | 11   | 484T   | 6.99   | 6.58  | 9.80   | 6.99  | 6.58  | 9.80  | 6.99                | 6.58              | 3.17                | 12.97               | 24.0   | -11.03 |        |
|           |            |         |        | 6165                          | 43   | 484T   | 6.99   | 6.50  | 9.76   | 6.99  | 6.50  | 9.76  | 6.99                | 6.50              | 3.17                | 12.93               | 24.0   | -11.07 |        |
|           | 6          | 484T    | 484T   | 6405                          | 91   | 484T   | 6.54   | 6.60  | 9.58   | 6.54  | 6.60  | 9.58  | 6.54                | 6.60              | 3.17                | 12.75               | 24.0   | -11.25 |        |
|           |            |         |        | 6445                          | 99   | 484T   | 6.99   | 6.75  | 9.88   | 6.99  | 6.75  | 9.88  | 6.99                | 6.75              | 3.19                | 13.07               | 24.0   | -10.93 |        |
|           |            |         |        | 6485                          | 107  | 484T   | 6.99   | 6.49  | 9.76   | 6.99  | 6.49  | 9.76  | 6.99                | 6.49              | 3.19                | 12.95               | 24.0   | -11.05 |        |
|           | 7          | 484T    | 484T   | 6525                          | 115  | 484T   | 6.68   | 6.39  | 9.55   | 6.68  | 6.39  | 9.55  | 6.68                | 6.39              | 3.19                | 12.74               | 24.0   | -11.26 |        |
|           |            |         |        | 6565                          | 123  | 484T   | 6.65   | 6.65  | 9.64   | 6.65  | 6.65  | 9.64  | 6.65                | 6.65              | 2.51                | 12.15               | 24.0   | -11.85 |        |
|           |            |         |        | 6685                          | 147  | 484T   | 6.75   | 6.99  | 9.88   | 6.75  | 6.99  | 9.88  | 6.75                | 6.99              | 2.51                | 12.39               | 24.0   | -11.61 |        |
|           | 8          | 484T    | 484T   | 6845                          | 179  | 484T   | 6.34   | 6.95  | 9.67   | 6.34  | 6.95  | 9.67  | 6.34                | 6.95              | 2.51                | 12.18               | 24.0   | -11.82 |        |
|           |            |         |        | 6885                          | 187  | 484T   | 6.82   | 6.83  | 9.84   | 6.82  | 6.83  | 9.84  | 6.82                | 6.83              | 1.38                | 11.21               | 24.0   | -12.79 |        |
|           |            |         |        | 7005                          | 211  | 484T   | 6.85   | 6.62  | 9.75   | 6.85  | 6.62  | 9.75  | 6.85                | 6.62              | 1.38                | 11.12               | 24.0   | -12.88 |        |
| 80MHz BW  | 5          | 7       | 996T   | 8.64                          | 7.66 | 11.19  | 8.64   | 7.66  | 11.19  | 8.64  | 7.66  | 11.19 | 3.17                | 14.35             | 24.0                | -9.65               |        |        |        |
|           |            |         |        | 6145                          | 39   | 996T   | 8.76   | 8.05  | 11.43  | 8.76  | 8.05  | 11.43 | 8.76                | 8.05              | 3.17                | 14.60               | 24.0   | -9.40  |        |
|           |            |         |        | 6385                          | 97   | 996T   | 8.74   | 8.04  | 11.41  | 8.74  | 8.04  | 11.41 | 8.74                | 8.04              | 3.17                | 14.58               | 24.0   | -9.42  |        |
|           | 6          | 996T    | 996T   | 6465                          | 103  | 996T   | 8.99   | 8.08  | 11.57  | 8.99  | 8.08  | 11.57 | 8.99                | 8.08              | 3.19                | 14.76               | 24.0   | -9.24  |        |
|           |            |         |        | 6545                          | 119  | 996T   | 8.94   | 8.60  | 11.78  | 8.94  | 8.60  | 11.78 | 8.94                | 8.60              | 2.51                | 14.29               | 24.0   | -9.71  |        |
|           |            |         |        | 6705                          | 151  | 996T   | 8.98   | 8.47  | 11.74  | 8.98  | 8.47  | 11.74 | 8.98                | 8.47              | 2.51                | 14.25               | 24.0   | -9.75  |        |
|           | 7          | 996T    | 996T   | 6865                          | 169  | 996T   | 8.61   | 8.15  | 11.40  | 8.61  | 8.15  | 11.40 | 8.61                | 8.15              | 2.51                | 13.91               | 24.0   | -10.09 |        |
|           |            |         |        | 6945                          | 199  | 996T   | 8.74   | 8.01  | 11.40  | 8.74  | 8.01  | 11.40 | 8.74                | 8.01              | 1.38                | 12.78               | 24.0   | -11.22 |        |
|           |            |         |        | 7025                          | 215  | 996T   | 8.46   | 8.26  | 11.37  | 8.46  | 8.26  | 11.37 | 8.46                | 8.26              | 1.38                | 12.75               | 24.0   | -11.25 |        |
|           | 160MHz BW  | 5       | 15     | 2x996T                        | 8.54 | 8.26   | 11.41  | 8.54  | 8.26   | 11.41 | 8.54  | 8.26  | 11.41               | 3.17              | 14.58               | 24.0                | -9.42  |        |        |
|           |            |         |        |                               | 6185 | 47     | 2x996T | 8.77  | 8.11   | 11.46 | 8.77  | 8.11  | 11.46               | 8.77              | 8.11                | 3.17                | 14.63  | 24.0   | -9.37  |
|           |            |         |        |                               | 6345 | 79     | 2x996T | 8.54  | 8.03   | 11.30 | 8.54  | 8.03  | 11.30               | 8.54              | 8.03                | 3.17                | 14.47  | 24.0   | -9.53  |
| 6         |            | 15      | 2x996T | 6505                          | 111  | 2x996T | 8.28   | 8.28  | 11.65  | 8.28  | 8.28  | 11.65 | 8.28                | 8.28              | 3.19                | 14.85               | 24.0   | -9.15  |        |
|           |            |         |        | 6665                          | 143  | 2x996T | 8.76   | 8.43  | 11.61  | 8.76  | 8.43  | 11.61 | 8.76                | 8.43              | 2.51                | 14.12               | 24.0   | -9.88  |        |
|           |            |         |        | 6825                          | 175  | 2x996T | 8.45   | 8.35  | 11.41  | 8.45  | 8.35  | 11.41 | 8.45                | 8.35              | 2.51                | 13.92               | 24.0   | -10.08 |        |
| 8         |            | 207     | 2x996T | 6985                          | 207  | 2x996T | 8.57   | 8.34  | 11.47  | 8.57  | 8.34  | 11.47 | 8.57                | 8.34              | 1.38                | 12.84               | 24.0   | -11.16 |        |
|           |            |         |        | 5                             | 63   | 2x996T | 8.98   | 8.65  | 11.83  | 8.98  | 8.65  | 11.83 | 8.98                | 8.65              | 11.83               | 3.17                | 15.00  | 24.0   | -9.00  |
|           |            |         |        |                               |      |        | 6265   | 63    | 2x996T | 8.23  | 8.34  | 11.30 | 8.23                | 8.34              | 11.30               | 8.23                | 8.34   | 3.17   | 14.56  |
| 6425      |            | 95      | 2x996T |                               |      |        | 8.72   | 8.30  | 11.53  | 8.72  | 8.30  | 11.53 | 8.72                | 8.30              | 3.19                | 14.72               | 24.0   | -9.28  |        |
| 320MHz BW |            | 5       | 129    | 2x996T                        | 8.25 | 8.44   | 11.36  | 8.34  | 8.55   | 11.46 | 8.25  | 8.44  | 11.36               | 2.51              | 13.97               | 24.0                | -10.03 |        |        |
|           |            |         |        |                               | 6595 | 159    | 2x996T | 8.43  | 8.51   | 11.48 | 8.27  | 8.37  | 11.27               | 8.43              | 8.51                |                     |        |        |        |

|                                                                                                                                                                                                                                                                                                                                                  | Band | Freq [MHz] | Channel | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------|---------|------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|-------------------|---------------------|---------------------|
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | MRU Index                     |       |       |       |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | 90                            |       |       | 92    |       |       |       |       |       |                     |                   |                     |                     |
| 80MHz BW                                                                                                                                                                                                                                                                                                                                         |      |            |         |            | ANT1                          | ANT2  | MIMO  | ANT1  | ANT2  | MIMO  | ANT1  | ANT2  | MIMO  |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  | 5    | 6145       | 39      | 242+484T   | 6.71                          | 6.05  | 9.40  | 6.83  | 6.07  | 9.48  |       |       |       | 3.17                | 12.64             | 24.0                | -11.36              |
|                                                                                                                                                                                                                                                                                                                                                  | 6    | 6465       | 103     | 242+484T   | 6.53                          | 5.56  | 9.08  | 6.55  | 5.55  | 9.09  |       |       |       | 3.19                | 12.28             | 24.0                | -11.72              |
|                                                                                                                                                                                                                                                                                                                                                  | 7    | 6705       | 151     | 242+484T   | 6.61                          | 6.03  | 9.34  | 6.59  | 6.05  | 9.34  |       |       |       | 2.51                | 11.85             | 24.0                | -12.15              |
|                                                                                                                                                                                                                                                                                                                                                  | 8    | 6945       | 199     | 242+484T   | 6.82                          | 6.04  | 9.46  | 6.80  | 6.02  | 9.44  |       |       |       | 1.38                | 10.83             | 24.0                | -13.17              |
| 160MHz BW                                                                                                                                                                                                                                                                                                                                        | Band | Freq [MHz] | Channel | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | MRU Index                     |       |       |       |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | 94                            |       |       | 1095  |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  | 5    | 6185       | 47      | 996+484T   | 8.66                          | 8.07  | 11.39 | 8.78  | 8.23  | 11.52 |       |       |       | 3.17                | 14.69             | 24.0                | -9.21               |
|                                                                                                                                                                                                                                                                                                                                                  | 6    | 6505       | 111     | 996+484T   | 8.98                          | 8.40  | 11.71 | 8.99  | 8.32  | 11.68 |       |       |       | 3.19                | 14.90             | 24.0                | -9.10               |
| 320MHz BW <th rowspan="3">Band</th> <th rowspan="3">Freq [MHz]</th> <th rowspan="3">Channel</th> <th rowspan="3">Tones</th> <th colspan="9">Average Conducted Power (dBm)</th> <th rowspan="3">Dir. Ant. Gain [dB]</th> <th rowspan="3">Max e.i.r.p [dBm]</th> <th rowspan="3">e.i.r.p Limit [dBm]</th> <th rowspan="3">e.i.r.p Margin [dB]</th> | Band | Freq [MHz] | Channel | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | MRU Index                     |       |       |       |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | 105                           |       |       | 10105 |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  | 5    | 6105       | 31      | 3x996+484T | 8.75                          | 8.52  | 11.65 | 8.71  | 8.52  | 11.63 |       |       |       | 3.17                | 14.81             | 24.0                | -9.19               |
|                                                                                                                                                                                                                                                                                                                                                  | 6    | 6425       | 95      | 3x996+484T | 8.45                          | 8.09  | 11.28 | 8.50  | 8.06  | 11.30 |       |       |       | 3.19                | 14.49             | 24.0                | -9.51               |
| 320MHz BW <th rowspan="3">Band</th> <th rowspan="3">Freq [MHz]</th> <th rowspan="3">Channel</th> <th rowspan="3">Tones</th> <th colspan="9">Average Conducted Power (dBm)</th> <th rowspan="3">Dir. Ant. Gain [dB]</th> <th rowspan="3">Max e.i.r.p [dBm]</th> <th rowspan="3">e.i.r.p Limit [dBm]</th> <th rowspan="3">e.i.r.p Margin [dB]</th> | Band | Freq [MHz] | Channel | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | MRU Index                     |       |       |       |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | 104                           |       |       | 10104 |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  | 5    | 6105       | 31      | 3x996T     | 8.68                          | 8.37  | 11.54 | 8.78  | 8.45  | 11.63 |       |       |       | 3.17                | 14.80             | 24.0                | -9.20               |
|                                                                                                                                                                                                                                                                                                                                                  | 6    | 6425       | 95      | 3x996T     | 8.39                          | 8.04  | 11.23 | 8.41  | 8.03  | 11.23 |       |       |       | 3.19                | 14.43             | 24.0                | -9.57               |
| 320MHz BW <th rowspan="3">Band</th> <th rowspan="3">Freq [MHz]</th> <th rowspan="3">Channel</th> <th rowspan="3">Tones</th> <th colspan="9">Average Conducted Power (dBm)</th> <th rowspan="3">Dir. Ant. Gain [dB]</th> <th rowspan="3">Max e.i.r.p [dBm]</th> <th rowspan="3">e.i.r.p Limit [dBm]</th> <th rowspan="3">e.i.r.p Margin [dB]</th> | Band | Freq [MHz] | Channel | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | MRU Index                     |       |       |       |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | 1101                          |       |       | 10103 |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  | 5    | 6105       | 31      | 2x996+484T | 8.98                          | 8.78  | 11.90 | 8.87  | 8.57  | 11.73 |       |       |       | 3.17                | 15.06             | 24.0                | -8.94               |
|                                                                                                                                                                                                                                                                                                                                                  | 6    | 6425       | 95      | 2x996+484T | 8.47                          | 8.12  | 11.31 | 8.57  | 8.26  | 11.43 |       |       |       | 3.19                | 14.62             | 24.0                | -9.38               |
| 20MHz BW <th rowspan="3">Band</th> <th rowspan="3">Freq [MHz]</th> <th rowspan="3">Channel</th> <th rowspan="3">Tones</th> <th colspan="9">Average Conducted Power (dBm)</th> <th rowspan="3">Dir. Ant. Gain [dB]</th> <th rowspan="3">Max e.i.r.p [dBm]</th> <th rowspan="3">e.i.r.p Limit [dBm]</th> <th rowspan="3">e.i.r.p Margin [dB]</th>  | Band | Freq [MHz] | Channel | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | MRU Index                     |       |       |       |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | 70                            |       |       | 71    |       |       | 72    |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  | 5    | 6175       | 45      | 52+26T     | -2.07                         | -3.75 | 0.18  | -2.03 | -3.74 | 0.21  | -2.33 | -3.92 | -0.04 | 3.17                | 3.38              | 24.0                | -20.62              |
|                                                                                                                                                                                                                                                                                                                                                  | 6    | 6475       | 105     | 52+26T     | -2.06                         | -3.09 | 0.47  | -2.26 | -3.54 | 0.16  | -2.23 | -3.48 | 0.20  | 3.19                | 3.66              | 24.0                | -20.34              |
| 20MHz BW <th rowspan="3">Band</th> <th rowspan="3">Freq [MHz]</th> <th rowspan="3">Channel</th> <th rowspan="3">Tones</th> <th colspan="9">Average Conducted Power (dBm)</th> <th rowspan="3">Dir. Ant. Gain [dB]</th> <th rowspan="3">Max e.i.r.p [dBm]</th> <th rowspan="3">e.i.r.p Limit [dBm]</th> <th rowspan="3">e.i.r.p Margin [dB]</th>  | Band | Freq [MHz] | Channel | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | MRU Index                     |       |       |       |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  |      |            |         |            | 82                            |       |       | 83    |       |       |       |       |       |                     |                   |                     |                     |
|                                                                                                                                                                                                                                                                                                                                                  | 5    | 6175       | 45      | 106+26T    | 0.81                          | -0.91 | 3.04  | 0.64  | -0.92 | 2.94  |       |       |       | 3.17                | 6.21              | 24.0                | -17.79              |
|                                                                                                                                                                                                                                                                                                                                                  | 6    | 6475       | 105     | 106+26T    | 0.89                          | -0.18 | 3.40  | 0.99  | -0.11 | 3.49  |       |       |       | 3.19                | 6.68              | 24.0                | -17.32              |
| 7                                                                                                                                                                                                                                                                                                                                                | 6695 | 149        | 106+26T | 0.68       | 0.22                          | 3.47  | 0.59  | -0.05 | 3.29  |       |       |       | 2.51  | 5.98                | 24.0              | -18.02              |                     |
| 8                                                                                                                                                                                                                                                                                                                                                | 6995 | 209        | 106+26T | 0.88       | 0.37                          | 3.64  | 0.84  | -0.20 | 3.36  |       |       |       | 1.38  | 5.02                | 24.0              | -18.98              |                     |

**Table 7-5. MIMO BW 802.11be (UNII) Maximum Conducted Output Power – MRU**

|                                         |                                        |                                        |  |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|--|-----------------------------------|
| FCC ID: A3LNP940XMA                     |                                        | MEASUREMENT REPORT                     |  | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device |  | Page 71 of 261                    |

## MIMO Maximum Conducted Output Power Measurements – SP

| Bandwidth | Band | Freq [MHz] | Channel | Tones  | Average Conducted Power (dBm) |      |       |      |      |       |      |      |       | Dir. Ant. Gain [dBi] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|-----------|------|------------|---------|--------|-------------------------------|------|-------|------|------|-------|------|------|-------|----------------------|-------------------|---------------------|---------------------|
|           |      |            |         |        | RU Index                      |      |       |      |      |       |      |      |       |                      |                   |                     |                     |
|           |      |            |         |        | 0                             |      |       | 4    |      |       | 8    |      |       |                      |                   |                     |                     |
| 20MHz BW  | 5    | 5935       | 2       | 26T    | 2.20                          | 1.82 | 5.02  | 2.36 | 2.22 | 5.30  | 1.96 | 1.63 | 4.81  | 3.17                 | 8.47              | 30.0                | -21.53              |
|           |      | 6175       | 45      | 26T    | 8.95                          | 7.68 | 11.37 | 8.69 | 7.63 | 11.20 | 8.68 | 7.37 | 11.08 | 3.17                 | 14.54             | 30.0                | -15.46              |
|           |      | 6415       | 93      | 26T    | 8.77                          | 7.74 | 11.30 | 8.91 | 7.50 | 11.27 | 8.50 | 7.92 | 11.23 | 3.17                 | 14.46             | 30.0                | -15.54              |
|           |      | 6535       | 117     | 26T    | 8.47                          | 7.88 | 11.20 | 8.53 | 7.43 | 11.03 | 8.83 | 7.69 | 11.31 | 2.51                 | 13.82             | 30.0                | -16.18              |
|           | 7    | 6695       | 149     | 26T    | 8.16                          | 8.06 | 11.12 | 8.83 | 8.15 | 11.51 | 8.68 | 8.13 | 11.42 | 2.51                 | 14.02             | 30.0                | -15.98              |
| 20MHz BW  | 5    | 5935       | 2       | 52T    | 2.21                          | 1.88 | 5.06  | 2.26 | 1.98 | 5.13  | 2.08 | 1.71 | 4.91  | 3.17                 | 8.30              | 30.0                | -21.70              |
|           |      | 6175       | 45      | 52T    | 8.62                          | 8.01 | 11.34 | 8.40 | 8.04 | 11.23 | 8.72 | 7.56 | 11.19 | 3.17                 | 14.50             | 30.0                | -15.50              |
|           |      | 6415       | 93      | 52T    | 8.91                          | 7.90 | 11.44 | 8.99 | 7.60 | 11.36 | 8.59 | 8.06 | 11.34 | 3.17                 | 14.61             | 30.0                | -15.39              |
|           |      | 6535       | 117     | 52T    | 8.64                          | 7.89 | 11.29 | 8.52 | 7.73 | 11.15 | 8.92 | 8.15 | 11.56 | 2.51                 | 14.07             | 30.0                | -15.93              |
|           | 7    | 6695       | 149     | 52T    | 8.01                          | 8.04 | 11.04 | 8.96 | 8.30 | 11.65 | 8.21 | 7.92 | 11.08 | 2.51                 | 14.16             | 30.0                | -15.84              |
| 20MHz BW  | 5    | 5935       | 2       | 106T   | 2.11                          | 2.12 | 5.13  | 1.86 | 1.85 | 4.87  |      |      |       | 3.17                 | 8.29              | 30.0                | -21.71              |
|           |      | 6175       | 45      | 106T   | 8.66                          | 7.26 | 11.03 | 8.84 | 7.66 | 11.30 |      |      |       | 3.17                 | 14.47             | 30.0                | -15.53              |
|           |      | 6415       | 93      | 106T   | 8.83                          | 7.41 | 11.19 | 8.68 | 7.57 | 11.17 |      |      |       | 3.17                 | 14.35             | 30.0                | -15.65              |
|           |      | 6535       | 117     | 106T   | 8.90                          | 7.88 | 11.43 | 8.96 | 7.58 | 11.33 |      |      |       | 2.51                 | 13.94             | 30.0                | -16.06              |
|           | 7    | 6695       | 149     | 106T   | 8.90                          | 7.88 | 11.43 | 8.96 | 7.58 | 11.33 |      |      |       | 2.51                 | 13.94             | 30.0                | -16.06              |
| 20MHz BW  | 5    | 5935       | 2       | 242T   | 2.0                           | 1.8  | 4.93  |      |      |       |      |      |       | 3.17                 | 8.09              | 30.0                | -21.91              |
|           |      | 6175       | 45      | 242T   | 8.31                          | 8.02 | 11.18 |      |      |       |      |      |       | 3.17                 | 14.34             | 30.0                | -15.66              |
|           |      | 6415       | 93      | 242T   | 8.61                          | 8.04 | 11.34 |      |      |       |      |      |       | 3.17                 | 14.51             | 30.0                | -15.49              |
|           |      | 6535       | 117     | 242T   | 8.98                          | 8.37 | 11.70 |      |      |       |      |      |       | 2.51                 | 14.21             | 30.0                | -15.79              |
|           | 7    | 6695       | 149     | 242T   | 8.84                          | 8.42 | 11.65 |      |      |       |      |      |       | 2.51                 | 14.16             | 30.0                | -15.84              |
| 40MHz BW  | 5    | 5965       | 3       | 484T   | 8.60                          | 7.34 | 11.03 |      |      |       |      |      |       | 3.17                 | 14.19             | 30.0                | -15.81              |
|           |      | 6005       | 11      | 484T   | 8.89                          | 8.36 | 11.64 |      |      |       |      |      |       | 3.17                 | 14.81             | 30.0                | -15.19              |
|           |      | 6165       | 43      | 484T   | 8.75                          | 8.08 | 11.44 |      |      |       |      |      |       | 3.17                 | 14.60             | 30.0                | -15.40              |
|           |      | 6405       | 91      | 484T   | 8.96                          | 8.12 | 11.57 |      |      |       |      |      |       | 3.17                 | 14.74             | 30.0                | -15.26              |
|           | 7    | 6565       | 123     | 484T   | 8.32                          | 8.37 | 11.36 |      |      |       |      |      |       | 2.51                 | 13.87             | 30.0                | -16.13              |
| 80MHz BW  | 5    | 6145       | 39      | 996T   | 8.64                          | 7.66 | 11.19 |      |      |       |      |      |       | 3.17                 | 14.35             | 30.0                | -15.65              |
|           |      | 6385       | 87      | 996T   | 8.76                          | 8.05 | 11.43 |      |      |       |      |      |       | 3.17                 | 14.60             | 30.0                | -15.40              |
|           |      | 6705       | 151     | 996T   | 8.74                          | 8.04 | 11.41 |      |      |       |      |      |       | 3.17                 | 14.58             | 30.0                | -15.42              |
|           | 7    | 6705       | 151     | 996T   | 8.98                          | 8.47 | 11.74 |      |      |       |      |      |       | 2.51                 | 14.25             | 30.0                | -15.75              |
|           | 7    | 6705       | 151     | 996T   | 8.98                          | 8.47 | 11.74 |      |      |       |      |      |       | 2.51                 | 14.25             | 30.0                | -15.75              |
| 160MHz BW | 5    | 6025       | 15      | 2x996T | 8.54                          | 8.26 | 11.41 |      |      |       |      |      |       | 3.17                 | 14.58             | 30.0                | -15.42              |
|           |      | 6185       | 47      | 2x996T | 8.77                          | 8.11 | 11.46 |      |      |       |      |      |       | 3.17                 | 14.63             | 30.0                | -15.37              |
|           |      | 6345       | 79      | 2x996T | 8.54                          | 8.03 | 11.30 |      |      |       |      |      |       | 3.17                 | 14.47             | 30.0                | -15.53              |
|           |      | 6665       | 143     | 2x996T | 8.76                          | 8.43 | 11.61 |      |      |       |      |      |       | 2.51                 | 14.12             | 30.0                | -15.88              |
|           | 7    | 6665       | 143     | 2x996T | 8.76                          | 8.43 | 11.61 |      |      |       |      |      |       | 2.51                 | 14.12             | 30.0                | -15.88              |
| 320MHz BW | 5    | 6105       | 31      | 2x996T | 8.98                          | 8.65 | 11.83 |      |      |       |      |      |       | 3.17                 | 15.00             | 30.0                | -15.00              |
|           |      | 6745       | 159     | 2x996T | 8.43                          | 8.51 | 11.48 |      |      |       |      |      |       | 2.51                 | 13.99             | 30.0                | -16.01              |
|           |      | 6745       | 159     | 2x996T | 8.43                          | 8.51 | 11.48 |      |      |       |      |      |       | 2.51                 | 13.99             | 30.0                | -16.01              |
|           |      | 6745       | 159     | 2x996T | 8.43                          | 8.51 | 11.48 |      |      |       |      |      |       | 2.51                 | 13.99             | 30.0                | -16.01              |
|           | 7    | 6745       | 159     | 2x996T | 8.43                          | 8.51 | 11.48 |      |      |       |      |      |       | 2.51                 | 13.99             | 30.0                | -16.01              |

Table 7-6. MIMO BW 802.11be (UNII) Maximum Conducted Output Power – Partial and Full Tones

|           | Band | Freq [MHz] | Channel    | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |      |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|-----------|------|------------|------------|------------|-------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|---------------------|-------------------|---------------------|---------------------|
|           |      |            |            |            | MRU Index                     |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
|           |      |            |            |            | 90                            |       |       | 92    |       |       |      |       |       |       |                     |                   |                     |                     |
| 5         | 6145 | 39         | 484+242T   | ANT1       | ANT2                          | MIMO  | ANT1  | ANT2  | MIMO  | ANT1  | ANT2 | MIMO  | 3.17  | 14.64 | 30.0                | -15.36            |                     |                     |
|           |      |            |            | 8.71       | 8.05                          | 11.40 | 8.83  | 8.07  | 11.48 |       |      |       |       |       |                     |                   |                     |                     |
| 7         | 6705 | 151        | 484+242T   | 8.61       | 8.03                          | 11.34 | 8.59  | 8.05  | 11.34 |       |      |       | 2.51  | 13.85 | 30.0                | -16.15            |                     |                     |
|           |      |            |            |            |                               |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
| 160MHz BW | Band | Freq [MHz] | Channel    | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |      |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|           |      |            |            |            | MRU Index                     |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
|           | 5    | 6185       | 47         | 996+484T   | 94                            |       |       | 105   |       |       |      |       |       |       | 3.17                | 14.69             | 30.0                | -15.31              |
|           |      |            |            |            | ANT1                          | ANT2  | MIMO  | ANT1  | ANT2  | MIMO  | ANT1 | ANT2  | MIMO  |       |                     |                   |                     |                     |
|           | 7    | 6665       | 143        | 996+484T   | 8.66                          | 8.07  | 11.39 | 8.78  | 8.23  | 11.52 | 8.42 | 11.56 |       | 2.51  | 14.07               | 30.0              | -15.93              |                     |
|           |      |            |            |            | 8.65                          | 8.37  | 11.52 | 8.68  | 8.42  | 11.56 |      |       |       |       |                     |                   |                     |                     |
|           | Band | Freq [MHz] | Channel    | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |      |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|           |      |            |            |            | MRU Index                     |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
|           | 5    | 6105       | 31         | 3x996+484T | 105                           |       |       | 1010S |       |       |      |       |       |       | 3.17                | 14.81             | 30.0                | -15.19              |
|           |      |            |            |            | ANT1                          | ANT2  | MIMO  | ANT1  | ANT2  | MIMO  | ANT1 | ANT2  | MIMO  |       |                     |                   |                     |                     |
| 7         | 6105 | 31         | 3x996+484T | 8.75       | 8.52                          | 11.65 | 8.71  | 8.52  | 11.63 |       |      |       | 3.17  | 14.81 | 30.0                | -15.19            |                     |                     |
|           |      |            |            |            |                               |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
| 320MHz BW | Band | Freq [MHz] | Channel    | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |      |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|           |      |            |            |            | MRU Index                     |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
|           | 5    | 6105       | 31         | 3x996T     | 104                           |       |       | 10104 |       |       |      |       |       |       | 3.17                | 14.80             | 30.0                | -15.20              |
|           |      |            |            |            | ANT1                          | ANT2  | MIMO  | ANT1  | ANT2  | MIMO  | ANT1 | ANT2  | MIMO  |       |                     |                   |                     |                     |
|           | 7    | 6105       | 31         | 3x996T     | 8.68                          | 8.37  | 11.54 | 8.78  | 8.45  | 11.63 |      |       |       | 3.17  | 14.80               | 30.0              | -15.20              |                     |
|           |      |            |            |            |                               |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
|           | Band | Freq [MHz] | Channel    | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |      |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|           |      |            |            |            | MRU Index                     |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
|           | 5    | 6105       | 31         | 2x996+484T | 1101                          |       |       | 10103 |       |       |      |       |       |       | 3.17                | 15.06             | 30.0                | -14.94              |
|           |      |            |            |            | ANT1                          | ANT2  | MIMO  | ANT1  | ANT2  | MIMO  | ANT1 | ANT2  | MIMO  |       |                     |                   |                     |                     |
| 7         | 6105 | 31         | 2x996+484T | 8.99       | 8.78                          | 11.90 | 8.87  | 8.57  | 11.73 |       |      |       | 3.17  | 15.06 | 30.0                | -14.94            |                     |                     |
|           |      |            |            |            |                               |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
| 20MHz BW  | Band | Freq [MHz] | Channel    | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |      |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|           |      |            |            |            | MRU Index                     |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
|           | 5    | 6175       | 45         | 52+26T     | 70                            |       |       | 71    |       |       | 72   |       |       |       | 3.17                | 14.79             | 30.0                | -15.21              |
|           |      |            |            |            | ANT1                          | ANT2  | MIMO  | ANT1  | ANT2  | MIMO  | ANT1 | ANT2  | MIMO  |       |                     |                   |                     |                     |
|           | 7    | 6695       | 149        | 52+26T     | 8.95                          | 8.25  | 11.62 | 8.80  | 7.77  | 11.33 | 8.35 | 8.05  | 11.21 | 2.51  | 14.79               | 30.0              | -15.21              |                     |
|           |      |            |            |            | 8.56                          | 8.26  | 11.42 | 8.96  | 8.15  | 11.77 | 8.85 | 8.50  | 11.69 | 2.51  | 14.28               | 30.0              | -15.72              |                     |
|           | Band | Freq [MHz] | Channel    | Tones      | Average Conducted Power (dBm) |       |       |       |       |       |      |       |       |       | Dir. Ant. Gain [dB] | Max e.i.r.p [dBm] | e.i.r.p Limit [dBm] | e.i.r.p Margin [dB] |
|           |      |            |            |            | MRU Index                     |       |       |       |       |       |      |       |       |       |                     |                   |                     |                     |
|           | 5    | 6175       | 45         | 106+26T    | 82                            |       |       | 83    |       |       |      |       |       |       | 3.17                | 14.61             | 30.0                | -15.39              |
|           |      |            |            |            | ANT1                          | ANT2  | MIMO  | ANT1  | ANT2  | MIMO  | ANT1 | ANT2  | MIMO  |       |                     |                   |                     |                     |
| 7         | 6695 | 149        | 106+26T    | 8.77       | 8.06                          | 11.41 | 8.35  | 8.02  | 11.20 |       |      |       | 3.17  | 14.61 | 30.0                | -15.39            |                     |                     |
|           |      |            |            | 8.68       | 8.41                          | 11.56 | 8.65  | 8.39  | 11.53 |       |      |       | 2.51  | 14.07 | 30.0                | -15.93            |                     |                     |



### Sample MIMO Calculation:

At 5935MHz in 802.11be (20MHz BW – 26 Tones) mode, the average conducted output power was measured to be -6.11 dBm for Antenna-1 and -5.14 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

$$(-6.11 \text{ dBm} + -5.14 \text{ dBm}) = (0.245 \text{ mW} + 0.306 \text{ mW}) = 0.551 \text{ mW} = -2.59 \text{ dBm}$$

### Sample Directional Gain Calculation:

Per ANSI C63.10-2013 Section 14.4.3, the directional gain is calculated using the following formula, where GN is the gain of the nth antenna and NANT, the total number of antennas used.

$$\text{Directional gain} = 10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{\text{ANT}}] \text{ dBi}$$

### Sample e.i.r.p. Calculation:

At 5935MHz in 802.11be (20MHz BW – 26 Tones) mode, the average MIMO conducted power was calculated to be -2.59 dBm with directional gain of 3.17 dBi.

$$\text{e.i.r.p. (dBm)} = \text{Conducted Power (dBm)} + \text{Ant gain (dBi)}$$

$$-2.59 \text{ dBm} + 3.17 \text{ dBi} = 0.58 \text{ dBm}$$

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LNP940XMA                     | <b>MEASUREMENT REPORT</b>                     |                                               | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2403190019-10.A3L | <b>Test Dates:</b><br>03/14/2024 – 04/25/2024 | <b>EUT Type:</b><br>Portable Computing Device | Page 73 of 261                           |

## 7.4 Maximum Power Spectral Density

### Test Overview and Limit

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013, was used to measure the power spectral density.

***In the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed  $-1$  dBm e.i.r.p. in any 1-megahertz band. For client devices, except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm/MHz e.i.r.p.***

### Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2

ANSI C63.10-2013 – Section 14.3.2.2 Measure-and-Sum Technique

### Test Settings

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire emission bandwidth of the signal
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points  $\geq 2 \times (\text{span/RBW})$
6. Sweep time = auto
7. Detector = power averaging (RMS)
8. Trigger was set to free run for all modes
9. Trace was averaged over 100 sweeps
10. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



**Figure 7-3. Test Instrument & Measurement Setup**

### Test Notes

None

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 74 of 261                    |

## MIMO Power Spectral Density Measurements

|            | Frequency [MHz] | Channel | 802.11 MODE | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Antenna-1 Gain [dBi] | Antenna-2 Gain [dBi] | Summed MIMO Power Density [dBm] | Duty Cycle Correction | Directional Gain [dBi] | EIRP [dBm] | Max EIRP [dBm] | Margin [dB] |
|------------|-----------------|---------|-------------|-------------------------------|-------------------------------|----------------------|----------------------|---------------------------------|-----------------------|------------------------|------------|----------------|-------------|
| Band 5     | 5935            | 2       | be (20MHz)  | -8.43                         | -7.75                         | 0.55                 | -0.74                | -5.07                           | 0.00                  | 2.94                   | -2.13      | -1             | -1.13       |
|            | 6175            | 45      | be (20MHz)  | -8.46                         | -7.54                         | 0.55                 | -0.74                | -4.97                           | 0.00                  | 2.94                   | -2.03      | -1             | -1.03       |
|            | 6415            | 93      | be (20MHz)  | -7.48                         | -8.13                         | 0.55                 | -0.74                | -4.78                           | 0.00                  | 2.94                   | -1.84      | -1             | -0.84       |
|            | 5965            | 3       | be (40MHz)  | -8.46                         | -7.55                         | 0.55                 | -0.74                | -4.97                           | 0.00                  | 2.94                   | -2.03      | -1             | -1.03       |
|            | 6165            | 43      | be (40MHz)  | -8.08                         | -7.38                         | 0.55                 | -0.74                | -4.70                           | 0.00                  | 2.94                   | -1.76      | -1             | -0.76       |
|            | 6405            | 91      | be (40MHz)  | -6.39                         | -8.71                         | 0.55                 | -0.74                | -4.39                           | 0.00                  | 2.94                   | -1.45      | -1             | -0.45       |
|            | 5985            | 7       | be (80MHz)  | -8.47                         | -7.20                         | 0.55                 | -0.74                | -4.78                           | 0.00                  | 2.94                   | -1.84      | -1             | -0.84       |
|            | 6145            | 39      | be (80MHz)  | -6.63                         | -8.69                         | 0.55                 | -0.74                | -4.53                           | 0.00                  | 2.94                   | -1.59      | -1             | -0.59       |
|            | 6385            | 87      | be (80MHz)  | -7.67                         | -8.53                         | 0.55                 | -0.74                | -5.07                           | 0.00                  | 2.94                   | -2.13      | -1             | -1.13       |
|            | 6025            | 15      | be (160MHz) | -8.04                         | -8.12                         | 0.55                 | -0.74                | -5.07                           | 0.00                  | 2.94                   | -2.13      | -1             | -1.13       |
|            | 6185            | 47      | be (160MHz) | -7.26                         | -8.60                         | 0.55                 | -0.74                | -4.87                           | 0.00                  | 2.94                   | -1.93      | -1             | -0.93       |
|            | 6345            | 79      | be (160MHz) | -7.81                         | -8.02                         | 0.55                 | -0.74                | -4.91                           | 0.00                  | 2.94                   | -1.97      | -1             | -0.97       |
|            | 6105            | 31      | be (320MHz) | -7.34                         | -7.67                         | 0.55                 | -0.74                | -4.49                           | 0.00                  | 2.94                   | -1.55      | -1             | -0.55       |
|            | 6265            | 63      | be (320MHz) | -7.10                         | -8.76                         | 0.55                 | -0.74                | -4.84                           | 0.00                  | 2.94                   | -1.90      | -1             | -0.90       |
| Band 6     | 6435            | 97      | be (20MHz)  | -7.74                         | -7.19                         | 0.02                 | 0.36                 | -4.44                           | 0.00                  | 3.20                   | -1.24      | -1             | -0.24       |
|            | 6475            | 105     | be (20MHz)  | -8.08                         | -7.84                         | 0.02                 | 0.36                 | -4.95                           | 0.00                  | 3.20                   | -1.75      | -1             | -0.75       |
|            | 6515            | 113     | be (20MHz)  | -7.69                         | -8.44                         | 0.02                 | 0.36                 | -5.04                           | 0.00                  | 3.20                   | -1.84      | -1             | -0.84       |
|            | 6445            | 99      | be (40MHz)  | -7.91                         | -7.67                         | 0.02                 | 0.36                 | -4.78                           | 0.00                  | 3.20                   | -1.57      | -1             | -0.57       |
|            | 6485            | 107     | be (40MHz)  | -7.46                         | -7.81                         | 0.02                 | 0.36                 | -4.62                           | 0.00                  | 3.20                   | -1.42      | -1             | -0.42       |
|            | 6525            | 115     | be (40MHz)  | -7.62                         | -8.08                         | 0.02                 | 0.36                 | -4.83                           | 0.00                  | 3.20                   | -1.63      | -1             | -0.63       |
|            | 6465            | 103     | be (80MHz)  | -7.86                         | -7.81                         | 0.02                 | 0.36                 | -4.82                           | 0.00                  | 3.20                   | -1.62      | -1             | -0.62       |
|            | 6505            | 111     | be (160MHz) | -8.46                         | -7.97                         | 0.02                 | 0.36                 | -5.19                           | 0.00                  | 3.20                   | -1.99      | -1             | -0.99       |
| Band 5/6/7 | 6425            | 95      | be (320MHz) | -8.01                         | -8.38                         | 0.00                 | 0.36                 | -5.18                           | 0.00                  | 3.19                   | -1.99      | -1             | -0.99       |
| Band 7     | 6695            | 117     | be (20MHz)  | -7.09                         | -7.74                         | -0.56                | -0.44                | -4.39                           | 0.00                  | 2.51                   | -1.88      | -1             | -0.88       |
|            | 6695            | 149     | be (20MHz)  | -7.20                         | -7.05                         | -0.56                | -0.44                | -4.11                           | 0.00                  | 2.51                   | -1.60      | -1             | -0.60       |
|            | 6875            | 185     | be (20MHz)  | -6.77                         | -7.81                         | -0.56                | -0.44                | -4.25                           | 0.00                  | 2.51                   | -1.74      | -1             | -0.74       |
|            | 6565            | 123     | be (40MHz)  | -7.59                         | -8.44                         | -0.56                | -0.44                | -4.98                           | 0.00                  | 2.51                   | -2.47      | -1             | -1.47       |
|            | 6685            | 155     | be (40MHz)  | -7.51                         | -7.37                         | -0.56                | -0.44                | -4.43                           | 0.00                  | 2.51                   | -1.92      | -1             | -0.92       |
|            | 6845            | 179     | be (40MHz)  | -7.45                         | -7.58                         | -0.56                | -0.44                | -4.50                           | 0.00                  | 2.51                   | -1.99      | -1             | -0.99       |
|            | 6545            | 119     | be (80MHz)  | -7.93                         | -7.87                         | -0.56                | -0.44                | -4.89                           | 0.00                  | 2.51                   | -2.38      | -1             | -1.38       |
|            | 6705            | 151     | be (80MHz)  | -7.85                         | -7.95                         | -0.56                | -0.44                | -4.89                           | 0.00                  | 2.51                   | -2.37      | -1             | -1.37       |
|            | 6865            | 183     | be (80MHz)  | -8.55                         | -7.28                         | -0.56                | -0.44                | -4.86                           | 0.00                  | 2.51                   | -2.35      | -1             | -1.35       |
|            | 6665            | 143     | be (160MHz) | -9.09                         | -7.74                         | -0.56                | -0.44                | -5.35                           | 0.00                  | 2.51                   | -2.84      | -1             | -1.84       |
|            | 6825            | 175     | be (160MHz) | -7.96                         | -6.55                         | -0.56                | -0.44                | -4.19                           | 0.00                  | 2.51                   | -1.68      | -1             | -0.68       |
| Band 6/7   | 6585            | 127     | be (320MHz) | -8.05                         | -7.05                         | -0.56                | -0.44                | -4.51                           | 0.00                  | 2.51                   | -2.00      | -1             | -1.00       |
| Band 7/8   | 6745            | 159     | be (320MHz) | -8.29                         | -7.50                         | -0.56                | -0.44                | -4.87                           | 0.00                  | 2.51                   | -2.36      | -1             | -1.36       |
| Band 8     | 6895            | 189     | be (20MHz)  | -6.61                         | -7.84                         | -1.65                | -1.62                | -4.17                           | 0.00                  | 1.38                   | -2.79      | -1             | -1.79       |
|            | 6995            | 209     | be (20MHz)  | -6.63                         | -7.67                         | -1.65                | -1.62                | -4.11                           | 0.00                  | 1.38                   | -2.73      | -1             | -1.73       |
|            | 7115            | 233     | be (20MHz)  | -7.33                         | -6.81                         | -1.65                | -1.62                | -4.05                           | 0.00                  | 1.38                   | -2.67      | -1             | -1.67       |
|            | 6885            | 187     | be (40MHz)  | -7.99                         | -6.74                         | -1.65                | -1.62                | -4.31                           | 0.00                  | 1.38                   | -2.93      | -1             | -1.93       |
|            | 6965            | 211     | be (40MHz)  | -7.60                         | -7.20                         | -1.65                | -1.62                | -4.39                           | 0.00                  | 1.38                   | -3.01      | -1             | -2.01       |
|            | 7085            | 227     | be (40MHz)  | -8.34                         | -6.29                         | -1.65                | -1.62                | -4.18                           | 0.00                  | 1.38                   | -2.81      | -1             | -1.81       |
|            | 6945            | 199     | be (80MHz)  | -7.60                         | -6.83                         | -1.65                | -1.62                | -4.19                           | 0.00                  | 1.38                   | -2.81      | -1             | -1.81       |
|            | 7025            | 215     | be (80MHz)  | -7.90                         | -6.94                         | -1.65                | -1.62                | -4.38                           | 0.00                  | 1.38                   | -3.01      | -1             | -2.01       |
|            | 6985            | 207     | be (160MHz) | -7.78                         | -6.48                         | -1.65                | -1.62                | -4.07                           | 0.00                  | 1.38                   | -2.69      | -1             | -1.69       |
| Band 7/8   | 6985            | 191     | be (320MHz) | -8.23                         | -7.10                         | -1.65                | -1.62                | -4.62                           | 0.00                  | 1.38                   | -3.24      | -1             | -2.24       |

Table 7-8. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (26 Tones) – LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 75 of 261                    |

|        | Frequency [MHz] | Channel | 802.11 MODE | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Antenna-1 Gain [dBi] | Antenna-2 Gain [dBi] | Summed MIMO Power Density [dBm] | Duty Cycle Correction | Directional Gain [dBi] | EIRP [dBm] | Max EIRP [dBm] | Margin [dB] |
|--------|-----------------|---------|-------------|-------------------------------|-------------------------------|----------------------|----------------------|---------------------------------|-----------------------|------------------------|------------|----------------|-------------|
| Band 5 | 5935            | 2       | be (20MHz)  | -1.95                         | -0.60                         | 0.55                 | -0.74                | 1.79                            | 0.00                  | 2.94                   | 4.73       | 17             | -12.27      |
|        | 6175            | 45      | be (20MHz)  | 6.31                          | 6.00                          | 0.55                 | -0.74                | 9.17                            | 0.00                  | 2.94                   | 12.11      | 17             | -4.89       |
|        | 6415            | 93      | be (20MHz)  | 5.90                          | 6.79                          | 0.55                 | -0.74                | 9.38                            | 0.00                  | 2.94                   | 12.32      | 17             | -4.68       |
|        | 5965            | 3       | be (40MHz)  | 6.60                          | 6.84                          | 0.55                 | -0.74                | 9.73                            | 0.00                  | 2.94                   | 12.67      | 17             | -4.33       |
|        | 6165            | 43      | be (40MHz)  | 6.43                          | 6.32                          | 0.55                 | -0.74                | 9.39                            | 0.00                  | 2.94                   | 12.32      | 17             | -4.68       |
|        | 6405            | 91      | be (40MHz)  | 6.18                          | 6.76                          | 0.55                 | -0.74                | 9.49                            | 0.00                  | 2.94                   | 12.43      | 17             | -4.57       |
|        | 5985            | 7       | be (80MHz)  | 6.23                          | 5.92                          | 0.55                 | -0.74                | 9.09                            | 0.00                  | 2.94                   | 12.03      | 17             | -4.97       |
|        | 6145            | 39      | be (80MHz)  | 6.04                          | 6.19                          | 0.55                 | -0.74                | 9.12                            | 0.00                  | 2.94                   | 12.06      | 17             | -4.94       |
|        | 6385            | 87      | be (80MHz)  | 6.56                          | 6.10                          | 0.55                 | -0.74                | 9.35                            | 0.00                  | 2.94                   | 12.29      | 17             | -4.71       |
|        | 6025            | 15      | be (160MHz) | 5.48                          | 6.79                          | 0.55                 | -0.74                | 9.19                            | 0.00                  | 2.94                   | 12.13      | 17             | -4.87       |
|        | 6185            | 47      | be (160MHz) | 6.24                          | 5.27                          | 0.55                 | -0.74                | 8.79                            | 0.00                  | 2.94                   | 11.73      | 17             | -5.27       |
|        | 6345            | 79      | be (160MHz) | 6.23                          | 5.85                          | 0.55                 | -0.74                | 9.06                            | 0.00                  | 2.94                   | 11.99      | 17             | -5.01       |
|        | 6105            | 31      | be (320MHz) | 6.11                          | 6.08                          | 0.55                 | -0.74                | 9.11                            | 0.00                  | 2.94                   | 12.05      | 17             | -4.95       |
|        | 6265            | 63      | be (320MHz) | 5.87                          | 5.50                          | 0.55                 | -0.74                | 8.70                            | 0.00                  | 2.94                   | 11.64      | 17             | -5.36       |
| Band 7 | 6695            | 117     | be (20MHz)  | 5.31                          | 6.22                          | -0.56                | -0.44                | 8.80                            | 0.00                  | 2.51                   | 11.31      | 17             | -5.69       |
|        | 6695            | 149     | be (20MHz)  | 6.05                          | 6.71                          | -0.56                | -0.44                | 9.40                            | 0.00                  | 2.51                   | 11.91      | 17             | -5.09       |
|        | 6875            | 185     | be (20MHz)  | 5.18                          | 5.97                          | -0.56                | -0.44                | 8.60                            | 0.00                  | 2.51                   | 11.11      | 17             | -5.89       |
|        | 6565            | 123     | be (40MHz)  | 5.88                          | 6.20                          | -0.56                | -0.44                | 9.05                            | 0.00                  | 2.51                   | 11.56      | 17             | -5.44       |
|        | 6685            | 155     | be (40MHz)  | 5.27                          | 6.46                          | -0.56                | -0.44                | 8.92                            | 0.00                  | 2.51                   | 11.43      | 17             | -5.57       |
|        | 6845            | 179     | be (40MHz)  | 5.30                          | 7.55                          | -0.56                | -0.44                | 9.58                            | 0.00                  | 2.51                   | 12.09      | 17             | -4.91       |
|        | 6545            | 119     | be (80MHz)  | 5.02                          | 5.50                          | -0.56                | -0.44                | 8.28                            | 0.00                  | 2.51                   | 10.79      | 17             | -6.21       |
|        | 6705            | 151     | be (80MHz)  | 5.49                          | 6.57                          | -0.56                | -0.44                | 9.07                            | 0.00                  | 2.51                   | 11.58      | 17             | -5.42       |
|        | 6865            | 183     | be (80MHz)  | 5.17                          | 6.51                          | -0.56                | -0.44                | 8.90                            | 0.00                  | 2.51                   | 11.41      | 17             | -5.59       |
|        | 6665            | 143     | be (160MHz) | 4.64                          | 5.93                          | -0.56                | -0.44                | 8.34                            | 0.00                  | 2.51                   | 10.85      | 17             | -6.15       |
|        | 6825            | 175     | be (160MHz) | 4.64                          | 6.31                          | -0.56                | -0.44                | 8.56                            | 0.00                  | 2.51                   | 11.07      | 17             | -5.93       |

**Table 7-9. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (26 Tones) – SP**

|                                                |                                               |                                               |                                          |
|------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LNP940XMA                     | <b>MEASUREMENT REPORT</b>                     |                                               | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2403190019-10.A3L | <b>Test Dates:</b><br>03/14/2024 – 04/25/2024 | <b>EUT Type:</b><br>Portable Computing Device | Page 76 of 261                           |

|            | Frequency [MHz] | Channel | 802.11 MODE    | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Antenna-1 Gain [dBi] | Antenna-2 Gain [dBi] | Summed MIMO Power Density [dBm] | Duty Cycle Correction | Directional Gain [dBi] | EIRP [dBm] | Max EIRP [dBm] | Margin [dB] |
|------------|-----------------|---------|----------------|-------------------------------|-------------------------------|----------------------|----------------------|---------------------------------|-----------------------|------------------------|------------|----------------|-------------|
| Band 5     | 5935            | 2       | be (20MHz)     | -8.68                         | -8.57                         | 0.55                 | -0.74                | -5.61                           | 0.00                  | 2.94                   | -2.67      | -1             | -1.67       |
|            | 6175            | 45      | be (20MHz)     | -8.52                         | -7.41                         | 0.55                 | -0.74                | -4.92                           | 0.00                  | 2.94                   | -1.98      | -1             | -0.98       |
|            | 6415            | 93      | be (20MHz)     | -8.35                         | -7.39                         | 0.55                 | -0.74                | -4.83                           | 0.00                  | 2.94                   | -1.89      | -1             | -0.89       |
|            | 5965            | 3       | be (40MHz)     | -7.85                         | -8.23                         | 0.55                 | -0.74                | -5.03                           | 0.11                  | 2.94                   | -1.98      | -1             | -0.98       |
|            | 6165            | 43      | be (40MHz)     | -8.23                         | -7.33                         | 0.55                 | -0.74                | -4.75                           | 0.11                  | 2.94                   | -1.70      | -1             | -0.70       |
|            | 6405            | 91      | be (40MHz)     | -8.18                         | -7.25                         | 0.55                 | -0.74                | -4.68                           | 0.11                  | 2.94                   | -1.63      | -1             | -0.63       |
|            | 5985            | 7       | be (80MHz)     | -9.30                         | -8.68                         | 0.55                 | -0.74                | -5.97                           | 0.12                  | 2.94                   | -2.91      | -1             | -1.91       |
|            | 6145            | 39      | be (80MHz)     | -8.59                         | -8.37                         | 0.55                 | -0.74                | -5.46                           | 0.12                  | 2.94                   | -2.40      | -1             | -1.40       |
|            | 6385            | 87      | be (80MHz)     | -8.85                         | -9.03                         | 0.55                 | -0.74                | -5.93                           | 0.12                  | 2.94                   | -2.87      | -1             | -1.87       |
|            | 6025            | 15      | be (160MHz)    | -11.98                        | -10.95                        | 0.55                 | -0.74                | -8.42                           | 0.12                  | 2.94                   | -5.36      | -1             | -4.36       |
|            | 6185            | 47      | be (160MHz)    | -10.70                        | -10.95                        | 0.55                 | -0.74                | -7.81                           | 0.12                  | 2.94                   | -4.75      | -1             | -3.75       |
|            | 6345            | 79      | be (160MHz)    | -11.34                        | -11.47                        | 0.55                 | -0.74                | -8.39                           | 0.12                  | 2.94                   | -5.34      | -1             | -4.34       |
|            | 6105            | 31      | be (320MHz)(L) | -9.11                         | -9.31                         | 0.55                 | -0.74                | -6.20                           | 0.09                  | 2.94                   | -3.17      | -1             | -2.17       |
|            | 6105            | 31      | be (320MHz)(U) | -10.28                        | -9.61                         | 0.55                 | -0.74                | -6.92                           | 0.09                  | 2.94                   | -3.89      | -1             | -2.89       |
| Band 6     | 6265            | 63      | be (320MHz)(L) | -9.88                         | -9.52                         | 0.55                 | -0.74                | -6.69                           | 0.09                  | 2.94                   | -3.66      | -1             | -2.66       |
|            | 6265            | 63      | be (320MHz)(U) | -10.97                        | -10.93                        | 0.55                 | -0.74                | -7.94                           | 0.09                  | 2.94                   | -4.91      | -1             | -3.91       |
|            | 6435            | 97      | be (20MHz)     | -7.69                         | -7.31                         | 0.02                 | 0.36                 | -4.48                           | 0.00                  | 3.20                   | -1.28      | -1             | -0.28       |
|            | 6475            | 105     | be (20MHz)     | -8.06                         | -7.61                         | 0.02                 | 0.36                 | -4.82                           | 0.00                  | 3.20                   | -1.62      | -1             | -0.62       |
|            | 6515            | 113     | be (20MHz)     | -7.44                         | -7.67                         | 0.02                 | 0.36                 | -4.54                           | 0.00                  | 3.20                   | -1.34      | -1             | -0.34       |
|            | 6445            | 99      | be (40MHz)     | -8.64                         | -6.59                         | 0.02                 | 0.36                 | -4.48                           | 0.11                  | 3.20                   | -1.17      | -1             | -0.17       |
|            | 6485            | 107     | be (40MHz)     | -8.56                         | -7.57                         | 0.02                 | 0.36                 | -5.02                           | 0.11                  | 3.20                   | -1.71      | -1             | -0.71       |
|            | 6525            | 115     | be (40MHz)     | -7.29                         | -7.84                         | 0.02                 | 0.36                 | -4.55                           | 0.11                  | 3.20                   | -1.24      | -1             | -0.24       |
|            | 6465            | 103     | be (80MHz)     | -7.74                         | -8.82                         | 0.02                 | 0.36                 | -5.24                           | 0.12                  | 3.20                   | -1.92      | -1             | -0.92       |
|            | 6505            | 111     | be (160MHz)    | -11.26                        | -11.23                        | 0.02                 | 0.36                 | -8.24                           | 0.12                  | 3.20                   | -4.91      | -1             | -3.91       |
| Band 5/6/7 | 6425            | 95      | be (320MHz)(L) | -10.51                        | -9.41                         | 0.02                 | 0.36                 | -6.91                           | 0.09                  | 3.20                   | -3.62      | -1             | -2.62       |
|            | 6425            | 95      | be (320MHz)(U) | -11.01                        | -9.88                         | 0.02                 | 0.36                 | -7.40                           | 0.09                  | 3.20                   | -4.11      | -1             | -3.11       |
| Band 7     | 6695            | 117     | be (20MHz)     | -7.24                         | -7.61                         | -0.56                | -0.44                | -4.41                           | 0.00                  | 2.51                   | -1.90      | -1             | -0.90       |
|            | 6695            | 149     | be (20MHz)     | -6.91                         | -7.02                         | -0.56                | -0.44                | -3.95                           | 0.00                  | 2.51                   | -1.44      | -1             | -0.44       |
|            | 6875            | 185     | be (20MHz)     | -7.29                         | -6.75                         | -0.56                | -0.44                | -4.00                           | 0.00                  | 2.51                   | -1.49      | -1             | -0.49       |
|            | 6565            | 123     | be (40MHz)     | -8.71                         | -7.90                         | -0.56                | -0.44                | -5.27                           | 0.11                  | 2.51                   | -2.65      | -1             | -1.65       |
|            | 6685            | 155     | be (40MHz)     | -7.34                         | -6.96                         | -0.56                | -0.44                | -4.13                           | 0.11                  | 2.51                   | -1.51      | -1             | -0.51       |
|            | 6845            | 179     | be (40MHz)     | -7.82                         | -6.75                         | -0.56                | -0.44                | -4.24                           | 0.11                  | 2.51                   | -1.62      | -1             | -0.62       |
|            | 6545            | 119     | be (80MHz)     | -8.82                         | -8.68                         | -0.56                | -0.44                | -5.74                           | 0.12                  | 2.51                   | -3.11      | -1             | -2.11       |
|            | 6705            | 151     | be (80MHz)     | -8.93                         | -7.52                         | -0.56                | -0.44                | -5.16                           | 0.12                  | 2.51                   | -2.53      | -1             | -1.53       |
|            | 6865            | 183     | be (80MHz)     | -9.09                         | -7.89                         | -0.56                | -0.44                | -5.44                           | 0.12                  | 2.51                   | -2.81      | -1             | -1.81       |
|            | 6665            | 143     | be (160MHz)    | -11.77                        | -10.90                        | -0.56                | -0.44                | -8.30                           | 0.12                  | 2.51                   | -5.67      | -1             | -4.67       |
|            | 6825            | 175     | be (160MHz)    | -11.82                        | -10.65                        | -0.56                | -0.44                | -8.19                           | 0.12                  | 2.51                   | -5.56      | -1             | -4.56       |
|            | 6585            | 127     | be (320MHz)(L) | -11.32                        | -9.96                         | -0.56                | -0.44                | -7.58                           | 0.09                  | 2.51                   | -4.98      | -1             | -3.98       |
|            | 6585            | 127     | be (320MHz)(U) | -11.10                        | -9.35                         | -0.56                | -0.44                | -7.13                           | 0.09                  | 2.51                   | -4.53      | -1             | -3.53       |
| Band 6/7   | 6745            | 159     | be (320MHz)(L) | -11.67                        | -9.73                         | -0.56                | -0.44                | -7.58                           | 0.09                  | 2.51                   | -4.98      | -1             | -3.98       |
| Band 7/8   | 6745            | 159     | be (320MHz)(U) | -11.00                        | -9.87                         | -0.56                | -0.44                | -7.39                           | 0.09                  | 2.51                   | -4.79      | -1             | -3.79       |
| Band 8     | 6895            | 189     | be (20MHz)     | -6.98                         | -6.62                         | -1.65                | -1.62                | -3.78                           | 0.00                  | 1.38                   | -2.41      | -1             | -1.41       |
|            | 6995            | 209     | be (20MHz)     | -7.62                         | -6.89                         | -1.65                | -1.62                | -4.23                           | 0.00                  | 1.38                   | -2.85      | -1             | -1.85       |
|            | 7115            | 233     | be (20MHz)     | -7.64                         | -6.58                         | -1.65                | -1.62                | -4.07                           | 0.00                  | 1.38                   | -2.69      | -1             | -1.69       |
|            | 6885            | 187     | be (40MHz)     | -7.60                         | -7.11                         | -1.65                | -1.62                | -4.34                           | 0.11                  | 1.38                   | -2.86      | -1             | -1.86       |
|            | 6965            | 211     | be (40MHz)     | -8.13                         | -6.66                         | -1.65                | -1.62                | -4.32                           | 0.11                  | 1.38                   | -2.84      | -1             | -1.84       |
|            | 7085            | 227     | be (40MHz)     | -8.42                         | -6.29                         | -1.65                | -1.62                | -4.21                           | 0.11                  | 1.38                   | -2.73      | -1             | -1.73       |
|            | 6945            | 199     | be (80MHz)     | -8.61                         | -8.30                         | -1.65                | -1.62                | -5.44                           | 0.12                  | 1.38                   | -3.94      | -1             | -2.94       |
|            | 7025            | 215     | be (80MHz)     | -7.34                         | -7.13                         | -1.65                | -1.62                | -4.22                           | 0.12                  | 1.38                   | -2.73      | -1             | -1.73       |
|            | 6985            | 207     | be (160MHz)    | -11.07                        | -10.49                        | -1.65                | -1.62                | -7.76                           | 0.12                  | 1.38                   | -6.26      | -1             | -5.26       |
|            | 6905            | 191     | be (320MHz)(L) | -11.11                        | -9.69                         | -1.65                | -1.62                | -7.33                           | 0.09                  | 1.38                   | -5.87      | -1             | -4.87       |
| Band 7/8   | 6905            | 191     | be (320MHz)(U) | -10.05                        | -9.13                         | -1.65                | -1.62                | -6.56                           | 0.09                  | 1.38                   | -5.09      | -1             | -4.09       |

Table 7-10. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (Full Tones) – LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 77 of 261                    |

|        | Frequency [MHz] | Channel | 802.11 MODE    | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Antenna-1 Gain [dBi] | Antenna-2 Gain [dBi] | Summed MIMO Power Density [dBm] | Duty Cycle Correction | Directional Gain [dBi] | EIRP [dBm] | Max EIRP [dBm] | Margin [dB] |
|--------|-----------------|---------|----------------|-------------------------------|-------------------------------|----------------------|----------------------|---------------------------------|-----------------------|------------------------|------------|----------------|-------------|
| Band 5 | 5935            | 2       | be (20MHz)     | -9.37                         | -8.49                         | 0.55                 | -0.74                | -5.90                           | 0.00                  | 2.94                   | -2.96      | 17             | -19.96      |
|        | 6175            | 45      | be (20MHz)     | -2.21                         | -2.44                         | 0.55                 | -0.74                | 0.69                            | 0.00                  | 2.94                   | 3.63       | 17             | -13.37      |
|        | 6415            | 93      | be (20MHz)     | -2.57                         | -2.01                         | 0.55                 | -0.74                | 0.73                            | 0.00                  | 2.94                   | 3.67       | 17             | -13.33      |
|        | 5965            | 3       | be (40MHz)     | -6.35                         | -6.26                         | 0.55                 | -0.74                | -3.29                           | 0.11                  | 2.94                   | -0.24      | 17             | -17.24      |
|        | 6165            | 43      | be (40MHz)     | -5.28                         | -4.86                         | 0.55                 | -0.74                | -2.05                           | 0.11                  | 2.94                   | 0.99       | 17             | -16.01      |
|        | 6405            | 91      | be (40MHz)     | -5.77                         | -4.99                         | 0.55                 | -0.74                | -2.35                           | 0.11                  | 2.94                   | 0.70       | 17             | -16.30      |
|        | 5985            | 7       | be (80MHz)     | -9.30                         | -8.68                         | 0.55                 | -0.74                | -5.97                           | 0.12                  | 2.94                   | -2.91      | 17             | -19.91      |
|        | 6145            | 39      | be (80MHz)     | -8.59                         | -8.37                         | 0.55                 | -0.74                | -5.46                           | 0.12                  | 2.94                   | -2.40      | 17             | -19.40      |
|        | 6385            | 87      | be (80MHz)     | -8.85                         | -9.03                         | 0.55                 | -0.74                | -5.93                           | 0.12                  | 2.94                   | -2.87      | 17             | -19.87      |
|        | 6025            | 15      | be (160MHz)    | -11.98                        | -10.95                        | 0.55                 | -0.74                | -8.42                           | 0.12                  | 2.94                   | -5.36      | 17             | -22.36      |
|        | 6185            | 47      | be (160MHz)    | -10.70                        | -10.95                        | 0.55                 | -0.74                | -7.81                           | 0.12                  | 2.94                   | -4.75      | 17             | -21.75      |
|        | 6345            | 79      | be (160MHz)    | -11.34                        | -11.47                        | 0.55                 | -0.74                | -8.39                           | 0.12                  | 2.94                   | -5.34      | 17             | -22.34      |
|        | 6105            | 31      | be (320MHz)(L) | -9.11                         | -9.31                         | 0.55                 | -0.74                | -6.20                           | 0.09                  | 2.94                   | -3.17      | 17             | -20.17      |
|        | 6105            | 31      | be (320MHz)(U) | -10.28                        | -9.61                         | 0.55                 | -0.74                | -6.92                           | 0.09                  | 2.94                   | -3.89      | 17             | -20.89      |
| Band 7 | 6265            | 63      | be (320MHz)(L) | -9.88                         | -9.52                         | 0.55                 | -0.74                | -6.69                           | 0.09                  | 2.94                   | -3.66      | 17             | -20.66      |
|        | 6265            | 63      | be (320MHz)(U) | -10.97                        | -10.93                        | 0.55                 | -0.74                | -7.94                           | 0.09                  | 2.94                   | -4.91      | 17             | -21.91      |
|        | 6695            | 117     | be (20MHz)     | -2.61                         | -2.40                         | -0.56                | -0.44                | 0.51                            | 0.00                  | 2.51                   | 3.02       | 17             | -13.98      |
|        | 6695            | 149     | be (20MHz)     | -2.43                         | -1.70                         | -0.56                | -0.44                | 0.96                            | 0.00                  | 2.51                   | 3.47       | 17             | -13.53      |
|        | 6875            | 185     | be (20MHz)     | -2.49                         | -1.99                         | -0.56                | -0.44                | 0.78                            | 0.00                  | 2.51                   | 3.29       | 17             | -13.71      |
|        | 6565            | 123     | be (40MHz)     | -6.19                         | -5.66                         | -0.56                | -0.44                | -2.91                           | 0.11                  | 2.51                   | -0.28      | 17             | -17.28      |
|        | 6685            | 155     | be (40MHz)     | -6.33                         | -5.51                         | -0.56                | -0.44                | -2.89                           | 0.11                  | 2.51                   | -0.27      | 17             | -17.27      |
|        | 6845            | 179     | be (40MHz)     | -6.18                         | -4.83                         | -0.56                | -0.44                | -2.44                           | 0.11                  | 2.51                   | 0.18       | 17             | -16.82      |
|        | 6545            | 119     | be (80MHz)     | -8.82                         | -8.68                         | -0.56                | -0.44                | -5.74                           | 0.12                  | 2.51                   | -3.11      | 17             | -20.11      |
|        | 6705            | 151     | be (80MHz)     | -8.93                         | -7.52                         | -0.56                | -0.44                | -5.16                           | 0.12                  | 2.51                   | -2.53      | 17             | -19.53      |
|        | 6865            | 183     | be (80MHz)     | -9.09                         | -7.89                         | -0.56                | -0.44                | -5.44                           | 0.12                  | 2.51                   | -2.81      | 17             | -19.81      |
|        | 6665            | 143     | be (160MHz)    | -11.77                        | -10.90                        | -0.56                | -0.44                | -8.30                           | 0.12                  | 2.51                   | -5.67      | 17             | -22.67      |
|        | 6825            | 175     | be (160MHz)    | -11.82                        | -10.65                        | -0.56                | -0.44                | -8.19                           | 0.12                  | 2.51                   | -5.56      | 17             | -22.56      |

**Table 7-11. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (Full Tones) – SP**

|            | Frequency [MHz] | Channel | 802.11 MODE | MRU Cases  | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Antenna-1 Gain [dBi] | Antenna-2 Gain [dBi] | Summed MIMO Power Density [dBm] | Duty Cycle Correction | Directional Gain [dBi] | EIRP [dBm] | Max EIRP [dBm] | Margin [dB] |
|------------|-----------------|---------|-------------|------------|-------------------------------|-------------------------------|----------------------|----------------------|---------------------------------|-----------------------|------------------------|------------|----------------|-------------|
| Band 5     | 6145            | 39      | be (80MHz)  | 484+242T   | -7.59                         | -8.22                         | 0.55                 | -0.74                | -4.89                           | 0.00                  | 2.94                   | -1.95      | -1             | -0.95       |
|            | 6185            | 47      | be (160MHz) | 996+484T   | -9.23                         | -9.54                         | 0.55                 | -0.74                | -6.37                           | 0.00                  | 2.94                   | -3.43      | -1             | -2.43       |
|            | 6105            | 31      | be (320MHz) | 3x996+484T | -11.68                        | -11.53                        | 0.55                 | -0.74                | -8.60                           | 0.17                  | 2.94                   | -5.49      | -1             | -4.49       |
|            | 6105            | 31      | be (320MHz) | 3x996T     | -10.72                        | -10.73                        | 0.55                 | -0.74                | -7.72                           | 0.15                  | 2.94                   | -4.63      | -1             | -3.63       |
|            | 6105            | 31      | be (320MHz) | 2x996+484T | -10.33                        | -10.46                        | 0.55                 | -0.74                | -7.38                           | 0.13                  | 2.94                   | -4.31      | -1             | -3.31       |
| Band 6     | 6465            | 103     | be (80MHz)  | 484+242T   | -9.31                         | -9.54                         | 0.02                 | 0.36                 | -6.41                           | 0.00                  | 3.20                   | -3.21      | -1             | -2.21       |
|            | 6505            | 111     | be (160MHz) | 996+484T   | -9.54                         | -9.17                         | 0.02                 | 0.36                 | -6.34                           | 0.00                  | 3.20                   | -3.14      | -1             | -2.14       |
| Band 5/6/7 | 6425            | 95      | be (320MHz) | 3x996+484T | -12.49                        | -11.92                        | 0.02                 | 0.36                 | -9.18                           | 0.17                  | 3.20                   | -5.81      | -1             | -4.81       |
|            | 6425            | 95      | be (320MHz) | 3x996T     | -11.93                        | -10.87                        | 0.02                 | 0.36                 | -8.36                           | 0.15                  | 3.20                   | -5.00      | -1             | -4.00       |
|            | 6425            | 95      | be (320MHz) | 2x996+484T | -11.33                        | -11.05                        | 0.02                 | 0.36                 | -8.18                           | 0.13                  | 3.20                   | -4.85      | -1             | -3.85       |
| Band 7     | 6705            | 151     | be (80MHz)  | 484+242T   | -8.77                         | -7.62                         | -0.56                | -0.44                | -5.15                           | 0.00                  | 2.51                   | -2.64      | -1             | -1.64       |
|            | 6665            | 143     | be (160MHz) | 996+484T   | -9.16                         | -8.84                         | -0.56                | -0.44                | -5.98                           | 0.00                  | 2.51                   | -3.47      | -1             | -2.47       |
| Band 6/7   | 6585            | 127     | be (320MHz) | 3x996+484T | -12.88                        | -11.94                        | -0.56                | -0.44                | -9.37                           | 0.17                  | 2.51                   | -6.69      | -1             | -5.69       |
|            | 6585            | 127     | be (320MHz) | 3x996T     | -11.98                        | -10.74                        | -0.56                | -0.44                | -8.30                           | 0.15                  | 2.51                   | -5.64      | -1             | -4.64       |
| Band 8     | 6585            | 127     | be (320MHz) | 2x996+484T | -10.80                        | -10.56                        | -0.56                | -0.44                | -7.67                           | 0.13                  | 2.51                   | -5.02      | -1             | -4.02       |
|            | 6945            | 199     | be (80MHz)  | 484+242T   | -7.64                         | -8.46                         | -0.56                | -0.44                | -5.02                           | 0.00                  | 2.51                   | -2.51      | -1             | -1.51       |
| Band 7/8   | 6985            | 207     | be (160MHz) | 996+484T   | -8.47                         | -8.80                         | -1.65                | -1.62                | -5.62                           | 0.00                  | 1.38                   | -4.25      | -1             | -3.25       |
|            | 6985            | 191     | be (320MHz) | 3x996+484T | -12.61                        | -11.91                        | -1.65                | -1.62                | -9.23                           | 0.17                  | 1.38                   | -7.69      | -1             | -6.69       |
|            | 6985            | 191     | be (320MHz) | 3x996T     | -11.67                        | -10.82                        | -1.65                | -1.62                | -8.21                           | 0.15                  | 1.38                   | -6.69      | -1             | -5.69       |
|            | 6985            | 191     | be (320MHz) | 2x996+484T | -10.92                        | -10.19                        | -1.65                | -1.62                | -7.53                           | 0.13                  | 1.38                   | -6.02      | -1             | -5.02       |

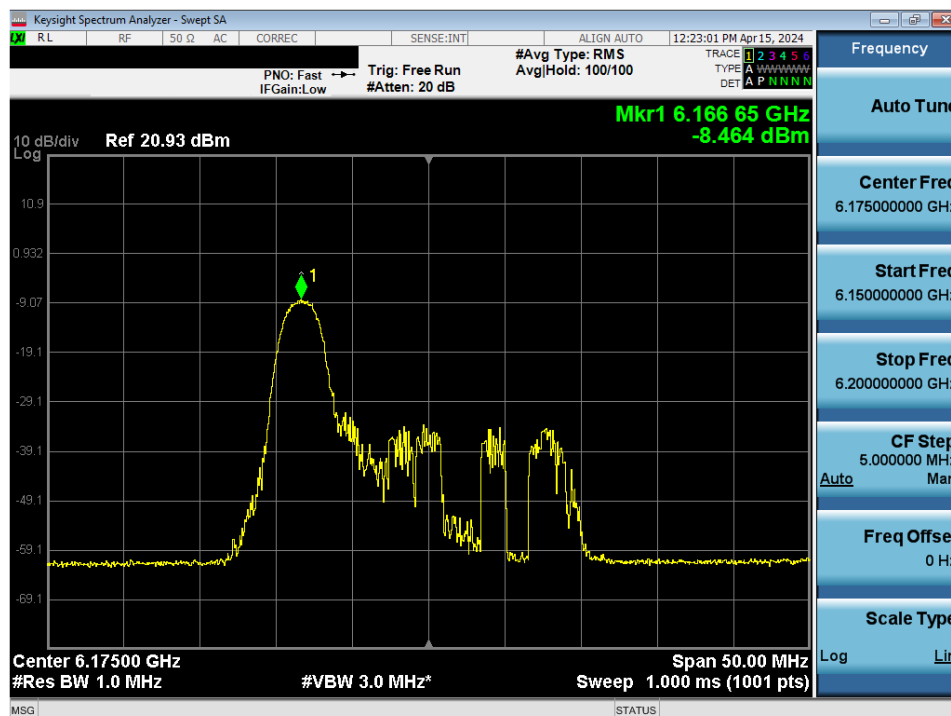
**Table 7-12. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (MRU) – LPI**

|        | Frequency [MHz] | Channel | 802.11 MODE | MRU Cases  | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Antenna-1 Gain [dBi] | Antenna-2 Gain [dBi] | Summed MIMO Power Density [dBm] | Duty Cycle Correction | Directional Gain [dBi] | EIRP [dBm] | Max EIRP [dBm] | Margin [dB] |
|--------|-----------------|---------|-------------|------------|-------------------------------|-------------------------------|----------------------|----------------------|---------------------------------|-----------------------|------------------------|------------|----------------|-------------|
| Band 5 | 6145            | 39      | be (80MHz)  | 484+242T   | -5.68                         | -6.34                         | 0.55                 | -0.74                | -2.98                           | 0.00                  | 2.94                   | -0.04      | 17             | -17.04      |
|        | 6185            | 47      | be (160MHz) | 996+484T   | -9.23                         | -9.54                         | 0.55                 | -0.74                | -6.37                           | 0.00                  | 2.94                   | -3.43      | 17             | -20.43      |
|        | 6105            | 31      | be (320MHz) | 3x996+484T | -11.68                        | -11.53                        | 0.55                 | -0.74                | -8.60                           | 0.17                  | 2.94                   | -5.66      | 17             | -22.66      |
|        | 6105            | 31      | be (320MHz) | 3x996T     | -10.72                        | -10.73                        | 0.55                 | -0.74                | -7.72                           | 0.15                  | 2.94                   | -4.78      | 17             | -21.78      |
|        | 6105            | 31      | be (320MHz) | 2x996+484T | -10.33                        | -10.46                        | 0.55                 | -0.74                | -7.38                           | 0.13                  | 2.94                   | -4.44      | 17             | -21.44      |
| Band 7 | 6705            | 151     | be (80MHz)  | 484+242T   | -7.35                         | -6.01                         | -0.56                | -0.44                | -3.62                           | 0.00                  | 2.51                   | -1.11      | 17             | -18.11      |
|        | 6665            | 143     | be (160MHz) | 996+484T   | -9.16                         | -8.84                         | -0.56                | -0.44                | -5.98                           | 0.00                  | 2.51                   | -3.47      | 17             | -20.47      |
|        | Frequency [MHz] | Channel | 802.11 MODE | MRU Cases  | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Antenna-1 Gain [dBi] | Antenna-2 Gain [dBi] | Summed MIMO Power Density [dBm] | Duty Cycle Correction | Directional Gain [dBi] | EIRP [dBm] | Max EIRP [dBm] | Margin [dB] |
| Band 5 | 6175            | 45      | be (20MHz)  | 52+26T     | 3.08                          | 2.49                          | 0.55                 | -0.74                | 5.80                            | 0.00                  | 2.94                   | 8.74       | 17             | -8.26       |
|        | 6175            | 45      | be (20MHz)  | 106+26T    | 0.87                          | -0.06                         | 0.55                 | -0.74                | 3.44                            | 0.00                  | 2.94                   | 6.38       | 17             | -10.62      |
| Band 7 | 6695            | 149     | be (20MHz)  | 52+26T     | 2.50                          | 2.75                          | -0.56                | -0.44                | 5.64                            | 0.00                  | 2.51                   | 8.15       | 17             | -8.85       |
|        | 6695            | 149     | be (20MHz)  | 106+26T    | 0.09                          | 0.39                          | -0.56                | -0.44                | 3.25                            | 0.00                  | 2.51                   | 5.76       | 17             | -11.24      |

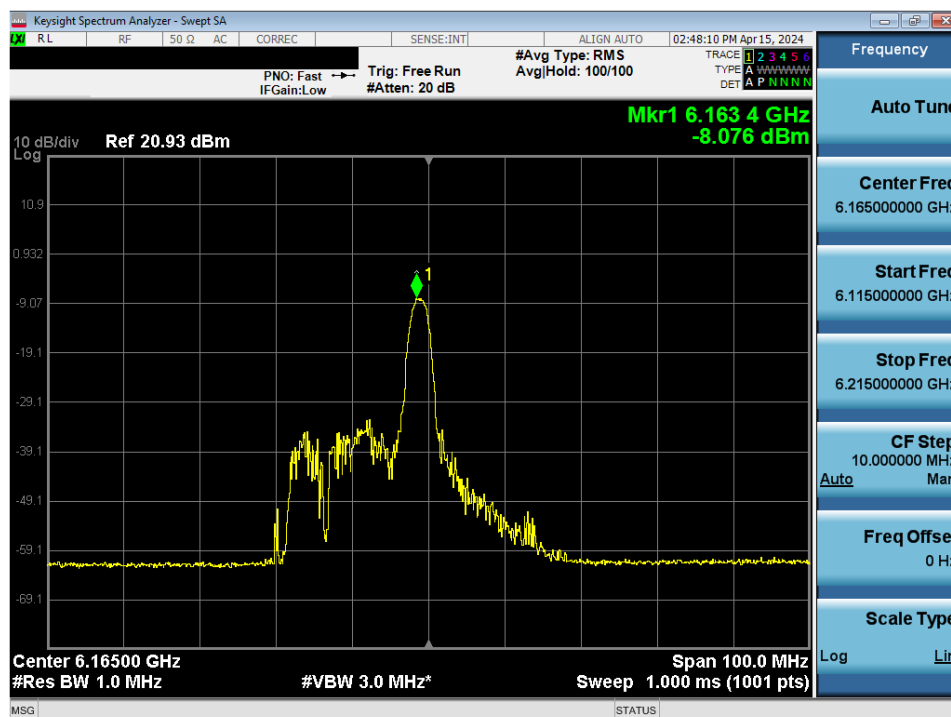
**Table 7-13. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (MRU) – SP**

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 78 of 261                    |

## 7.4.1 MIMO Antenna-1 Power Spectral Density Measurements

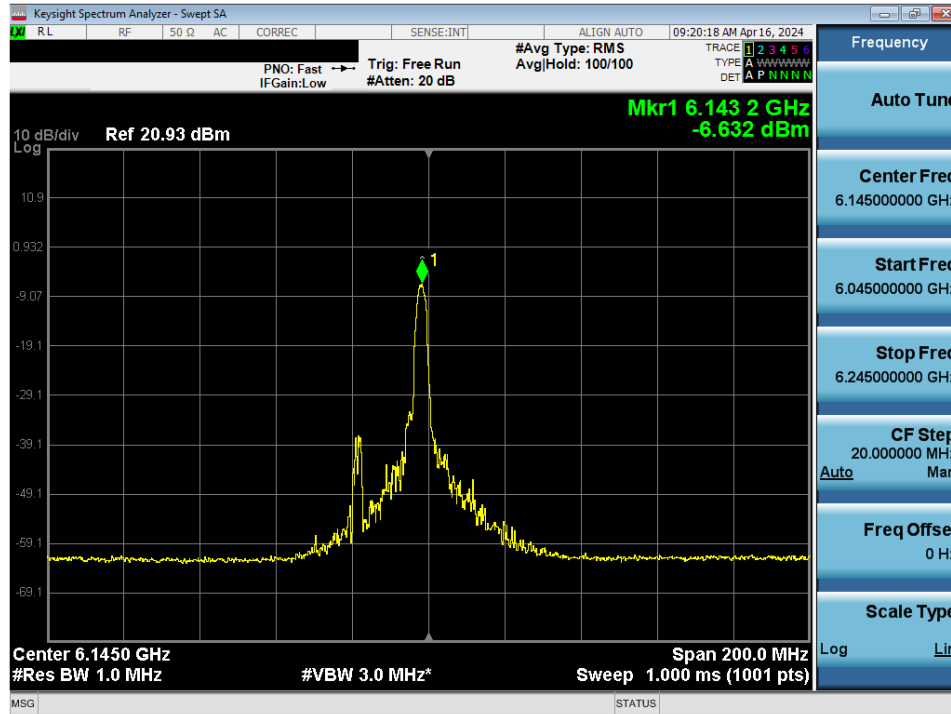


Plot 7-81. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 45) - LPI

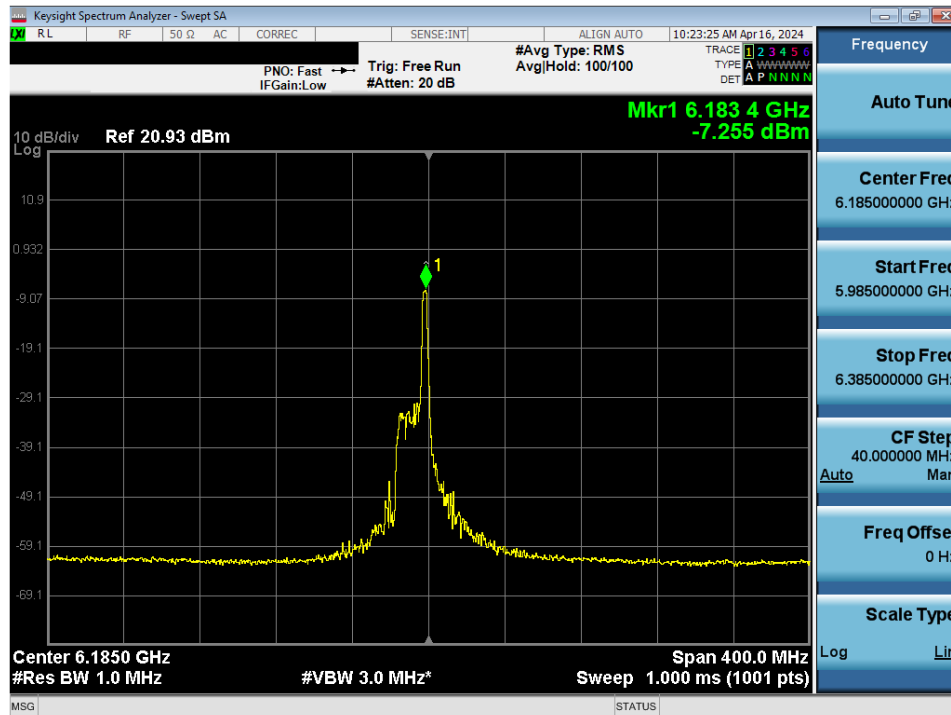


Plot 7-82. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 43) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 79 of 261                    |

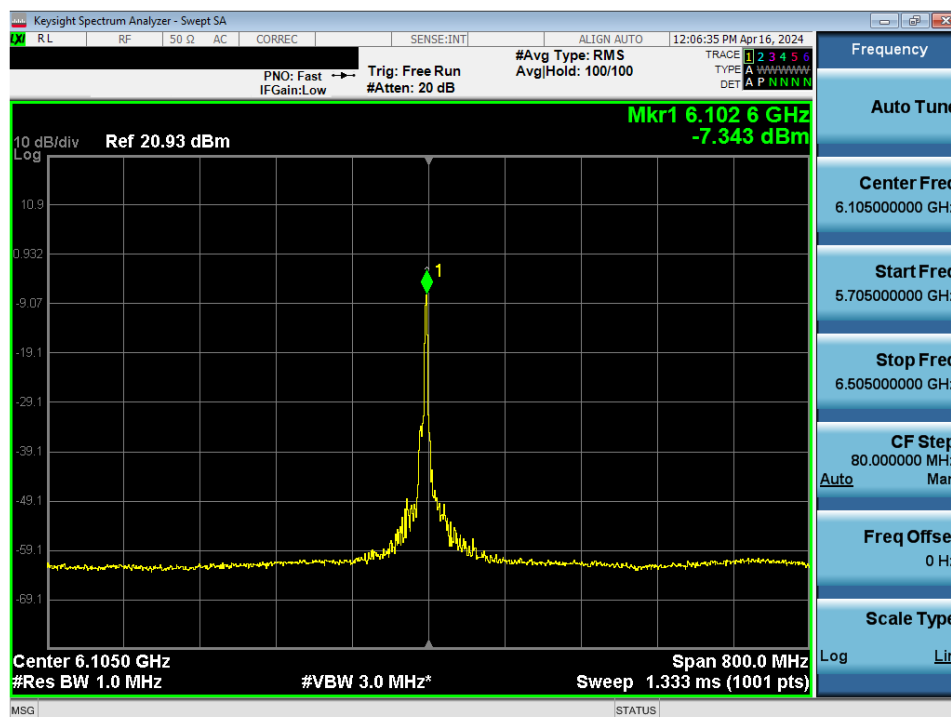


Plot 7-83. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 39) - LPI

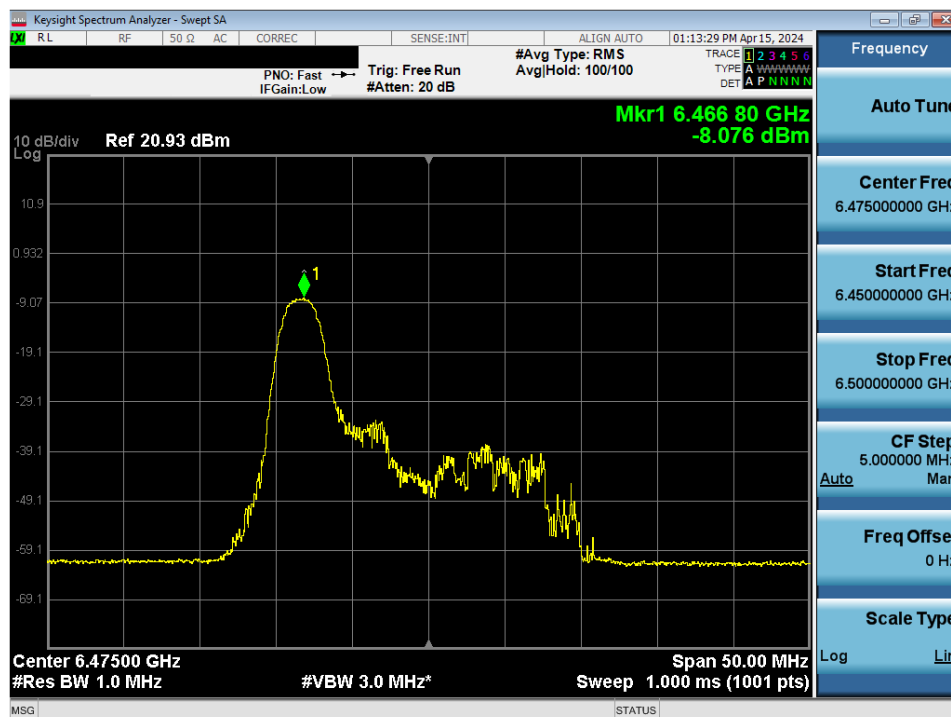


Plot 7-84. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 47) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 80 of 261                    |

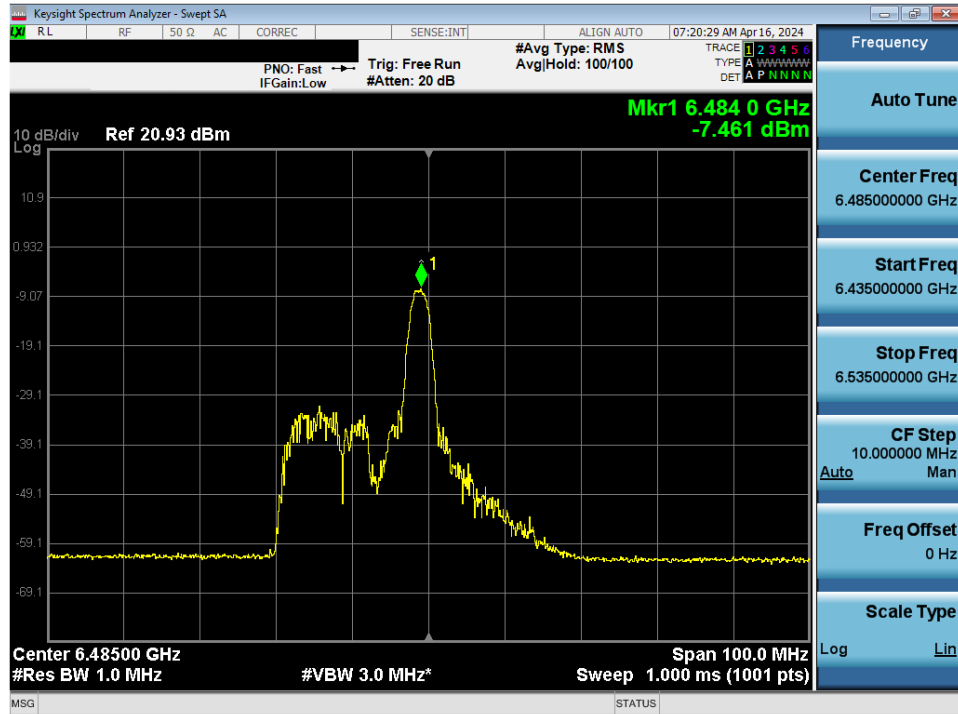


Plot 7-85. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802. 11be (26 Tones) (UNII Band 5) – Ch. 31) - LPI

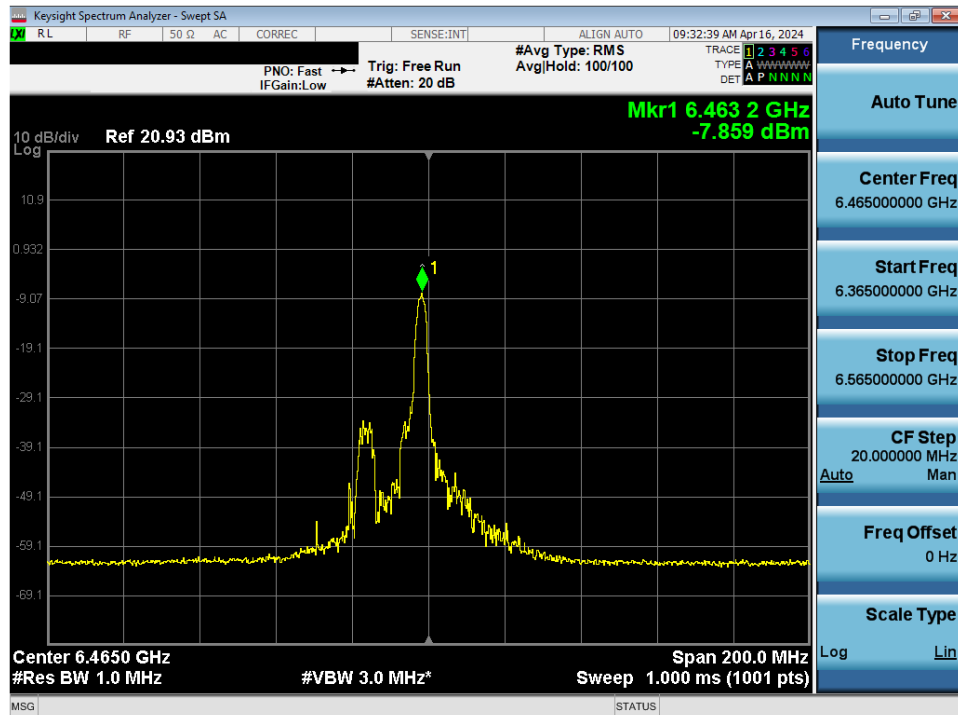


Plot 7-86. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 105) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 81 of 261                    |

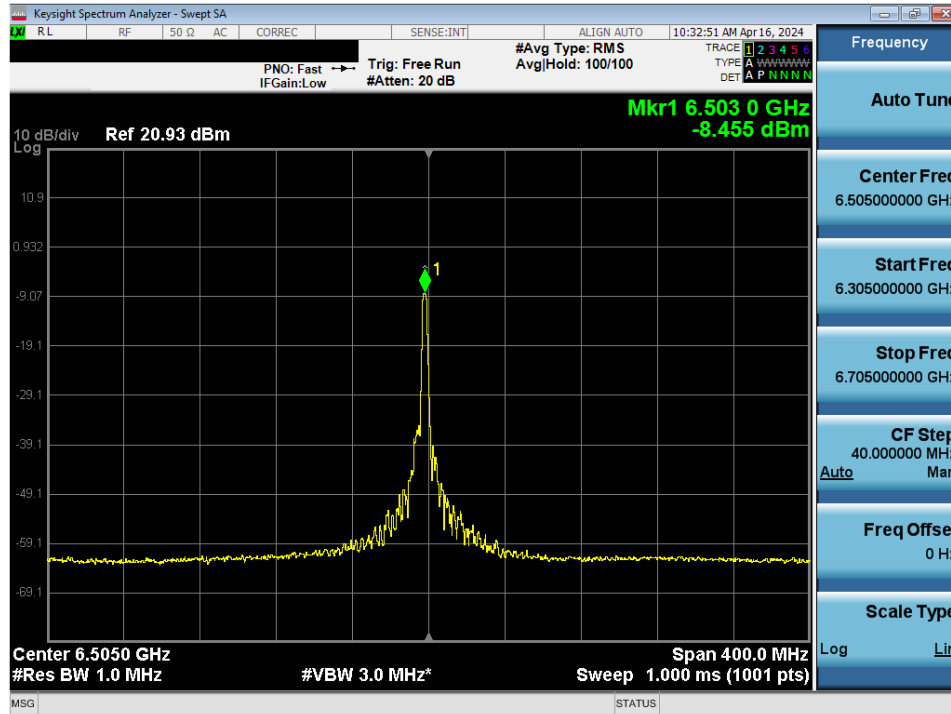


Plot 7-87. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 107) - LPI

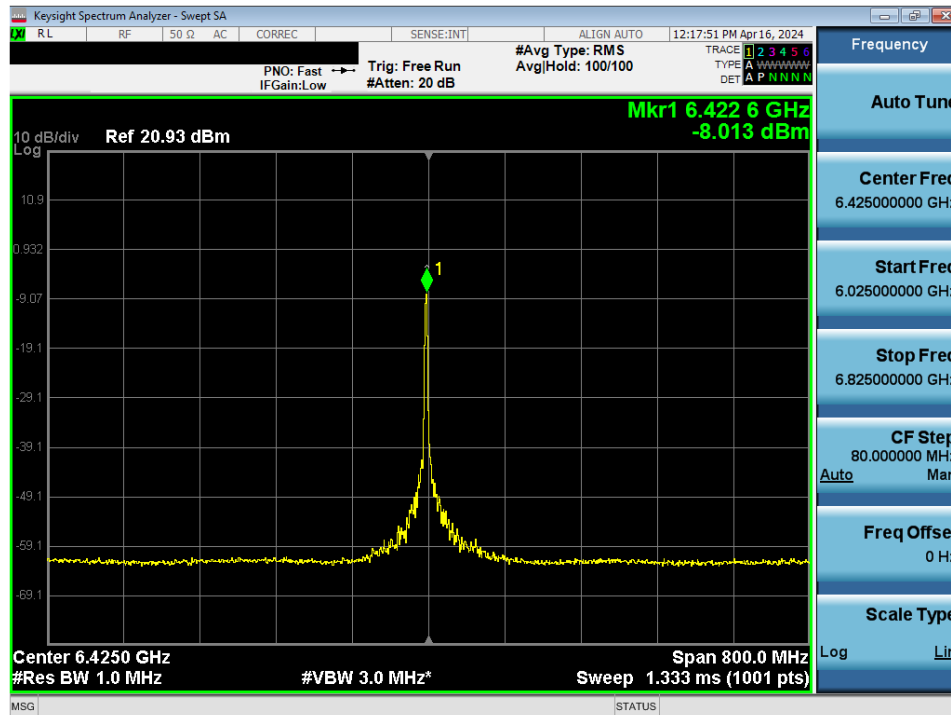


Plot 7-88. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 103) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 82 of 261                    |

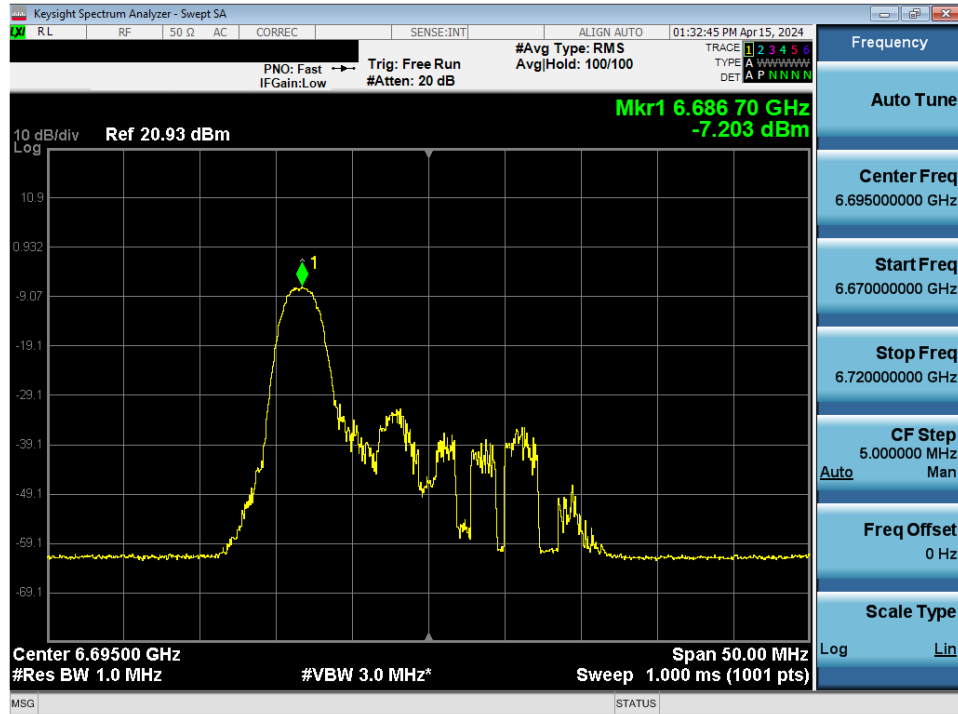


Plot 7-89. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 111) - LPI

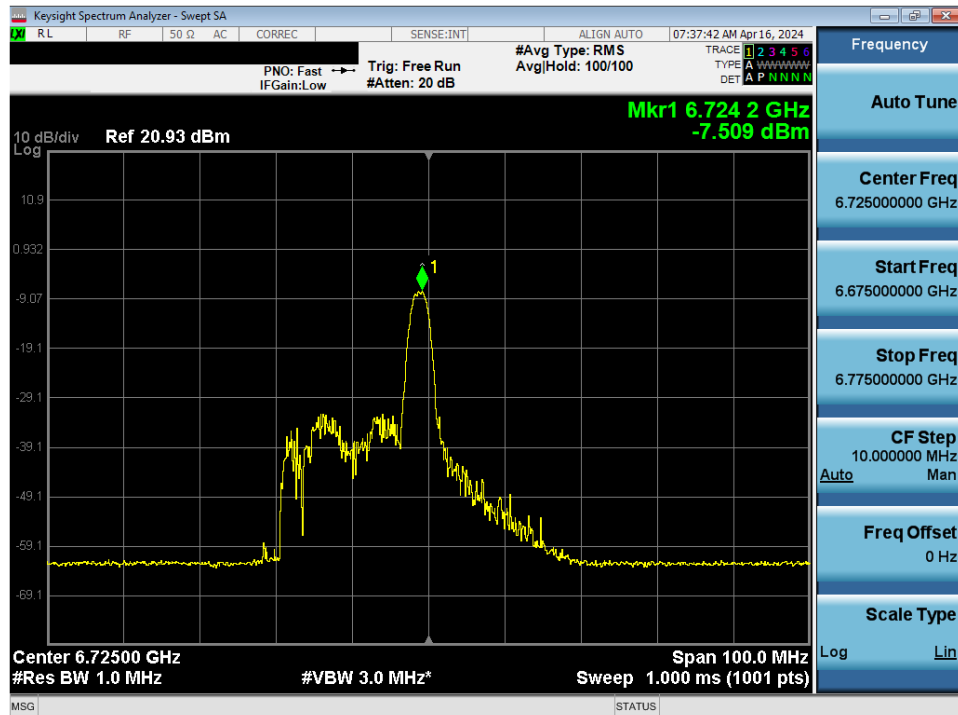


Plot 7-90. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802. 11be (26 Tones) (UNII Band 6) – Ch. 95) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 83 of 261                    |

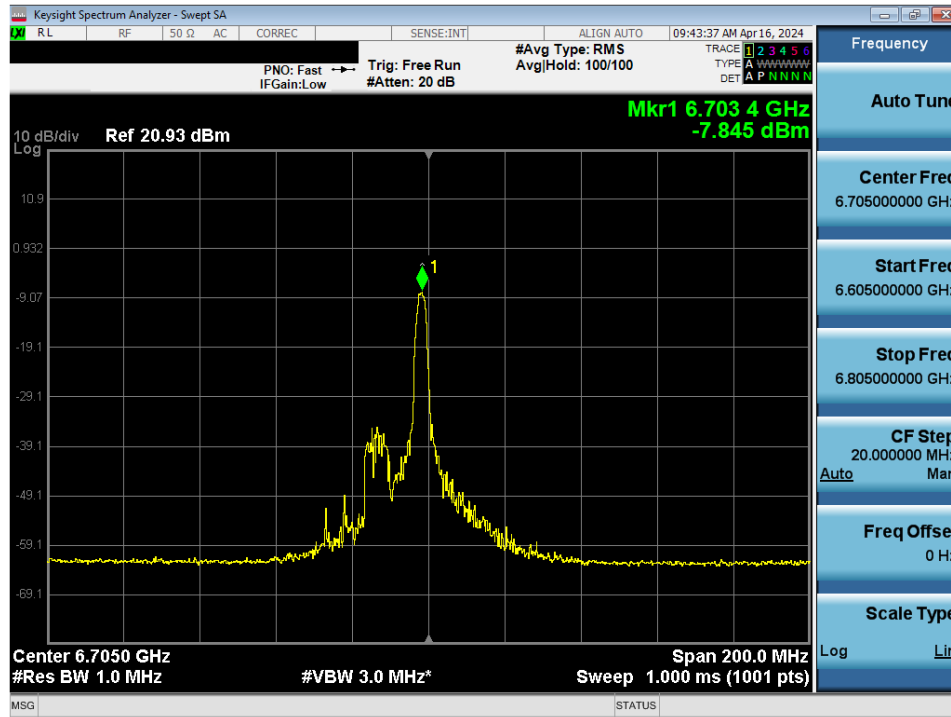


Plot 7-91. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 149) - LPI

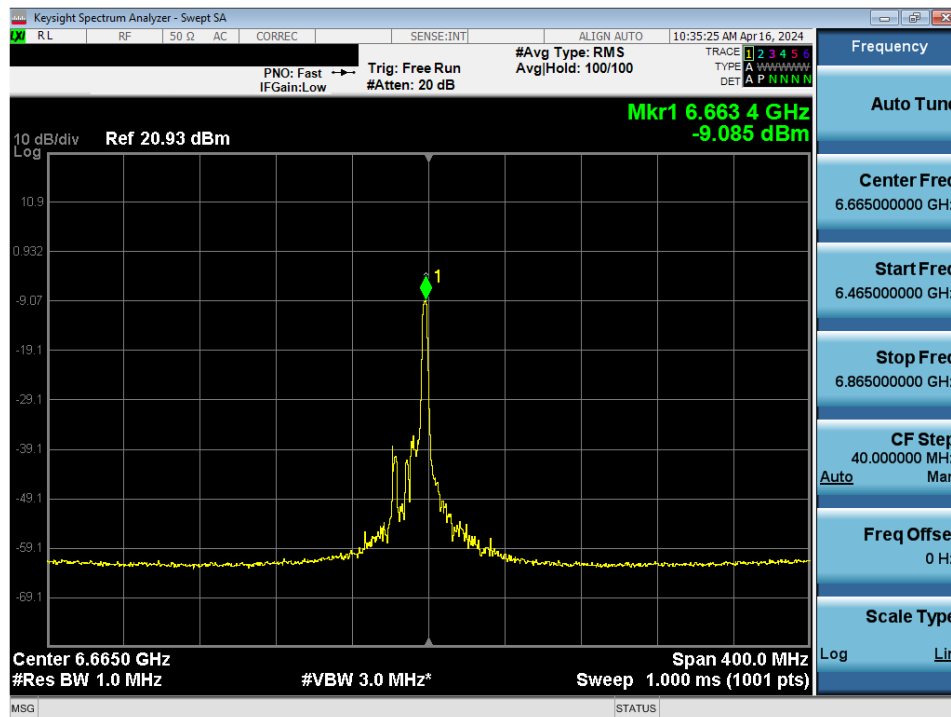


Plot 7-92. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 155) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 84 of 261                    |

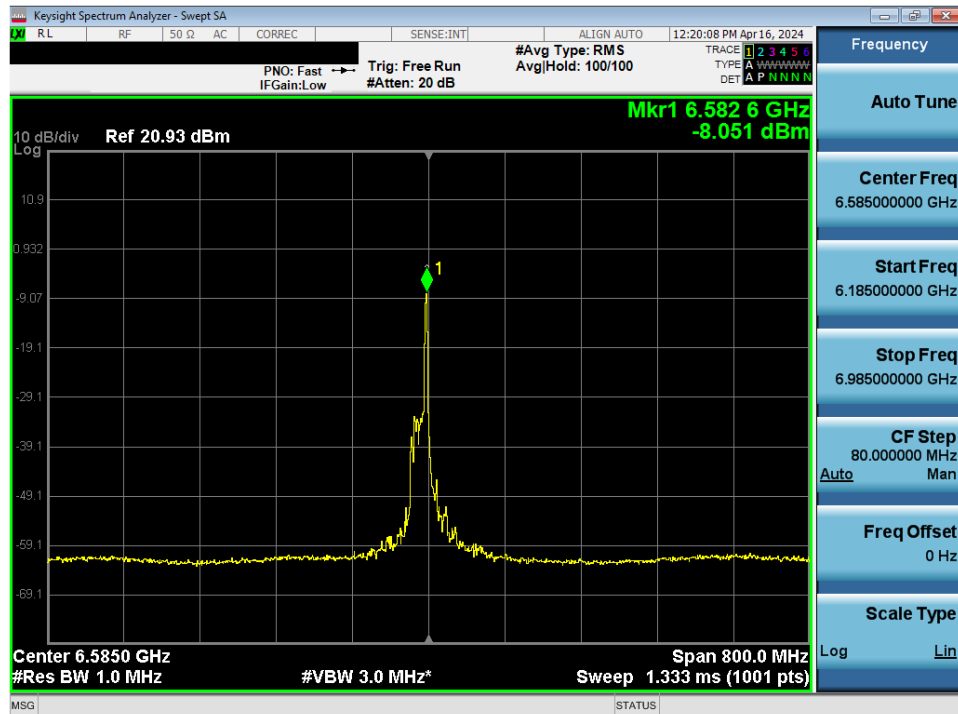


Plot 7-93. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 151) - LPI

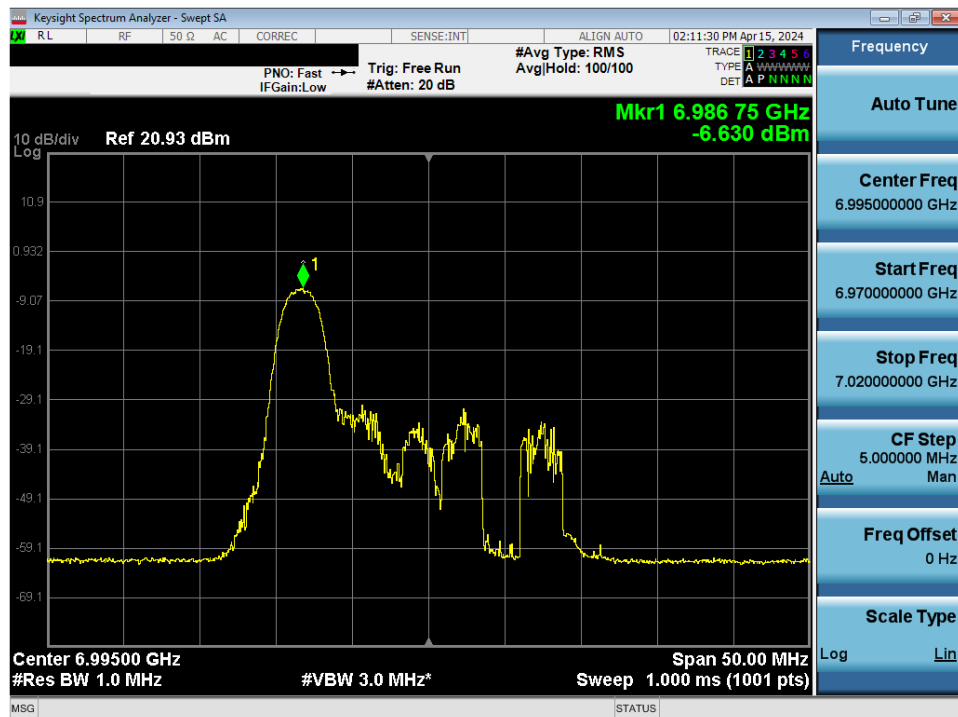


Plot 7-94. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 143) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 85 of 261                    |

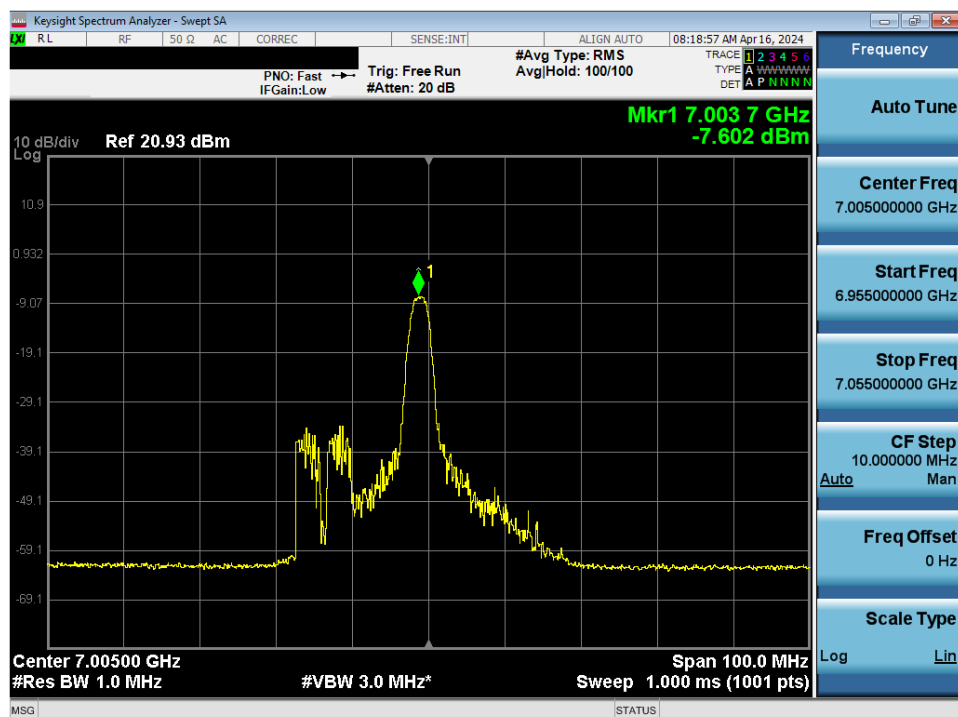


Plot 7-95. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802. 11be (26 Tones) (UNII Band 7) – Ch. 127) - LPI

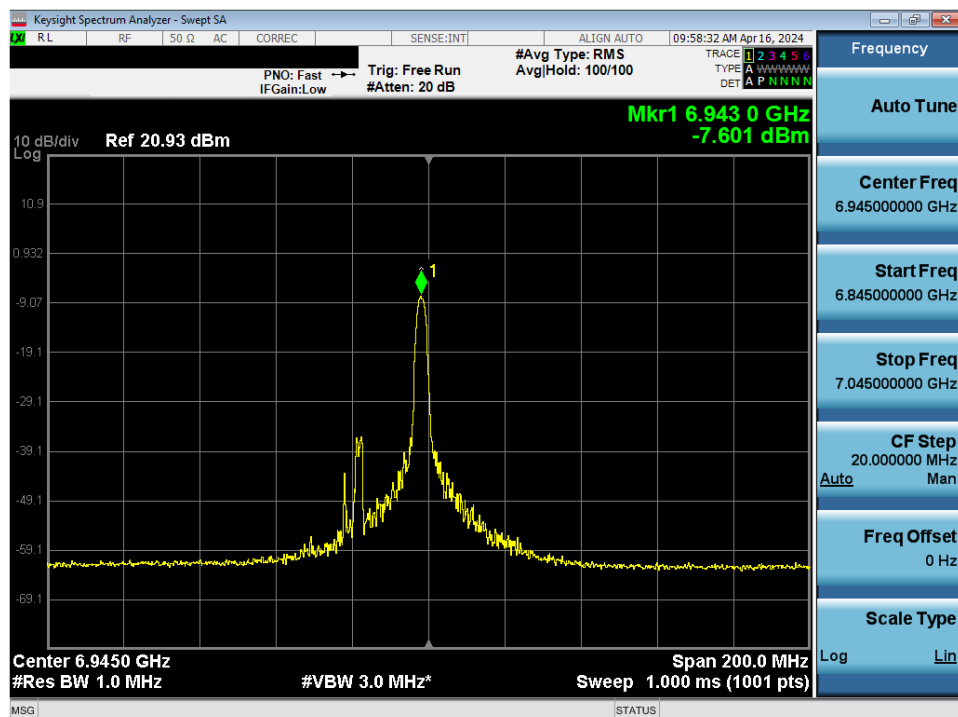


Plot 7-96. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 209) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 86 of 261                    |

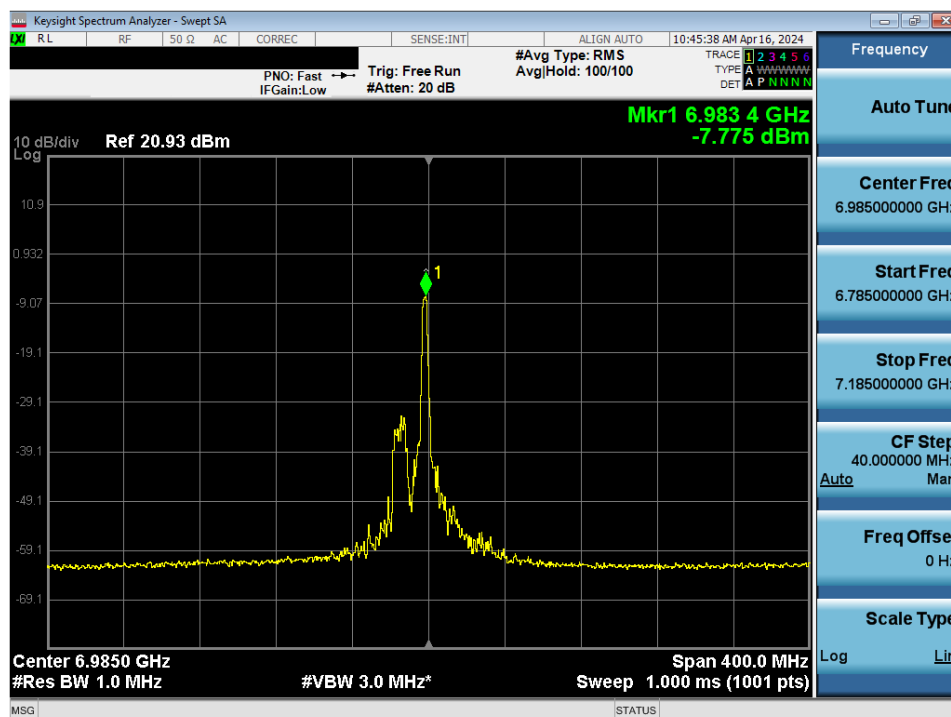


Plot 7-97. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 211) - LPI

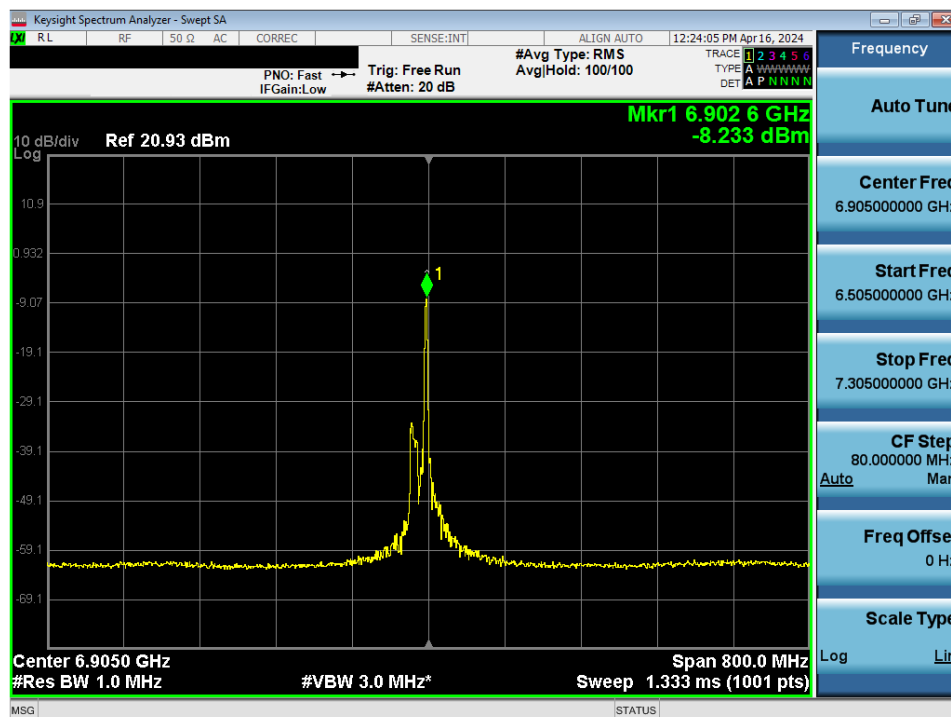


Plot 7-98. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 199) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 87 of 261                    |

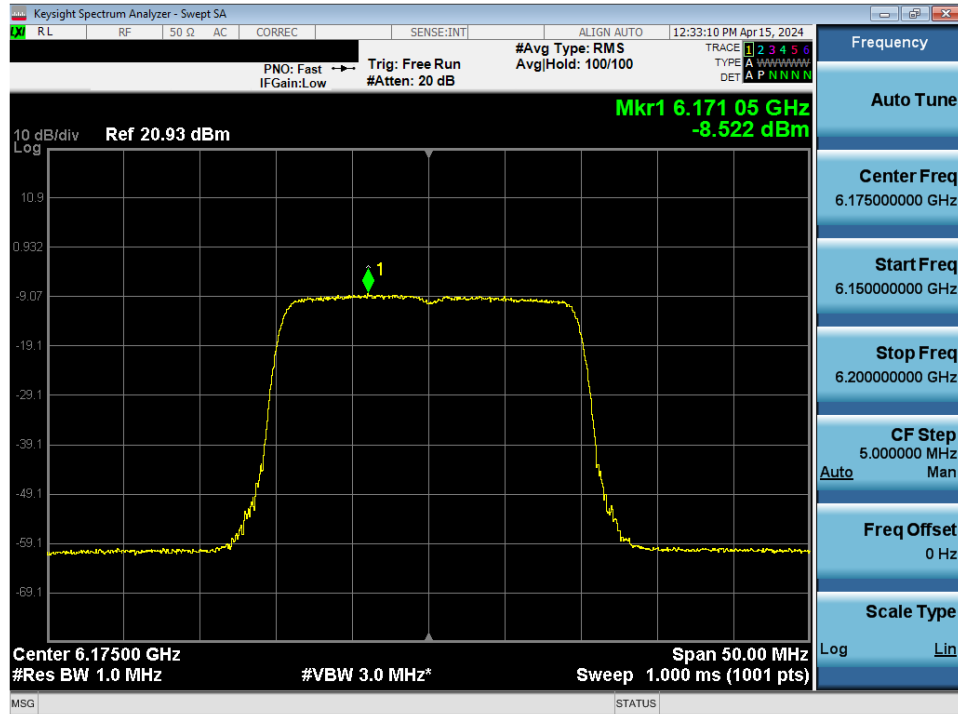


Plot 7-99. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 207) - LPI

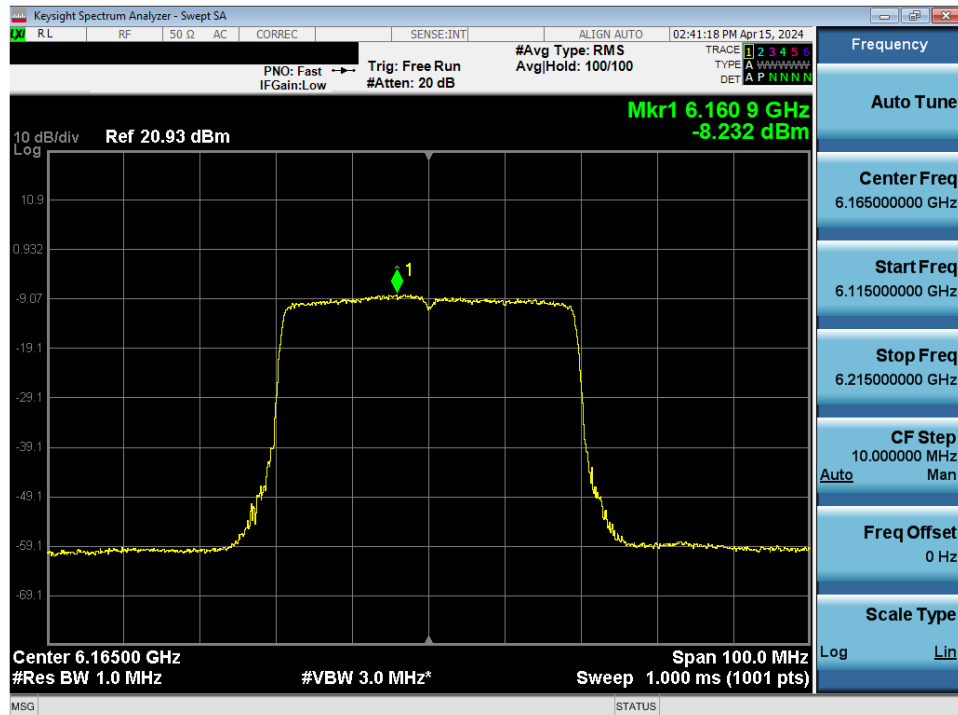


Plot 7-100. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802. 11be (26 Tones) (UNII Band 8) – Ch. 191) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 88 of 261                    |

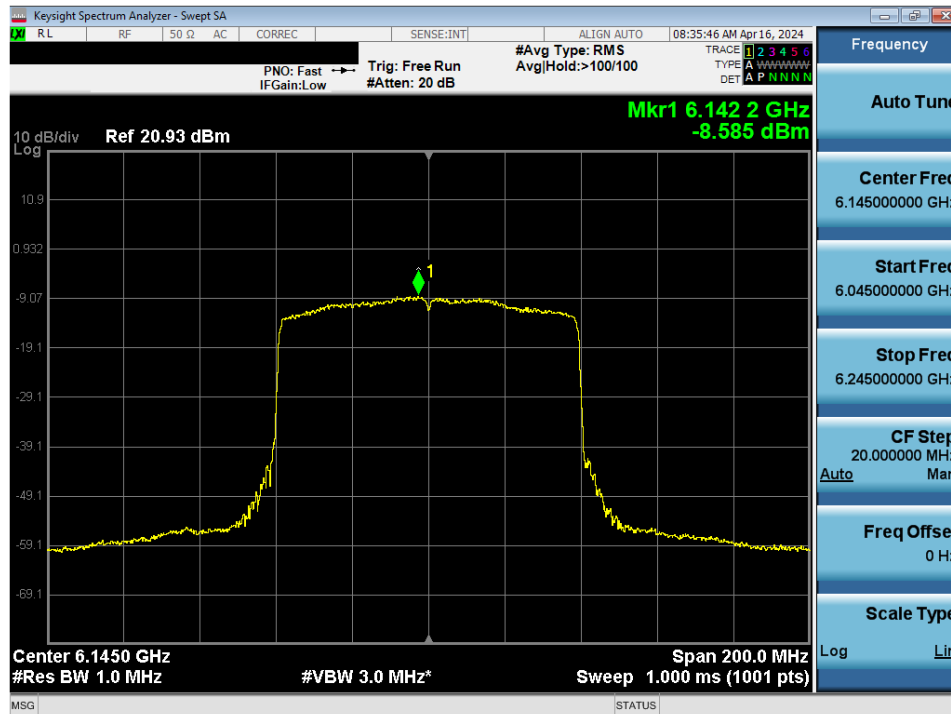


Plot 7-101. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 45) - LPI

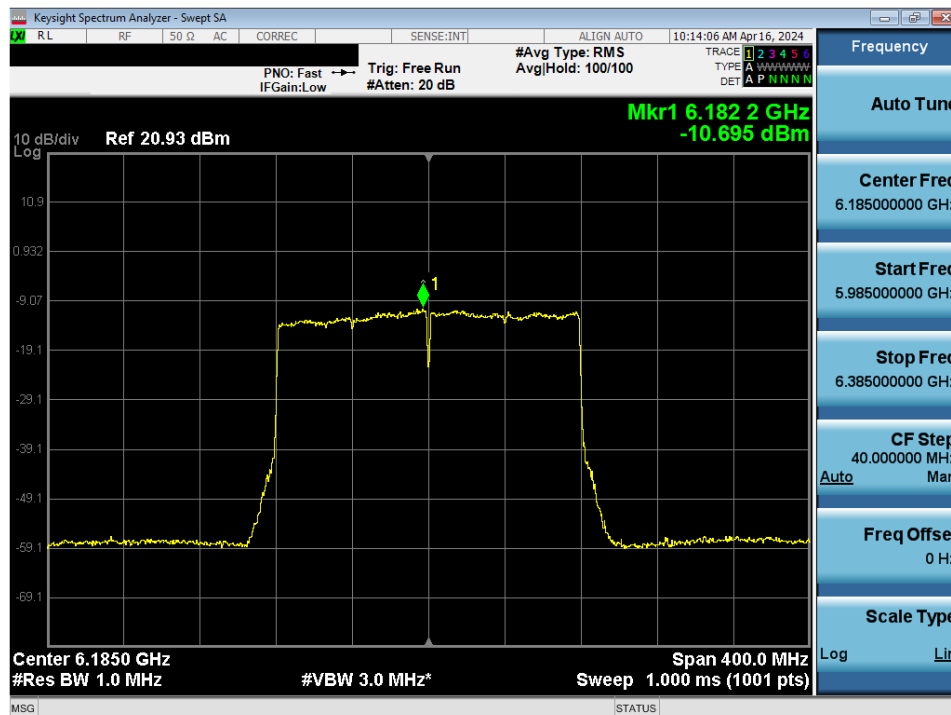


Plot 7-102. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 43) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 89 of 261                    |

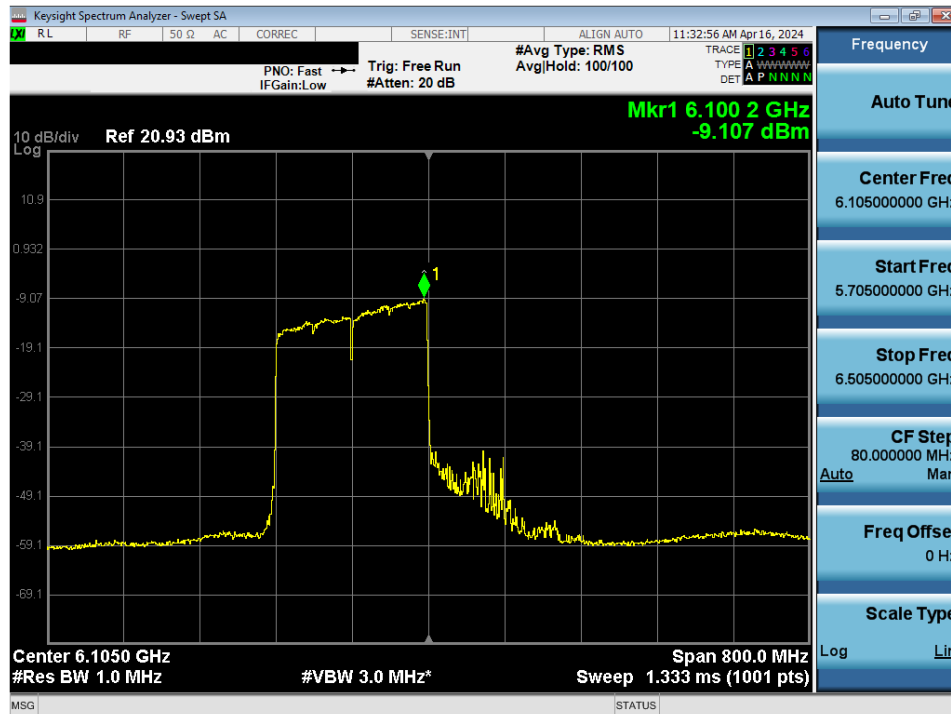


Plot 7-103. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 39) - LPI & SP

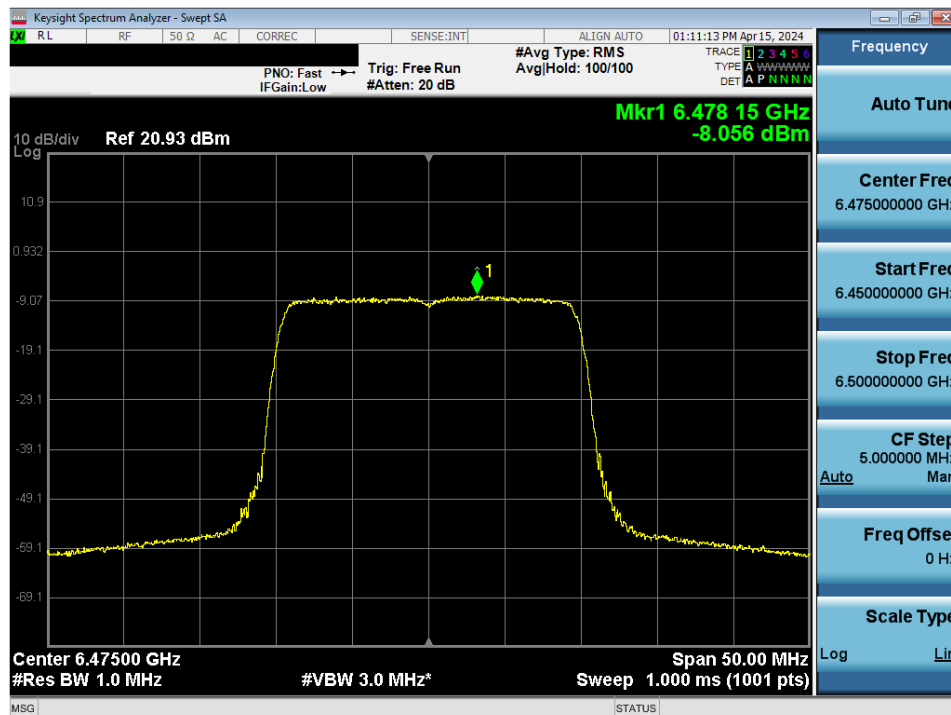


Plot 7-104. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802. 11be (Full Tone) (UNII Band 5) – Ch. 47) - LPI & SP

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 90 of 261                    |

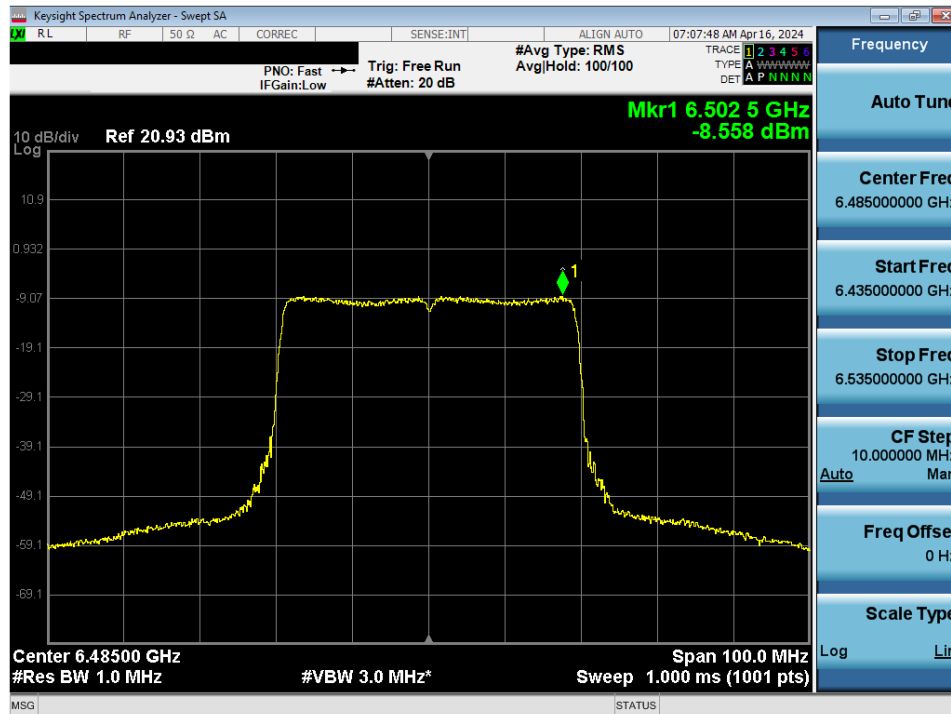


Plot 7-105. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802. 11be (Full Tones) (UNII Band 5) – Ch. 31) - LPI & SP

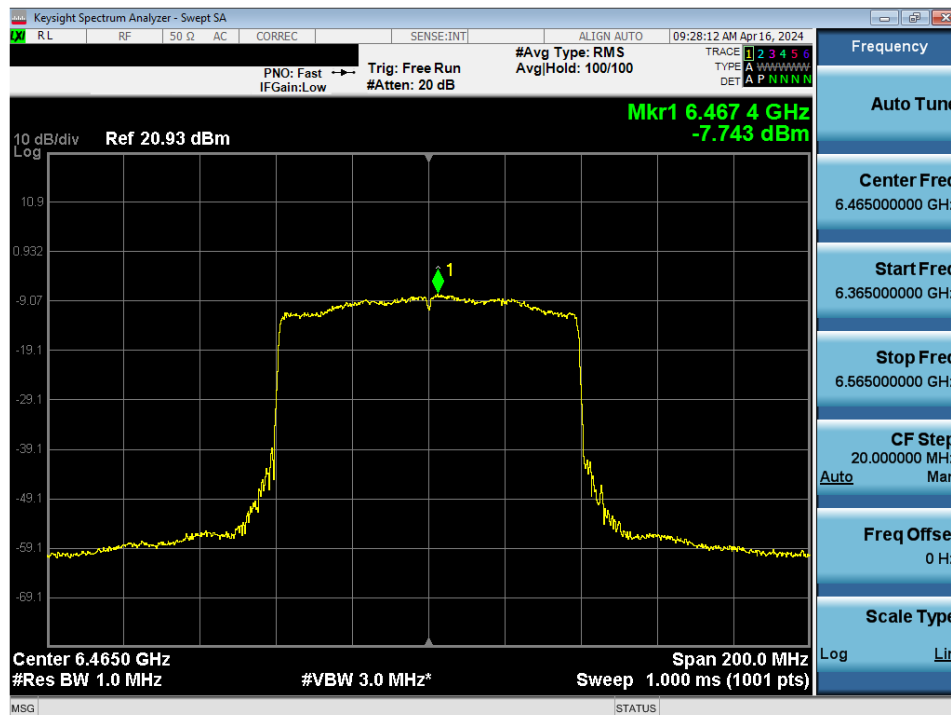


Plot 7-106. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 105) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 91 of 261                    |

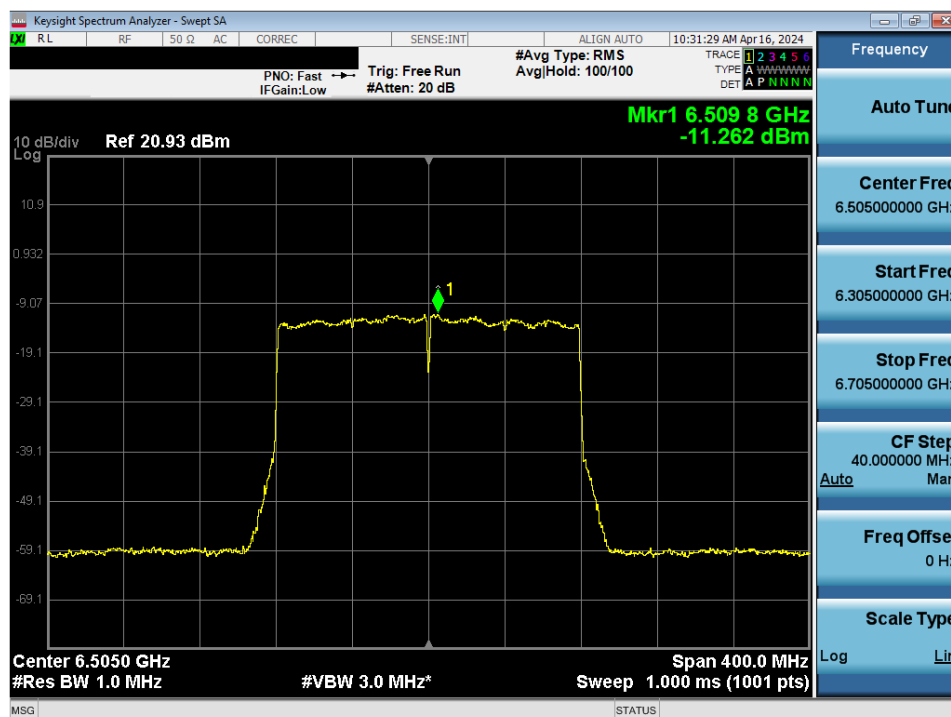


Plot 7-107. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 107) - LPI

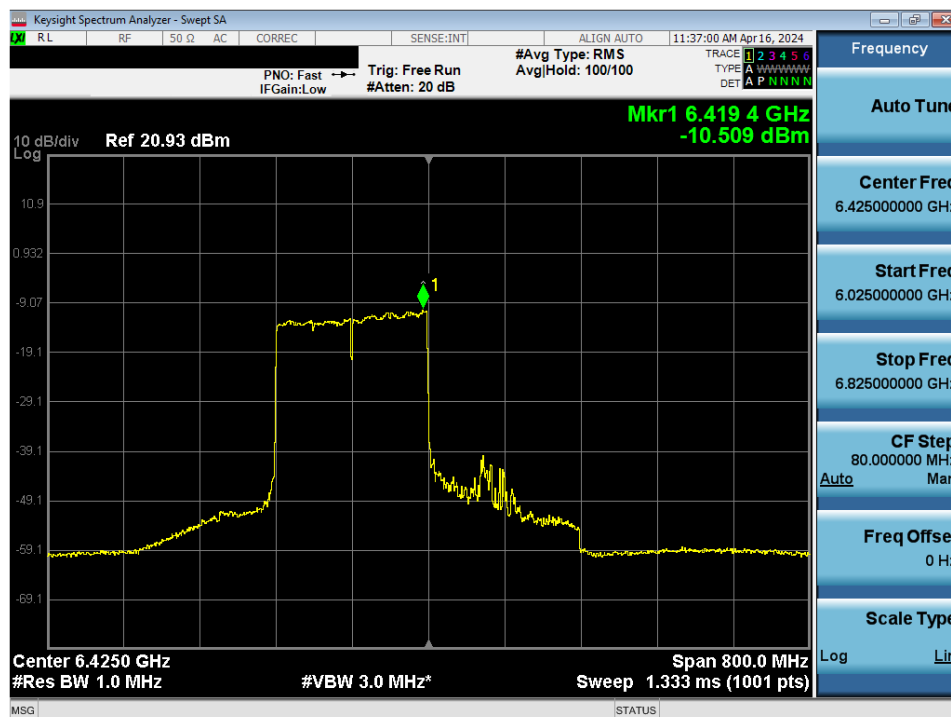


Plot 7-108. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 103) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 92 of 261                    |

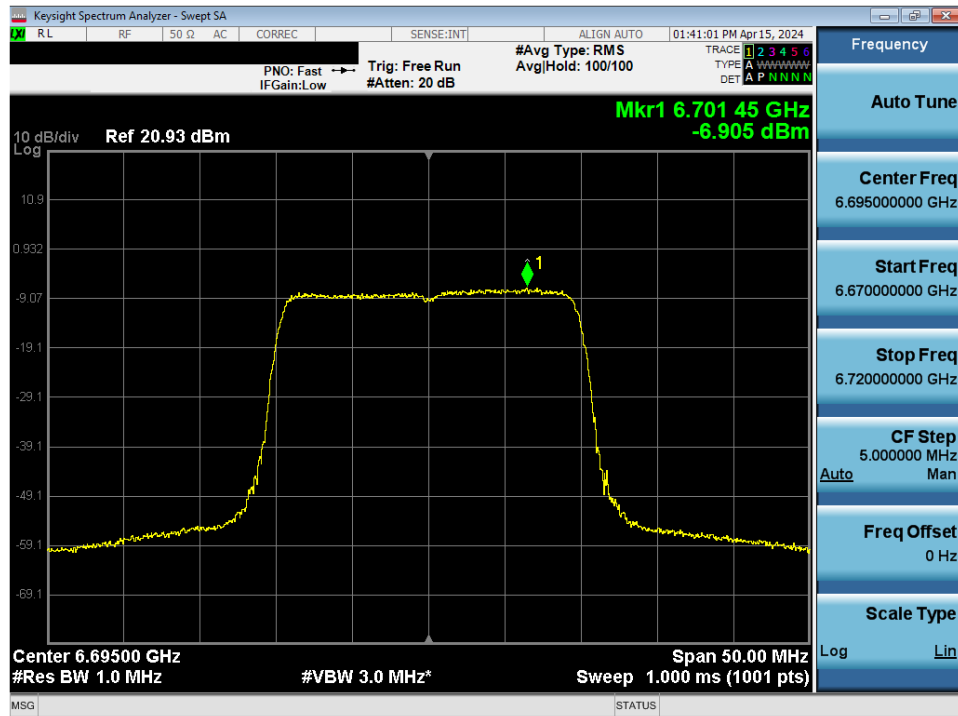


Plot 7-109. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802. 11be (Full Tone) (UNII Band 6) – Ch. 111) - LPI

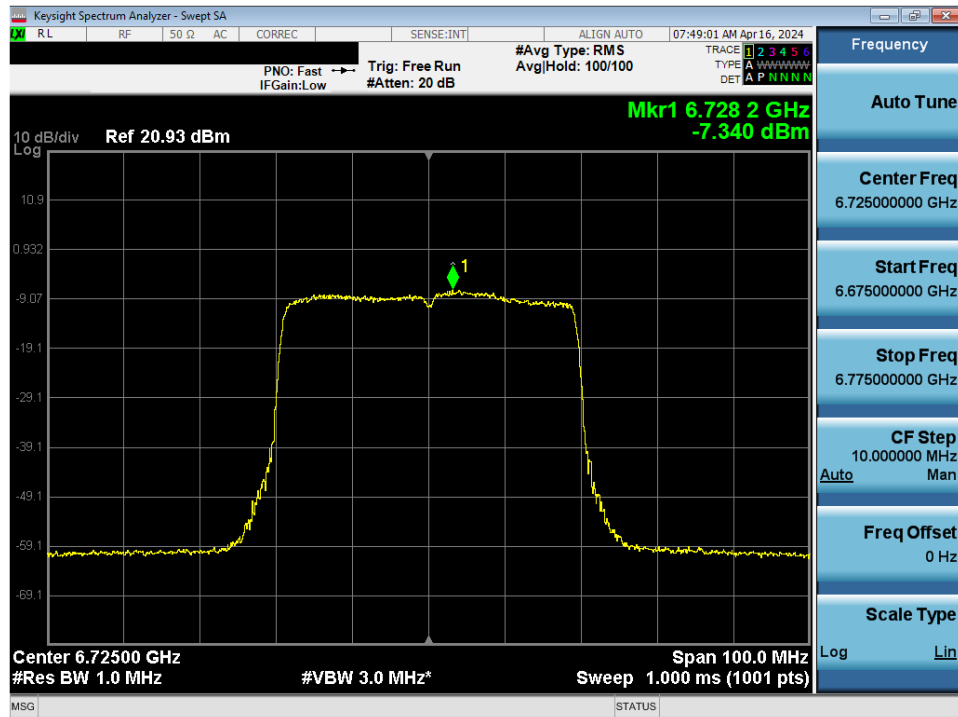


Plot 7-110. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802. 11be (Full Tones) (UNII Band 6) – Ch. 95) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 93 of 261                    |

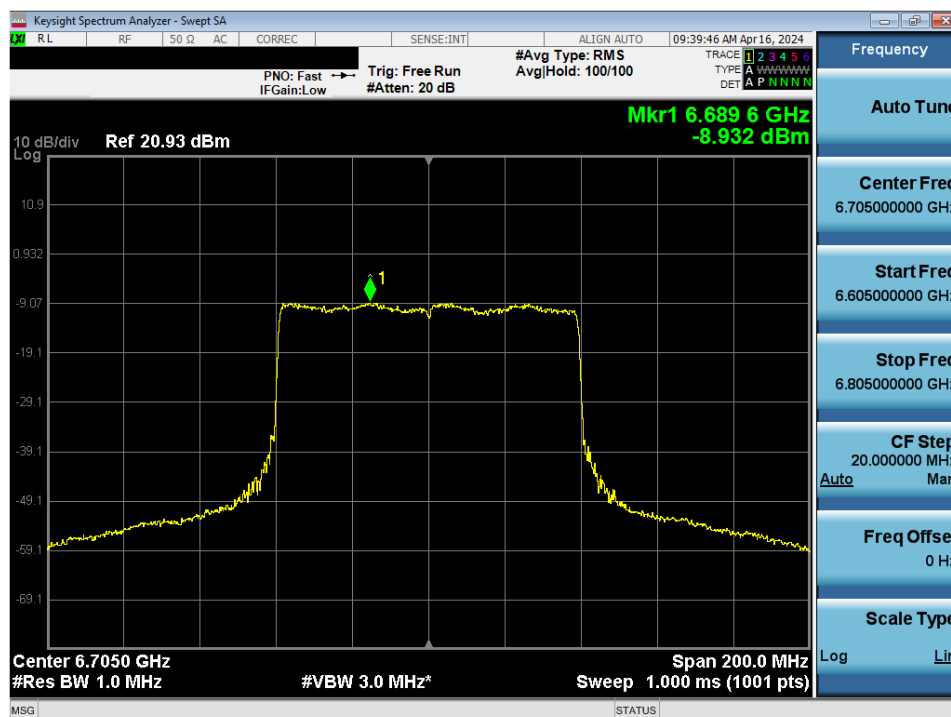


Plot 7-111. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 149) - LPI

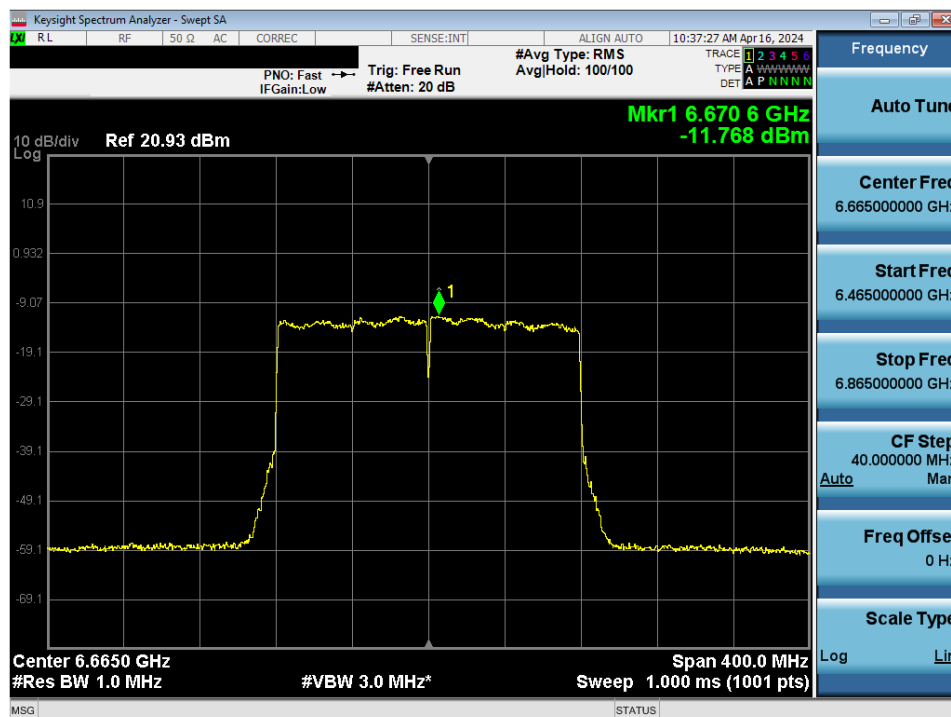


Plot 7-112. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 155) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 94 of 261                    |

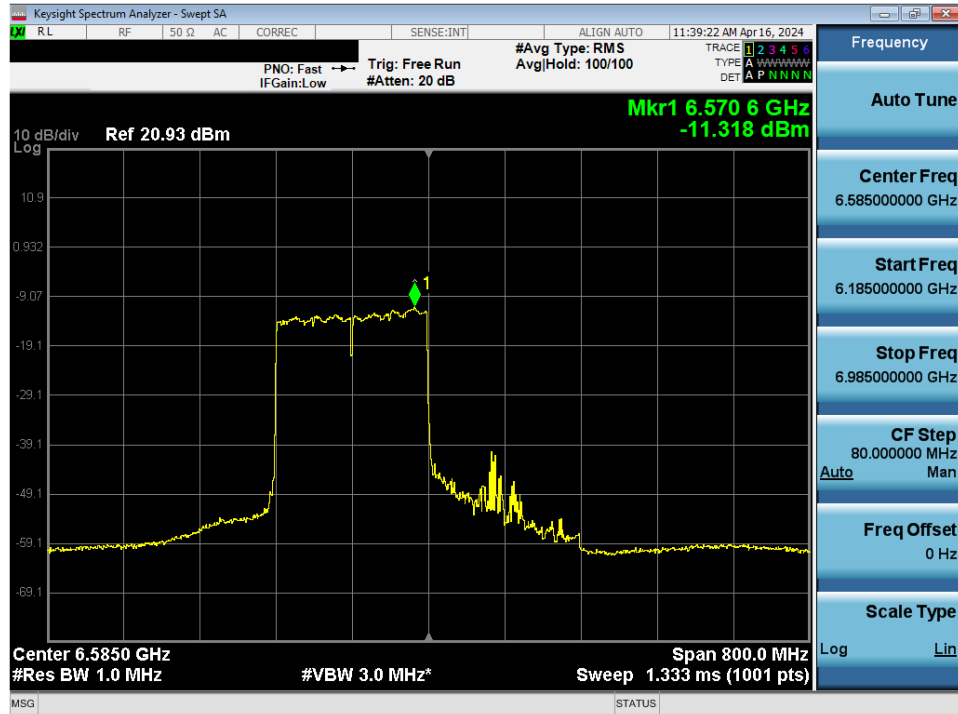


Plot 7-113. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 151) - LPI & SP

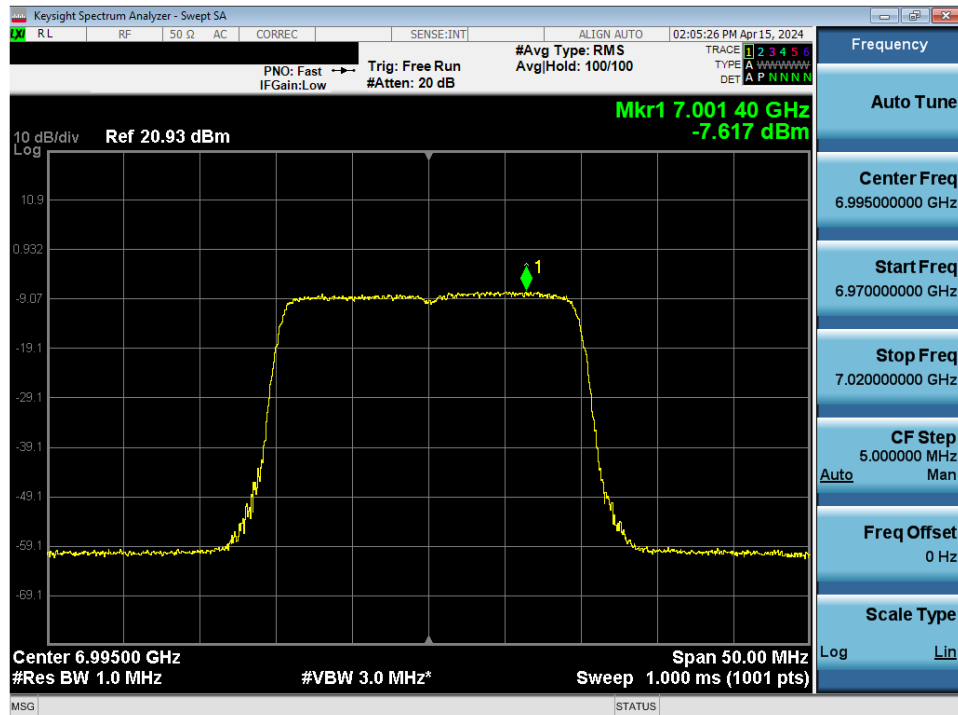


Plot 7-114. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 143) - LPI & SP

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 95 of 261                    |



Plot 7-115. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802. 11be (Full Tone) (UNII Band 7) – Ch. 127) - LPI



Plot 7-116. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802. 11be (Full Tone) (UNII Band 8) – Ch. 209) - LPI

|                                         |                                        |                                        |                                   |
|-----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|
| FCC ID: A3LNP940XMA                     | MEASUREMENT REPORT                     |                                        | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2403190019-10.A3L | Test Dates:<br>03/14/2024 – 04/25/2024 | EUT Type:<br>Portable Computing Device | Page 96 of 261                    |