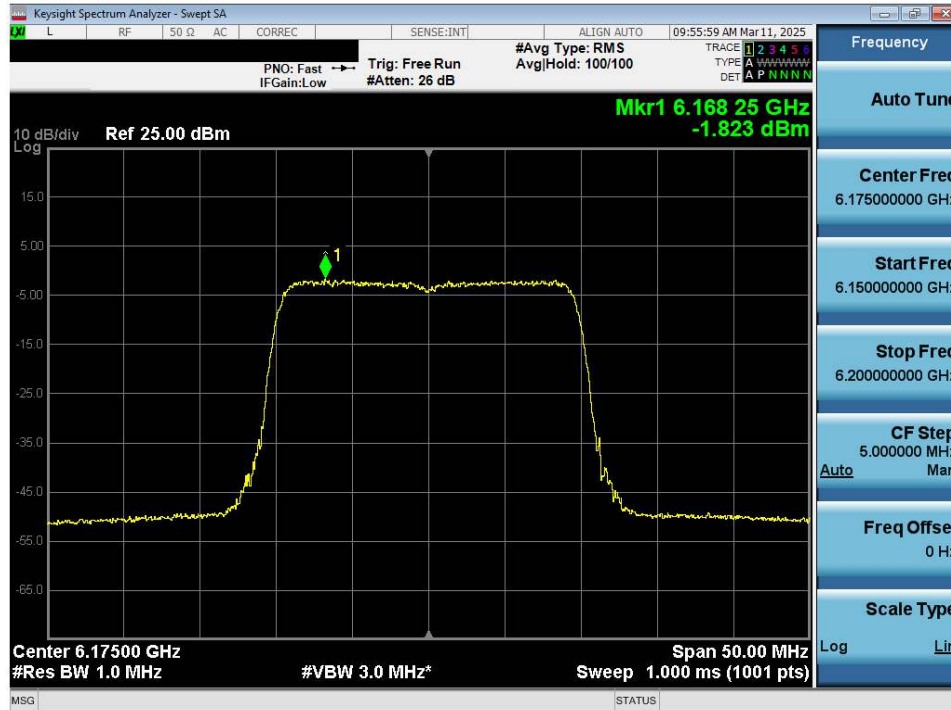
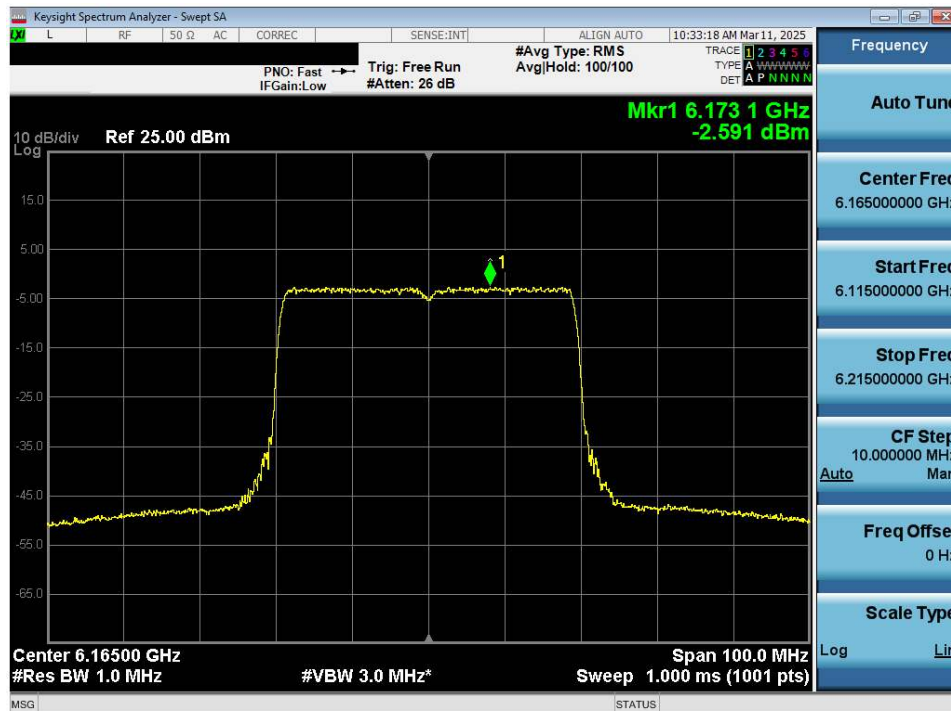


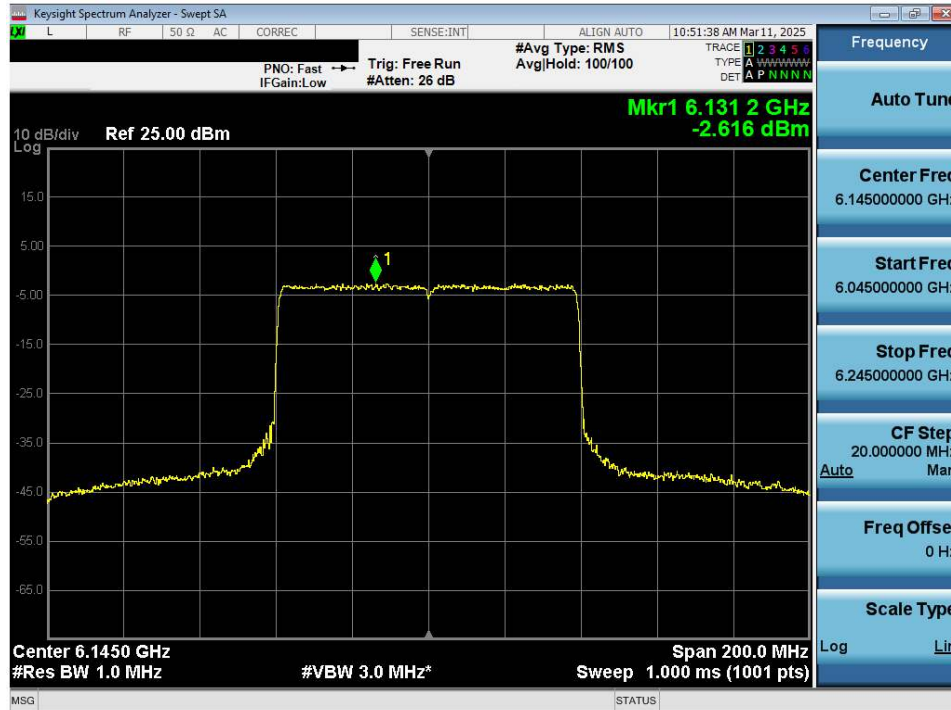


Plot 7-82. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 45) - LPI

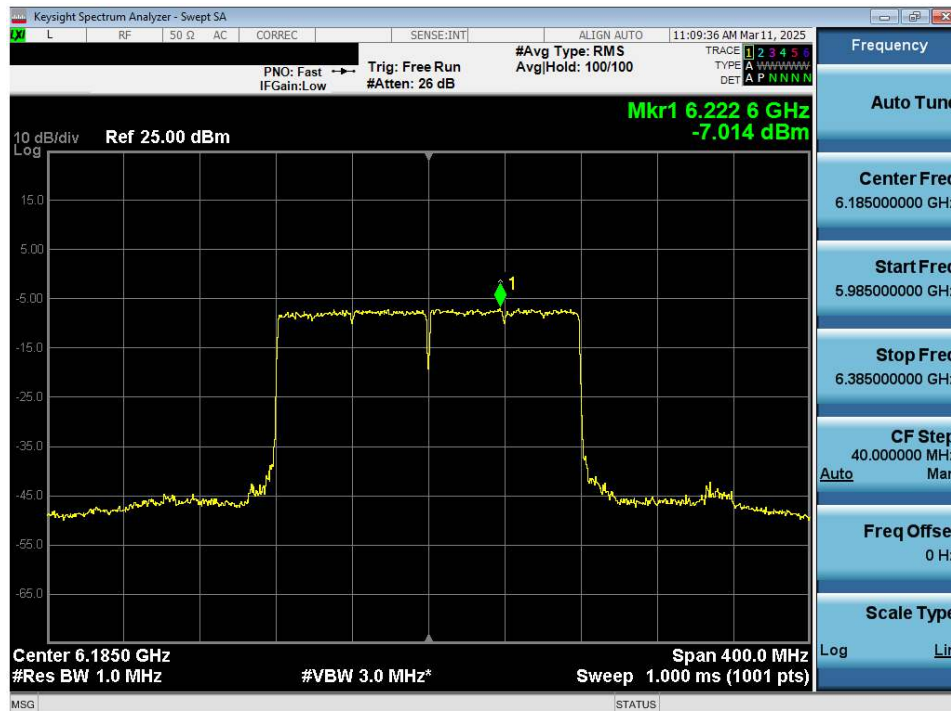


Plot 7-83. Power Spectral Density Plot MIMO ANT2 (40MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 43) - LPI

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 99 of 164                    |



Plot 7-84. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 39) - LPI/SP



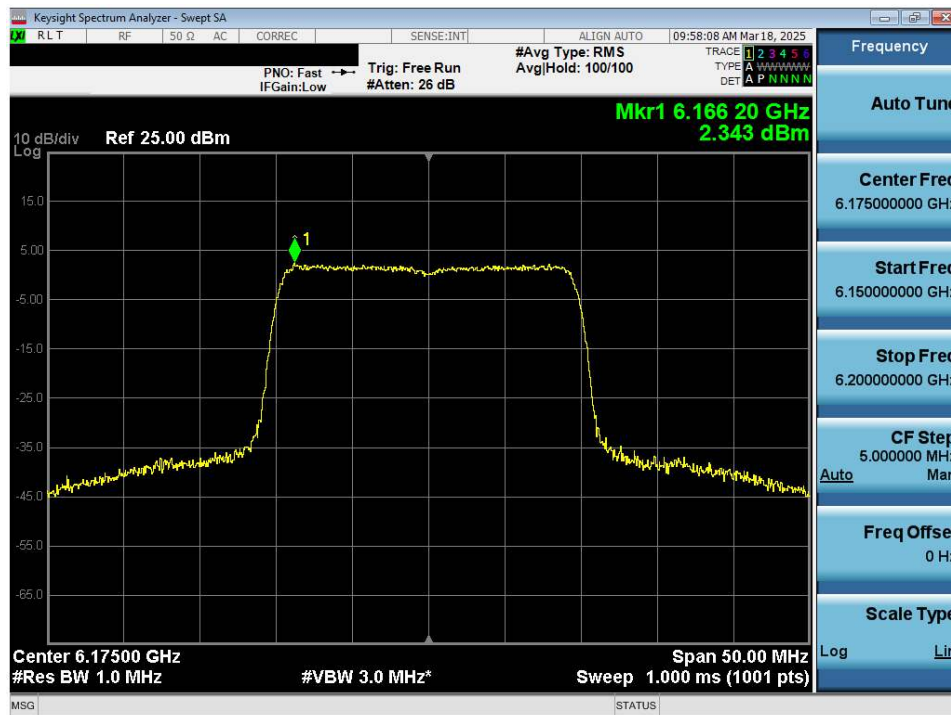
Plot 7-85. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 47) - LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 100 of 164                   |

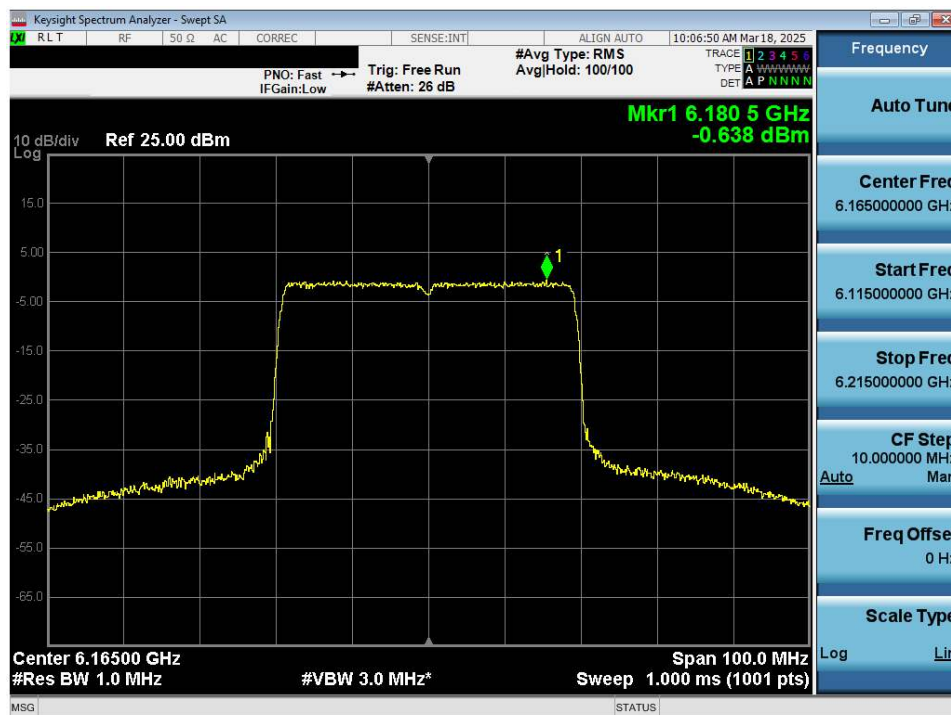


Plot 7-86. Power Spectral Density Plot MIMO ANT2 (320MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 31) - LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 101 of 164                   |



Plot 7-87. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 45) - SP



Plot 7-88. Power Spectral Density Plot MIMO ANT2 (40MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 43) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 102 of 164                   |

**Note:**

Per ANSI C63.10-2013 Section 14.3.2.2 the power spectral density at Antenna 1 and Antenna 2 were first measured separately as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

Per ANSI C63.10-2013 Section 14.4.3, the directional gain is calculated using the following formula, where  $G_N$  is the gain of the nth antenna and  $N_{ANT}$ , the total number of antennas used.

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

**Sample MIMO Calculation:**

At 5935MHz in 802.11ax (20MHz BW) mode, the average conducted power spectral density was measured to be -3.96 dBm for Antenna-1 and -5.51 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

$$(-3.96 \text{ dBm} + -5.51 \text{ dBm}) = (0.402 \text{ mW} + 0.281 \text{ mW}) = 0.683 \text{ mW} = -1.66 \text{ dBm}$$

**Sample e.i.r.p Power Spectral Density Calculation:**

At 5935 MHz in 802.11ax (20MHz BW) mode, the average MIMO power density was calculated to be -1.66 dBm with directional gain of -3.07 dBi.

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

$$-1.66 \text{ dBm} + -3.07 \text{ dBi} = -4.72 \text{ dBm}$$

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 103 of 164                          |

## 7.5 In-Band Emissions

### 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.

**For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.**

### Test Procedure Used

KDB 987594 D02 v03

### Test Settings

1. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to not damage the instrumentation.
2. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2013.
3. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (This will be used to determine the channel edge.)
4. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
  - a) Set the span to encompass the entire 26 dB EBW of the signal.
  - b) Set RBW = same RBW used for 26 dB EBW measurement.
  - c) Set VBW  $\geq 3 \times$  RBW
  - d) Number of points in sweep  $\geq [2 \times \text{span} / \text{RBW}]$ .
  - e) Sweep time = auto.
  - f) Detector = RMS (i.e., power averaging)
  - g) Trace average at least 100 traces in power averaging (rms) mode.
  - h) Use the peak search function on the instrument to find the peak of the spectrum.
5. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW.
6. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
  - a) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
  - b) Suppressed by 28 dB at one channel bandwidth from the channel center.
  - c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
7. Adjust the span to encompass the entire mask as necessary.
8. Clear trace.
9. Trace average at least 100 traces in power averaging (rms) mode.
10. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 104 of 164                          |

**Test Setup**

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



**Figure 7-4. Test Instrument & Measurement Setup**

**Test Notes**

None.

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 105 of 164                          |

|            | Frequency<br>[MHz] | Channel | 802.11<br>MODE | Antenna-1<br>In-Band<br>Emission | Antenna-2<br>In-Band<br>Emission |
|------------|--------------------|---------|----------------|----------------------------------|----------------------------------|
| Band 5     | 5935               | 2       | be (20MHz)     | PASS                             | PASS                             |
|            | 6175               | 45      | be (20MHz)     | PASS                             | PASS                             |
|            | 6415               | 93      | be (20MHz)     | PASS                             | PASS                             |
|            | 5965               | 3       | be (40MHz)     | PASS                             | PASS                             |
|            | 6165               | 43      | be (40MHz)     | PASS                             | PASS                             |
|            | 6405               | 91      | be (40MHz)     | PASS                             | PASS                             |
|            | 5985               | 7       | be (80MHz)     | PASS                             | PASS                             |
|            | 6145               | 39      | be (80MHz)     | PASS                             | PASS                             |
|            | 6385               | 87      | be (80MHz)     | PASS                             | PASS                             |
|            | 6025               | 15      | be (160MHz)    | PASS                             | PASS                             |
|            | 6185               | 47      | be (160MHz)    | PASS                             | PASS                             |
|            | 6345               | 79      | be (160MHz)    | PASS                             | PASS                             |
|            | 6105               | 31      | be (320MHz)    | PASS                             | PASS                             |
|            | 6265               | 63      | be (320MHz)    | PASS                             | PASS                             |
| Band 6     | 6435               | 97      | be (20MHz)     | PASS                             | PASS                             |
|            | 6475               | 105     | be (20MHz)     | PASS                             | PASS                             |
|            | 6515               | 113     | be (20MHz)     | PASS                             | PASS                             |
|            | 6445               | 99      | be (40MHz)     | PASS                             | PASS                             |
|            | 6485               | 107     | be (40MHz)     | PASS                             | PASS                             |
|            | 6525               | 115     | be (40MHz)     | PASS                             | PASS                             |
|            | 6465               | 103     | be (80MHz)     | PASS                             | PASS                             |
|            | 6505               | 111     | be (160MHz)    | PASS                             | PASS                             |
| Band 5/6/7 | 6425               | 95      | be (320MHz)    | PASS                             | PASS                             |
| Band 7     | 6695               | 117     | be (20MHz)     | PASS                             | PASS                             |
|            | 6695               | 149     | be (20MHz)     | PASS                             | PASS                             |
|            | 6875               | 185     | be (20MHz)     | PASS                             | PASS                             |
|            | 6565               | 123     | be (40MHz)     | PASS                             | PASS                             |
|            | 6725               | 155     | be (40MHz)     | PASS                             | PASS                             |
|            | 6845               | 179     | be (40MHz)     | PASS                             | PASS                             |
|            | 6545               | 119     | be (80MHz)     | PASS                             | PASS                             |
|            | 6705               | 151     | be (80MHz)     | PASS                             | PASS                             |
|            | 6865               | 183     | be (80MHz)     | PASS                             | PASS                             |
|            | 6665               | 143     | be (160MHz)    | PASS                             | PASS                             |
| Band 6/7   | 6585               | 127     | be (320MHz)    | PASS                             | PASS                             |
|            | 6745               | 159     | be (320MHz)    | PASS                             | PASS                             |
| Band 8     | 6895               | 189     | be (20MHz)     | PASS                             | PASS                             |
|            | 6995               | 209     | be (20MHz)     | PASS                             | PASS                             |
|            | 7115               | 233     | be (20MHz)     | PASS                             | PASS                             |
|            | 6885               | 187     | be (40MHz)     | PASS                             | PASS                             |
|            | 6965               | 211     | be (40MHz)     | PASS                             | PASS                             |
|            | 7085               | 227     | be (40MHz)     | PASS                             | PASS                             |
|            | 6945               | 199     | be (80MHz)     | PASS                             | PASS                             |
|            | 7025               | 215     | be (80MHz)     | PASS                             | PASS                             |
| Band 7/8   | 6985               | 207     | be (160MHz)    | PASS                             | PASS                             |
| Band 7/8   | 6985               | 191     | be (320MHz)    | PASS                             | PASS                             |

**Table 7-83. In Band Emissions Results Measurements (26 Tones) – LPI**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 106 of 164                          |

|            | Frequency<br>[MHz] | Channel | 802.11<br>MODE | Antenna-1<br>In-Band<br>Emission | Antenna-2<br>In-Band<br>Emission |
|------------|--------------------|---------|----------------|----------------------------------|----------------------------------|
| Band 5     | 5935               | 2       | be (20MHz)     | PASS                             | PASS                             |
|            | 6175               | 45      | be (20MHz)     | PASS                             | PASS                             |
|            | 6415               | 93      | be (20MHz)     | PASS                             | PASS                             |
|            | 5965               | 3       | be (40MHz)     | PASS                             | PASS                             |
|            | 6165               | 43      | be (40MHz)     | PASS                             | PASS                             |
|            | 6405               | 91      | be (40MHz)     | PASS                             | PASS                             |
|            | 5985               | 7       | be (80MHz)     | PASS                             | PASS                             |
|            | 6145               | 39      | be (80MHz)     | PASS                             | PASS                             |
|            | 6385               | 87      | be (80MHz)     | PASS                             | PASS                             |
|            | 6025               | 15      | be (160MHz)    | PASS                             | PASS                             |
|            | 6185               | 47      | be (160MHz)    | PASS                             | PASS                             |
|            | 6345               | 79      | be (160MHz)    | PASS                             | PASS                             |
|            | 6105               | 31      | be (320MHz)    | PASS                             | PASS                             |
|            | 6265               | 63      | be (320MHz)    | PASS                             | PASS                             |
| Band 6     | 6435               | 97      | be (20MHz)     | PASS                             | PASS                             |
|            | 6475               | 105     | be (20MHz)     | PASS                             | PASS                             |
|            | 6515               | 113     | be (20MHz)     | PASS                             | PASS                             |
|            | 6445               | 99      | be (40MHz)     | PASS                             | PASS                             |
|            | 6485               | 107     | be (40MHz)     | PASS                             | PASS                             |
|            | 6525               | 115     | be (40MHz)     | PASS                             | PASS                             |
|            | 6465               | 103     | be (80MHz)     | PASS                             | PASS                             |
|            | 6505               | 111     | be (160MHz)    | PASS                             | PASS                             |
| Band 5/6/7 | 6425               | 95      | be (320MHz)    | PASS                             | PASS                             |
| Band 7     | 6695               | 117     | be (20MHz)     | PASS                             | PASS                             |
|            | 6695               | 149     | be (20MHz)     | PASS                             | PASS                             |
|            | 6875               | 185     | be (20MHz)     | PASS                             | PASS                             |
|            | 6565               | 123     | be (40MHz)     | PASS                             | PASS                             |
|            | 6725               | 155     | be (40MHz)     | PASS                             | PASS                             |
|            | 6845               | 179     | be (40MHz)     | PASS                             | PASS                             |
|            | 6545               | 119     | be (80MHz)     | PASS                             | PASS                             |
|            | 6705               | 151     | be (80MHz)     | PASS                             | PASS                             |
|            | 6865               | 183     | be (80MHz)     | PASS                             | PASS                             |
|            | 6665               | 143     | be (160MHz)    | PASS                             | PASS                             |
| Band 6/7   | 6585               | 127     | be (320MHz)    | PASS                             | PASS                             |
|            | 6745               | 159     | be (320MHz)    | PASS                             | PASS                             |
| Band 7/8   | 6745               | 159     | be (320MHz)    | PASS                             | PASS                             |
| Band 8     | 6895               | 189     | be (20MHz)     | PASS                             | PASS                             |
|            | 6995               | 209     | be (20MHz)     | PASS                             | PASS                             |
|            | 7115               | 233     | be (20MHz)     | PASS                             | PASS                             |
|            | 6885               | 187     | be (40MHz)     | PASS                             | PASS                             |
|            | 6965               | 211     | be (40MHz)     | PASS                             | PASS                             |
|            | 7085               | 227     | be (40MHz)     | PASS                             | PASS                             |
|            | 6945               | 199     | be (80MHz)     | PASS                             | PASS                             |
|            | 7025               | 215     | be (80MHz)     | PASS                             | PASS                             |
|            | 6985               | 207     | be (160MHz)    | PASS                             | PASS                             |
| Band 7/8   | 6985               | 191     | be (320MHz)    | PASS                             | PASS                             |

**Table 7-84. In Band Emissions Results Measurements (Full Tones) – LPI**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 107 of 164                          |

|            | Frequency<br>[MHz] | Channel | 802.11<br>MODE | Antenna-1<br>In-Band<br>Emission | Antenna-2<br>In-Band<br>Emission |
|------------|--------------------|---------|----------------|----------------------------------|----------------------------------|
| Band 5     | 6175               | 45      | be (20MHz)     | PASS                             | PASS                             |
|            | 6145               | 39      | be (80MHz)     | PASS                             | PASS                             |
|            | 6185               | 47      | be (160MHz)    | PASS                             | PASS                             |
|            | 6105               | 31      | be (320MHz)    | PASS                             | PASS                             |
| Band 6     | 6475               | 105     | be (20MHz)     | PASS                             | PASS                             |
|            | 6465               | 103     | be (80MHz)     | PASS                             | PASS                             |
|            | 6505               | 111     | be (160MHz)    | PASS                             | PASS                             |
| Band 5/6/7 | 6425               | 95      | be (320MHz)    | PASS                             | PASS                             |
| Band 7     | 6695               | 149     | be (20MHz)     | PASS                             | PASS                             |
|            | 6725               | 155     | be (40MHz)     | PASS                             | PASS                             |
|            | 6705               | 151     | be (80MHz)     | PASS                             | PASS                             |
|            | 6825               | 175     | be (160MHz)    | PASS                             | PASS                             |
| Band 6/7   | 6585               | 127     | be (320MHz)    | PASS                             | PASS                             |
| Band 7/8   | 6745               | 159     | be (320MHz)    | PASS                             | PASS                             |
| Band 8     | 6995               | 209     | be (20MHz)     | PASS                             | PASS                             |
|            | 6965               | 211     | be (40MHz)     | PASS                             | PASS                             |
|            | 6945               | 199     | be (80MHz)     | PASS                             | PASS                             |
|            | 6985               | 207     | be (160MHz)    | PASS                             | PASS                             |
| Band 7/8   | 6905               | 191     | be (320MHz)    | PASS                             | PASS                             |

**Table 7-85. In Band Emissions Results Measurements (MRU) – LPI**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 108 of 164                          |

|          | Frequency<br>[MHz] | Channel | 802.11<br>MODE | Antenna-1<br>In-Band<br>Emission | Antenna-2<br>In-Band<br>Emission |
|----------|--------------------|---------|----------------|----------------------------------|----------------------------------|
| Band 5   | 5935               | 2       | be (20MHz)     | PASS                             | PASS                             |
|          | 6175               | 45      | be (20MHz)     | PASS                             | PASS                             |
|          | 6415               | 93      | be (20MHz)     | PASS                             | PASS                             |
|          | 5965               | 3       | be (40MHz)     | PASS                             | PASS                             |
|          | 6165               | 43      | be (40MHz)     | PASS                             | PASS                             |
|          | 6405               | 91      | be (40MHz)     | PASS                             | PASS                             |
|          | 5985               | 7       | be (80MHz)     | PASS                             | PASS                             |
|          | 6145               | 39      | be (80MHz)     | PASS                             | PASS                             |
|          | 6385               | 87      | be (80MHz)     | PASS                             | PASS                             |
|          | 6025               | 15      | be (160MHz)    | PASS                             | PASS                             |
|          | 6185               | 47      | be (160MHz)    | PASS                             | PASS                             |
|          | 6345               | 79      | be (160MHz)    | PASS                             | PASS                             |
|          | 6105               | 31      | be (320MHz)    | PASS                             | PASS                             |
|          | 6265               | 63      | be (320MHz)    | PASS                             | PASS                             |
| Band 7   | 6695               | 117     | be (20MHz)     | PASS                             | PASS                             |
|          | 6695               | 149     | be (20MHz)     | PASS                             | PASS                             |
|          | 6875               | 185     | be (20MHz)     | PASS                             | PASS                             |
|          | 6565               | 123     | be (40MHz)     | PASS                             | PASS                             |
|          | 6725               | 155     | be (40MHz)     | PASS                             | PASS                             |
|          | 6845               | 179     | be (40MHz)     | PASS                             | PASS                             |
|          | 6545               | 119     | be (80MHz)     | PASS                             | PASS                             |
|          | 6705               | 151     | be (80MHz)     | PASS                             | PASS                             |
|          | 6865               | 183     | be (80MHz)     | PASS                             | PASS                             |
|          | 6665               | 143     | be (160MHz)    | PASS                             | PASS                             |
|          | 6825               | 175     | be (160MHz)    | PASS                             | PASS                             |
| Band 7/8 | 6745               | 159     | be (320MHz)    | PASS                             | PASS                             |

**Table 7-86. In Band Emissions Results Measurements (26 Tones) – SP**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 109 of 164                          |

|          | Frequency<br>[MHz] | Channel | 802.11<br>MODE | Antenna-1<br>In-Band<br>Emission | Antenna-2<br>In-Band<br>Emission |
|----------|--------------------|---------|----------------|----------------------------------|----------------------------------|
| Band 5   | 5935               | 2       | be (20MHz)     | PASS                             | PASS                             |
|          | 6175               | 45      | be (20MHz)     | PASS                             | PASS                             |
|          | 6415               | 93      | be (20MHz)     | PASS                             | PASS                             |
|          | 5965               | 3       | be (40MHz)     | PASS                             | PASS                             |
|          | 6165               | 43      | be (40MHz)     | PASS                             | PASS                             |
|          | 6405               | 91      | be (40MHz)     | PASS                             | PASS                             |
|          | 5985               | 7       | be (80MHz)     | PASS                             | PASS                             |
|          | 6145               | 39      | be (80MHz)     | PASS                             | PASS                             |
|          | 6385               | 87      | be (80MHz)     | PASS                             | PASS                             |
|          | 6025               | 15      | be (160MHz)    | PASS                             | PASS                             |
|          | 6185               | 47      | be (160MHz)    | PASS                             | PASS                             |
|          | 6345               | 79      | be (160MHz)    | PASS                             | PASS                             |
|          | 6105               | 31      | be (320MHz)    | PASS                             | PASS                             |
|          | 6265               | 63      | be (320MHz)    | PASS                             | PASS                             |
| Band 7   | 6695               | 117     | be (20MHz)     | PASS                             | PASS                             |
|          | 6695               | 149     | be (20MHz)     | PASS                             | PASS                             |
|          | 6875               | 185     | be (20MHz)     | PASS                             | PASS                             |
|          | 6565               | 123     | be (40MHz)     | PASS                             | PASS                             |
|          | 6725               | 155     | be (40MHz)     | PASS                             | PASS                             |
|          | 6845               | 179     | be (40MHz)     | PASS                             | PASS                             |
|          | 6545               | 119     | be (80MHz)     | PASS                             | PASS                             |
|          | 6705               | 151     | be (80MHz)     | PASS                             | PASS                             |
|          | 6865               | 183     | be (80MHz)     | PASS                             | PASS                             |
|          | 6665               | 143     | be (160MHz)    | PASS                             | PASS                             |
|          | 6825               | 175     | be (160MHz)    | PASS                             | PASS                             |
| Band 7/8 | 6745               | 159     | be (320MHz)    | PASS                             | PASS                             |

**Table 7-87. In Band Emissions Results Measurements (Full Tones) – SP**

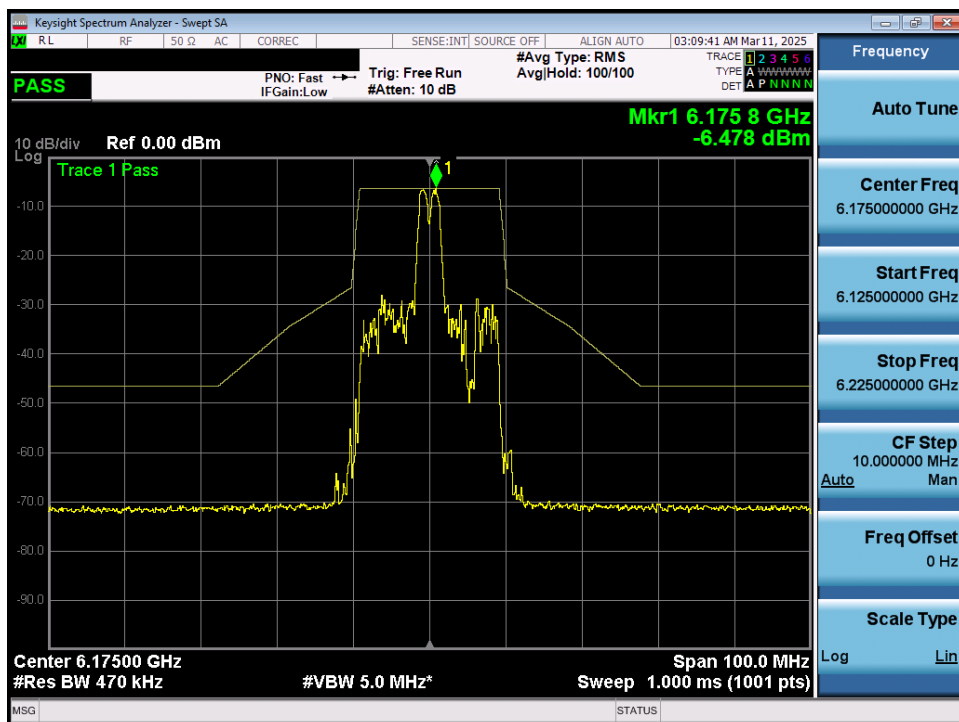
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 110 of 164                          |

|          | Frequency<br>[MHz] | Channel | 802.11<br>MODE | Antenna-1<br>In-Band<br>Emission | Antenna-2<br>In-Band<br>Emission |
|----------|--------------------|---------|----------------|----------------------------------|----------------------------------|
| Band 5   | 6175               | 45      | be (20MHz)     | PASS                             | PASS                             |
|          | 6145               | 39      | be (80MHz)     | PASS                             | PASS                             |
|          | 6185               | 47      | be (160MHz)    | PASS                             | PASS                             |
|          | 6265               | 63      | be (320MHz)    | PASS                             | PASS                             |
| Band 7   | 6695               | 149     | be (20MHz)     | PASS                             | PASS                             |
|          | 6705               | 151     | be (80MHz)     | PASS                             | PASS                             |
|          | 6825               | 175     | be (160MHz)    | PASS                             | PASS                             |
| Band 7/8 | 6745               | 159     | be (320MHz)    | PASS                             | PASS                             |

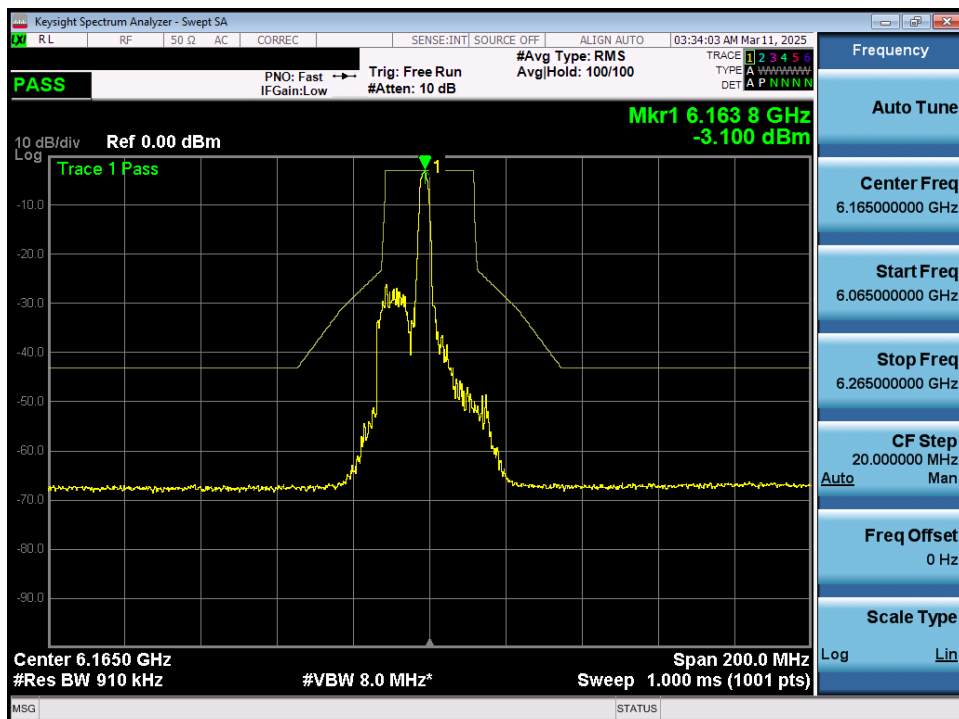
**Table 7-88. In Band Emissions Results Measurements (MRU) – SP**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 111 of 164                          |

## 7.5.1 MIMO Antenna-1 In-Band Emission Measurements

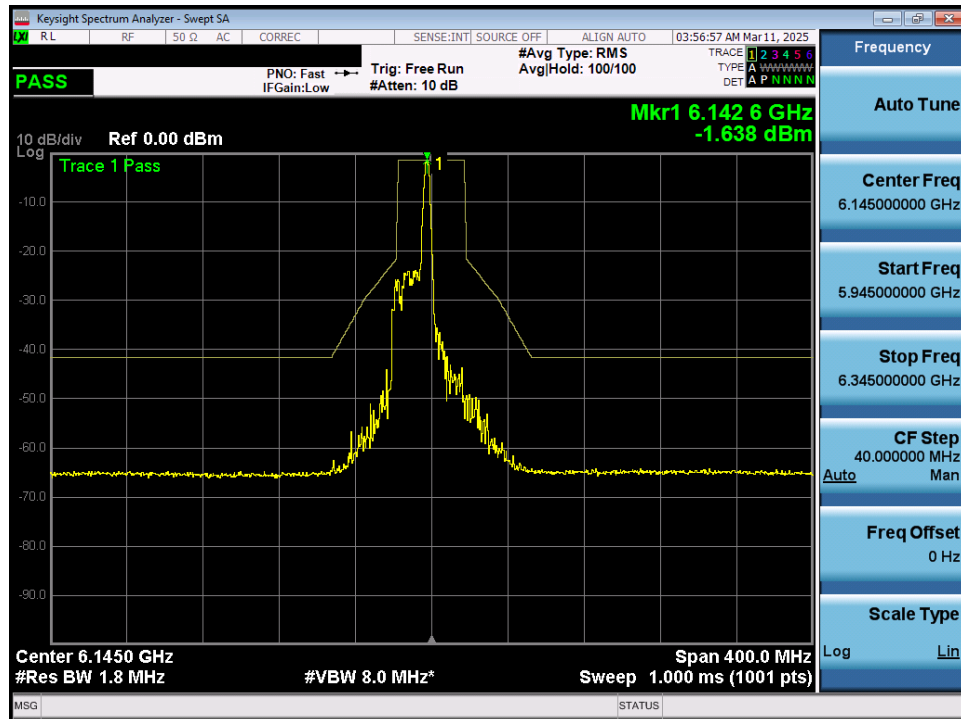


Plot 7-89. In Band Emissions Plot MIMO ANT1 (20MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 45) - LPI

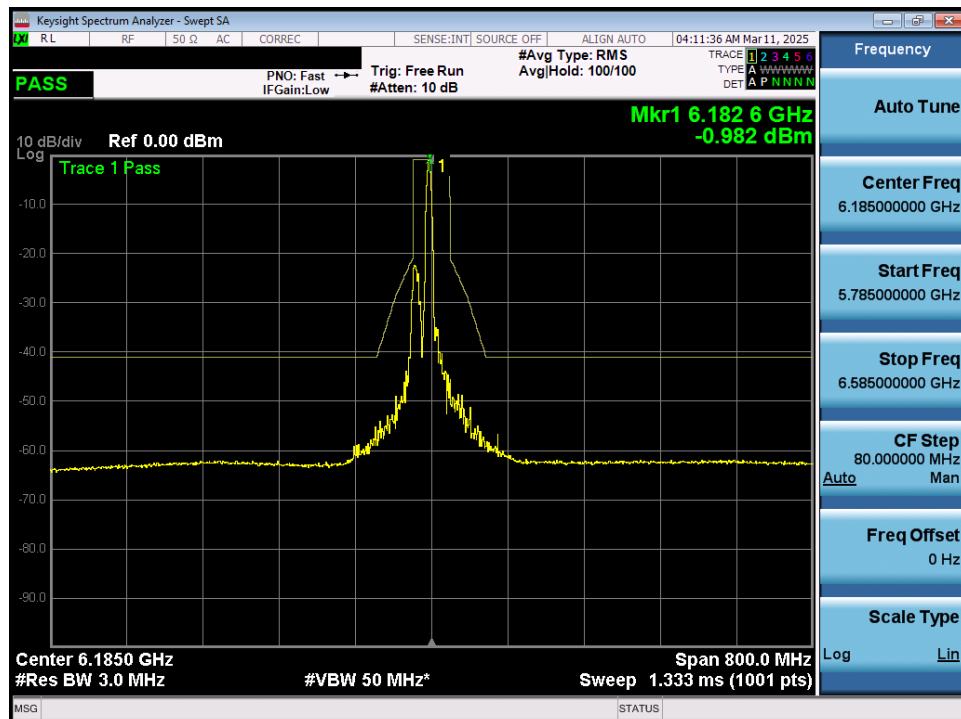


Plot 7-90. In Band Emissions Plot MIMO ANT1 (40MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 43) - LPI

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 112 of 164                   |

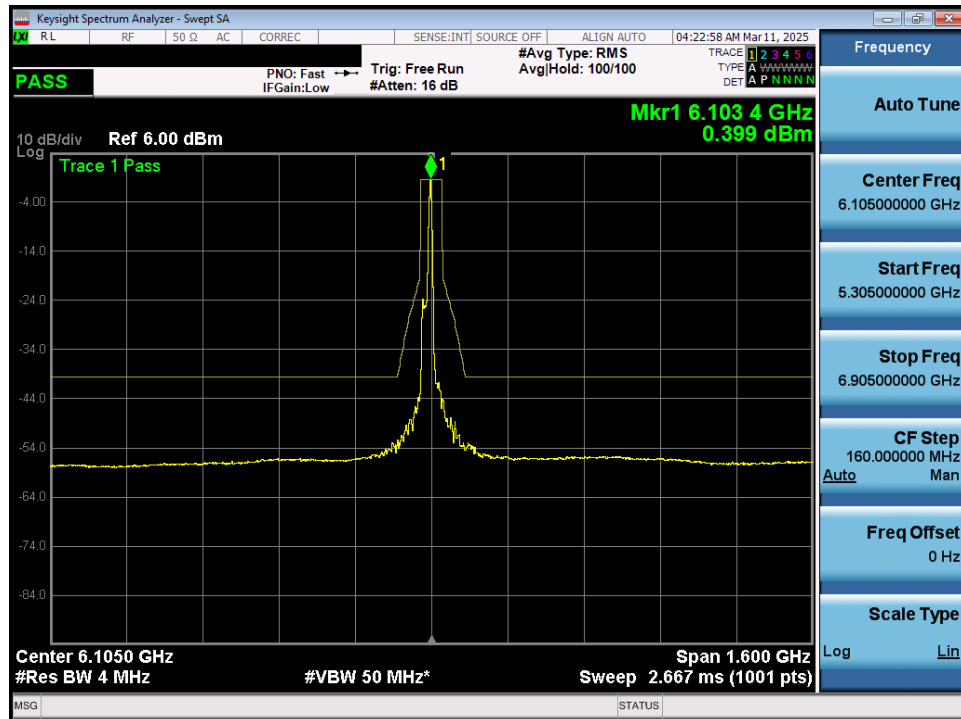


Plot 7-91. In Band Emissions Plot MIMO ANT1 (80MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 39) - LPI

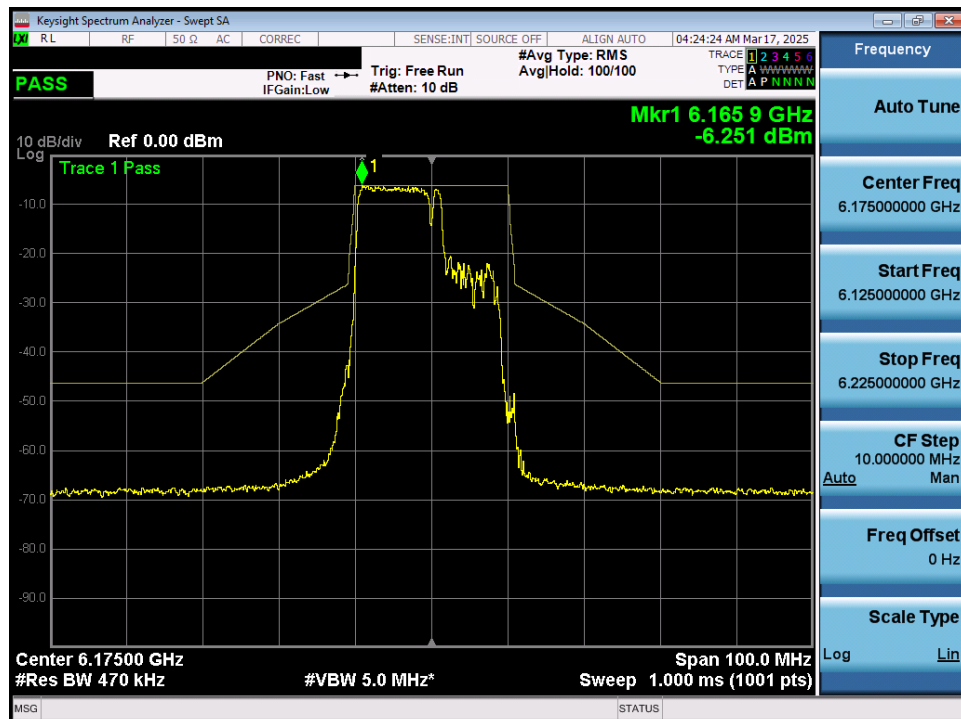


Plot 7-92. In Band Emissions Plot MIMO ANT1 (160MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 47) - LPI

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 113 of 164                   |

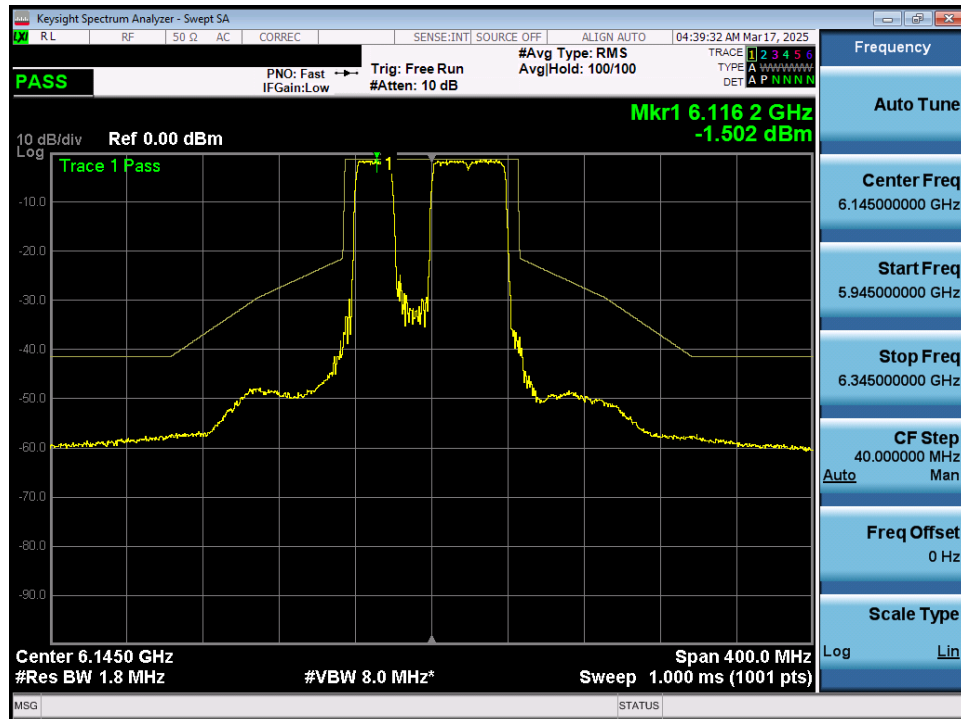


Plot 7-93. In Band Emissions Plot MIMO ANT1 (320MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 31) - LPI

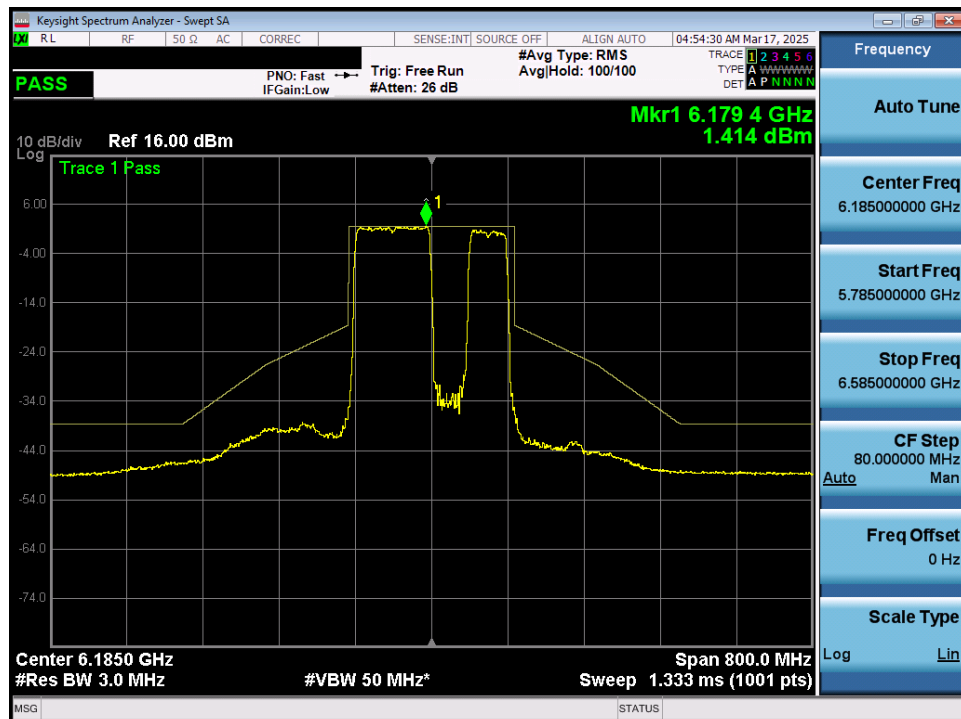


Plot 7-94. In Band Emissions Plot MIMO ANT1 (20MHz 802.11be (106+26 Tones) (UNII Band 5) – Ch. 45) - LPI

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 114 of 164                   |

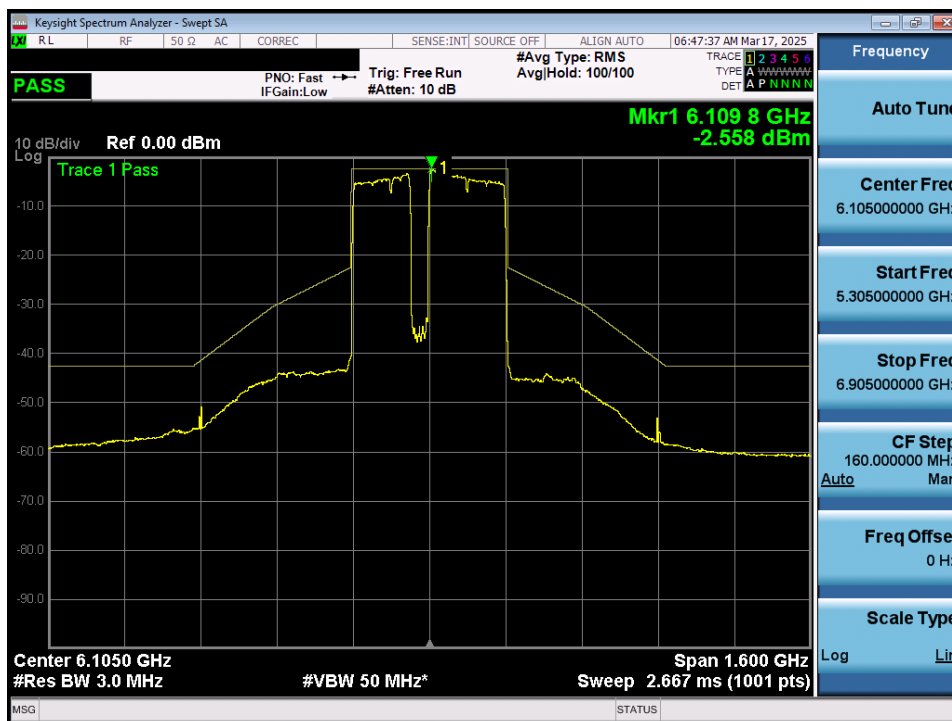


Plot 7-95. In Band Emissions Plot MIMO ANT1 (80MHz 802.11be (484+242 Tones) (UNII Band 5) – Ch. 39) LPI/SP



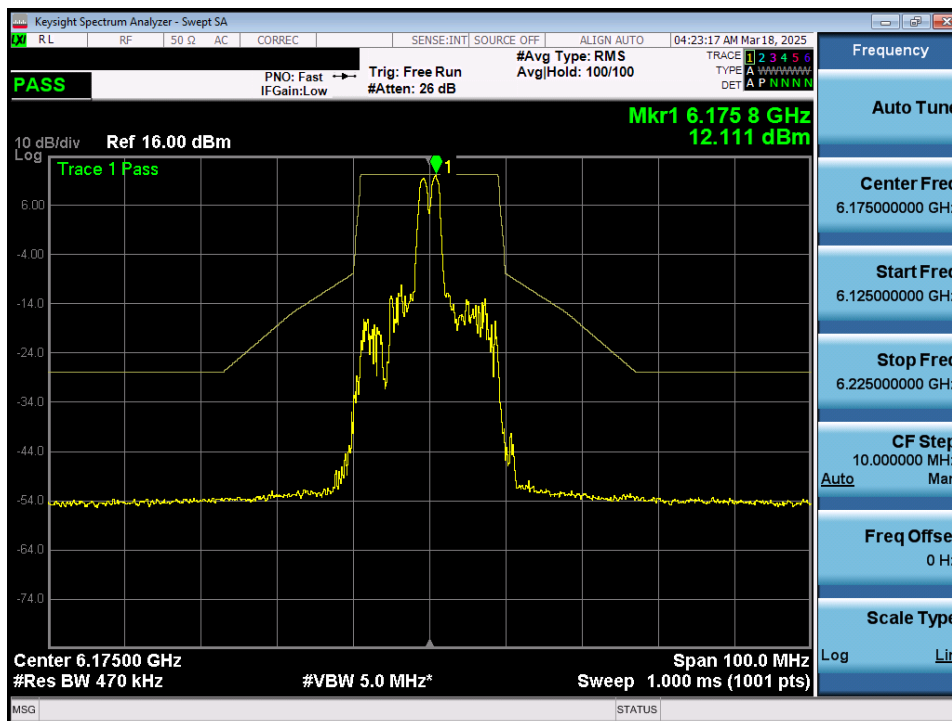
Plot 7-96. In Band Emissions Plot MIMO ANT1 (160MHz 802.11be (996+484 Tones) (UNII Band 5) – Ch. 47) LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 115 of 164                   |

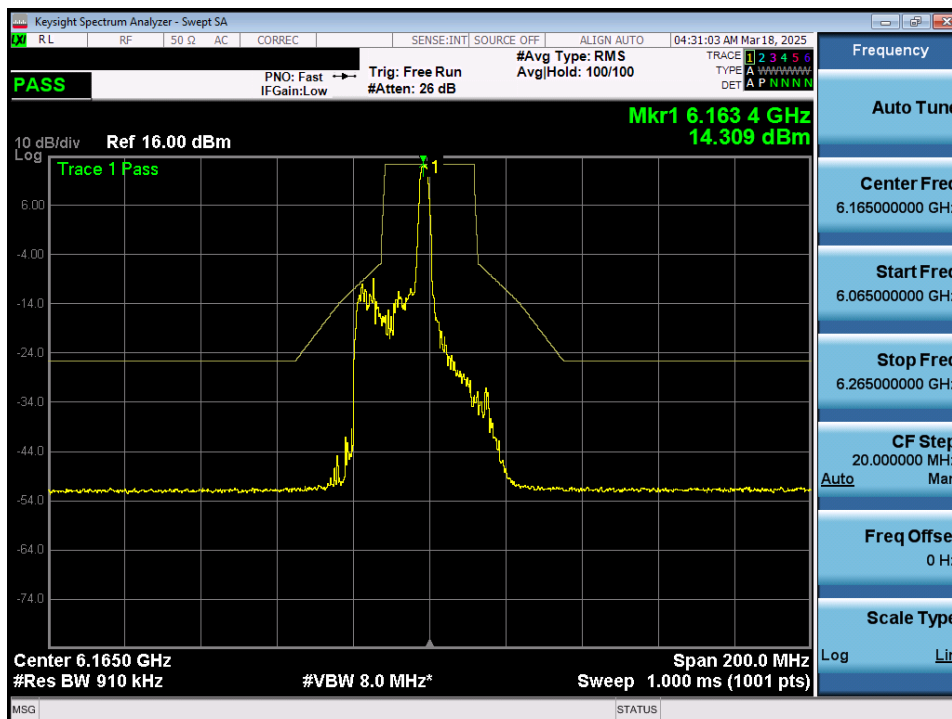


Plot 7-97. In Band Emissions Plot MIMO ANT1 (320MHz 802.11be (3\*996+484 Tones) (UNII Band 5) – Ch. 31) LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 116 of 164                   |

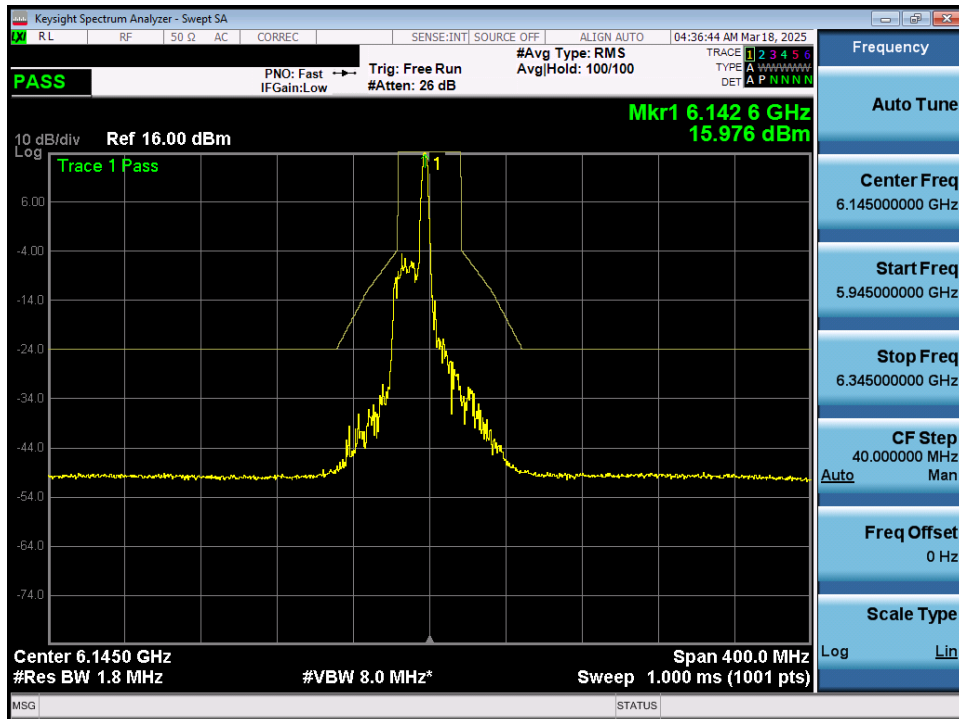


Plot 7-98. In Band Emissions Plot MIMO ANT1 (20MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 45) - SP

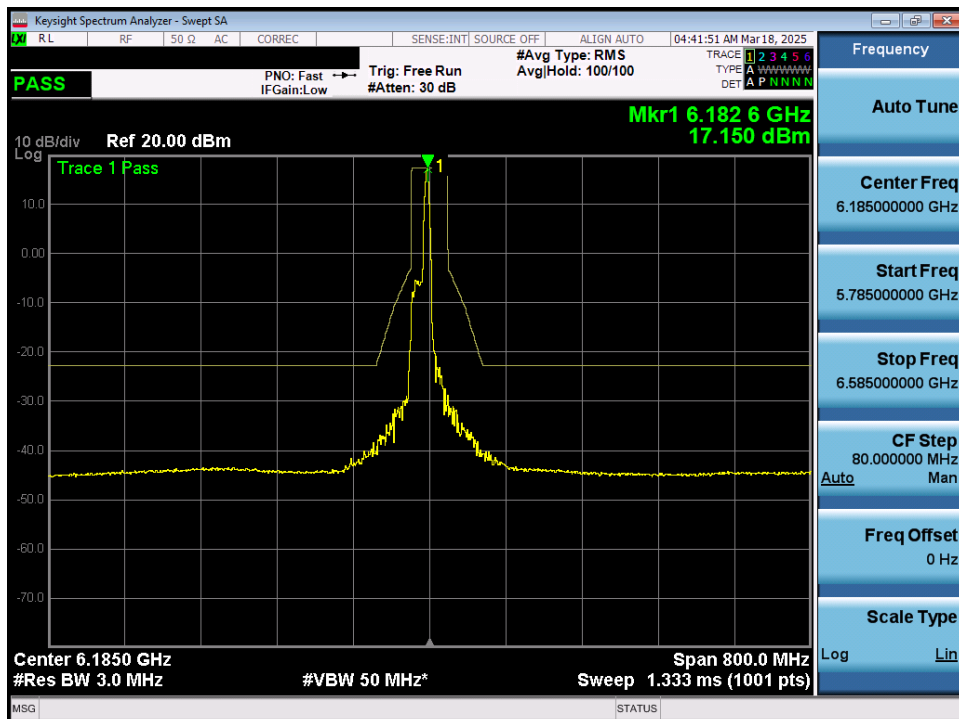


Plot 7-99. In Band Emissions Plot MIMO ANT1 (40MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 43) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 117 of 164                   |

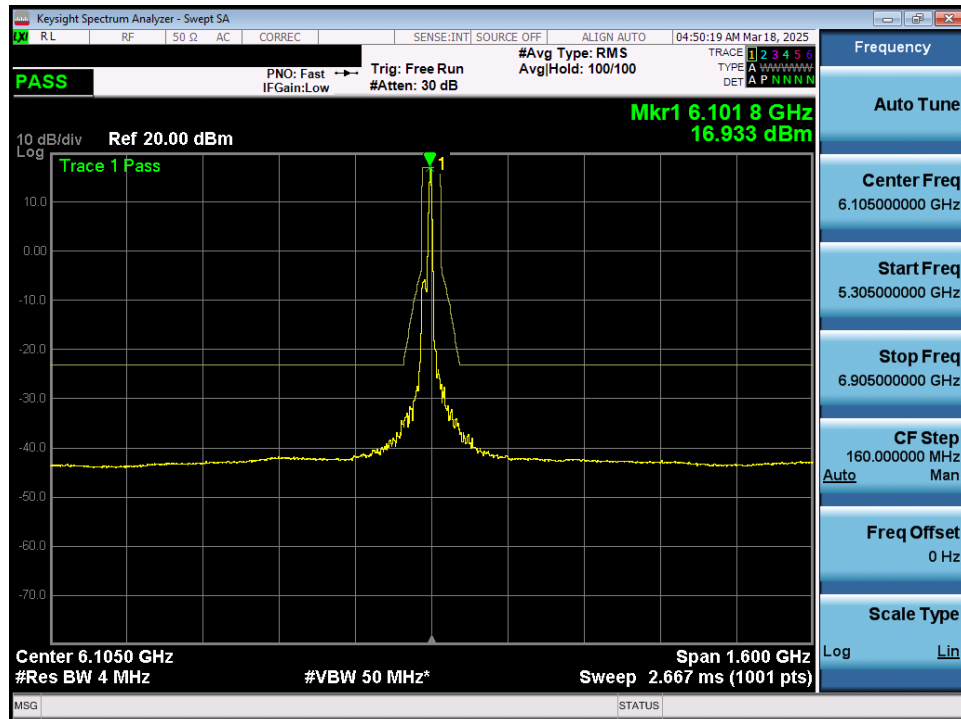


Plot 7-100. In Band Emissions Plot MIMO ANT1 (80MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 39) - SP

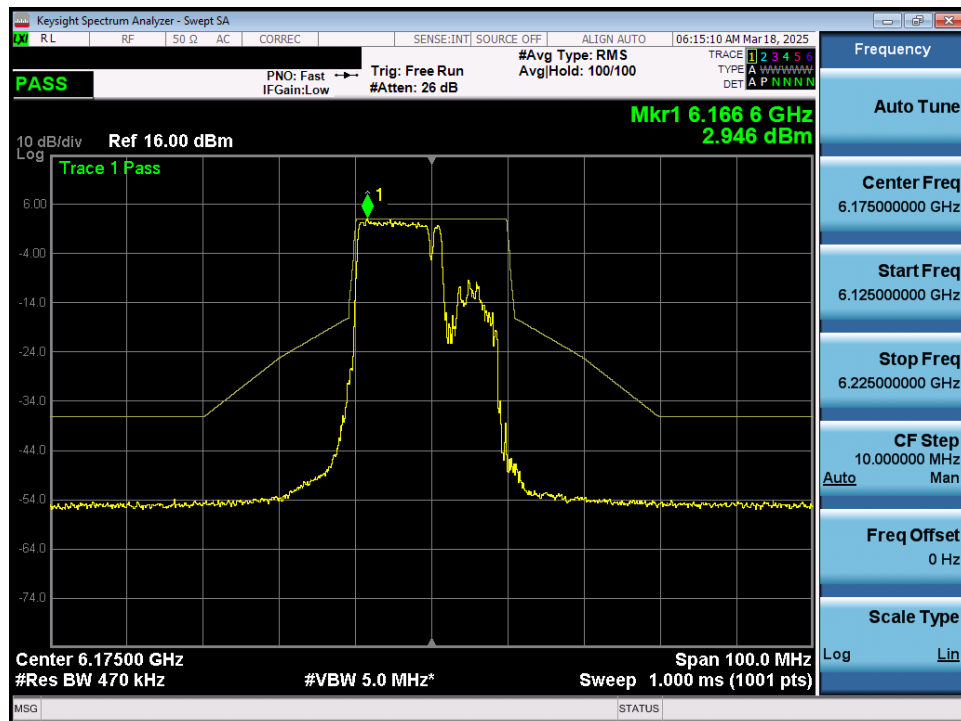


Plot 7-101. In Band Emissions Plot MIMO ANT1 (160MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 47) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 118 of 164                   |

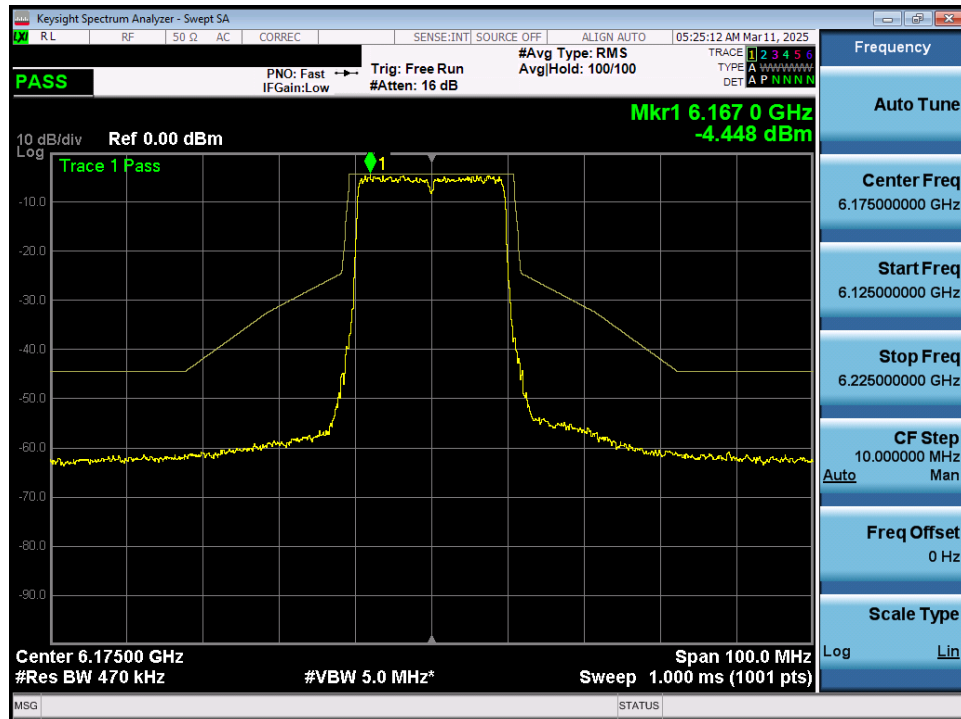


Plot 7-102. In Band Emissions Plot MIMO ANT1 (320MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 31) - SP

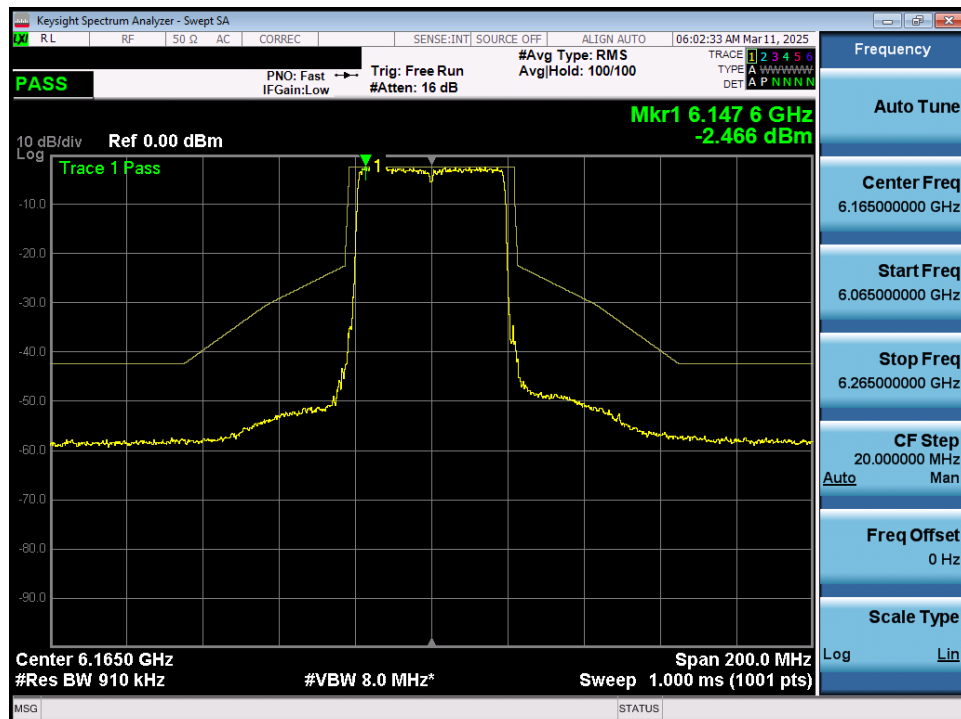


Plot 7-103. In Band Emissions Plot MIMO ANT1 (20MHz 802.11be (106+26 Tones) (UNII Band 5) – Ch. 45) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 119 of 164                   |

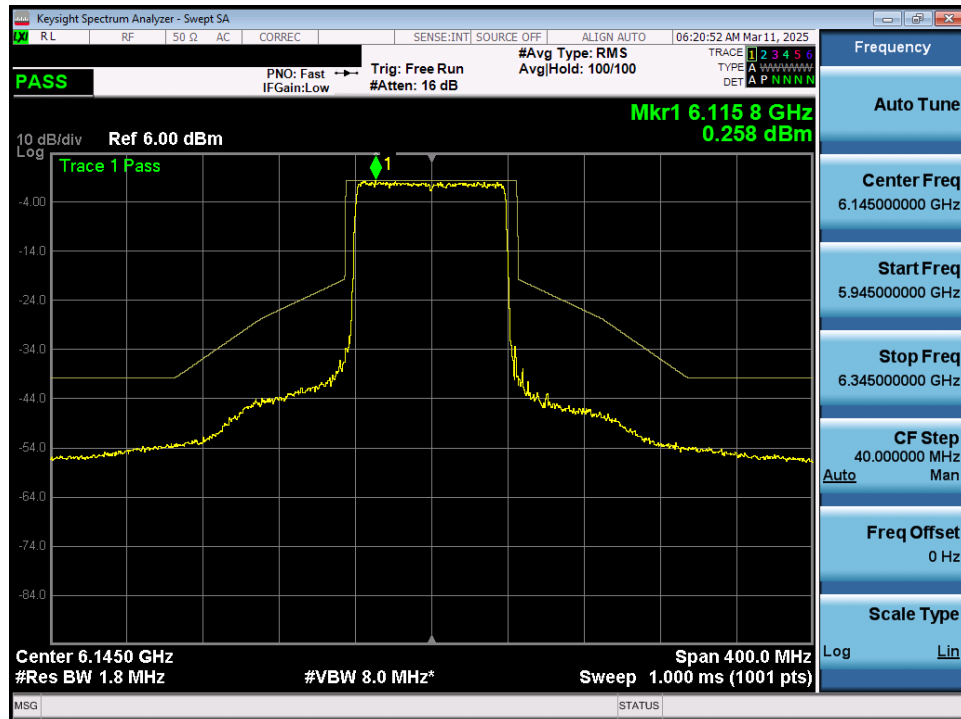


Plot 7-104. In Band Emissions Plot MIMO ANT1 (20MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 45) - LPI

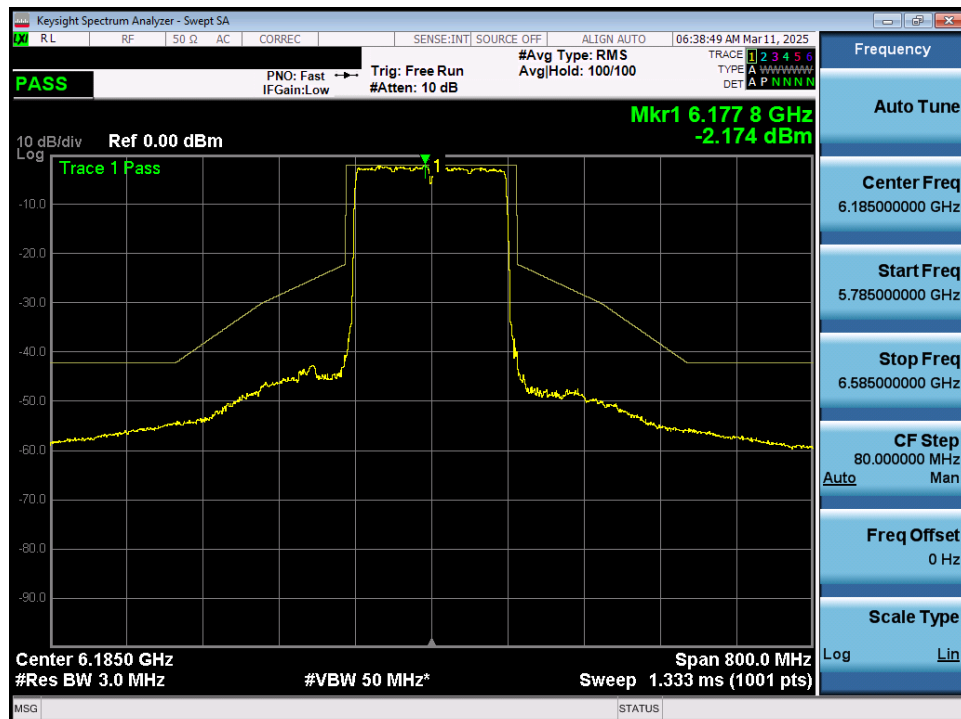


Plot 7-105. In Band Emissions Plot MIMO ANT1 (40MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 43) - LPI

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 120 of 164                   |

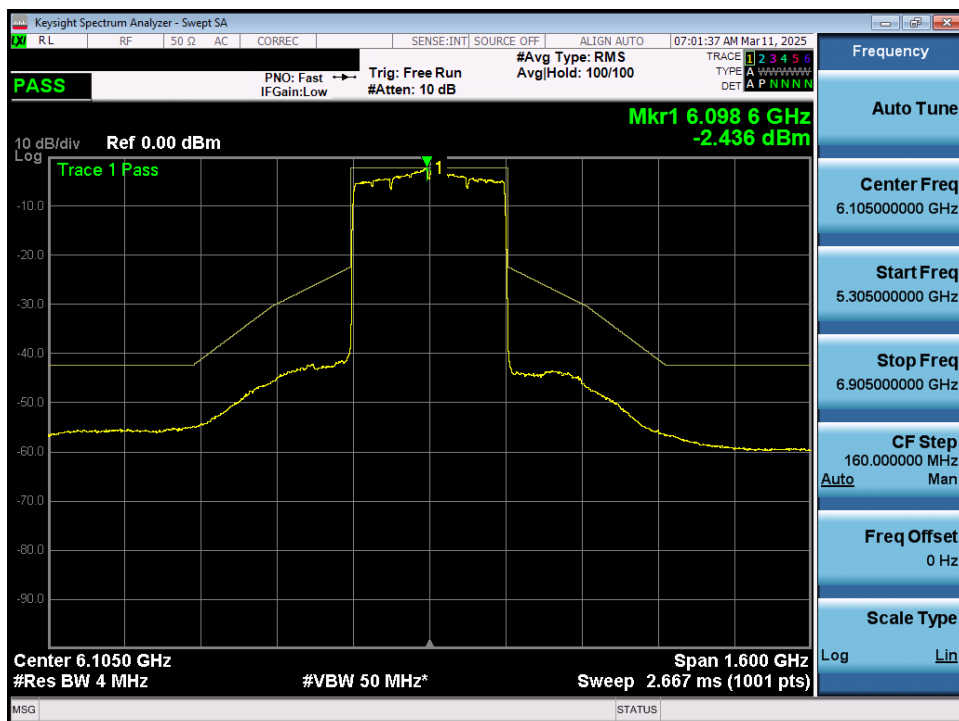


Plot 7-106. In Band Emissions Plot MIMO ANT1 (80MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 39) - LPI/SP



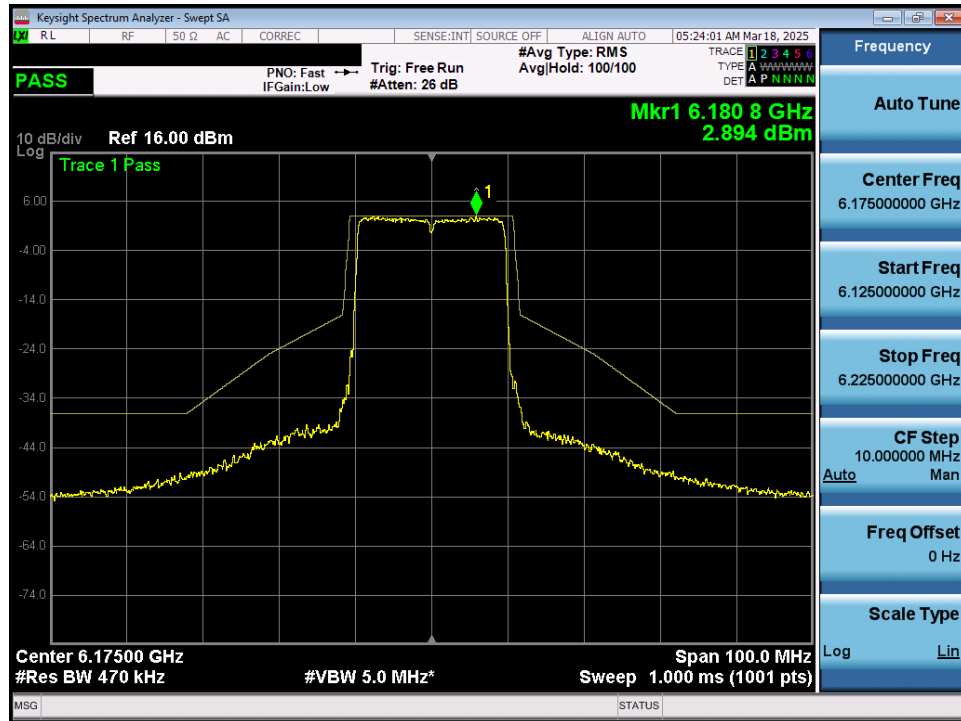
Plot 7-107. In Band Emissions Plot MIMO ANT1 (160MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 47) - LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 121 of 164                   |

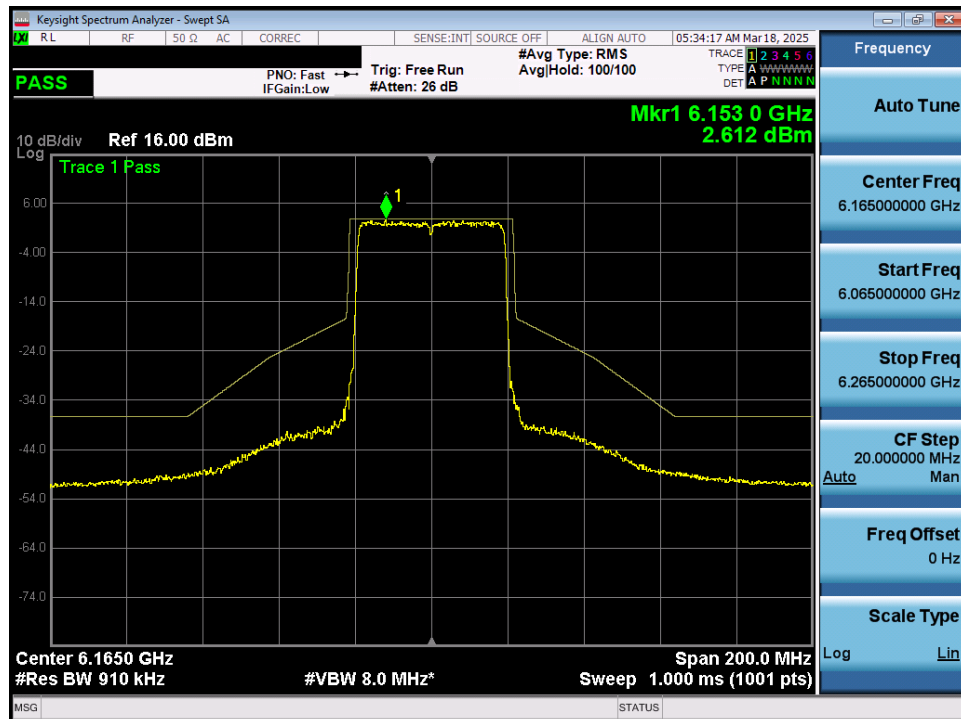


Plot 7-108. In Band Emissions Plot MIMO ANT1 (320MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 31) - LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 122 of 164                   |



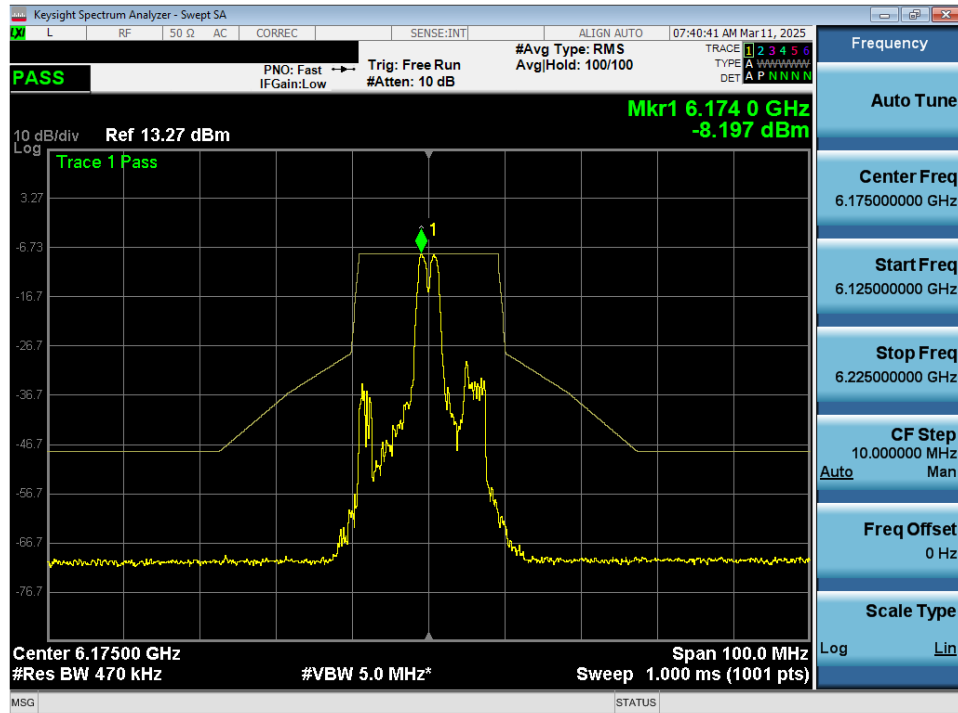
Plot 7-109. In Band Emissions Plot MIMO ANT1 (20MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 45) - SP



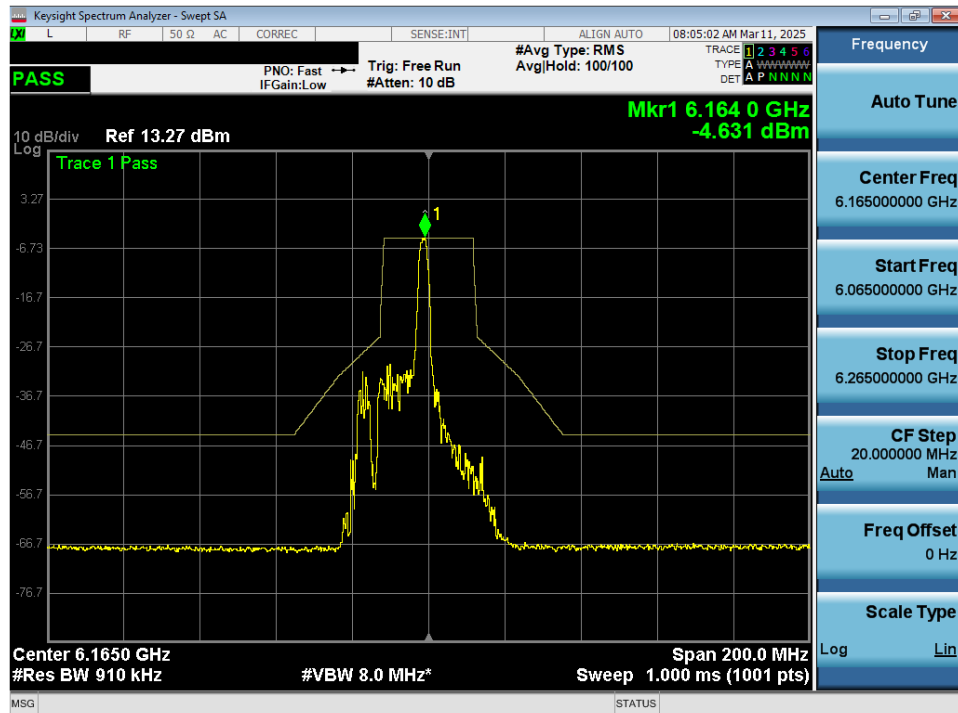
Plot 7-110. In Band Emissions Plot MIMO ANT1 (40MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 43) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 123 of 164                   |

## 7.5.2 MIMO Antenna-2 In-Band Emission Measurements

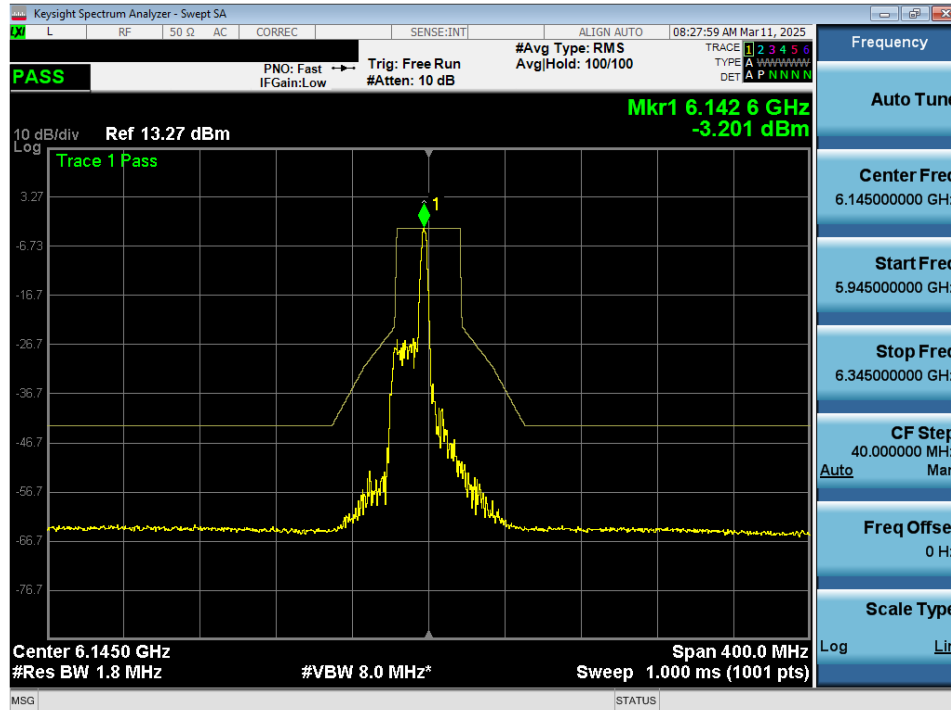


Plot 7-111. In Band Emissions Plot MIMO ANT2 (20MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 45) - LPI

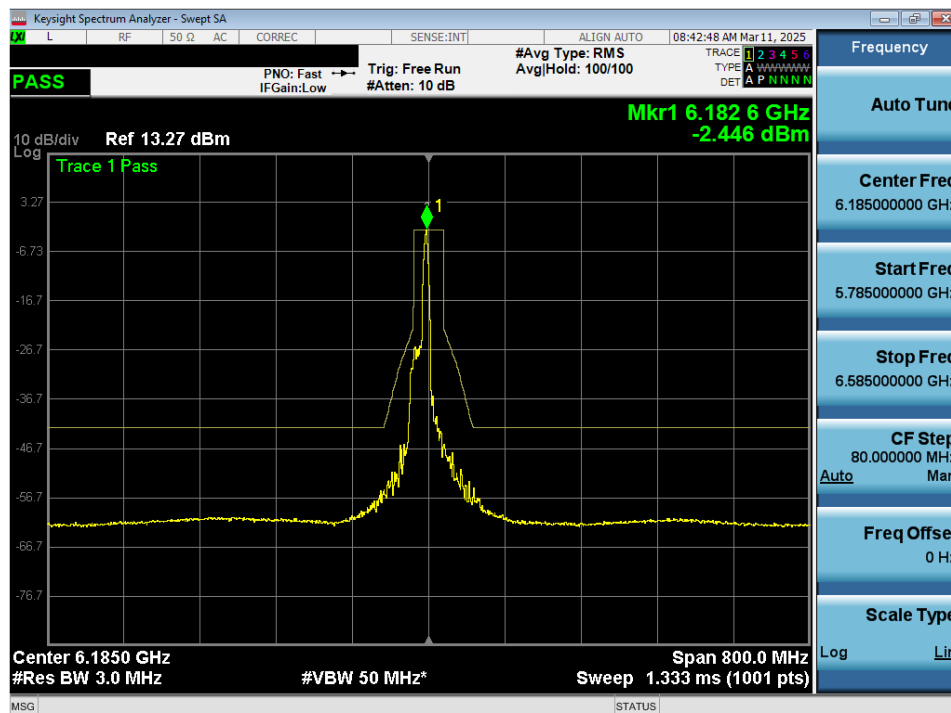


Plot 7-112. In Band Emissions Plot MIMO ANT2 (40MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 43) - LPI

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 124 of 164                   |

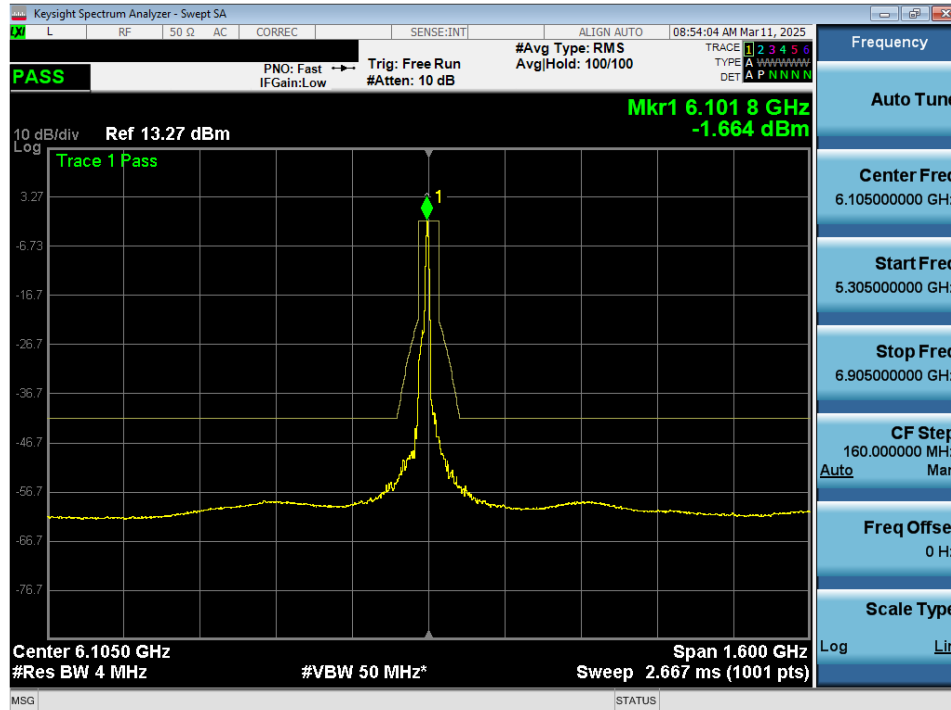


Plot 7-113. In Band Emissions Plot MIMO ANT2 (80MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 39) - LPI

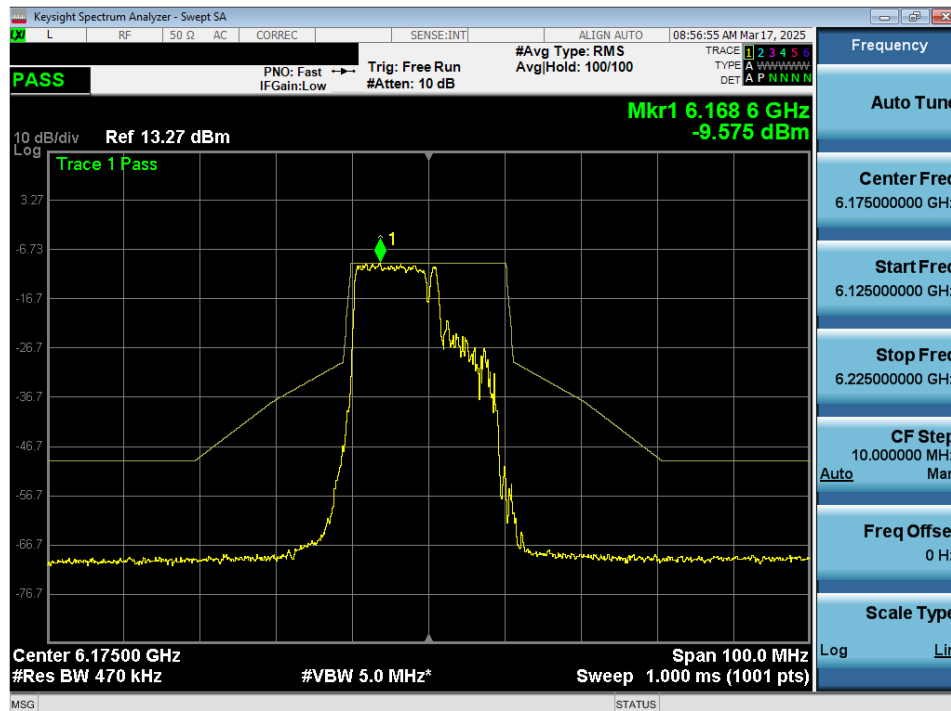


Plot 7-114. In Band Emissions Plot MIMO ANT2 (160MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 47) - LPI

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 125 of 164                   |

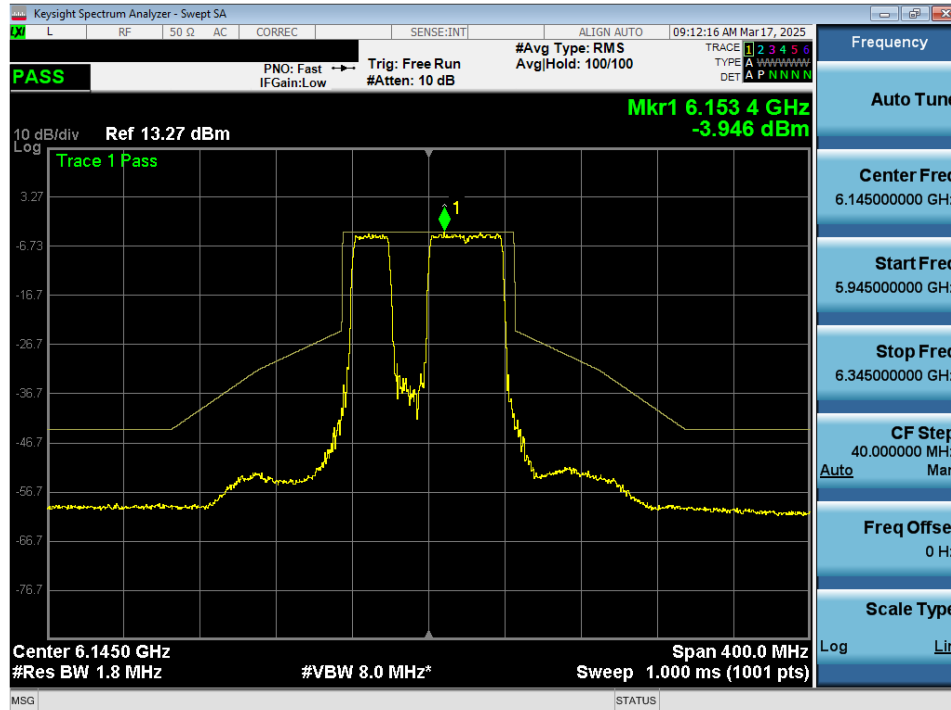


Plot 7-115. In Band Emissions Plot MIMO ANT2 (320MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 31) - LPI

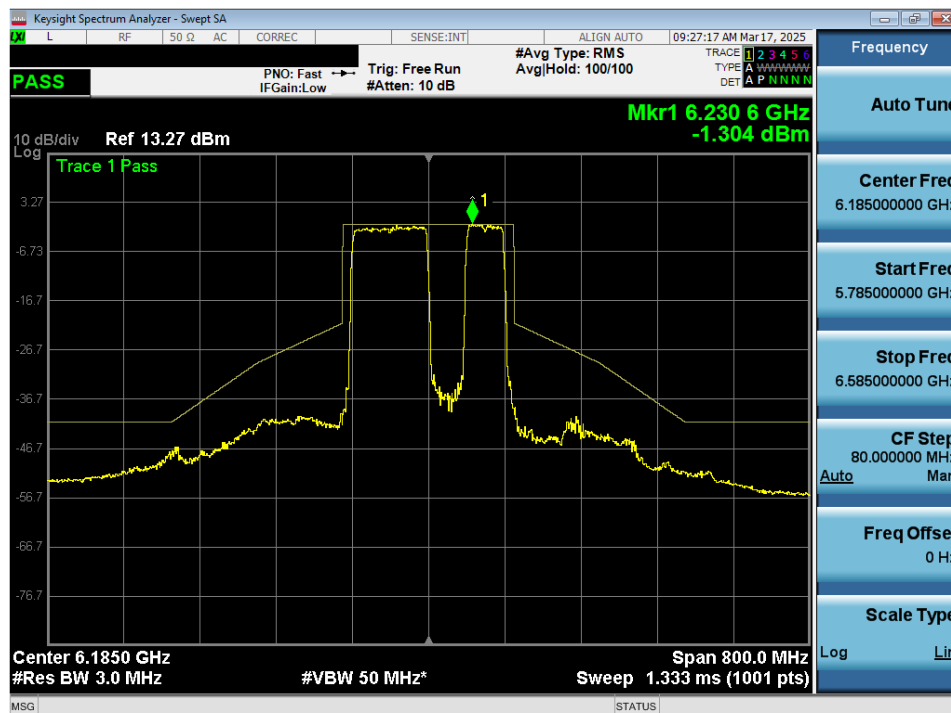


Plot 7-116. In Band Emissions Plot MIMO ANT2 (20MHz 802.11be (106+26 Tones) (UNII Band 5) – Ch. 45) - LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 126 of 164                   |

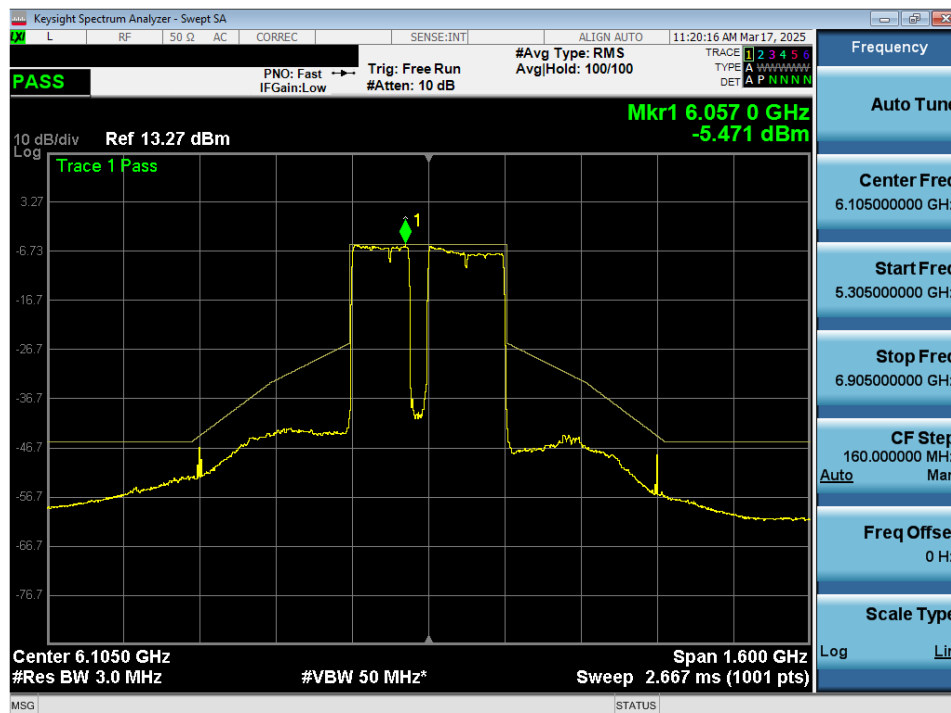


Plot 7-117. In Band Emissions Plot MIMO ANT2 (80MHz 802.11be (484+242 Tones) (UNII Band 5) – Ch. 39) LPI/SP



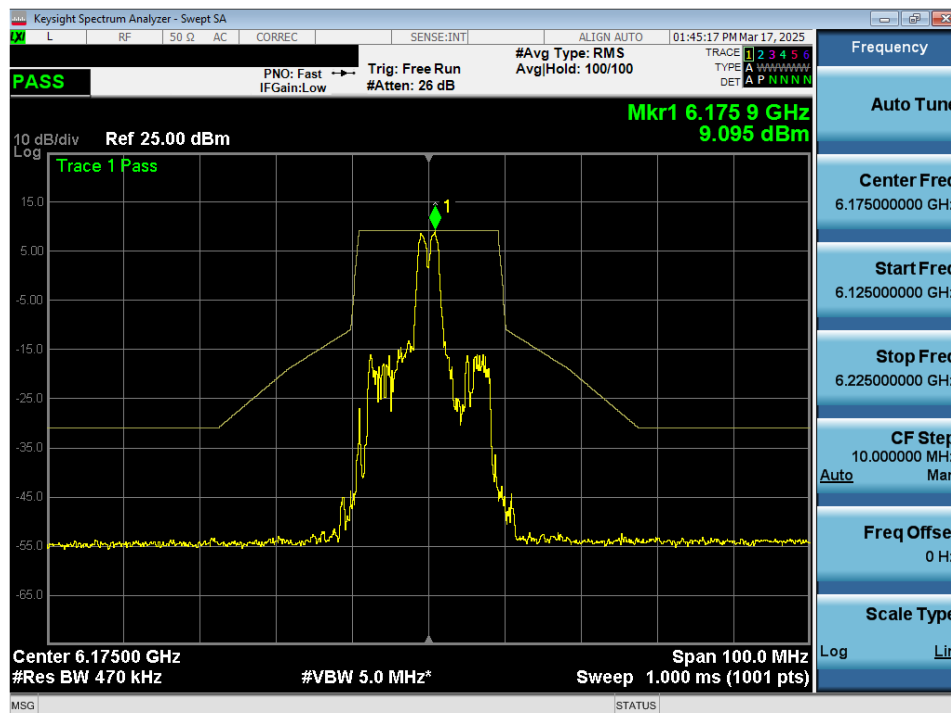
Plot 7-118. In Band Emissions Plot MIMO ANT2 (160MHz 802.11be (996+484 Tones) (UNII Band 5) – Ch. 47) LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 127 of 164                   |

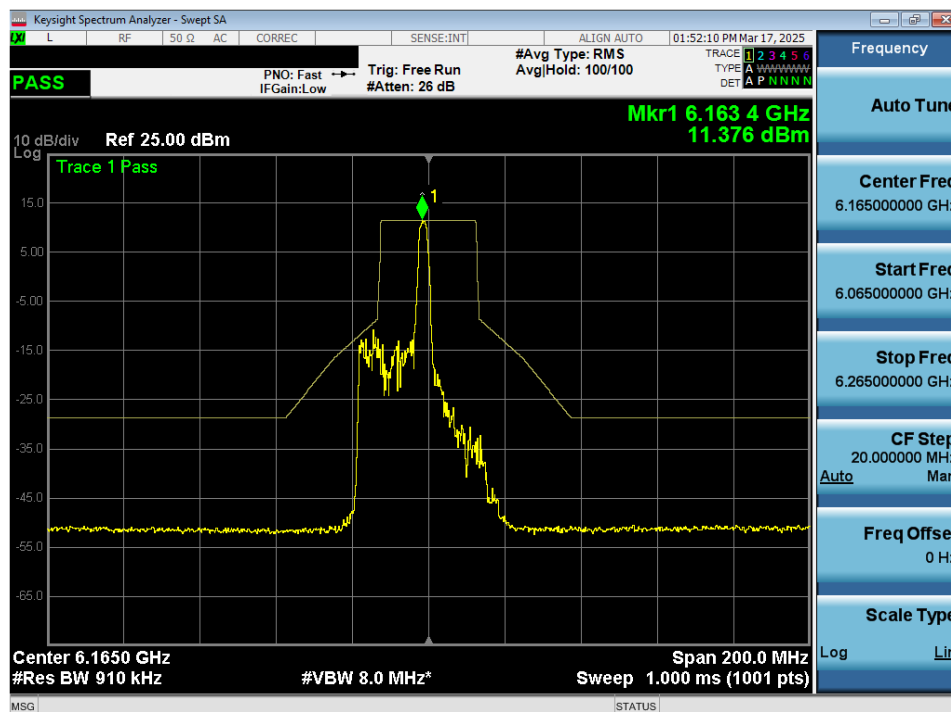


Plot 7-119. In Band Emissions Plot MIMO ANT2 (320MHz 802.11be (3\*996+484 Tones) (UNII Band 5) – Ch. 31) LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 128 of 164                   |

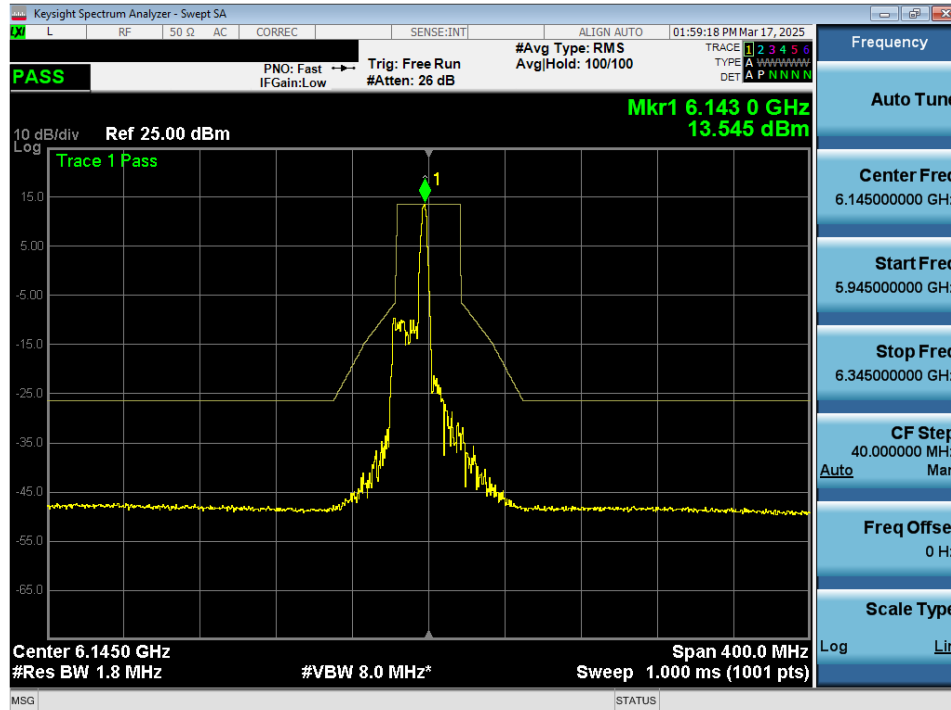


Plot 7-120. In Band Emissions Plot MIMO ANT2 (20MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 45) - SP

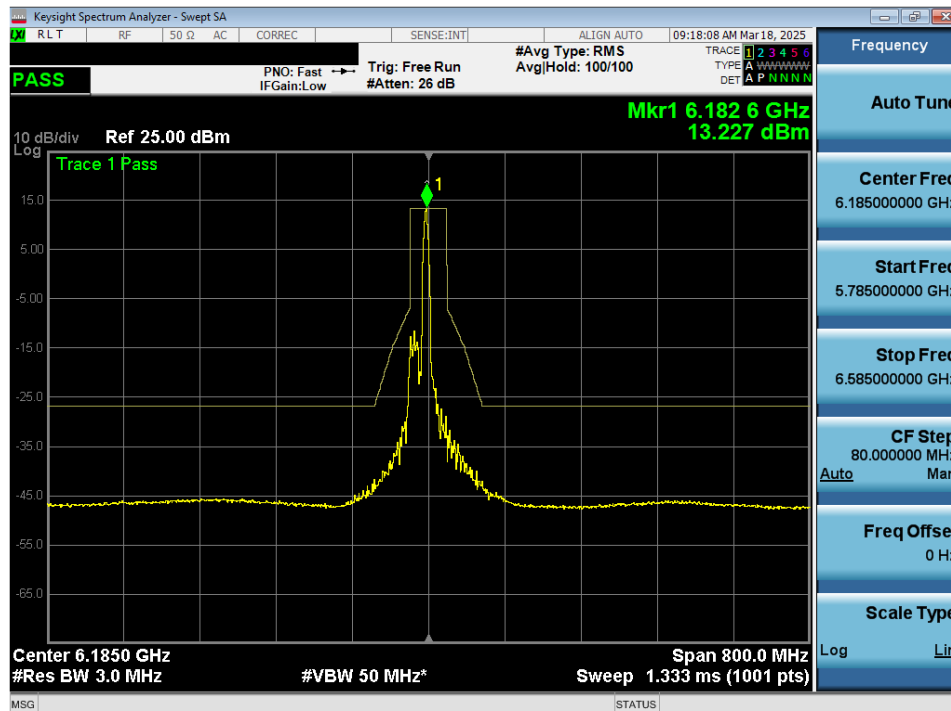


Plot 7-121. In Band Emissions Plot MIMO ANT2 (40MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 43) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 129 of 164                   |

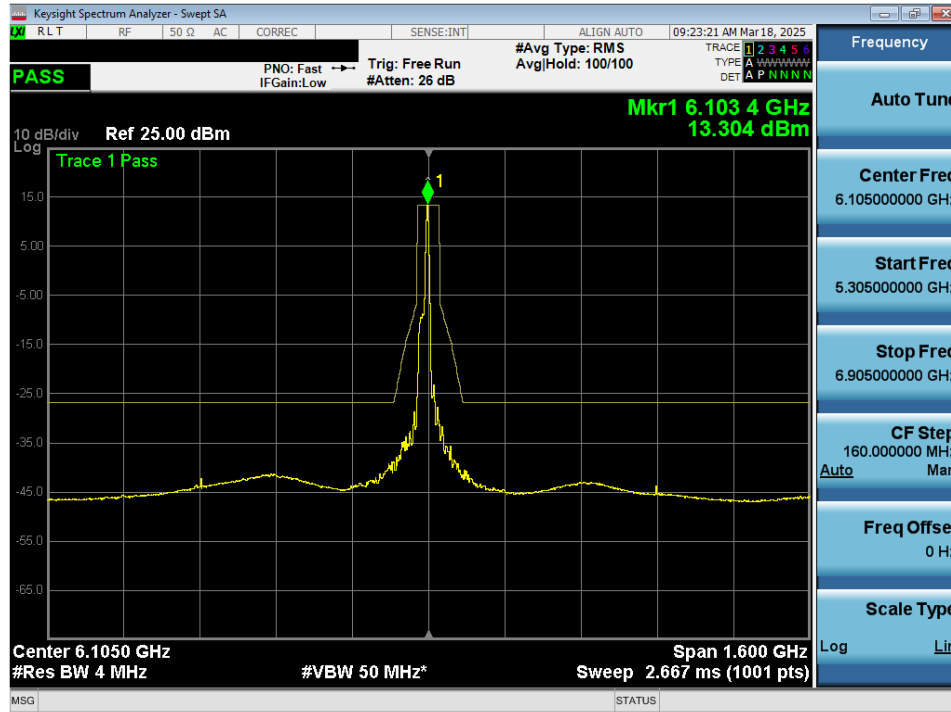


Plot 7-122. In Band Emissions Plot MIMO ANT2 (80MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 39) - SP

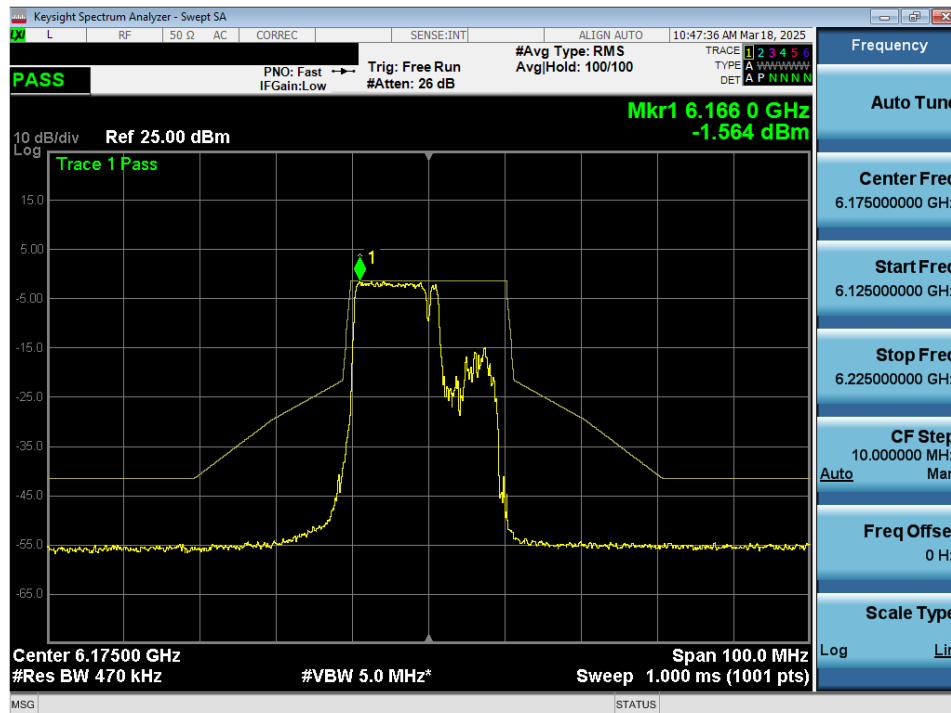


Plot 7-123. In Band Emissions Plot MIMO ANT2 (160MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 47) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 130 of 164                   |

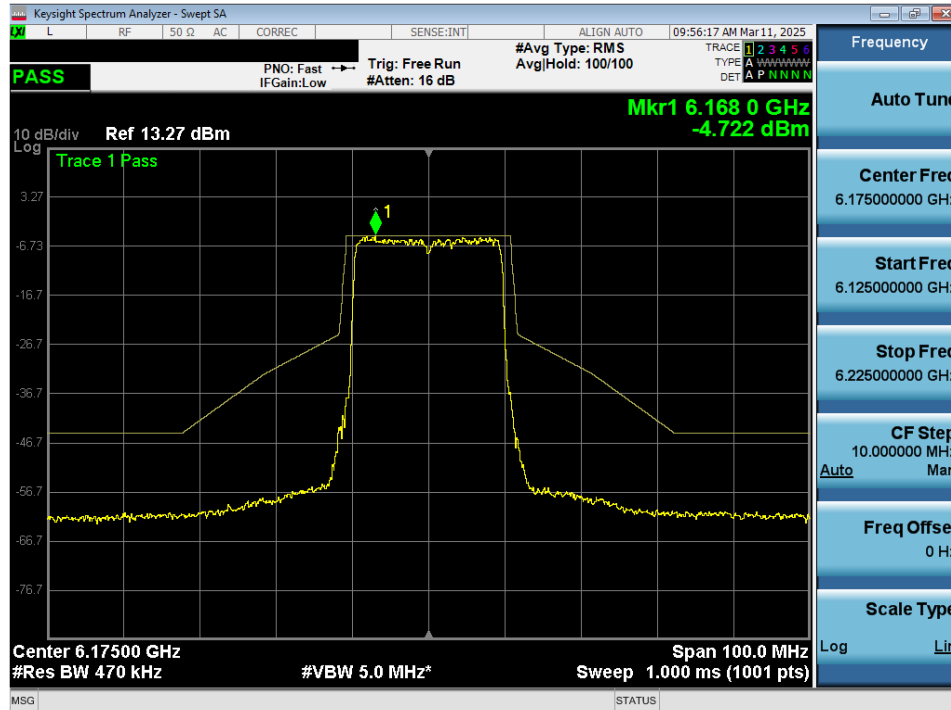


Plot 7-124. In Band Emissions Plot MIMO ANT2 (320MHz 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 31) - SP

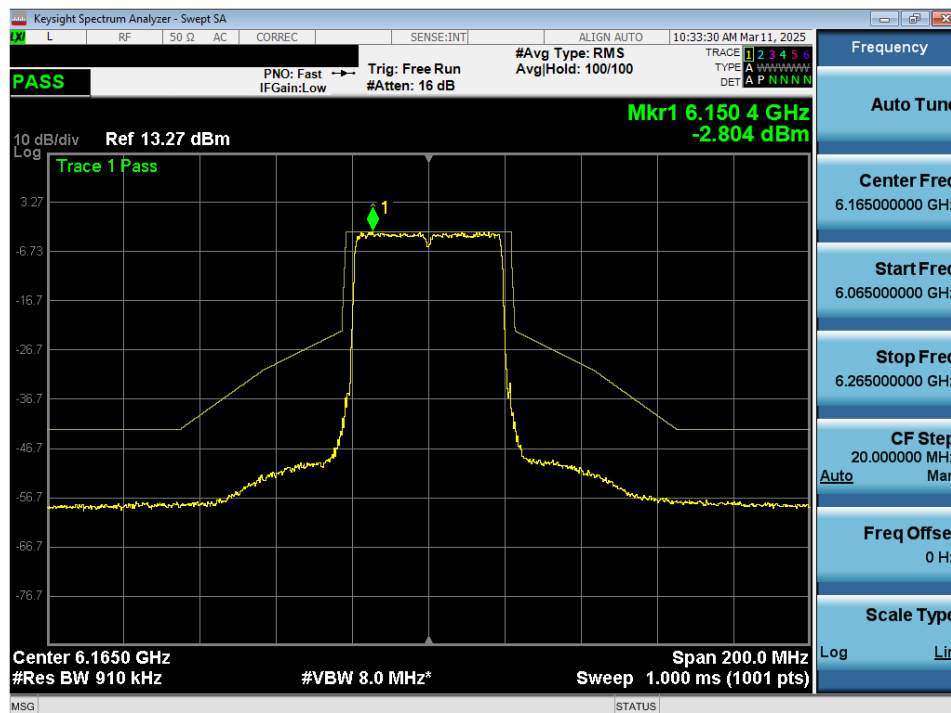


Plot 7-125. In Band Emissions Plot MIMO ANT2 (20MHz 802.11be (106+26 Tones) (UNII Band 5) – Ch. 45) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 131 of 164                   |

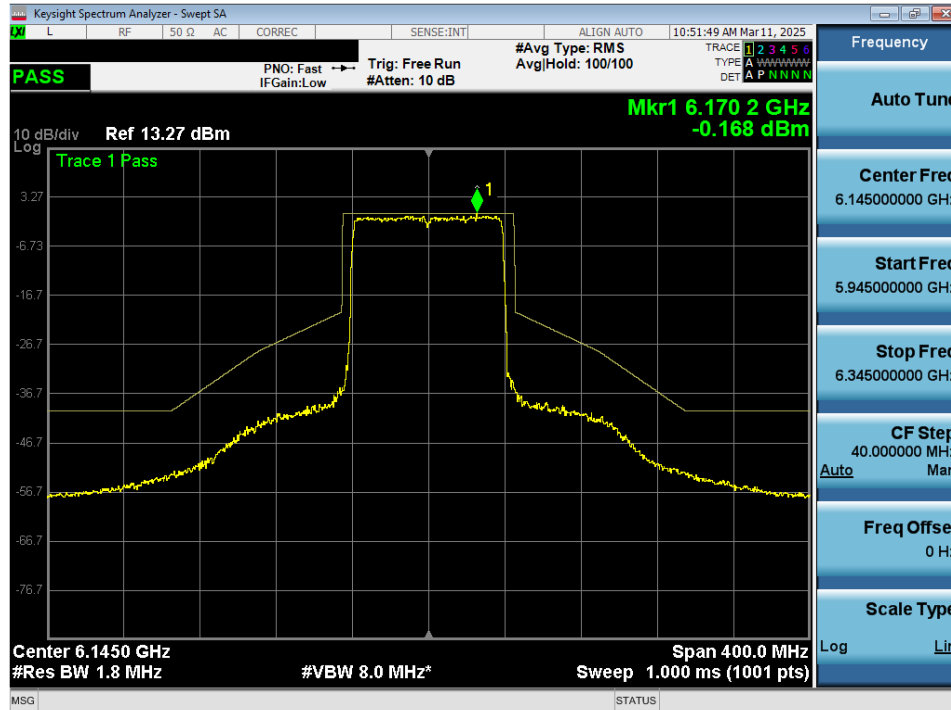


Plot 7-126. In Band Emissions Plot MIMO ANT2 (20MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 45) - LPI

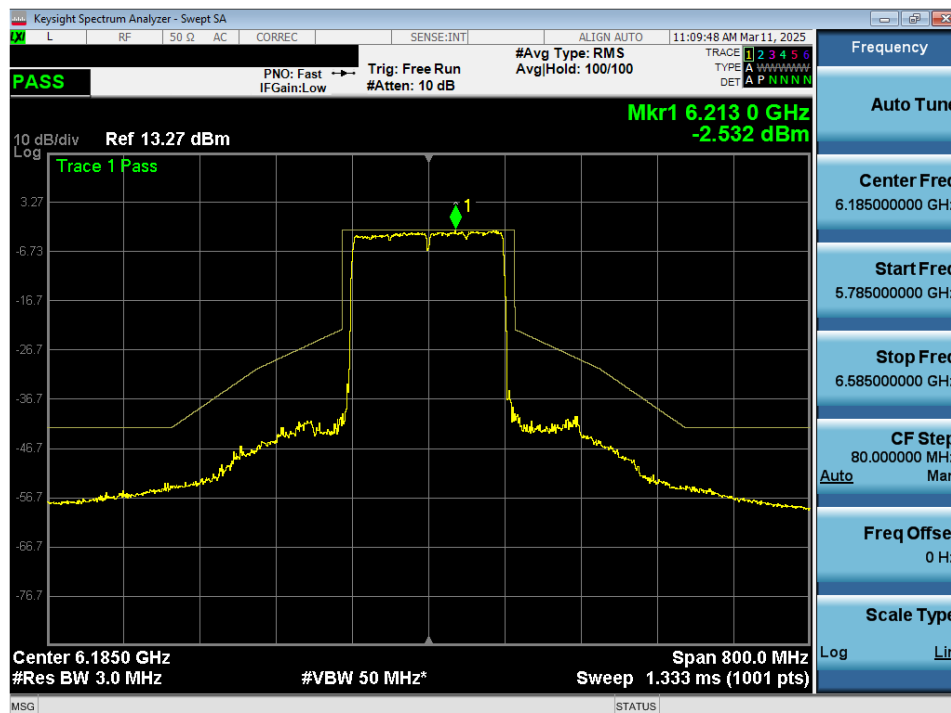


Plot 7-127. In Band Emissions Plot MIMO ANT2 (40MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 43) - LPI

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 132 of 164                   |

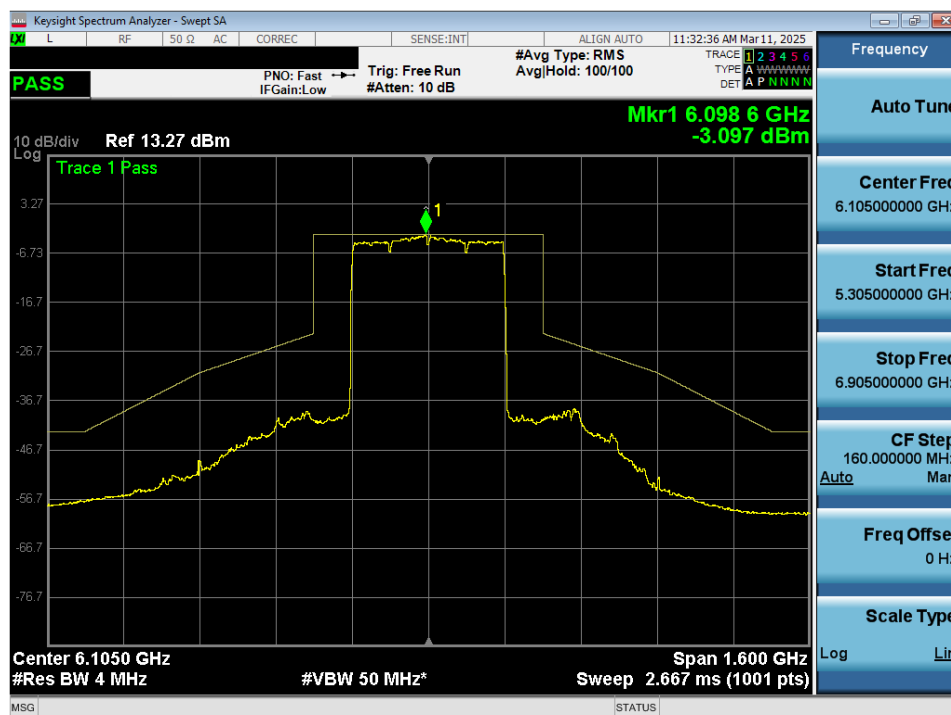


Plot 7-128. In Band Emissions Plot MIMO ANT2 (80MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 39) - LPI/SP



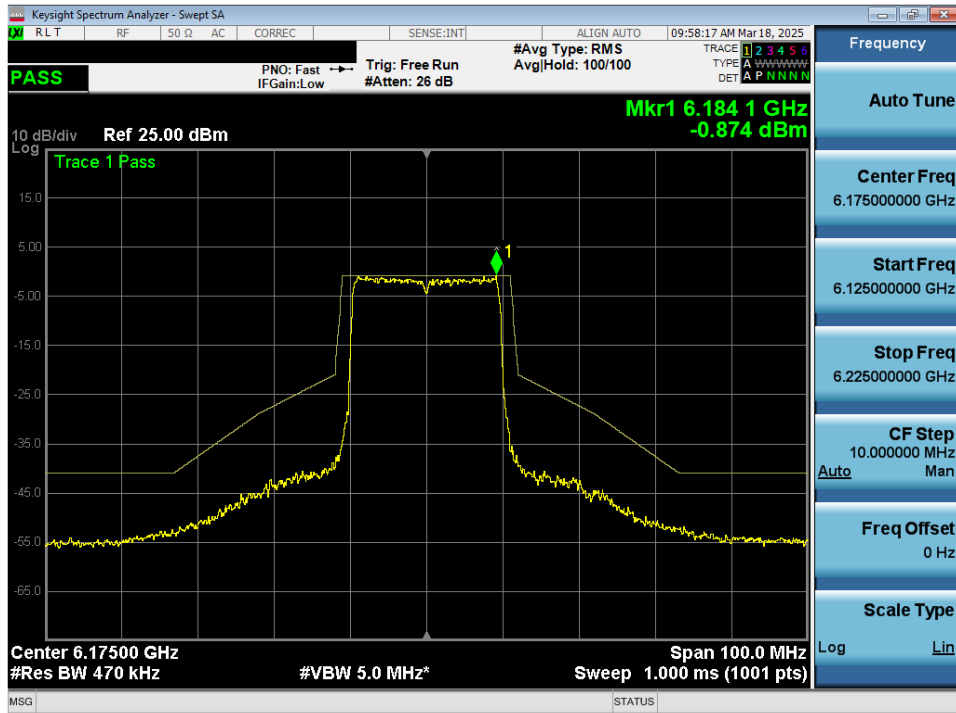
Plot 7-129. In Band Emissions Plot MIMO ANT2 (160MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 47) - LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 133 of 164                   |

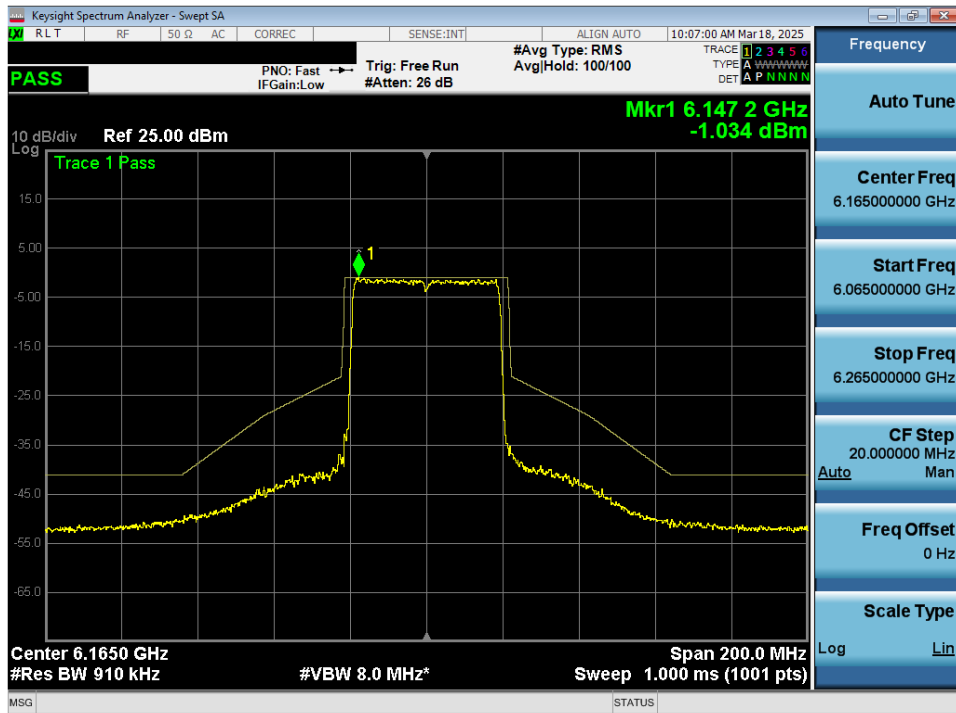


Plot 7-130. In Band Emissions Plot MIMO ANT2 (320MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 31) - LPI/SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 134 of 164                   |



Plot 7-131. In Band Emissions Plot MIMO ANT2 (20MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 45) - SP



Plot 7-132. In Band Emissions Plot MIMO ANT2 (40MHz 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 43) - SP

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 135 of 164                   |

## 7.6 Radiated Emission Measurements

### Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna 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. All channels, modes (e.g. 802.11ax (20/40/80/160MHz)), and modulations/data rates were investigated among all UNII bands. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

***For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz***

***Emissions found in a restricted band are subject to the limits of 15.209 as shown in the table below.***

| Frequency         | Field Strength<br>[ $\mu\text{V/m}$ ] | Measured Distance<br>[Meters] |
|-------------------|---------------------------------------|-------------------------------|
| 0.009 – 0.490 MHz | 2400/F (kHz)                          | 300                           |
| 0.490 – 1.705 MHz | 24000/F (kHz)                         | 30                            |
| 1.705 – 30.00 MHz | 30                                    | 30                            |
| 30.00 – 88.00 MHz | 100                                   | 3                             |
| 88.00 – 216.0 MHz | 150                                   | 3                             |
| 216.0 – 960.0 MHz | 200                                   | 3                             |
| Above 960.0 MHz   | 500                                   | 3                             |

**Table 7-89. Radiated Limits**

### Test Procedures Used

ANSI C63.10-2013 – Sections 12.7.7.2, 12.7.6, 12.7.5

### Test Settings – Above 1GHz

#### Average Field Strength Measurements (Method AD – Average Detection)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest.
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be  $\geq 2 \times \text{span/RBW}$ )
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 136 of 164                          |

### Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest.
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize.

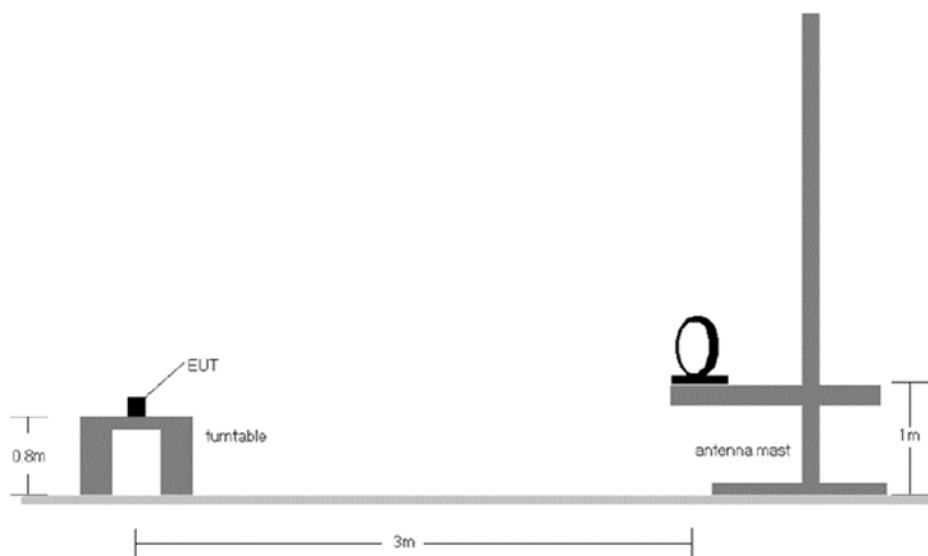
### Test Settings – Below 1GHz

#### Quasi-Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest.
2. RBW = 120kHz (for emissions from 30MHz – 1GHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize.

### Test Setup

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



**Figure 7-5. Radiated Test Setup < 30MHz**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 137 of 164                          |

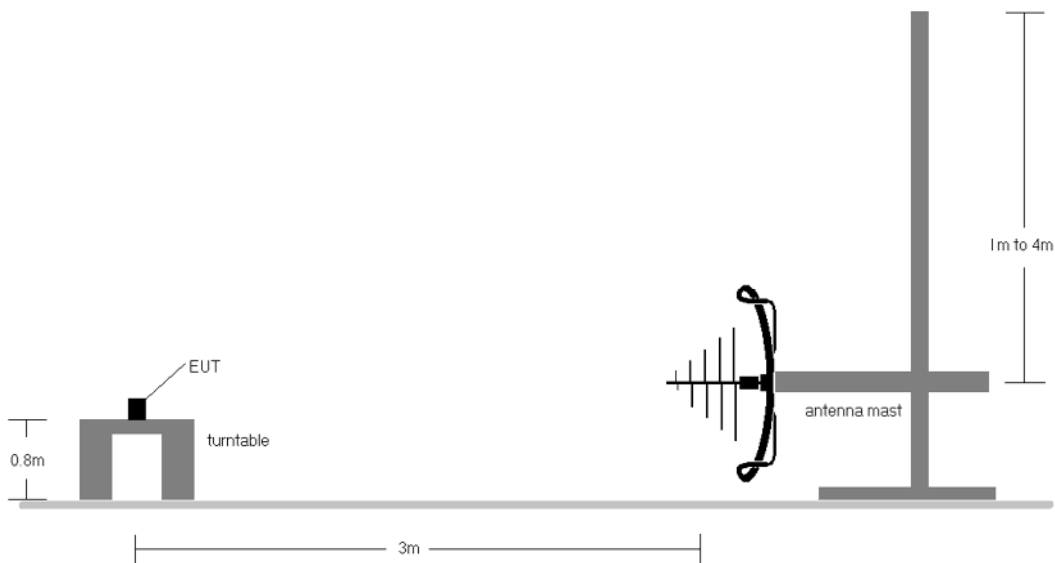


Figure 7-6. Radiated Test Setup < 1GHz

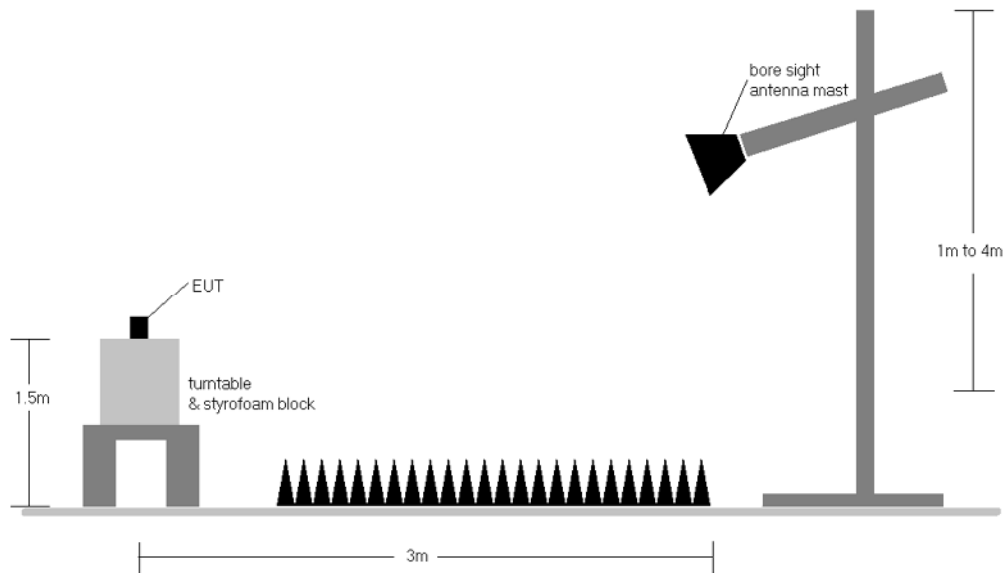


Figure 7-7. Radiated Test Setup > 1GHz

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 138 of 164                   |

## Test Notes

1. All spurious emissions lying in restricted bands specified in §15.205 are below the limit shown in §15.209. All spurious emissions that do not lie in a restricted band are subject to an average limit of -27dBm/MHz. At 3 meters, the field strength limit in dB $\mu$ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB $\mu$ V/m.
2. All spurious emissions that do not lie in a restricted band are subject to a peak limit not to exceed 20dB of the average limit [68.2dB $\mu$ V/m]. If a peak measurement passes the average limit, it was determined no further investigation is necessary.
3. The antenna is manipulated through typical positions, polarity, and length during the tests. The EUT is manipulated through three orthogonal planes.
4. This unit was tested with its standard battery.
5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas. The worst-case emissions are reported, however emissions whose levels were not within 20dB of the respective limits were not reported.
6. Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1-meter test distance with the application of a distance correction factor.
7. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
8. The “-” shown in the following RSE tables are used to denote a noise floor measurement.
9. For radiated measurements, emissions were investigated for the fully-loaded RU configuration and for all of the partially-loaded RU configurations. Among all of the available partially-loaded RU configurations, only the configuration with the worst case emissions is reported.

## Sample Calculations

### Determining Spurious Emissions Levels

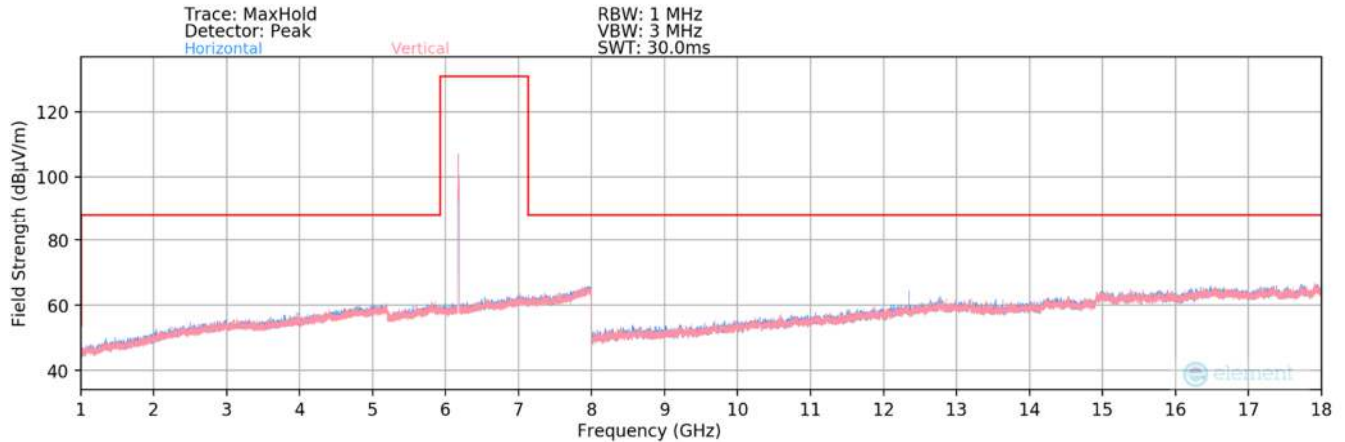
- Field Strength Level [dB $\mu$ V/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level [dB $\mu$ V/m] – Limit [dB $\mu$ V/m]

### Radiated Band Edge Measurement Offset

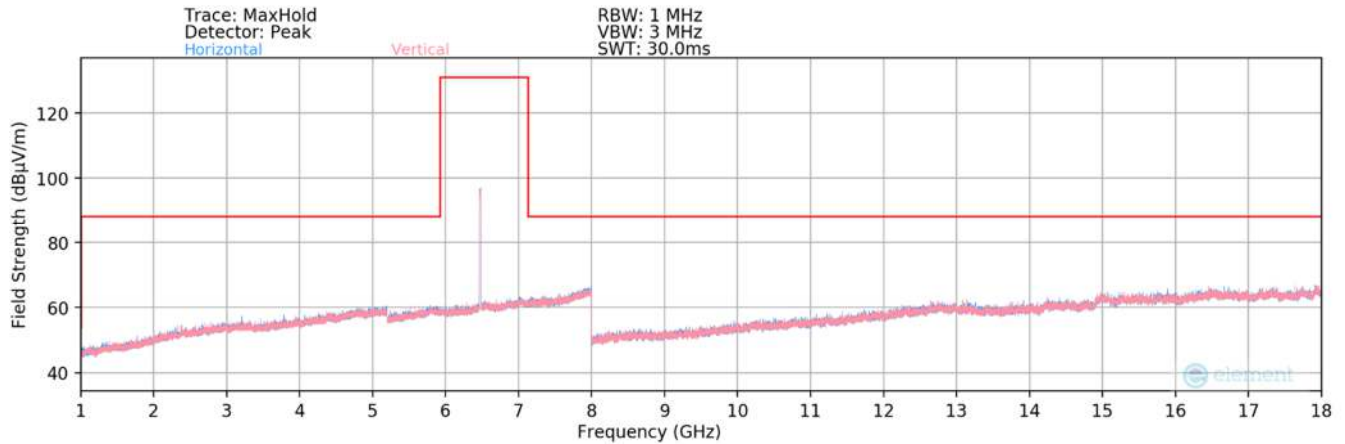
- The amplitude offset shown in the radiated restricted band edge plots was calculated using the formula:  
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 139 of 164                          |

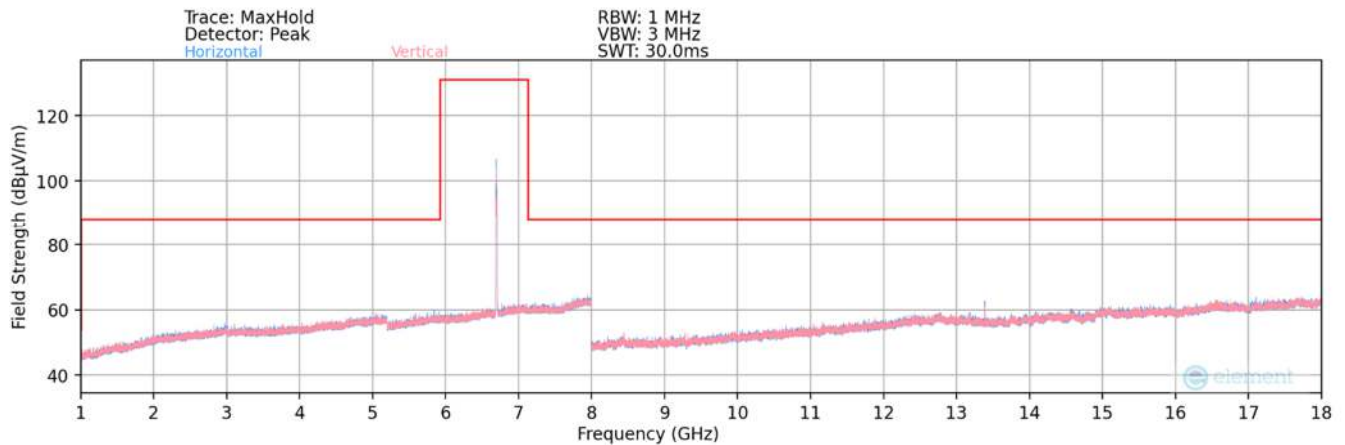
## 7.6.1 MIMO Radiated Spurious Emission Measurements (26 Tones)



**Plot 7-133. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 5 Ch. 45)**

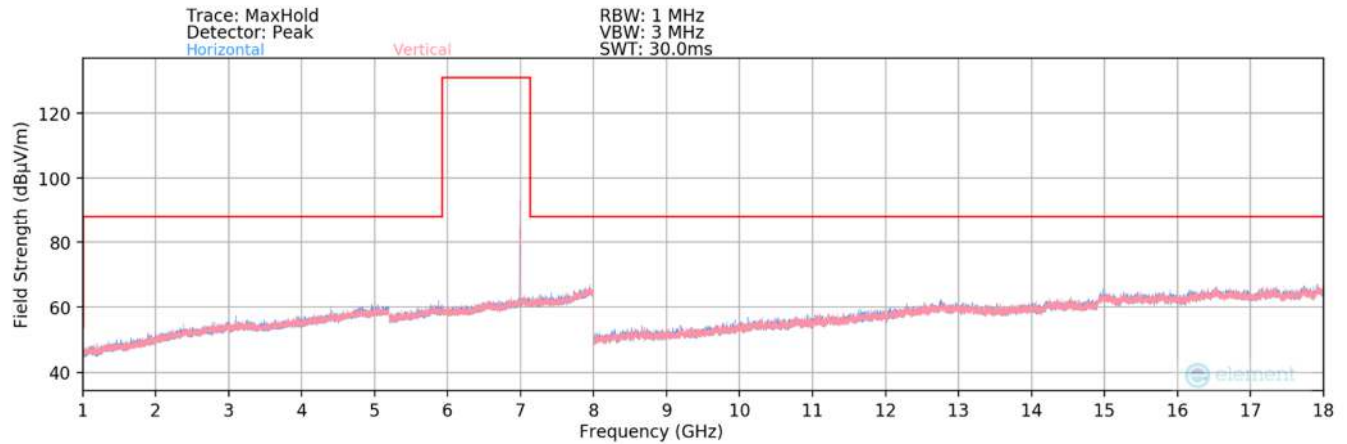


**Plot 7-134. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 6 Ch. 105)**

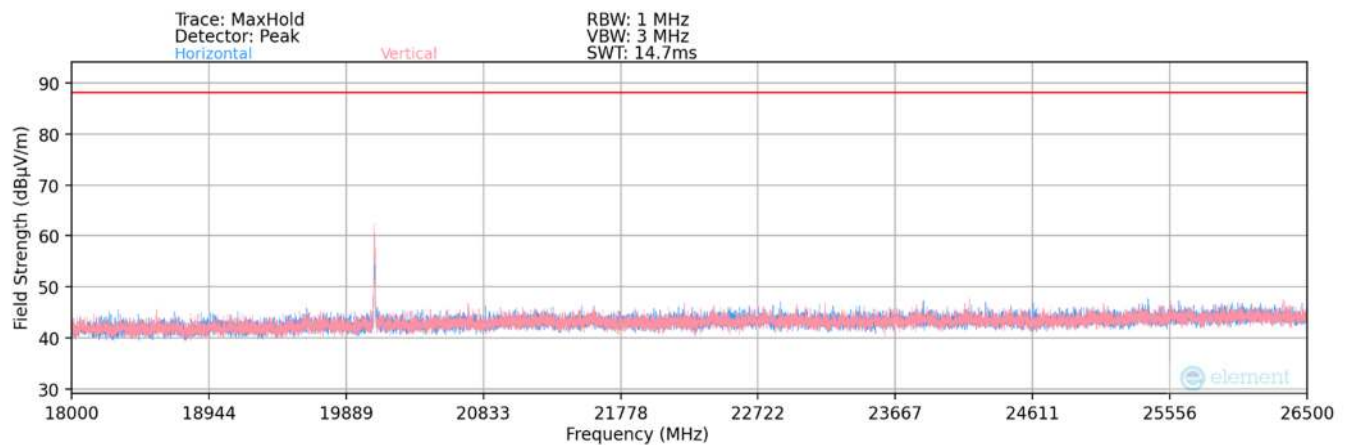


**Plot 7-135. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 7 Ch. 149)**

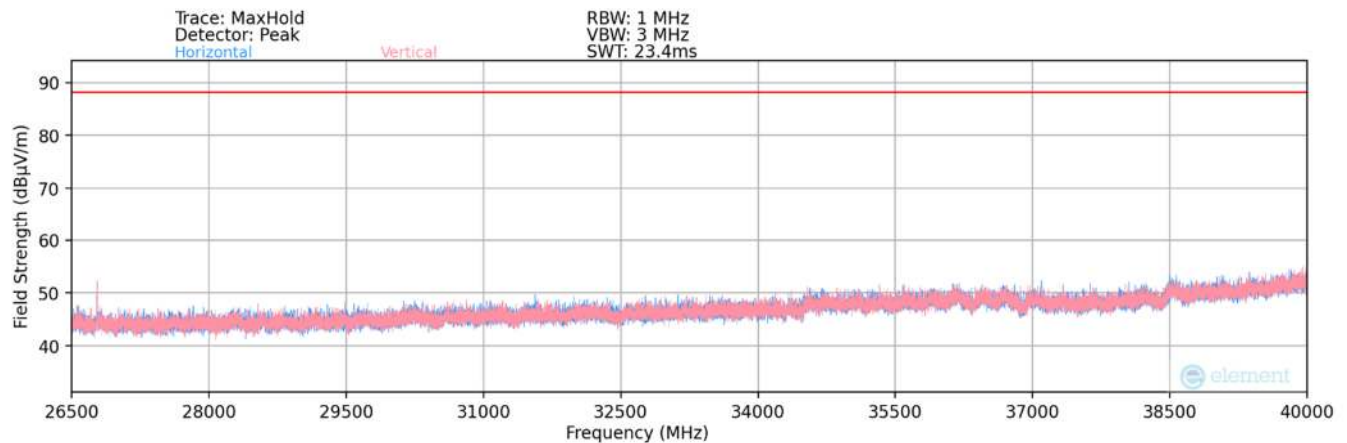
|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 140 of 164                   |



**Plot 7-136. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – U Band 8 Ch. 209)**



**Plot 7-137. Radiated Spurious Plot 18GHz - 26.5GHz (802.11ax) – Ch.149**



**Plot 7-138. Radiated Spurious Plot 26.5GHz - 40GHz (802.11ax) – Ch.149**

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 141 of 164                   |

### 7.6.1.1 MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII Band 5

| Mode            | Antenna | UNII Band | Channel | Test Channel Freq. | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degrees] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|---------|-----------|---------|--------------------|----------|------------|-----------------|----------|-----------------|---------------------|-----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 26T | MIMO    | 5         | 2       | 5935               | 4        | *          | 11870.00        | Average  | H               | 178                 | 21                          | -79.65               | 18.86       | 0.00                            | 46.21                   | 53.98          | -7.77       |
|                 |         |           |         |                    |          | *          | 11870.00        | Peak     | H               | 178                 | 21                          | -68.27               | 18.86       | 0.00                            | 57.59                   | 73.98          | -16.39      |
|                 |         |           |         |                    |          | *          | 17805.00        | Average  | H               | -                   | -                           | -83.16               | 26.16       | 0.00                            | 50.00                   | 53.98          | -3.98       |
|                 |         |           |         |                    |          | *          | 17805.00        | Peak     | H               | -                   | -                           | -72.44               | 26.16       | 0.00                            | 60.72                   | 73.98          | -13.26      |
|                 |         |           |         |                    |          | *          | 23740.00        | Average  | V               | -                   | -                           | -67.44               | 3.58        | -9.54                           | 33.60                   | 53.98          | -20.38      |
|                 |         |           |         |                    |          | *          | 23740.00        | Peak     | V               | -                   | -                           | -56.68               | 3.58        | -9.54                           | 44.36                   | 73.98          | -29.62      |
|                 |         |           | 45      | 6175               | 4        |            | 29675.00        | Peak     | V               | -                   | -                           | -57.63               | 5.33        | -9.54                           | 45.16                   | 68.20          | -23.04      |
|                 |         |           |         |                    |          | *          | 12350.00        | Average  | H               | 176                 | 3                           | -78.35               | 19.23       | 0.00                            | 47.88                   | 53.98          | -6.10       |
|                 |         |           |         |                    |          | *          | 12350.00        | Peak     | H               | 176                 | 3                           | -64.25               | 19.23       | 0.00                            | 61.98                   | 73.98          | -12.00      |
|                 |         |           |         |                    |          | *          | 18525.00        | Average  | V               | 150                 | 350                         | -56.17               | 1.16        | -9.54                           | 42.45                   | 53.98          | -11.53      |
|                 |         |           |         |                    |          | *          | 18525.00        | Peak     | V               | 150                 | 350                         | -43.74               | 1.16        | -9.54                           | 54.88                   | 73.98          | -19.10      |
|                 |         |           |         |                    |          | *          | 24700.00        | Peak     | V               | 150                 | 350                         | -52.88               | 3.72        | -9.54                           | 48.30                   | 68.20          | -19.90      |
|                 |         |           | 93      | 6415               | 4        |            | 30875.00        | Peak     | V               | -                   | -                           | -57.47               | 6.32        | -9.54                           | 46.32                   | 68.20          | -21.88      |
|                 |         |           |         |                    |          |            | 12830.00        | Peak     | H               | 178                 | 72                          | -62.19               | 20.14       | 0.00                            | 64.95                   | 68.20          | -3.25       |
|                 |         |           |         |                    |          | *          | 19245.00        | Average  | V               | 150                 | 350                         | -53.82               | 1.84        | -9.54                           | 45.48                   | 53.98          | -8.50       |
|                 |         |           |         |                    |          | *          | 19245.00        | Peak     | V               | 150                 | 350                         | -41.96               | 1.84        | -9.54                           | 57.34                   | 73.98          | -16.64      |
|                 |         |           |         |                    |          |            | 25660.00        | Peak     | V               | 150                 | 350                         | -55.81               | 3.90        | -9.54                           | 45.55                   | 68.20          | -22.65      |
|                 |         |           |         |                    |          |            | 32075.00        | Peak     | V               | -                   | -                           | -56.70               | 6.64        | -9.54                           | 47.40                   | 68.20          | -20.80      |

Table 7-90. Radiated Measurements MIMO (26 Tones)

### 7.6.1.2 MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII Band 6

| Mode            | Antenna | UNII Band | Channel | Test Channel Freq. | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degrees] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|---------|-----------|---------|--------------------|----------|------------|-----------------|----------|-----------------|---------------------|-----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 26T | MIMO    | 6         | 97      | 6435               | 4        |            | 12870.00        | Peak     | H               | -                   | -                           | -70.48               | 20.06       | 0.00                            | 56.58                   | 68.20          | -11.62      |
|                 |         |           |         |                    |          | *          | 19305.00        | Average  | H               | -                   | -                           | -66.69               | 1.64        | -9.54                           | 32.41                   | 53.98          | -21.56      |
|                 |         |           |         |                    |          | *          | 19305.00        | Peak     | H               | -                   | -                           | -56.45               | 1.64        | -9.54                           | 42.65                   | 73.98          | -31.33      |
|                 |         |           |         |                    |          |            | 25740.00        | Peak     | H               | -                   | -                           | -57.24               | 3.84        | -9.54                           | 44.06                   | 68.20          | -24.14      |
|                 |         |           |         |                    |          |            | 32175.00        | Peak     | H               | -                   | -                           | -57.34               | 6.80        | -9.54                           | 46.91                   | 68.20          | -21.29      |
|                 |         |           | 105     | 6475               | 4        |            | 12950.00        | Peak     | H               | -                   | -                           | -70.57               | 20.00       | 0.00                            | 56.43                   | 68.20          | -11.77      |
|                 |         |           |         |                    |          | *          | 19425.00        | Average  | H               | -                   | -                           | -67.15               | 1.80        | -9.54                           | 32.11                   | 53.98          | -21.87      |
|                 |         |           |         |                    |          | *          | 19425.00        | Peak     | H               | -                   | -                           | -56.55               | 1.80        | -9.54                           | 42.71                   | 73.98          | -31.27      |
|                 |         |           |         |                    |          |            | 25900.00        | Peak     | H               | -                   | -                           | -57.38               | 4.24        | -9.54                           | 44.32                   | 68.20          | -23.88      |
|                 |         |           |         |                    |          |            | 32375.00        | Peak     | H               | -                   | -                           | -57.63               | 6.46        | -9.54                           | 46.29                   | 68.20          | -21.91      |
|                 |         |           | 113     | 6515               | 4        |            | 13030.00        | Peak     | H               | -                   | -                           | -70.59               | 20.37       | 0.00                            | 56.78                   | 68.20          | -11.42      |
|                 |         |           |         |                    |          | *          | 19545.00        | Average  | H               | -                   | -                           | -66.71               | 1.84        | -9.54                           | 32.59                   | 53.98          | -21.39      |
|                 |         |           |         |                    |          | *          | 19545.00        | Peak     | H               | -                   | -                           | -55.33               | 1.84        | -9.54                           | 43.97                   | 73.98          | -30.01      |
|                 |         |           |         |                    |          |            | 26060.00        | Peak     | H               | -                   | -                           | -57.53               | 4.18        | -9.54                           | 44.11                   | 68.20          | -24.09      |
|                 |         |           |         |                    |          |            | 32575.00        | Peak     | H               | -                   | -                           | -57.16               | 6.18        | -9.54                           | 46.48                   | 68.20          | -21.72      |

Table 7-91. Radiated Measurements MIMO (26 Tones)

|                                         |                                        |                               |  |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|--|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               |  | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset |  | Page 142 of 164                   |

### 7.6.1.3 MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII Band 7

| Mode            | Antenna | UNII Band | Channel | Test Channel Freq. | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degrees] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|---------|-----------|---------|--------------------|----------|------------|-----------------|----------|-----------------|---------------------|-----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 26T | MIMO    | 7         | 117     | 6535               | 4        |            | 13070.00        | Peak     | H               | 222                 | 17                          | -62.35               | 20.29       | 0.00                            | 64.94                   | 68.20          | -3.26       |
|                 |         |           |         |                    |          | *          | 19605.00        | Average  | V               | 150                 | 340                         | -50.51               | 2.38        | -9.54                           | 49.32                   | 53.98          | -4.65       |
|                 |         |           |         |                    |          | *          | 19605.00        | Peak     | V               | 150                 | 340                         | -36.99               | 2.38        | -9.54                           | 62.84                   | 73.98          | -11.14      |
|                 |         |           |         |                    |          |            | 26140.00        | Peak     | V               | 150                 | 335                         | -50.62               | 4.03        | -9.54                           | 50.87                   | 68.20          | -17.33      |
|                 |         |           |         |                    |          |            | 32675.00        | Peak     | V               | -                   | -                           | -57.27               | 6.46        | -9.54                           | 46.65                   | 68.20          | -21.55      |
|                 |         |           | 149     | 6695               | 4        | *          | 13390.00        | Average  | H               | 136                 | 325                         | -77.54               | 20.77       | 0.00                            | 50.23                   | 53.98          | -3.75       |
|                 |         |           |         |                    |          | *          | 13390.00        | Peak     | H               | 136                 | 325                         | -62.94               | 20.77       | 0.00                            | 64.83                   | 73.98          | -9.15       |
|                 |         |           |         |                    |          | *          | 20085.00        | Average  | V               | 150                 | 350                         | -52.49               | 2.58        | -9.54                           | 47.55                   | 53.98          | -6.43       |
|                 |         |           |         |                    |          | *          | 20085.00        | Peak     | V               | 150                 | 350                         | -38.96               | 2.58        | -9.54                           | 61.08                   | 73.98          | -12.90      |
|                 |         |           |         |                    |          |            | 26780.00        | Peak     | V               | 150                 | 340                         | -46.80               | 4.33        | -9.54                           | 54.99                   | 68.20          | -13.21      |
|                 |         |           | 185     | 6875               | 4        |            | 33475.00        | Peak     | V               | -                   | -                           | -57.27               | 6.96        | -9.54                           | 47.15                   | 68.20          | -21.05      |
|                 |         |           |         |                    |          |            | 13750.00        | Peak     | H               | 121                 | 76                          | -63.71               | 21.34       | 0.00                            | 64.63                   | 68.20          | -3.57       |
|                 |         |           |         |                    |          | *          | 20625.00        | Average  | V               | 150                 | 325                         | -49.96               | 3.01        | -9.54                           | 50.50                   | 53.98          | -3.48       |
|                 |         |           |         |                    |          | *          | 20625.00        | Peak     | V               | 150                 | 325                         | -38.57               | 3.01        | -9.54                           | 61.89                   | 73.98          | -12.09      |
|                 |         |           |         |                    |          |            | 27500.00        | Peak     | V               | 150                 | 350                         | -52.51               | 3.97        | -9.54                           | 48.92                   | 68.20          | -19.28      |
|                 |         |           |         |                    |          |            | 34375.00        | Peak     | V               | -                   | -                           | -57.50               | 7.33        | -9.54                           | 47.29                   | 68.20          | -20.91      |

Table 7-92. Radiated Measurements MIMO (26 Tones)

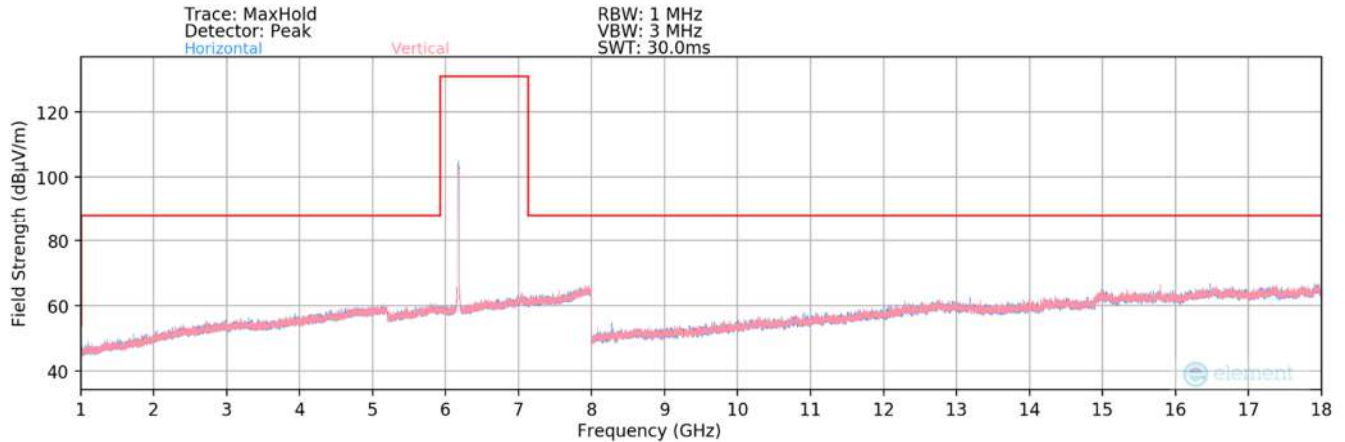
### 7.6.1.4 MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII Band 8

| Mode            | Antenna | UNII Band | Channel | Test Channel Freq. | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degrees] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|---------|-----------|---------|--------------------|----------|------------|-----------------|----------|-----------------|---------------------|-----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 26T | MIMO    | 8         | 189     | 6895               | 4        |            | 13790.00        | Peak     | H               | -                   | -                           | -71.09               | 21.59       | 0.00                            | 57.50                   | 68.20          | -10.70      |
|                 |         |           |         |                    |          | *          | 20685.00        | Average  | H               | -                   | -                           | -67.38               | 3.01        | -9.54                           | 33.10                   | 53.98          | -20.88      |
|                 |         |           |         |                    |          | *          | 20685.00        | Peak     | H               | -                   | -                           | -56.84               | 3.01        | -9.54                           | 43.63                   | 73.98          | -30.35      |
|                 |         |           |         |                    |          |            | 27580.00        | Peak     | H               | -                   | -                           | -56.78               | 4.40        | -9.54                           | 45.08                   | 68.20          | -23.12      |
|                 |         |           |         |                    |          |            | 34475.00        | Peak     | H               | -                   | -                           | -57.00               | 7.31        | -9.54                           | 47.77                   | 68.20          | -20.43      |
|                 |         |           | 209     | 6995               | 4        |            | 13990.00        | Peak     | H               | -                   | -                           | -70.87               | 21.24       | 0.00                            | 57.37                   | 68.20          | -10.83      |
|                 |         |           |         |                    |          | *          | 20985.00        | Average  | H               | -                   | -                           | -67.86               | 3.27        | -9.54                           | 32.87                   | 53.98          | -21.11      |
|                 |         |           |         |                    |          | *          | 20985.00        | Peak     | H               | -                   | -                           | -57.47               | 3.27        | -9.54                           | 43.26                   | 73.98          | -30.72      |
|                 |         |           |         |                    |          |            | 27980.00        | Peak     | H               | -                   | -                           | -57.32               | 4.40        | -9.54                           | 44.54                   | 68.20          | -23.66      |
|                 |         |           |         |                    |          |            | 34975.00        | Peak     | H               | -                   | -                           | -56.42               | 7.79        | -9.54                           | 48.83                   | 68.20          | -19.37      |
|                 |         |           | 233     | 7115               | 4        |            | 14230.00        | Peak     | H               | -                   | -                           | -71.13               | 21.94       | 0.00                            | 57.81                   | 68.20          | -10.39      |
|                 |         |           |         |                    |          | *          | 21345.00        | Average  | H               | -                   | -                           | -67.56               | 3.57        | -9.54                           | 33.47                   | 53.98          | -20.51      |
|                 |         |           |         |                    |          | *          | 21345.00        | Peak     | H               | -                   | -                           | -57.01               | 3.57        | -9.54                           | 44.02                   | 73.98          | -29.96      |
|                 |         |           |         |                    |          |            | 28460.00        | Peak     | H               | -                   | -                           | -57.12               | 5.01        | -9.54                           | 45.35                   | 68.20          | -22.85      |
|                 |         |           |         |                    |          |            | 35575.00        | Peak     | H               | -                   | -                           | -56.95               | 7.78        | -9.54                           | 48.29                   | 68.20          | -19.91      |

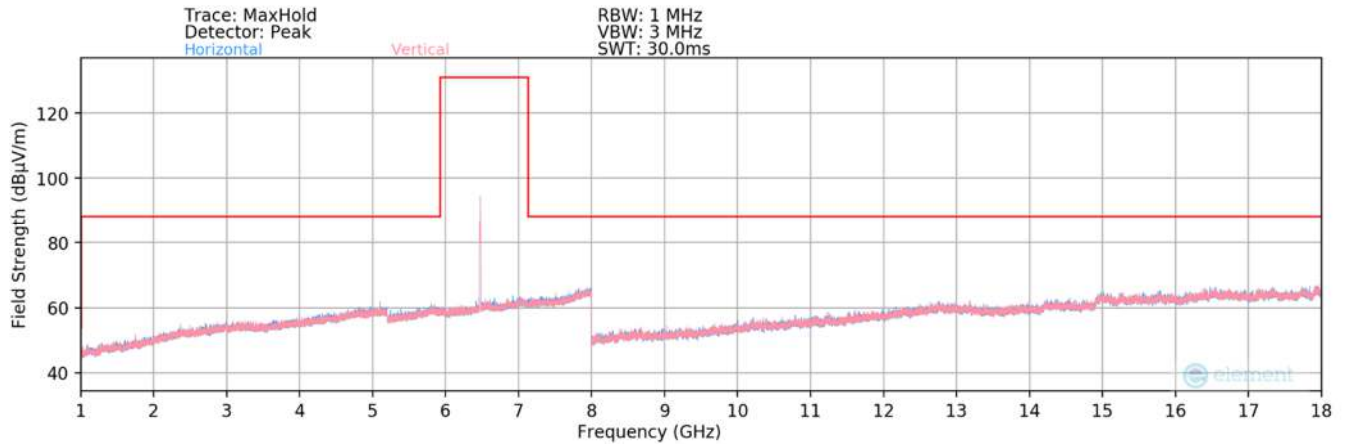
Table 7-93. Radiated Measurements MIMO (26 Tones)

|                                         |                                        |                               |  |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|--|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               |  | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset |  | Page 143 of 164                   |

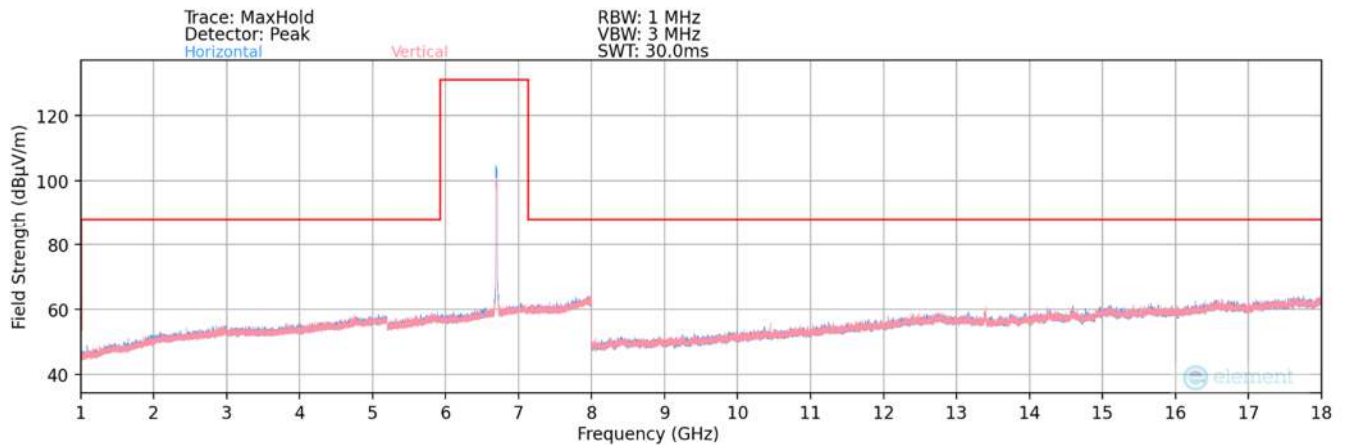
## 7.6.2 MIMO Radiated Spurious Emission Measurements (242 Tones)



**Plot 7-139. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 5 Ch. 45)**

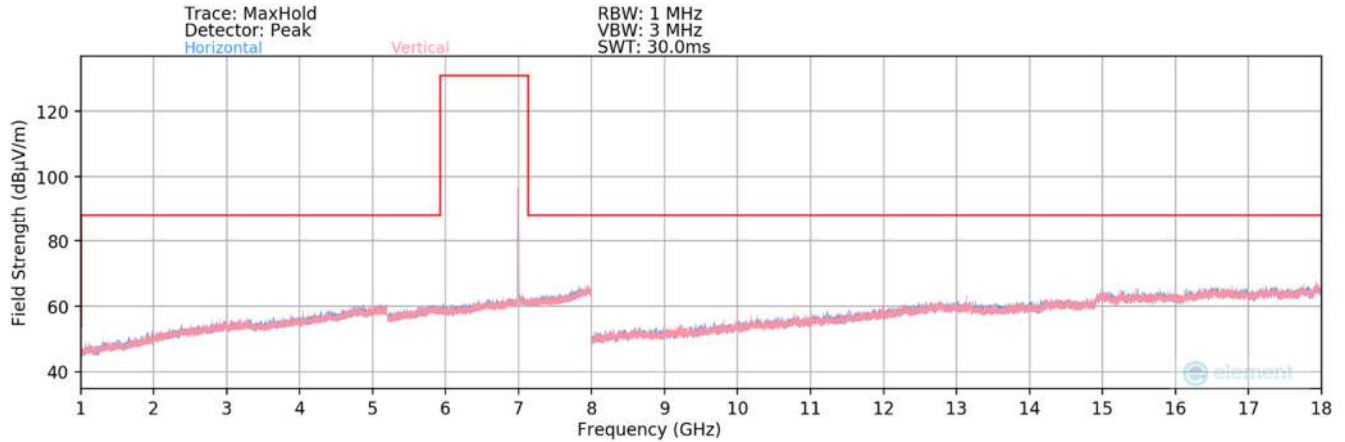


**Plot 7-140. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 6 Ch. 105)**

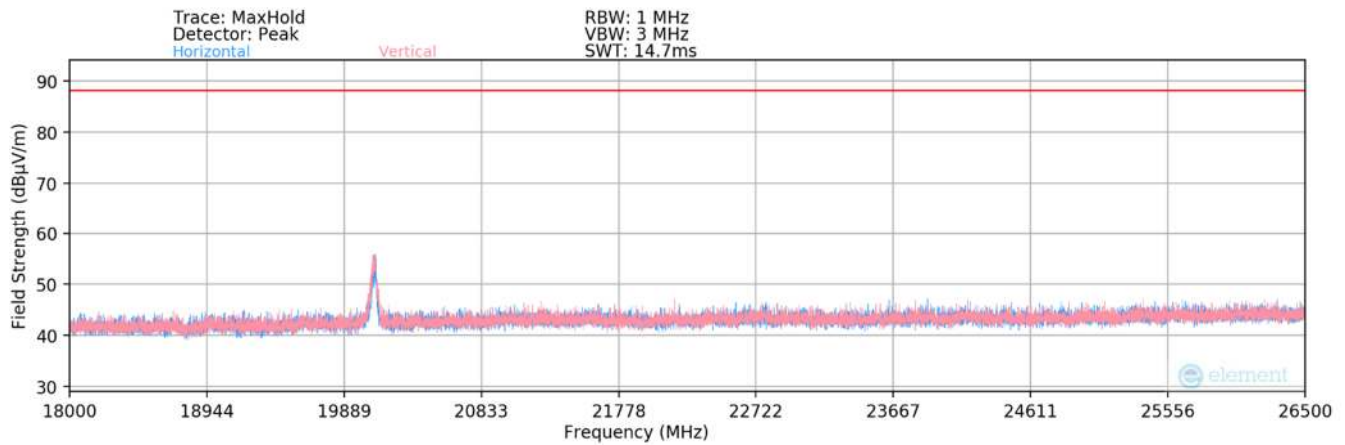


**Plot 7-141. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 7 Ch. 149)**

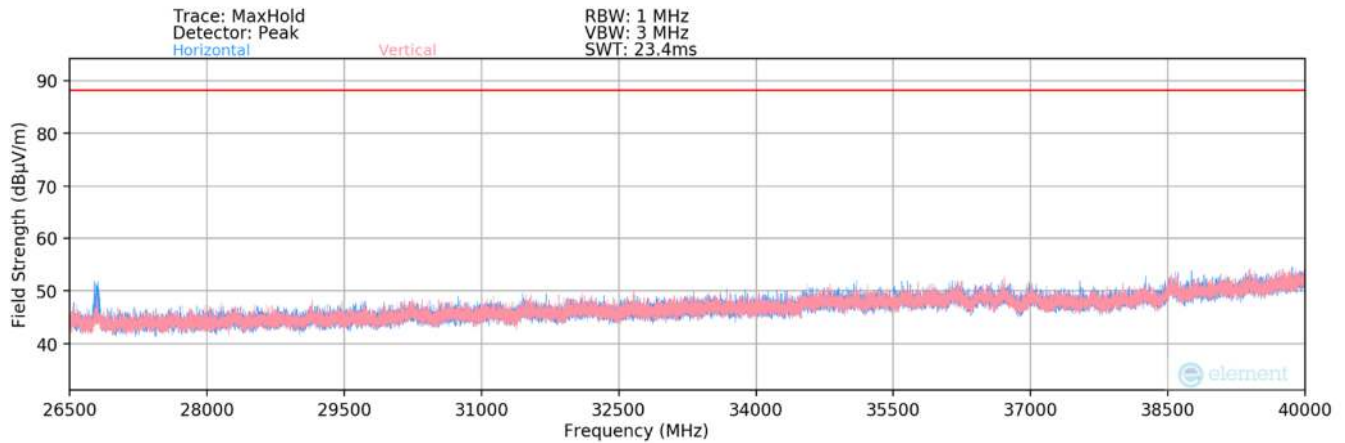
|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 144 of 164                   |



**Plot 7-142. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – U Band 8 Ch. 209)**



**Plot 7-143. Radiated Spurious Plot 18GHz - 26.5GHz (802.11ax) – Ch.149**



**Plot 7-144. Radiated Spurious Plot 26.5GHz - 40GHz (802.11ax) – Ch.149**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 145 of 164                          |

### 7.6.2.1 MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII Band 5

| Mode             | Antenna | UNII Band | Channel | Test Channel Freq. [MHz] | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|------------------|---------|-----------|---------|--------------------------|----------|------------|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 242T | MIMO    | 5         | 2       | 5935                     | 61       | *          | 11870.00        | Average  | H               | 178                 | 21                         | -80.68               | 18.86       | 0.00                            | 45.18                   | 53.98          | -8.80       |
|                  |         |           |         |                          |          | *          | 11870.00        | Peak     | H               | 178                 | 21                         | -70.33               | 18.86       | 0.00                            | 55.53                   | 73.98          | -18.45      |
|                  |         |           |         |                          |          | *          | 17805.00        | Average  | H               | -                   | -                          | -83.08               | 26.16       | 0.00                            | 50.08                   | 53.98          | -3.90       |
|                  |         |           |         |                          |          | *          | 17805.00        | Peak     | H               | -                   | -                          | -72.11               | 26.16       | 0.00                            | 61.05                   | 73.98          | -12.93      |
|                  |         |           |         |                          |          | *          | 23740.00        | Average  | H               | -                   | -                          | -66.98               | 3.58        | -9.54                           | 34.06                   | 53.98          | -19.92      |
|                  |         |           |         |                          |          | *          | 23740.00        | Peak     | H               | -                   | -                          | -56.32               | 3.58        | -9.54                           | 44.72                   | 73.98          | -29.26      |
|                  |         |           | 45      | 6175                     | 61       |            | 29675.00        | Peak     | H               | -                   | -                          | -55.70               | 5.33        | -9.54                           | 47.08                   | 68.20          | -21.12      |
|                  |         |           |         |                          |          | *          | 12350.00        | Average  | H               | 176                 | 3                          | -79.88               | 19.23       | 0.00                            | 46.35                   | 53.98          | -7.63       |
|                  |         |           |         |                          |          | *          | 12350.00        | Peak     | H               | 176                 | 3                          | -67.80               | 19.23       | 0.00                            | 58.43                   | 73.98          | -15.55      |
|                  |         |           |         |                          |          | *          | 18525.00        | Average  | H               | 150                 | 0                          | -62.12               | 1.16        | -9.54                           | 36.50                   | 53.98          | -17.48      |
|                  |         |           |         |                          |          | *          | 18525.00        | Peak     | H               | 150                 | 0                          | -50.56               | 1.16        | -9.54                           | 48.07                   | 73.98          | -25.91      |
|                  |         |           |         |                          |          |            | 24700.00        | Peak     | H               | -                   | -                          | -57.21               | 3.72        | -9.54                           | 43.97                   | 68.20          | -24.23      |
|                  |         |           | 93      | 6415                     | 61       |            | 30875.00        | Peak     | H               | -                   | -                          | -57.23               | 6.32        | -9.54                           | 46.55                   | 68.20          | -21.65      |
|                  |         |           |         |                          |          |            | 12830.00        | Peak     | H               | 178                 | 72                         | -65.34               | 20.14       | 0.00                            | 61.80                   | 68.20          | -6.40       |
|                  |         |           |         |                          |          | *          | 19245.00        | Average  | H               | 150                 | 320                        | -58.03               | 1.84        | -9.54                           | 41.27                   | 53.98          | -12.71      |
|                  |         |           |         |                          |          | *          | 19245.00        | Peak     | H               | 150                 | 320                        | -46.43               | 1.84        | -9.54                           | 52.87                   | 73.98          | -21.11      |
|                  |         |           |         |                          |          |            | 25660.00        | Peak     | H               | -                   | -                          | -56.17               | 3.90        | -9.54                           | 45.20                   | 68.20          | -23.00      |
|                  |         |           |         |                          |          |            | 32075.00        | Peak     | H               | -                   | -                          | -55.88               | 6.64        | -9.54                           | 48.22                   | 68.20          | -19.98      |

Table 7-94. Radiated Measurements MIMO (242 Tones)

### 7.6.2.2 MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII Band 6

| Mode             | Antenna | UNII Band | Channel | Test Channel Freq. [MHz] | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|------------------|---------|-----------|---------|--------------------------|----------|------------|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 242T | MIMO    | 6         | 97      | 6435                     | 61       |            | 12870.00        | Peak     | H               | 189                 | 74                         | -68.35               | 20.06       | 0.00                            | 58.71                   | 68.20          | -9.49       |
|                  |         |           |         |                          |          | *          | 19305.00        | Average  | H               | 150                 | 320                        | -63.67               | 1.64        | -9.54                           | 35.44                   | 53.98          | -18.54      |
|                  |         |           |         |                          |          | *          | 19305.00        | Peak     | H               | 150                 | 320                        | -51.98               | 1.64        | -9.54                           | 47.12                   | 73.98          | -26.86      |
|                  |         |           |         |                          |          |            | 25740.00        | Peak     | H               | -                   | -                          | -56.85               | 3.84        | -9.54                           | 44.45                   | 68.20          | -23.75      |
|                  |         |           |         |                          |          |            | 32175.00        | Peak     | H               | -                   | -                          | -57.38               | 6.80        | -9.54                           | 46.88                   | 68.20          | -21.32      |
|                  |         |           | 105     | 6475                     | 61       |            | 12950.00        | Peak     | H               | 188                 | 76                         | -69.76               | 20.00       | 0.00                            | 57.24                   | 68.20          | -10.96      |
|                  |         |           |         |                          |          | *          | 19425.00        | Average  | H               | 150                 | 330                        | -62.15               | 1.80        | -9.54                           | 37.11                   | 53.98          | -16.87      |
|                  |         |           |         |                          |          | *          | 19425.00        | Peak     | H               | 150                 | 330                        | -49.47               | 1.80        | -9.54                           | 49.79                   | 73.98          | -24.19      |
|                  |         |           |         |                          |          |            | 25900.00        | Peak     | H               | -                   | -                          | -55.92               | 4.24        | -9.54                           | 45.78                   | 68.20          | -22.42      |
|                  |         |           |         |                          |          |            | 32375.00        | Peak     | H               | -                   | -                          | -57.45               | 6.46        | -9.54                           | 46.47                   | 68.20          | -21.73      |
|                  |         |           | 113     | 6515                     | 61       |            | 13030.00        | Peak     | H               | 126                 | 29                         | -69.54               | 20.37       | 0.00                            | 57.83                   | 68.20          | -10.37      |
|                  |         |           |         |                          |          | *          | 19545.00        | Average  | H               | 150                 | 330                        | -62.30               | 1.84        | -9.54                           | 37.00                   | 53.98          | -16.98      |
|                  |         |           |         |                          |          | *          | 19545.00        | Peak     | H               | 150                 | 330                        | -50.32               | 1.84        | -9.54                           | 48.98                   | 73.98          | -25.00      |
|                  |         |           |         |                          |          |            | 26060.00        | Peak     | H               | -                   | -                          | -57.81               | 4.18        | -9.54                           | 43.83                   | 68.20          | -24.37      |
|                  |         |           |         |                          |          |            | 32575.00        | Peak     | H               | -                   | -                          | -55.83               | 6.18        | -9.54                           | 47.81                   | 68.20          | -20.39      |

Table 7-95. Radiated Measurements MIMO (242 Tones)

|                                         |                                        |                               |  |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|--|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               |  | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset |  | Page 146 of 164                   |

### 7.6.2.3 MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII Band 7

| Mode             | Antenna | UNII Band | Channel | Test Channel Freq. [MHz] | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBuV/m] | Limit [dBuV/m] | Margin [dB] |
|------------------|---------|-----------|---------|--------------------------|----------|------------|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 242T | MIMO    | 7         | 117     | 6535                     | 61       |            | 13070.00        | Peak     | H               | 222                 | 17                         | -63.92               | 20.29       | 0.00                            | 63.37                   | 68.20          | -4.83       |
|                  |         |           |         |                          |          | *          | 19605.00        | Average  | H               | 150                 | 325                        | -54.13               | 2.38        | -9.54                           | 45.70                   | 53.98          | -8.27       |
|                  |         |           |         |                          |          | *          | 19605.00        | Peak     | H               | 150                 | 325                        | -43.74               | 2.38        | -9.54                           | 56.10                   | 73.98          | -17.88      |
|                  |         |           |         |                          |          |            | 26140.00        | Peak     | H               | -                   | -                          | -56.31               | 4.03        | -9.54                           | 45.18                   | 68.20          | -23.02      |
|                  |         |           |         |                          |          |            | 32675.00        | Peak     | H               | -                   | -                          | -58.04               | 6.46        | -9.54                           | 45.88                   | 68.20          | -22.32      |
|                  |         |           | 149     | 6695                     | 61       | *          | 13390.00        | Average  | H               | 136                 | 325                        | -77.14               | 20.77       | 0.00                            | 50.63                   | 53.98          | -3.35       |
|                  |         |           |         |                          |          | *          | 13390.00        | Peak     | H               | 136                 | 325                        | -64.96               | 20.77       | 0.00                            | 62.81                   | 73.98          | -11.17      |
|                  |         |           |         |                          |          | *          | 20085.00        | Peak     | H               | 150                 | 320                        | -54.82               | 2.58        | -9.54                           | 45.22                   | 53.98          | -8.76       |
|                  |         |           |         |                          |          | *          | 20085.00        | Average  | H               | 150                 | 320                        | -44.40               | 2.58        | -9.54                           | 55.64                   | 73.98          | -18.34      |
|                  |         |           |         |                          |          |            | 26780.00        | Peak     | H               | 150                 | 320                        | -51.69               | 4.33        | -9.54                           | 50.10                   | 68.20          | -18.10      |
|                  |         |           | 185     | 6875                     | 61       |            | 33475.00        | Peak     | H               | -                   | -                          | -56.07               | 6.96        | -9.54                           | 48.35                   | 68.20          | -19.85      |
|                  |         |           |         |                          |          |            | 13750.00        | Peak     | H               | 121                 | 76                         | -67.10               | 21.34       | 0.00                            | 61.24                   | 68.20          | -6.96       |
|                  |         |           |         |                          |          | *          | 20625.00        | Average  | H               | 150                 | 320                        | -54.66               | 3.01        | -9.54                           | 45.81                   | 53.98          | -8.17       |
|                  |         |           |         |                          |          | *          | 20625.00        | Peak     | H               | 150                 | 320                        | -43.38               | 3.01        | -9.54                           | 57.09                   | 73.98          | -16.89      |
|                  |         |           |         |                          |          |            | 27500.00        | Peak     | H               | 150                 | 320                        | -54.31               | 3.97        | -9.54                           | 47.12                   | 68.20          | -21.08      |
|                  |         |           |         |                          |          |            | 34375.00        | Peak     | H               | -                   | -                          | -56.24               | 7.33        | -9.54                           | 48.55                   | 68.20          | -19.65      |

Table 7-96. Radiated Measurements MIMO (242 Tones)

### 7.6.2.4 MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII Band 8

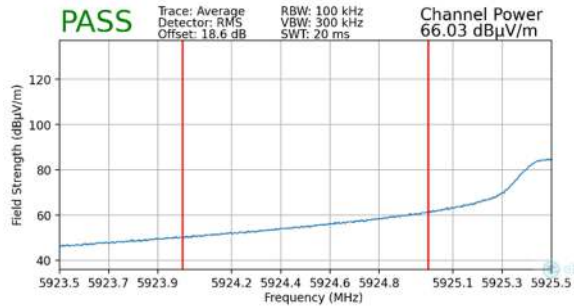
| Mode             | Antenna | UNII Band | Channel | Test Channel Freq. [MHz] | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBuV/m] | Limit [dBuV/m] | Margin [dB] |
|------------------|---------|-----------|---------|--------------------------|----------|------------|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 242T | MIMO    | 8         | 189     | 6895                     | 61       |            | 13790.00        | Peak     | H               | 133                 | 74                         | -68.17               | 21.59       | 0.00                            | 60.42                   | 68.20          | -7.78       |
|                  |         |           |         |                          |          | *          | 20685.00        | Average  | H               | 150                 | 320                        | -60.24               | 3.01        | -9.54                           | 40.23                   | 53.98          | -13.75      |
|                  |         |           |         |                          |          | *          | 20685.00        | Peak     | H               | 150                 | 320                        | -47.25               | 3.01        | -9.54                           | 53.22                   | 73.98          | -20.76      |
|                  |         |           |         |                          |          |            | 27580.00        | Peak     | H               | -                   | -                          | -56.06               | 4.40        | -9.54                           | 45.81                   | 68.20          | -22.39      |
|                  |         |           |         |                          |          |            | 34475.00        | Peak     | H               | -                   | -                          | -57.22               | 7.31        | -9.54                           | 47.55                   | 68.20          | -20.65      |
|                  |         |           | 209     | 6995                     | 61       |            | 13990.00        | Peak     | H               | 150                 | 82                         | -69.10               | 21.24       | 0.00                            | 59.14                   | 68.20          | -9.06       |
|                  |         |           |         |                          |          | *          | 20985.00        | Average  | H               | 150                 | 315                        | -60.57               | 3.27        | -9.54                           | 40.15                   | 53.98          | -13.83      |
|                  |         |           |         |                          |          | *          | 20985.00        | Peak     | H               | 150                 | 315                        | -48.28               | 3.27        | -9.54                           | 52.45                   | 73.98          | -21.53      |
|                  |         |           |         |                          |          |            | 27980.00        | Peak     | H               | -                   | -                          | -57.42               | 4.40        | -9.54                           | 44.44                   | 68.20          | -23.76      |
|                  |         |           |         |                          |          |            | 34975.00        | Peak     | H               | -                   | -                          | -57.47               | 7.79        | -9.54                           | 47.78                   | 68.20          | -20.42      |
|                  |         |           | 233     | 7115                     | 61       |            | 14230.00        | Peak     | H               | 120                 | 357                        | -70.10               | 21.94       | 0.00                            | 58.84                   | 68.20          | -9.36       |
|                  |         |           |         |                          |          | *          | 21345.00        | Average  | H               | 150                 | 320                        | -60.77               | 3.57        | -9.54                           | 40.26                   | 53.98          | -13.72      |
|                  |         |           |         |                          |          | *          | 21345.00        | Peak     | H               | 150                 | 320                        | -48.31               | 3.57        | -9.54                           | 52.72                   | 73.98          | -21.26      |
|                  |         |           |         |                          |          |            | 28460.00        | Peak     | H               | -                   | -                          | -56.48               | 5.01        | -9.54                           | 45.99                   | 68.20          | -22.21      |
|                  |         |           |         |                          |          |            | 35575.00        | Peak     | H               | -                   | -                          | -56.35               | 7.78        | -9.54                           | 48.89                   | 68.20          | -19.31      |

Table 7-97. Radiated Measurements MIMO (242 Tones)

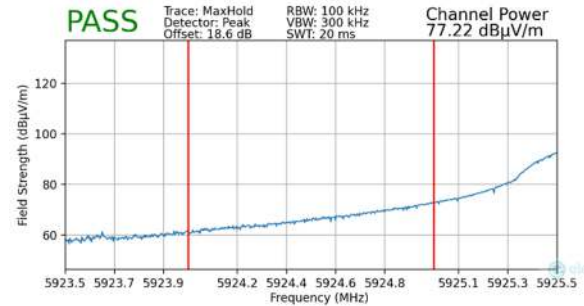
|                                         |                                        |                               |  |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|--|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               |  | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset |  | Page 147 of 164                   |

### 7.6.3 MIMO Radiated Band Edge Measurements (20MHz BW – Partial Tone – 106T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 53       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 5935MHz  |
| Channel:                  | 2        |

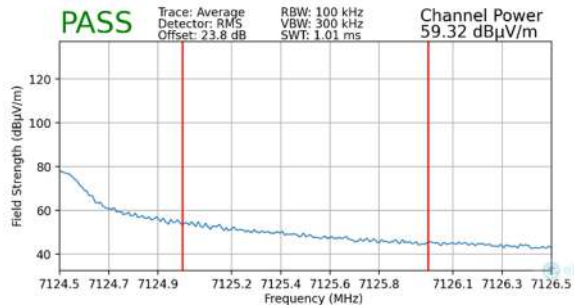


**Plot 7-145. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 106T)**

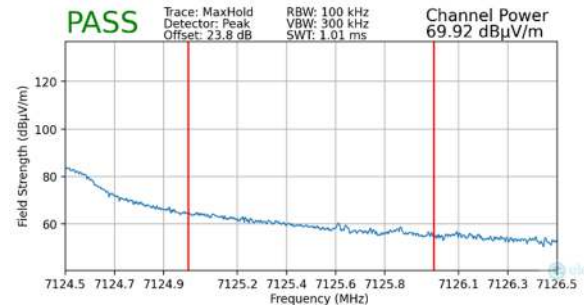


**Plot 7-146. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 106T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 54       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 7115MHz  |
| Channel:                  | 233      |



**Plot 7-147. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 106T)**

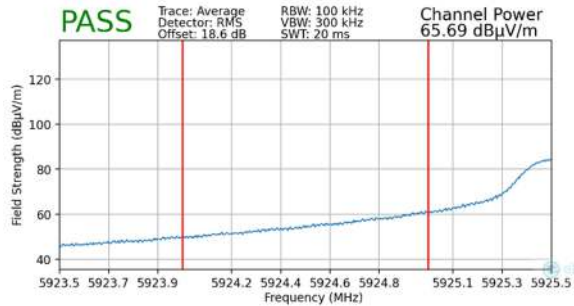


**Plot 7-148. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 106T)**

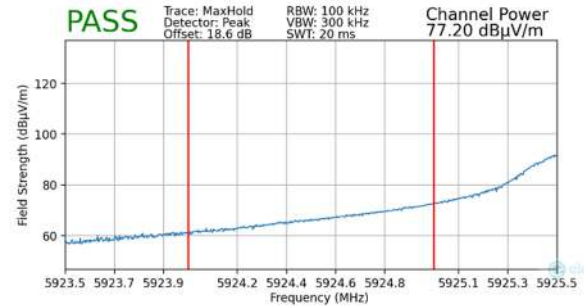
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 148 of 164                          |

## 7.6.4 MIMO Radiated Band Edge Measurements (20MHz BW – MRU – 106+26T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 82       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 5935MHz  |
| Channel:                  | 2        |

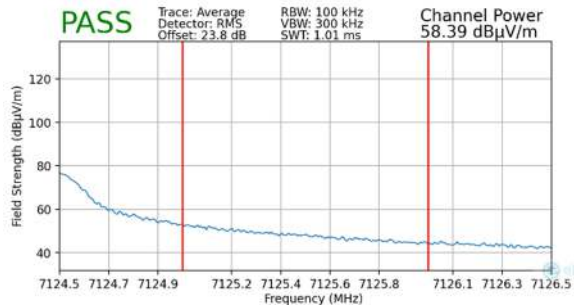


**Plot 7-149. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 106+26T)**

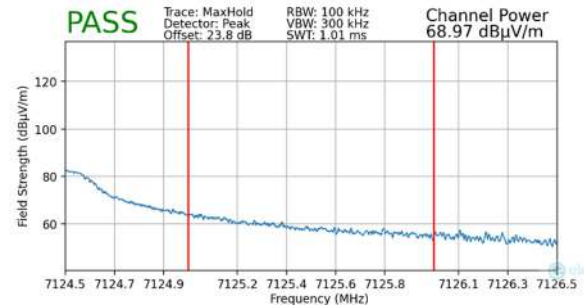


**Plot 7-150. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 106+26T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 83       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 7115MHz  |
| Channel:                  | 233      |



**Plot 7-151. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 106+26T)**

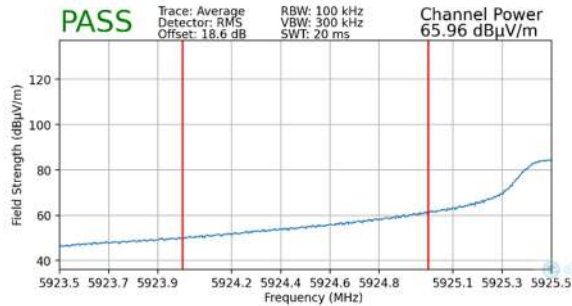


**Plot 7-152. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 106+26T)**

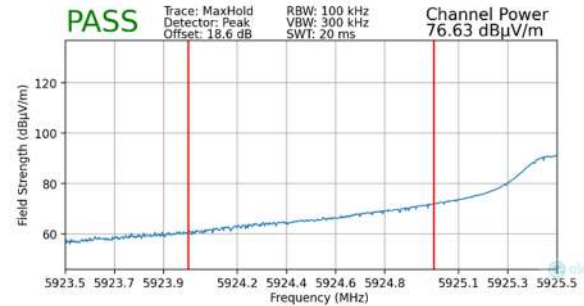
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 149 of 164                          |

## 7.6.5 MIMO Radiated Band Edge Measurements (20MHz BW – Full Tone – 242T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 61       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 5935MHz  |
| Channel:                  | 2        |

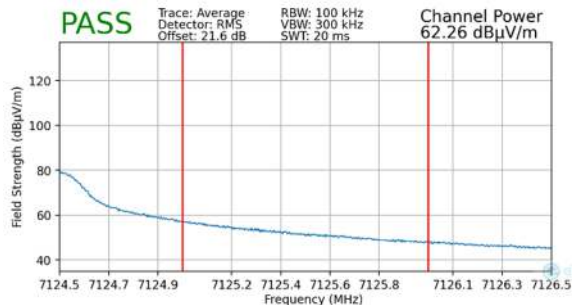


**Plot 7-153. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 242T)**

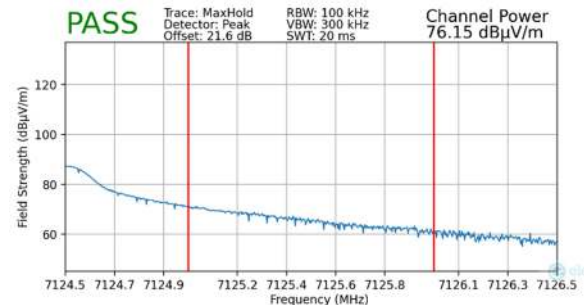


**Plot 7-154. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 242T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 61       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 7115MHz  |
| Channel:                  | 233      |



**Plot 7-155. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 242T)**

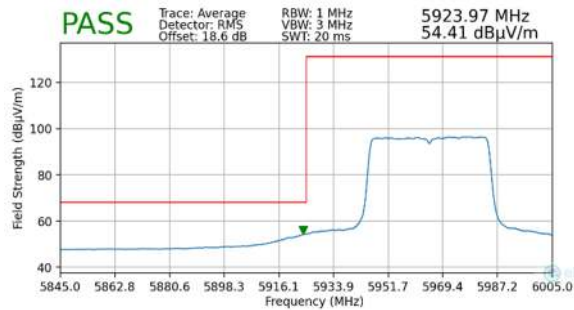


**Plot 7-156. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 242T)**

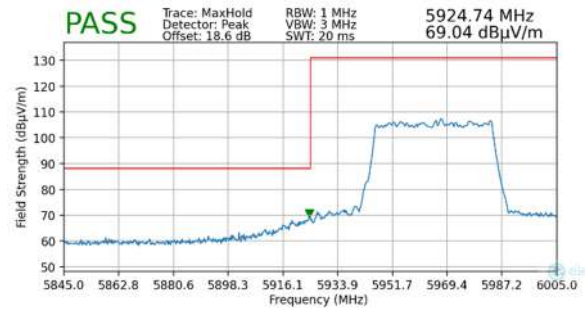
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 150 of 164                          |

## 7.6.6 MIMO Radiated Band Edge Measurements (40MHz BW – Full Tone – 484T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 65       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 5965MHz  |
| Channel:                  | 3        |

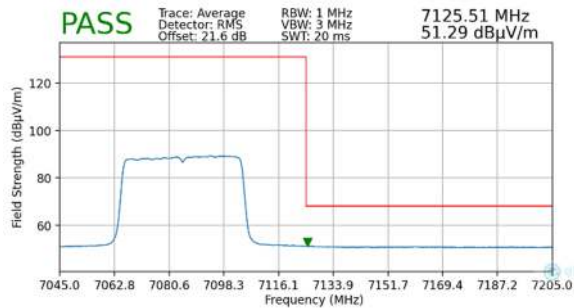


**Plot 7-157. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 484T)**

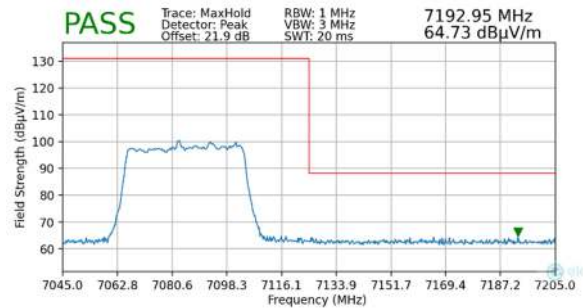


**Plot 7-158. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 484T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 65       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 7085MHz  |
| Channel:                  | 227      |



**Plot 7-159. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 484T)**

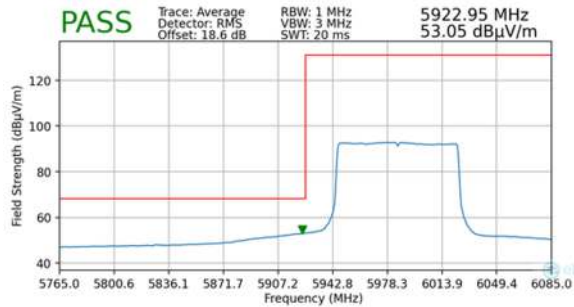


**Plot 7-160. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 484T)**

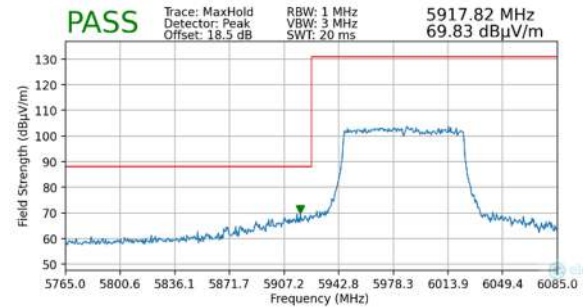
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 151 of 164                          |

## 7.6.7 MIMO Radiated Band Edge Measurements (80MHz BW – Full Tone – 996T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 67       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 5985MHz  |
| Channel:                  | 7        |

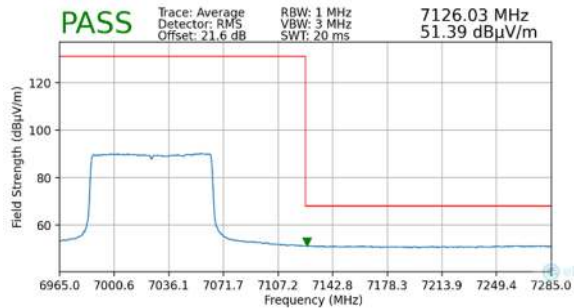


**Plot 7-161. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 996T)**

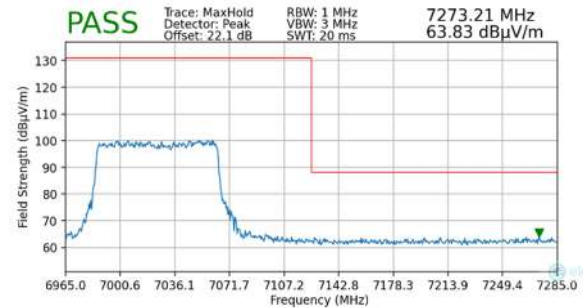


**Plot 7-162. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 996T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 67       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 7025MHz  |
| Channel:                  | 215      |



**Plot 7-163. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 996T)**

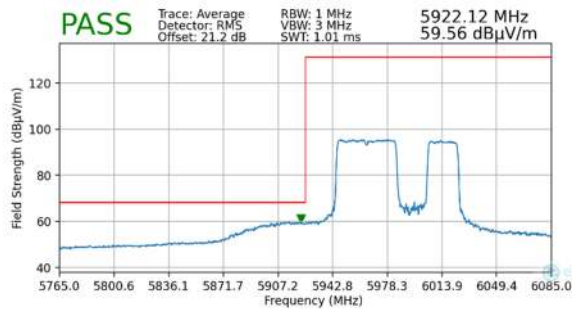


**Plot 7-164. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 996T)**

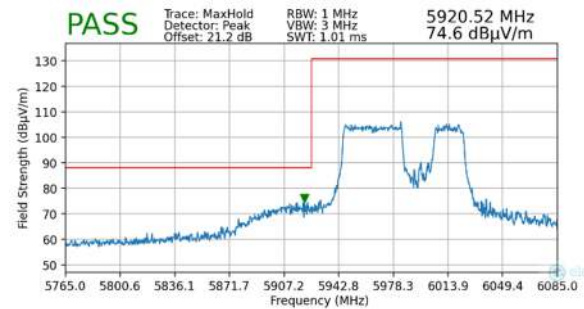
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 152 of 164                          |

## 7.6.8 MIMO Radiated Band Edge Measurements (80MHz BW – MRU – 484+242T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 92       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 5985MHz  |
| Channel:                  | 7        |

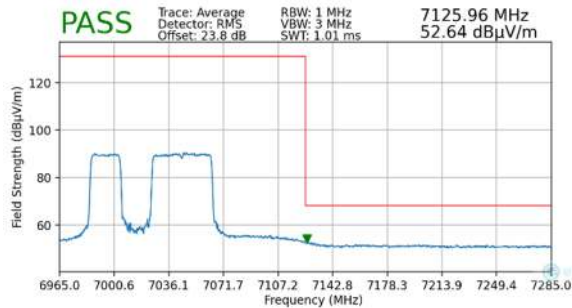


**Plot 7-165. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 484+242T)**

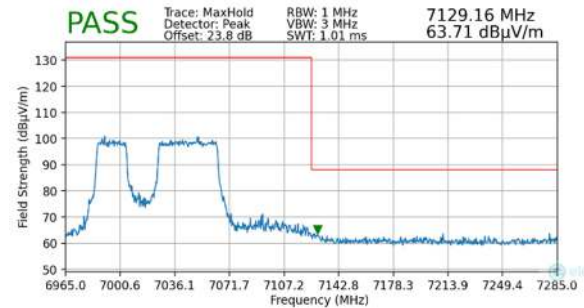


**Plot 7-166. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 484+242T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 91       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 7025MHz  |
| Channel:                  | 215      |



**Plot 7-167. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 484+242T)**

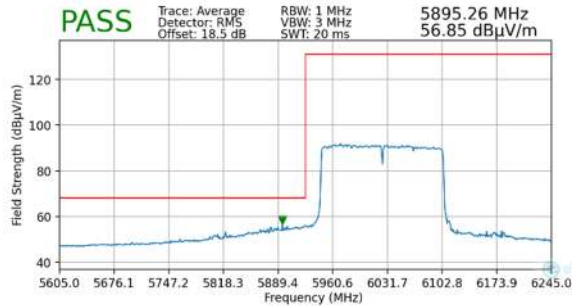


**Plot 7-168. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 484+242T)**

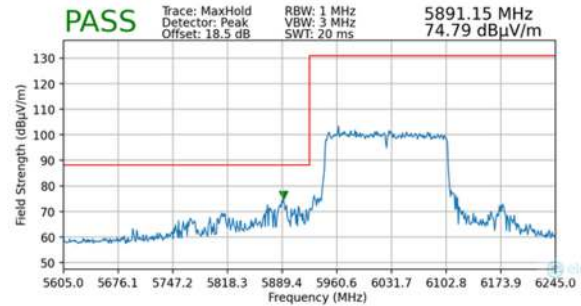
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 153 of 164                          |

## 7.6.9 MIMO Radiated Band Edge Measurements (160MHz BW – Full Tone – 2x996T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 67       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 6025MHz  |
| Channel:                  | 15       |

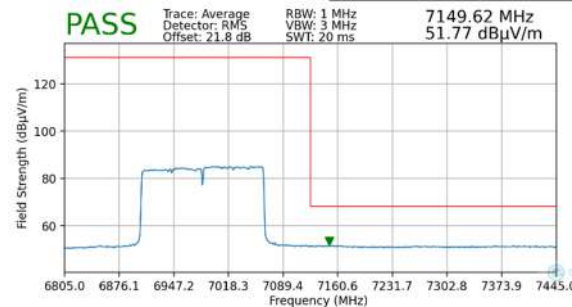


**Plot 7-169. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 2x996T)**

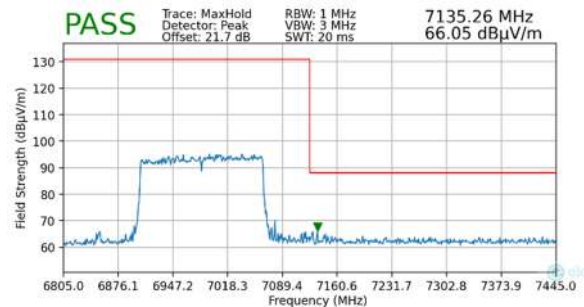


**Plot 7-170. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 2x996T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 67       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 6985MHz  |
| Channel:                  | 207      |



**Plot 7-171. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 2x996T)**

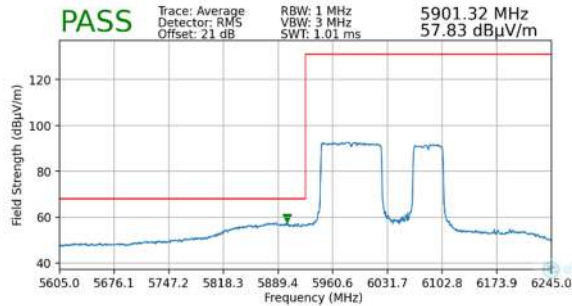


**Plot 7-172. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 2x996T)**

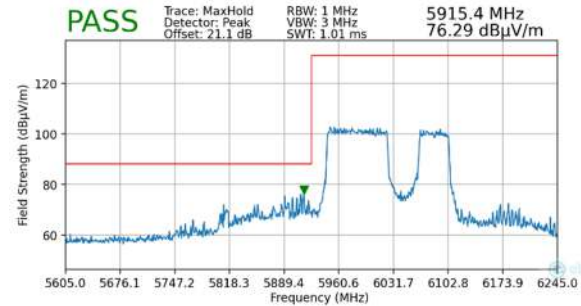
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 154 of 164                          |

## 7.6.10 MIMO Radiated Band Edge Measurements (160MHz BW – MRU – 996+484T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 1094     |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 6025MHz  |
| Channel:                  | 15       |

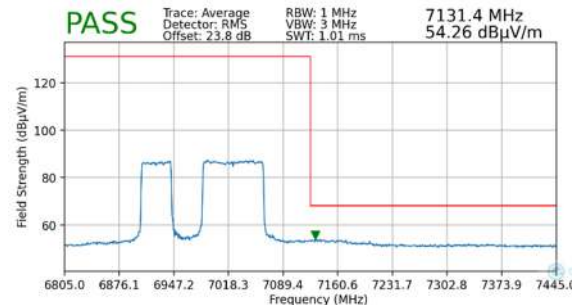


Plot 7-173. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 996+484T)

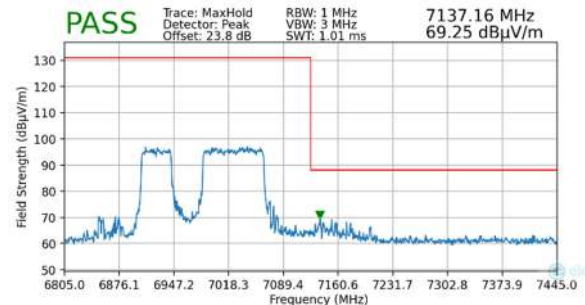


Plot 7-174. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 996+484T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 95       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 6985MHz  |
| Channel:                  | 207      |



Plot 7-175. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 996+484T)

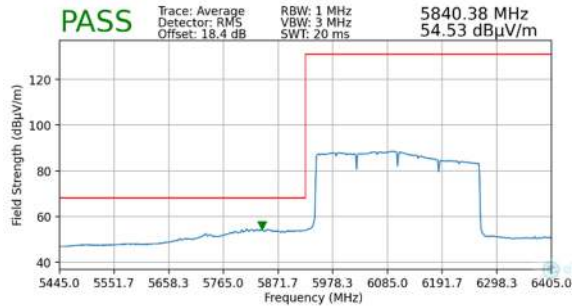


Plot 7-176. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 996+484T)

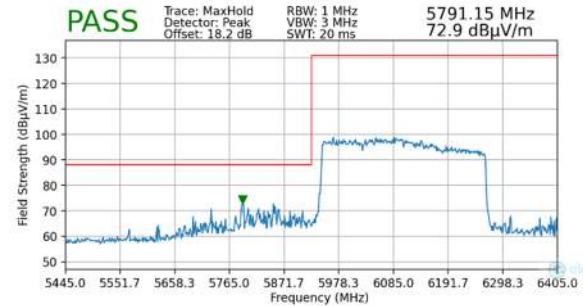
|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 155 of 164                   |

## 7.6.11 MIMO Radiated Band Edge Measurements (320MHz BW – Full Tone – 4\*996T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11ax |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 67       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 6025MHz  |
| Channel:                  | 15       |

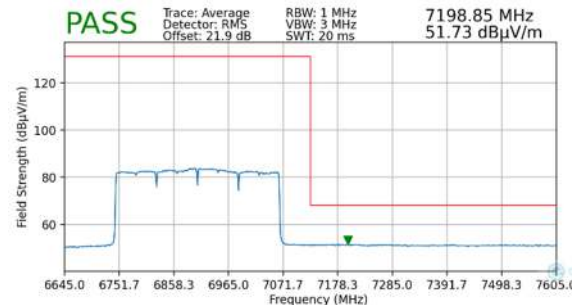


**Plot 7-177. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 4\*996T)**

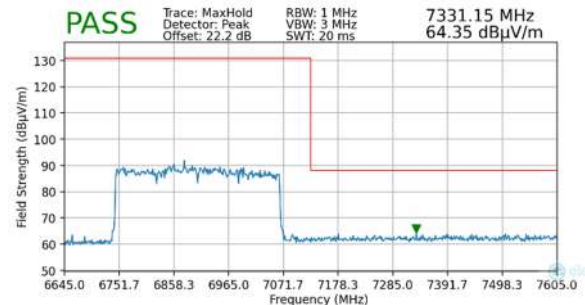


**Plot 7-178. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 4\*996T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11ax |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 67       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 6985MHz  |
| Channel:                  | 207      |



**Plot 7-179. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 4\*996T)**

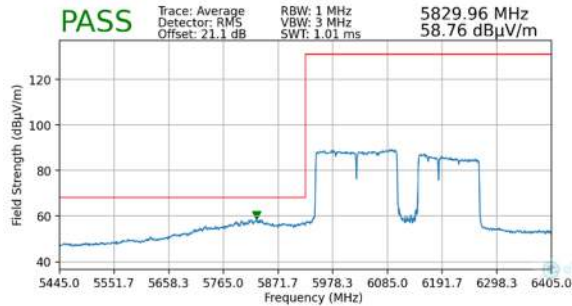


**Plot 7-180. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 4\*996T)**

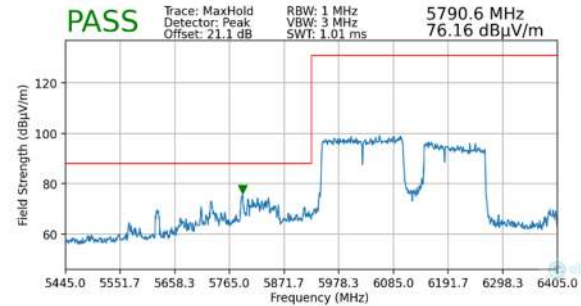
|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 156 of 164                          |

## 7.6.12 MIMO Radiated Band Edge Measurements (320MHz BW – MRU – 3\*996+484T)

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11ax |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 10105    |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 6025MHz  |
| Channel:                  | 15       |

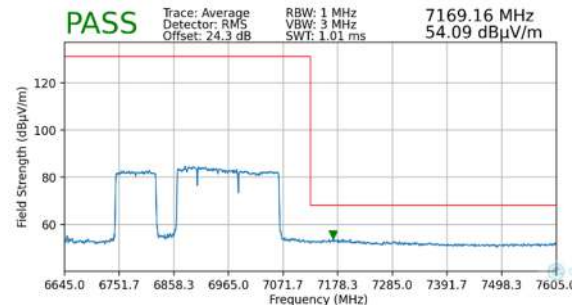


**Plot 7-181. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 3\*996+484T)**

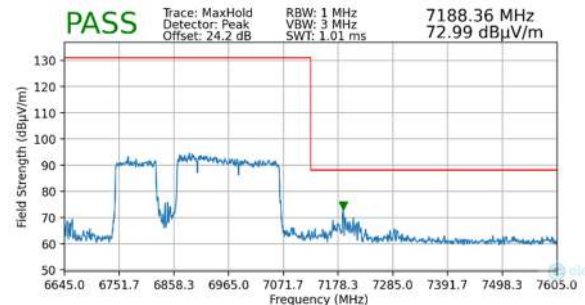


**Plot 7-182. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 3\*996+484T)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11ax |
| Worst Case Transfer Rate: | MCS0     |
| RU Index                  | 01104    |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 6985MHz  |
| Channel:                  | 207      |



**Plot 7-183. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 3\*996+484T)**



**Plot 7-184. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 3\*996+484T)**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 157 of 164                          |

## 8 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMF966JPN** is in compliance with FCC Part Subpart E (15.407) of the FCC rules for operation as a Dual Client Device.

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 158 of 164                          |

## 9 APPENDIX A – DATA REFERENCING SPOT-CHECKS

### Overview

The spot-check data presented in this section was measured on the variant model following the guidance of the FCC's Data Referencing guidance in KDB 484596 D01 v03. Each spot-check test on the EUT was performed using the same procedure and setting that were used to perform the test on the corresponding reference device. For the worst-case RSE data, the measurement is determined by an actual emission and not by noise floor.

All test cases were performed to verify the variant EUT is still in compliance with the spot-checked results to the reference device and was performed using the guidance of ANSI C63.10-2013.

### Notes

1. Each spot check test on the EUT was performed using the same procedure and setting that were used to perform the test on the corresponding reference device.

### Conducted Spot-Checks – SC-56F

| 20MHz BW | Band | Freq [MHz] | Channel | Tones | Average Conducted Power (dBm) |       |       |
|----------|------|------------|---------|-------|-------------------------------|-------|-------|
|          |      |            |         |       | RU Index                      |       |       |
|          |      |            |         |       | 61                            |       |       |
|          |      |            |         |       | ANT1                          | ANT2  | MIMO  |
|          | 5    | 6175       | 45      | 242T  | 10.72                         | 10.34 | 13.54 |
|          | 6    | 6475       | 105     | 242T  | 10.19                         | 10.01 | 13.11 |
|          | 7    | 6695       | 149     | 242T  | 10.11                         | 10.59 | 13.37 |
|          | 8    | 6995       | 209     | 242T  | 10.16                         | 10.48 | 13.33 |

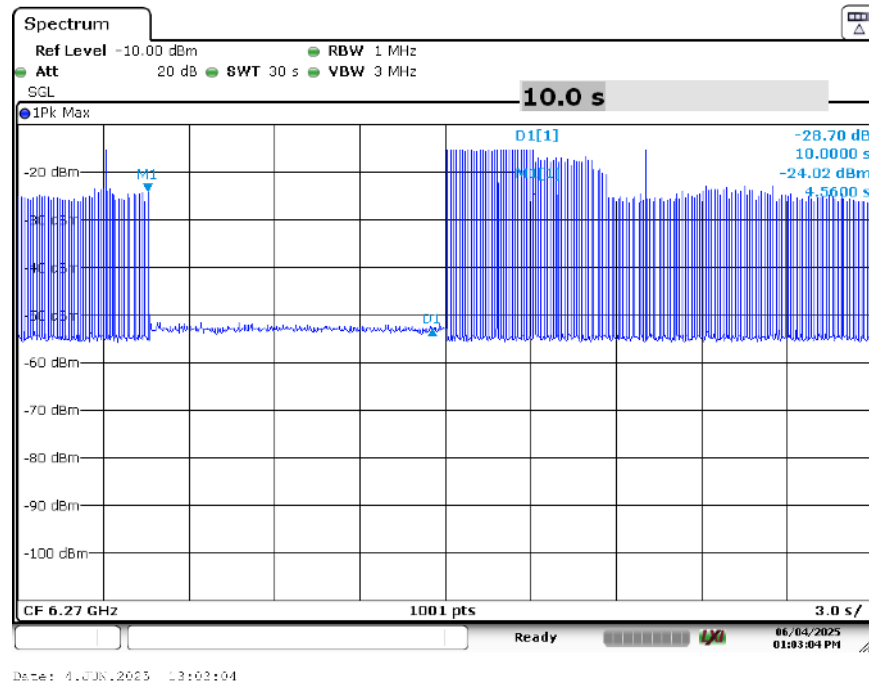
**Table 9-1. Conducted Output Power Measurements (Spot-check)**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 159 of 164                          |

## Contention Based Protocol Detection Spot-check SC-56F

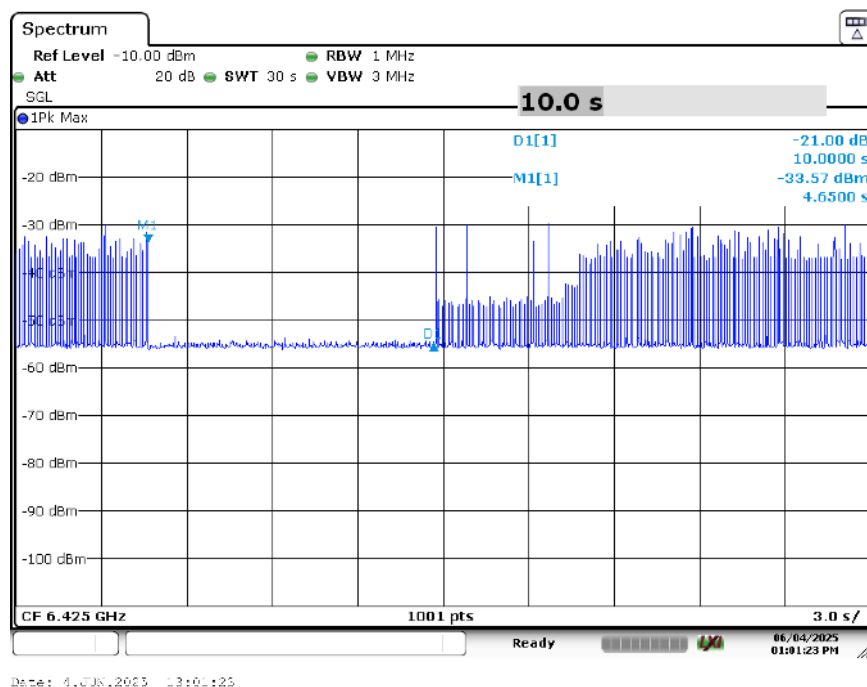
| Band        | Channel | Channel Freq [MHz] | Channel BW [MHz] | Incumbent Freq [MHz] | Injected (AWGN) [dBm] | Antenna Gain [dBi] | Adjusted Power Level [dBm] | Detection Limit [dBm] | Margin [dB] |
|-------------|---------|--------------------|------------------|----------------------|-----------------------|--------------------|----------------------------|-----------------------|-------------|
| UNII Band 6 | 95      | 6425               | 320              | 6270                 | -74.14                | -11.08             | -63.06                     | -62.0                 | -1.06       |
|             |         |                    |                  | 6425                 | -73.46                | -11.08             | -62.38                     | -62.0                 | -0.38       |
|             |         |                    |                  | 6580                 | -76.44                | -11.08             | -65.36                     | -62.0                 | -3.36       |

Table 9-2. Contention Based Protocol – Incumbent Detection – Spot-check (SC-56F)

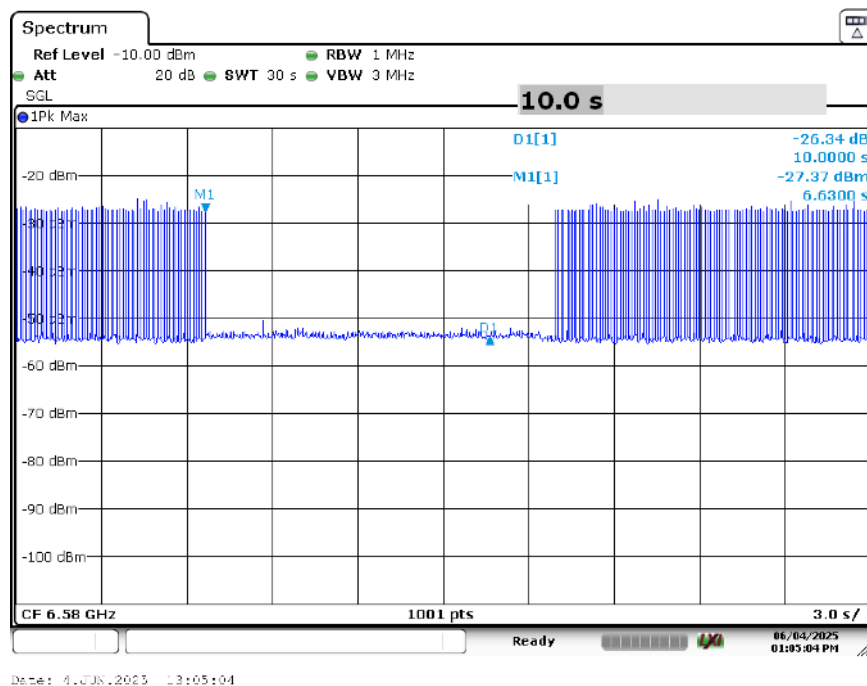


Plot 9-1. Contention Based Protocol Timing Plot (320MHz (UNII Band 5) – Ch.95 Low)

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 160 of 164                   |



Plot 9-2. Contention Based Protocol Timing Plot (320MHz (UNII Band 5) – Ch.95 Mid)

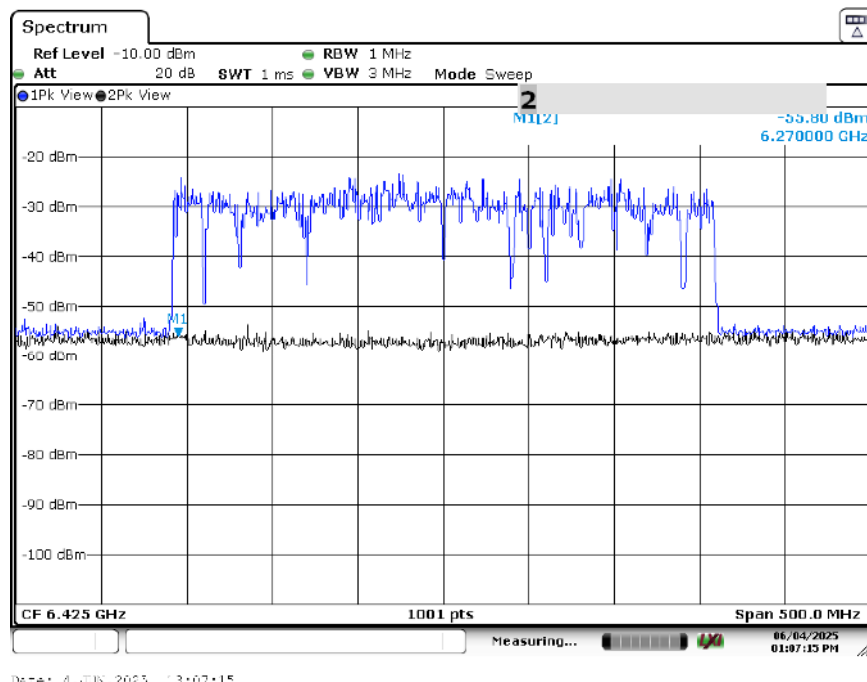


Plot 9-3. Contention Based Protocol Timing Plot (320MHz (UNII Band 5) – Ch.95 High)

|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 161 of 164                   |

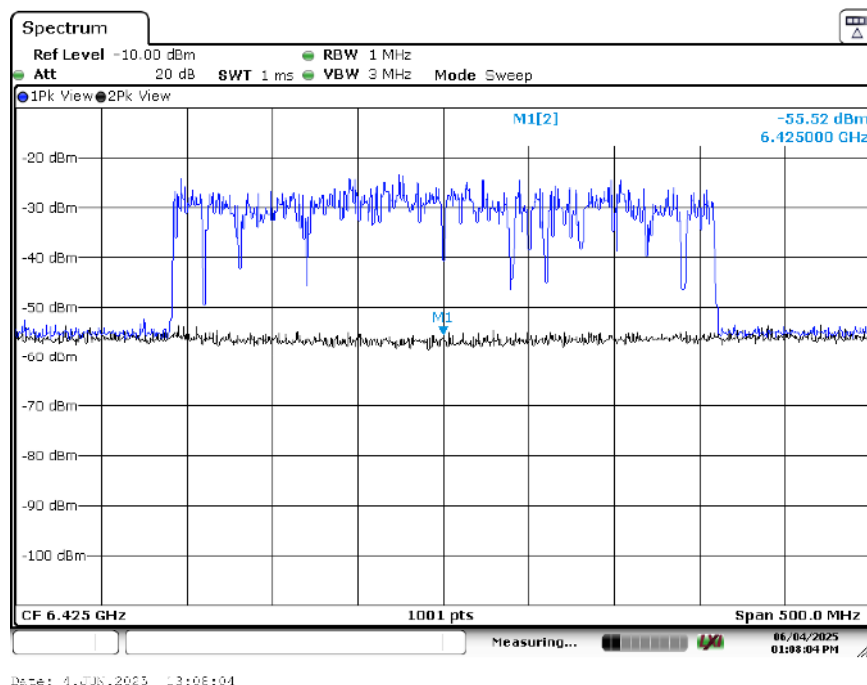
## Contention Based Protocol Incumbent Avoidance Spot-Check

- When a 10 MHz AWGN signal centered at 6270 MHz (lower edge of channel) is injected, the channel completely stops transmitting.
- When a 10 MHz AWGN signal centered at 6425 MHz (middle of channel) is injected, the channel completely stops transmitting.
- When a 10 MHz AWGN signal centered at 6580 MHz (upper edge of channel) is injected, the channel completely stops transmitting.

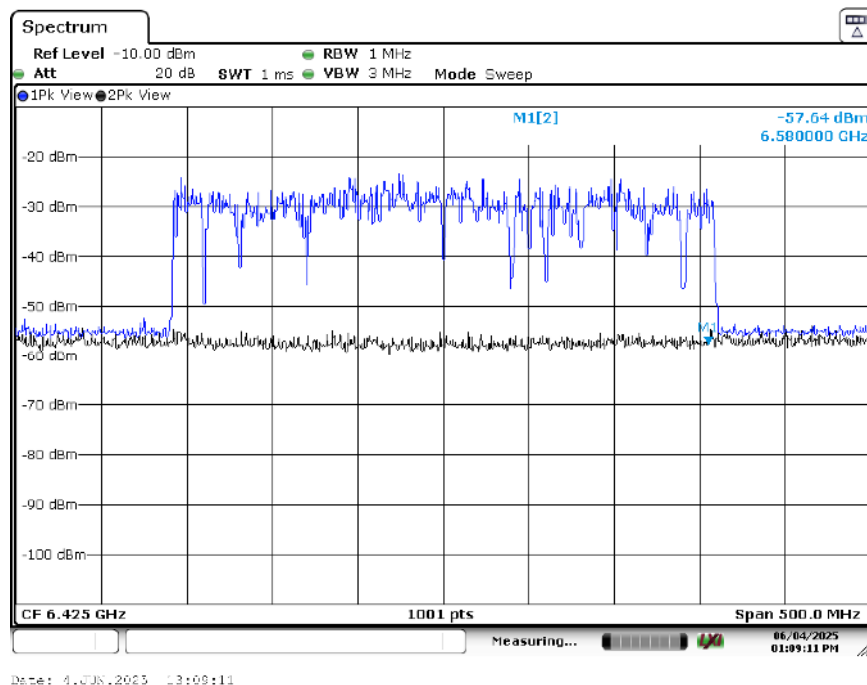


**Plot 9-4. CBP 320MHz Channel - Injection Lower Edge – [6270 MHz]**

|                                                |                                               |                                      |                                          |
|------------------------------------------------|-----------------------------------------------|--------------------------------------|------------------------------------------|
| <b>FCC ID:</b> A3LSMF966JPN                    | <b>MEASUREMENT REPORT</b>                     |                                      | <b>Approved by:</b><br>Technical Manager |
| <b>Test Report S/N:</b><br>1M2504070040-10.A3L | <b>Test Dates:</b><br>02/24/2025 – 05/05/2025 | <b>EUT Type:</b><br>Portable Handset | Page 162 of 164                          |



**Plot 9-5. CBP 320MHz Channel - Injection Center – 6425 MHz]**



**Plot 9-6. CBP 320MHz Channel - Injection Upper Edge – [6580 MHz]**

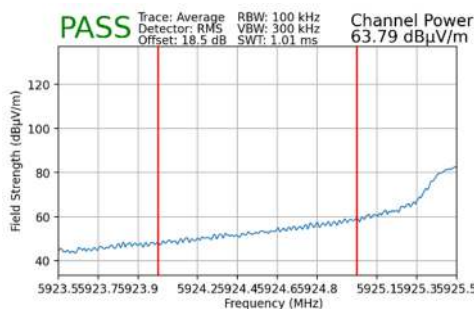
|                                         |                                        |                               |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset | Page 163 of 164                   |

## Radiated Spot-Checks – SC-56F

| Mode             | Antenna | UNII Band | Channel | Test Channel Freq. [MHz] | RU Index | Restricted | Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|------------------|---------|-----------|---------|--------------------------|----------|------------|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 802.11be RU 242T | MIMO    | 7         | 149     | 6695                     | 61       | *          | 13390.00        | Average  | H               | -                   | -                          | -82.02               | 24.65       | 0.00                            | 49.63                   | 53.98          | -4.35       |

**Table 9-3. RSE Measurements (Spot-check)**

|                           |          |
|---------------------------|----------|
| Worst Case Mode:          | 802.11be |
| Worst Case Transfer Rate: | MCS0     |
| RU Index:                 | 61       |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 5935MHz  |
| Channel:                  | 2        |



**Plot 9-7. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5)**

## Results

| FCC Rules            | Test Item                    | Test Case                                              | Units  | Limit | Reference Model: SM-S966U | Variant Model: SC-56F | Deviation (dB) | Max Deviation (dB) | Pass/Fail |
|----------------------|------------------------------|--------------------------------------------------------|--------|-------|---------------------------|-----------------------|----------------|--------------------|-----------|
| 2.1046, 15.407(a)(8) | Conducted Output Power       | Mid Channel Each UNII Band - 802.11be 242T 20MHz - Lpi | dBm    | -     | 13.61                     | 13.54                 | -0.07          | 1                  | PASS      |
| 15.407(d)(6)         | Contention Based Protocol    | Ch.31 - 320 MHz                                        | dBm    | -62   | -63.06                    | -62.38                | 0.68           | 2                  | PASS      |
| 15.209               | Radiated Spurious Emissions  | 802.11be MIMO 242 Tone Ch.149 - Average - 13390 MHz    | dBμV/m | 53.98 | 50.63                     | 49.63                 | -1.00          | 3                  | PASS      |
| 15.209               | Radiated Band Edge Emissions | 802.11be MIMO Ch.2 242T - Average                      | dBμV/m | 68.2  | 65.96                     | 63.79                 | -2.17          | 3                  | PASS      |

**Table 9-4. Summary of Spot-checks**

## Conclusion

The spot-check data presented in this section was measured on the variant model following the guidance of the FCC's Data Referencing guidance in KDB 484596 D01 v03 demonstrates that the use of referenced data from A3LSMF966U for the certification of A3LSMF966JPN is acceptable.

|                                         |                                        |                               |  |                                   |
|-----------------------------------------|----------------------------------------|-------------------------------|--|-----------------------------------|
| FCC ID: A3LSMF966JPN                    | MEASUREMENT REPORT                     |                               |  | Approved by:<br>Technical Manager |
| Test Report S/N:<br>1M2504070040-10.A3L | Test Dates:<br>02/24/2025 – 05/05/2025 | EUT Type:<br>Portable Handset |  | Page 164 of 164                   |