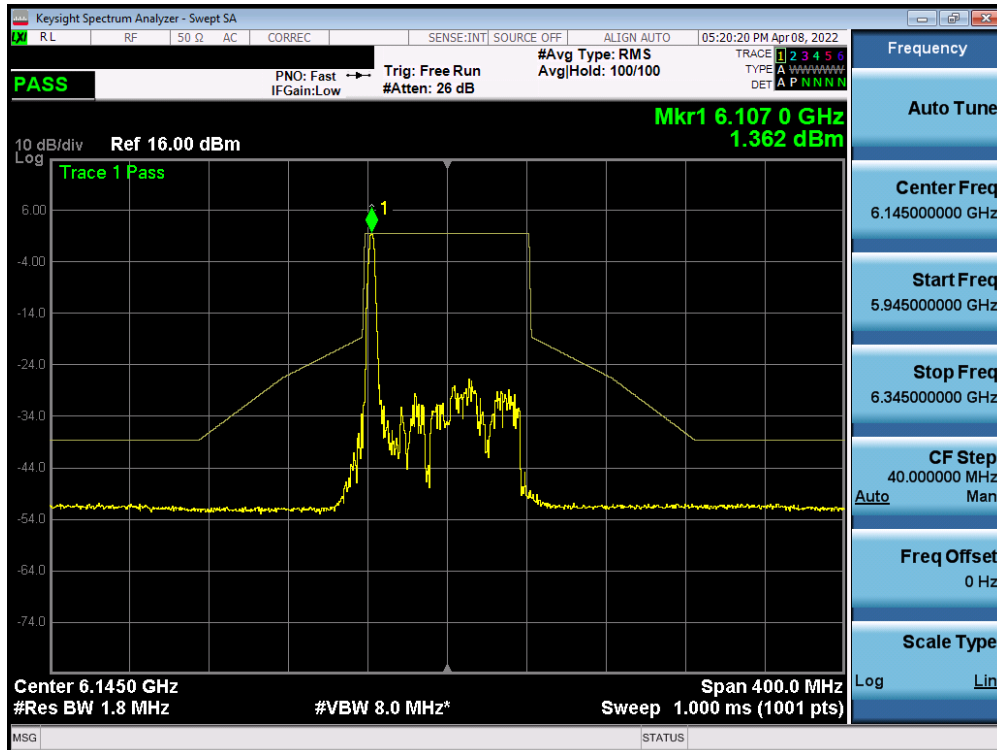
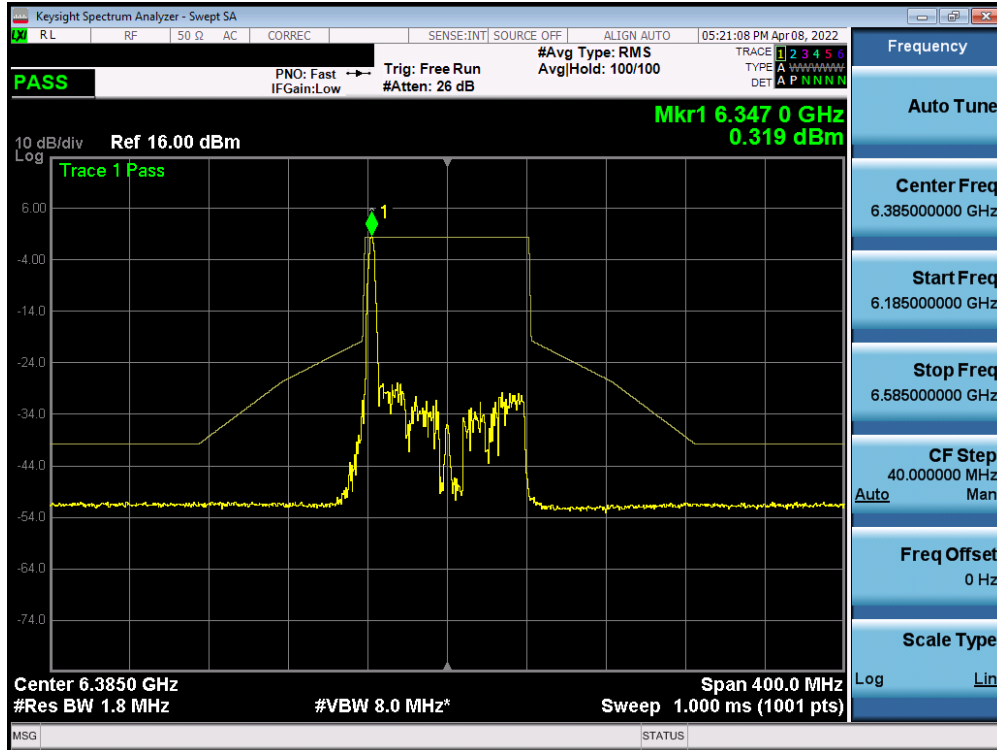


Plot 7-376. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) – Ch. 7)

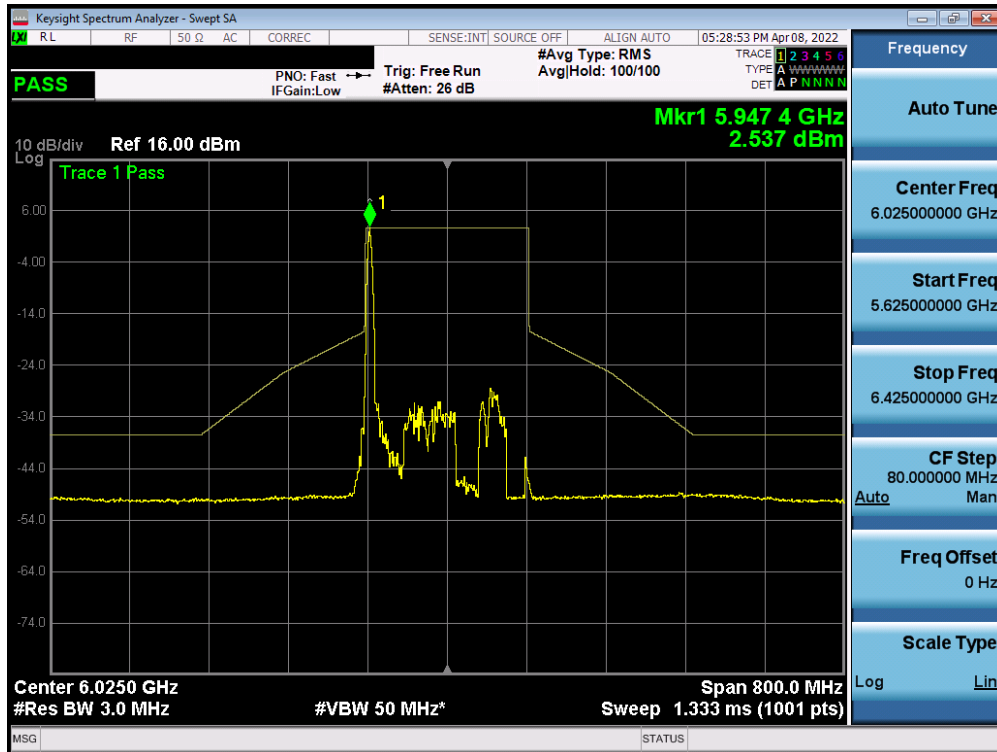


Plot 7-377. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) – Ch. 39)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 221 of 302 |



Plot 7-378. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) – Ch. 87)

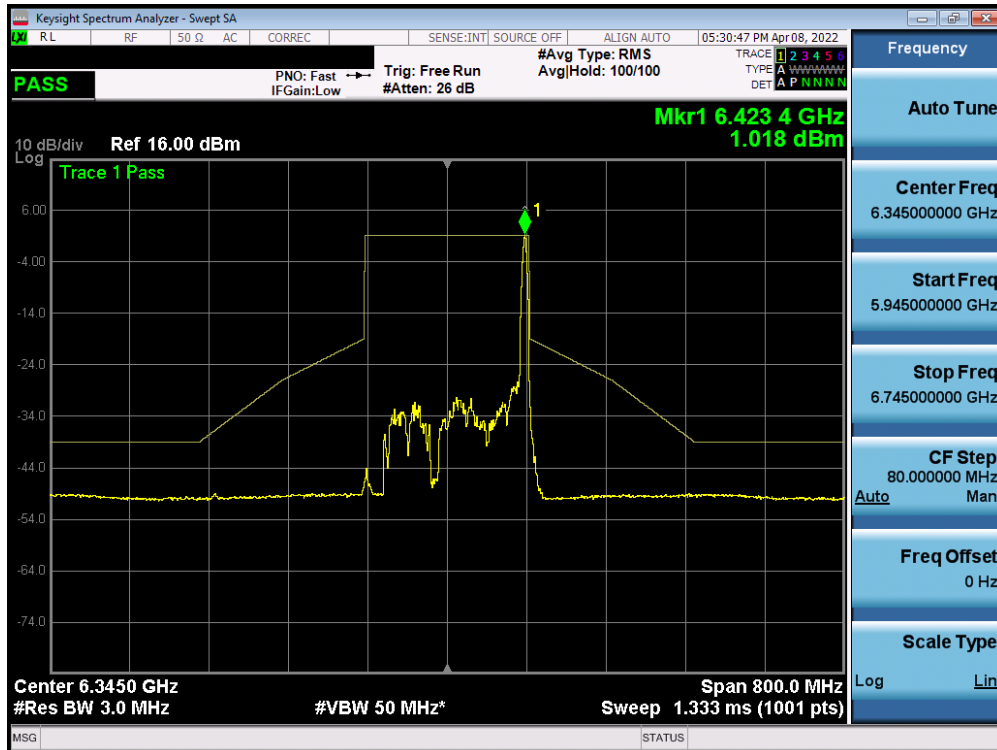


Plot 7-379. In-Band Emission Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) – Ch. 15)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 222 of 302 |

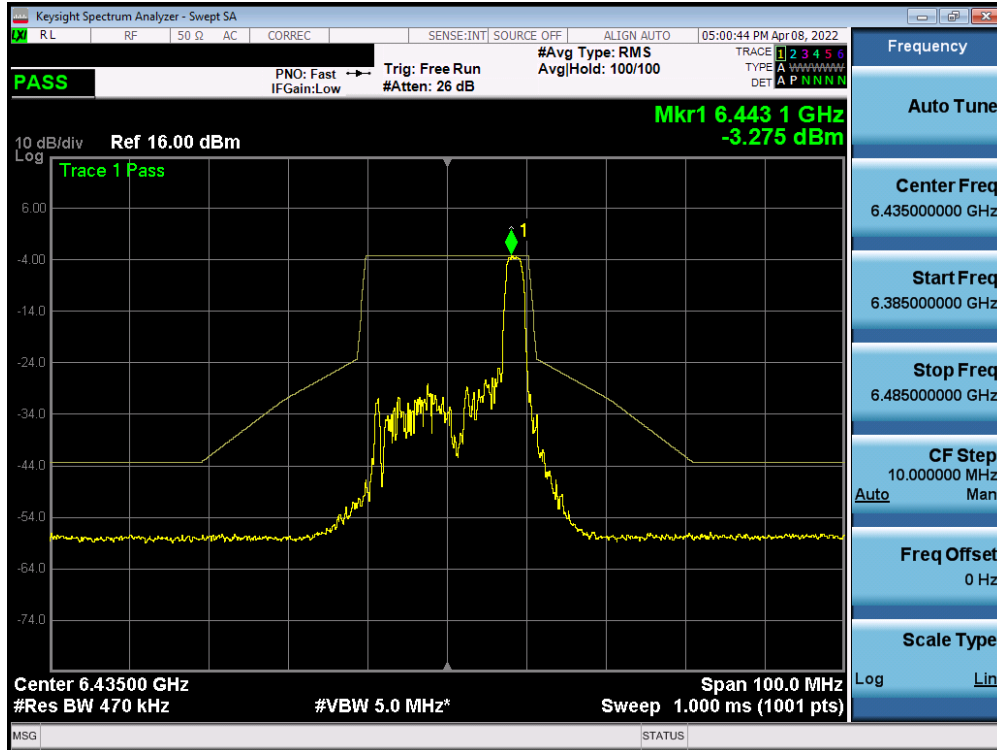


Plot 7-380. In-Band Emission Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) – Ch. 47)

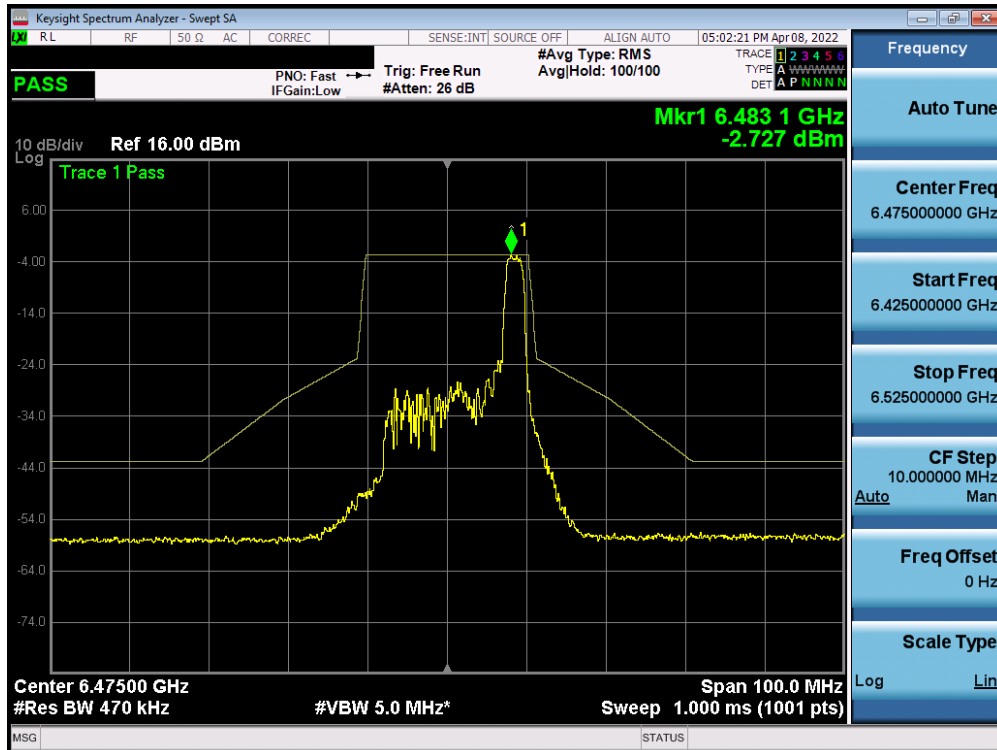


Plot 7-381. In-Band Emission Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) – Ch. 79)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 223 of 302 |

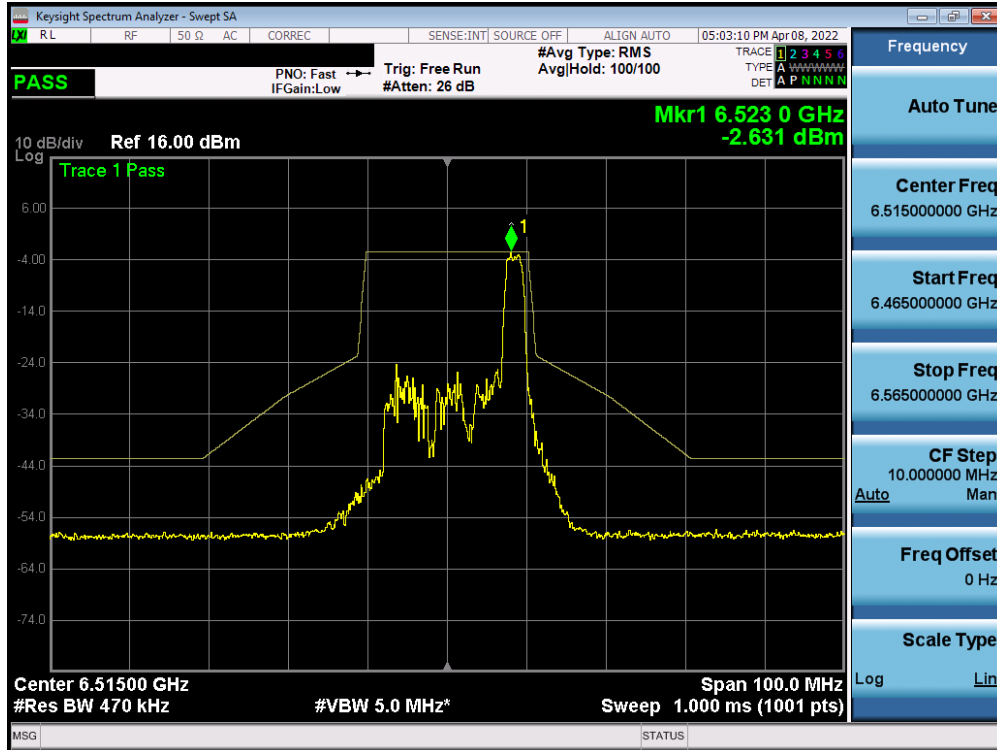


Plot 7-382. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 6) – Ch. 97)

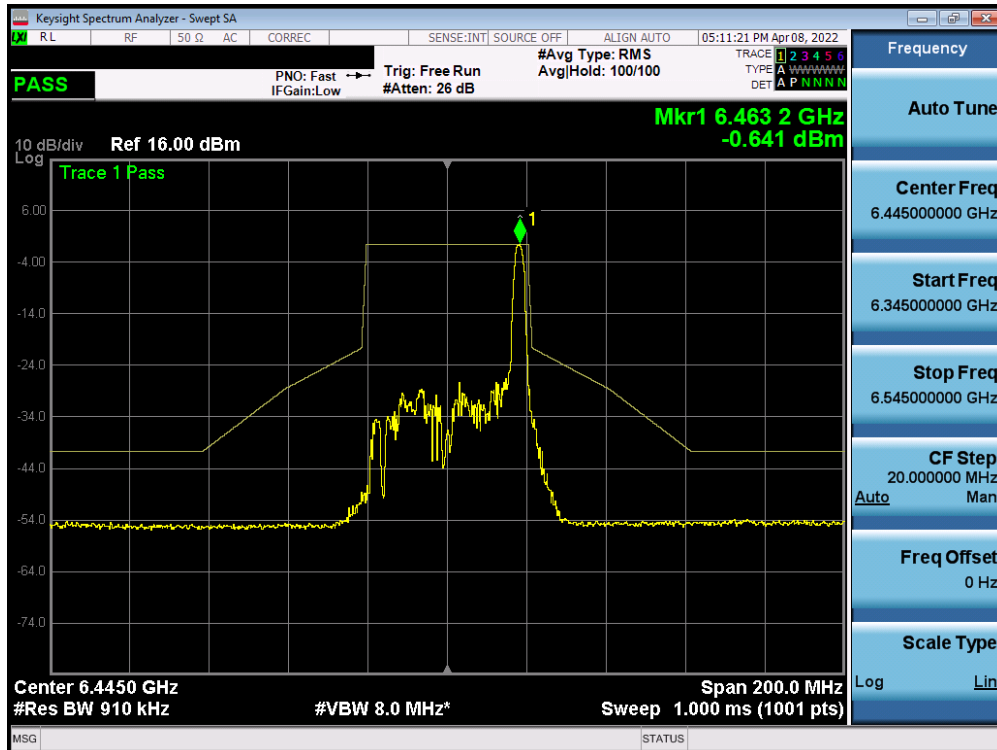


Plot 7-383. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 6) – Ch. 105)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 224 of 302 |

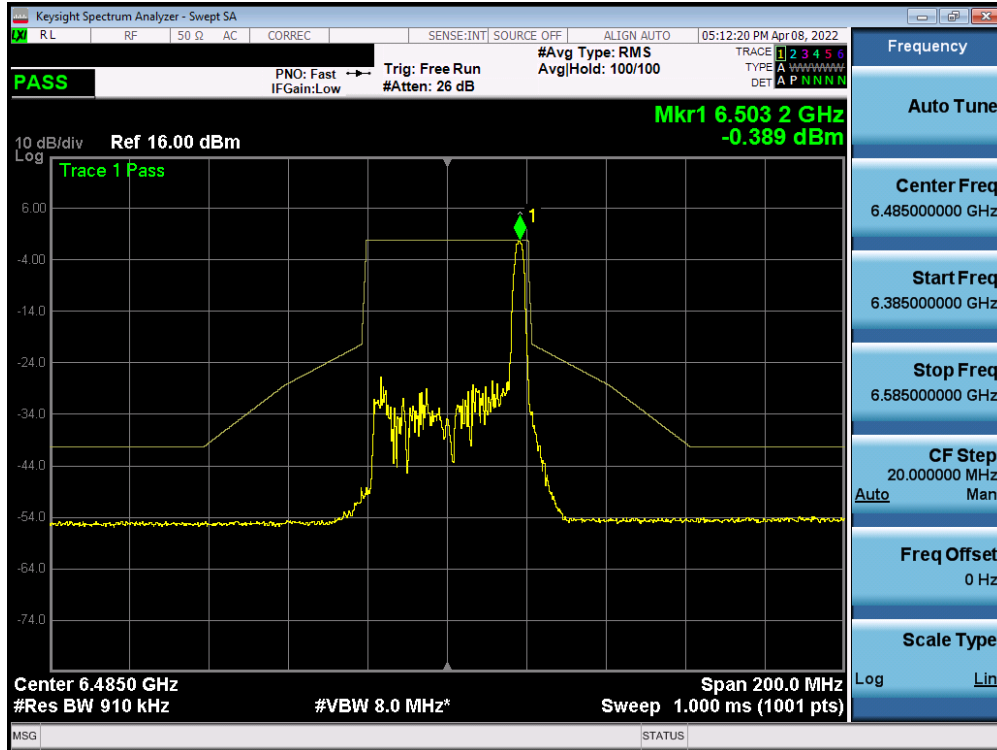


Plot 7-384. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 6) – Ch. 113)

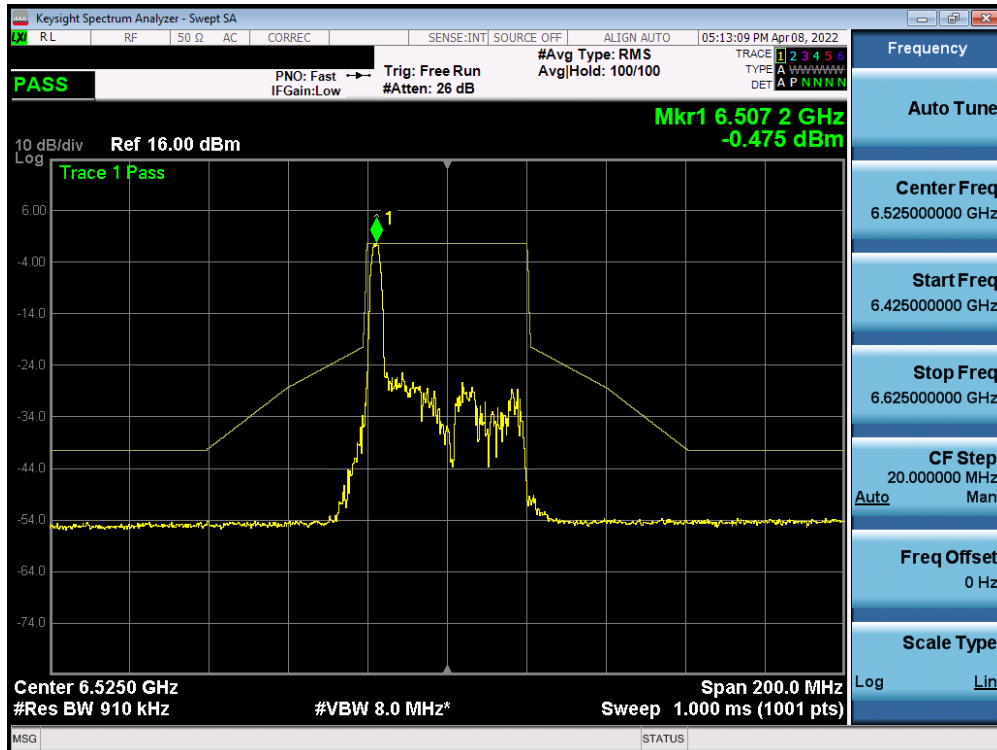


Plot 7-385. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 6) – Ch. 99)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 225 of 302 |

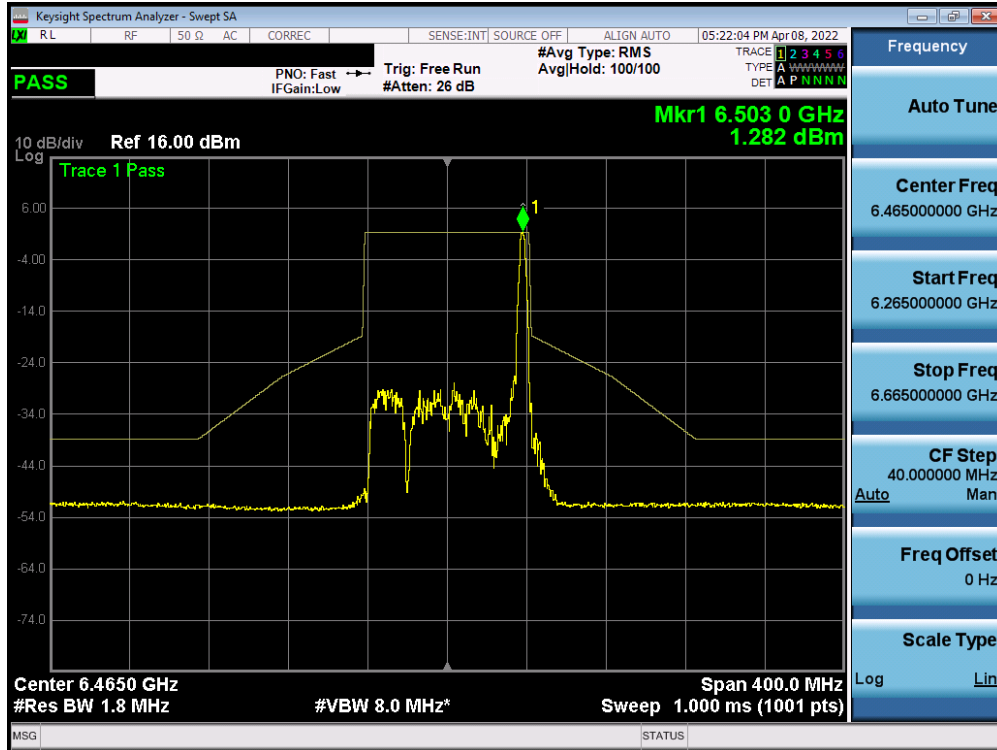


Plot 7-386. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 6) – Ch. 107)



Plot 7-387. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 6) – Ch. 115)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 226 of 302 |

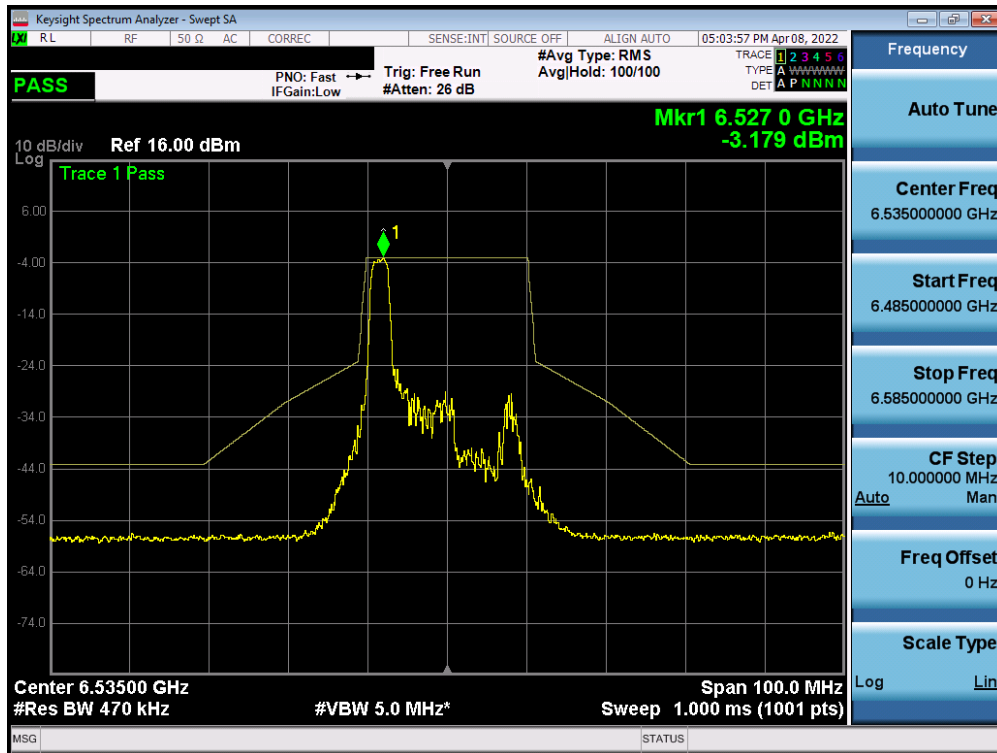


Plot 7-388. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 6) – Ch. 103)

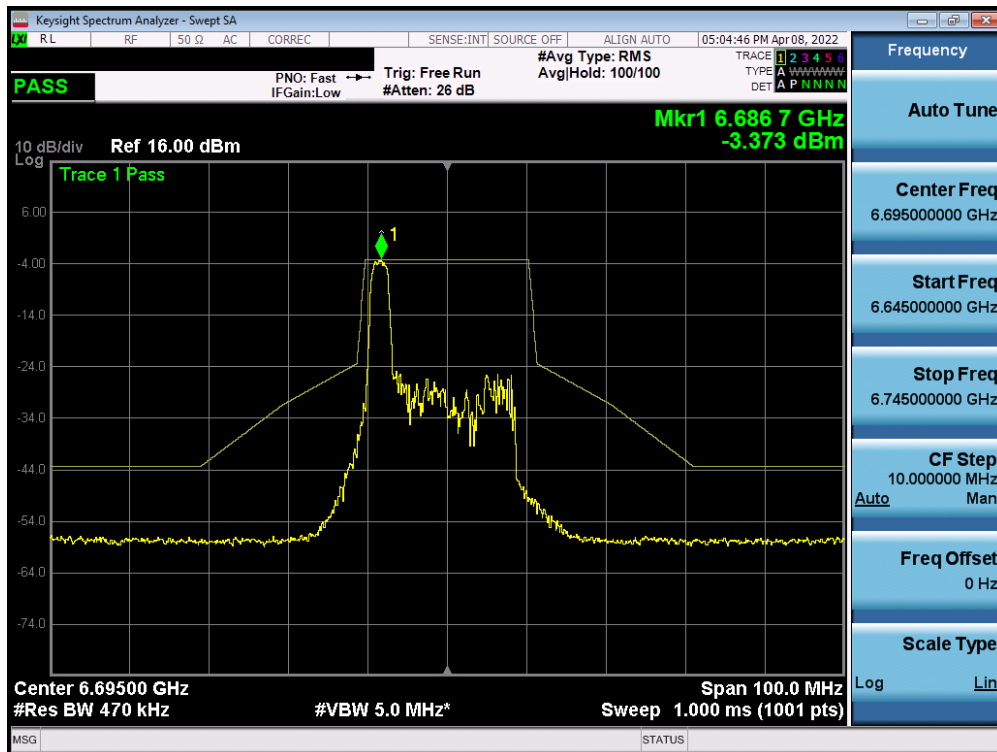


Plot 7-389. In-Band Emission Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 6) – Ch. 111)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 227 of 302 |

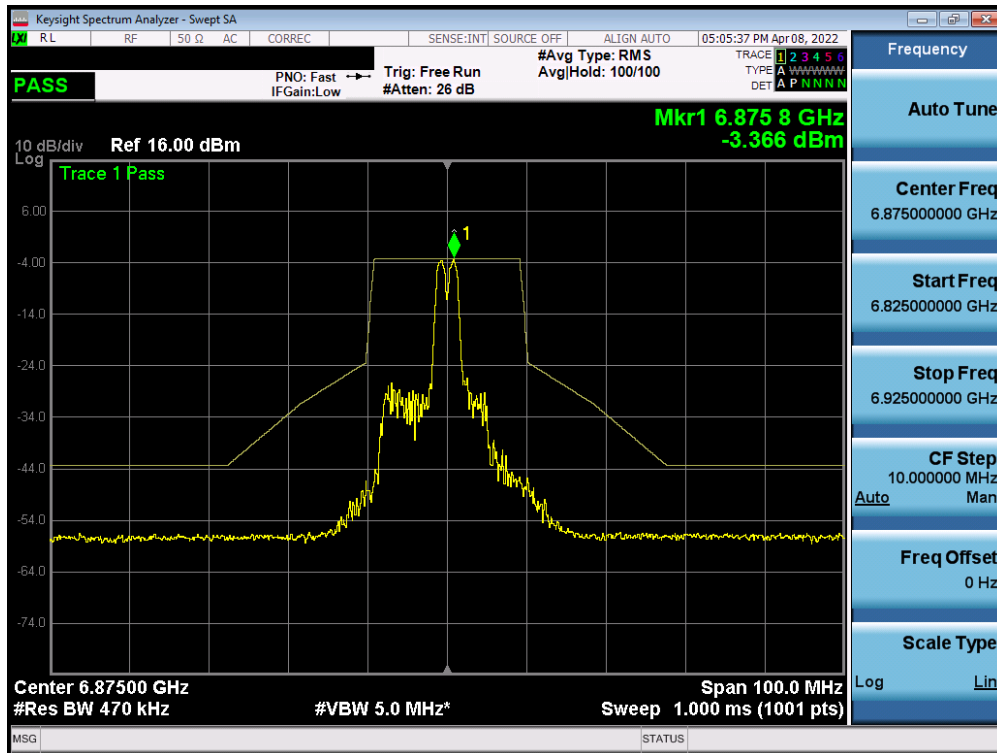


Plot 7-390. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 117)



Plot 7-391. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 149)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 228 of 302 |

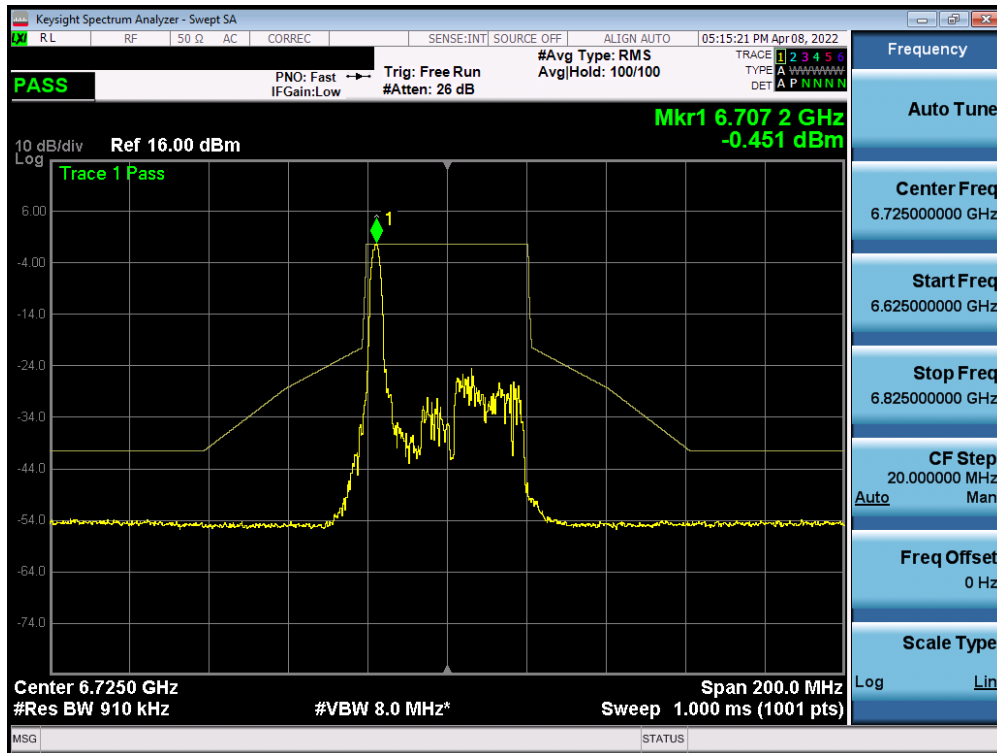


Plot 7-392. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 185)

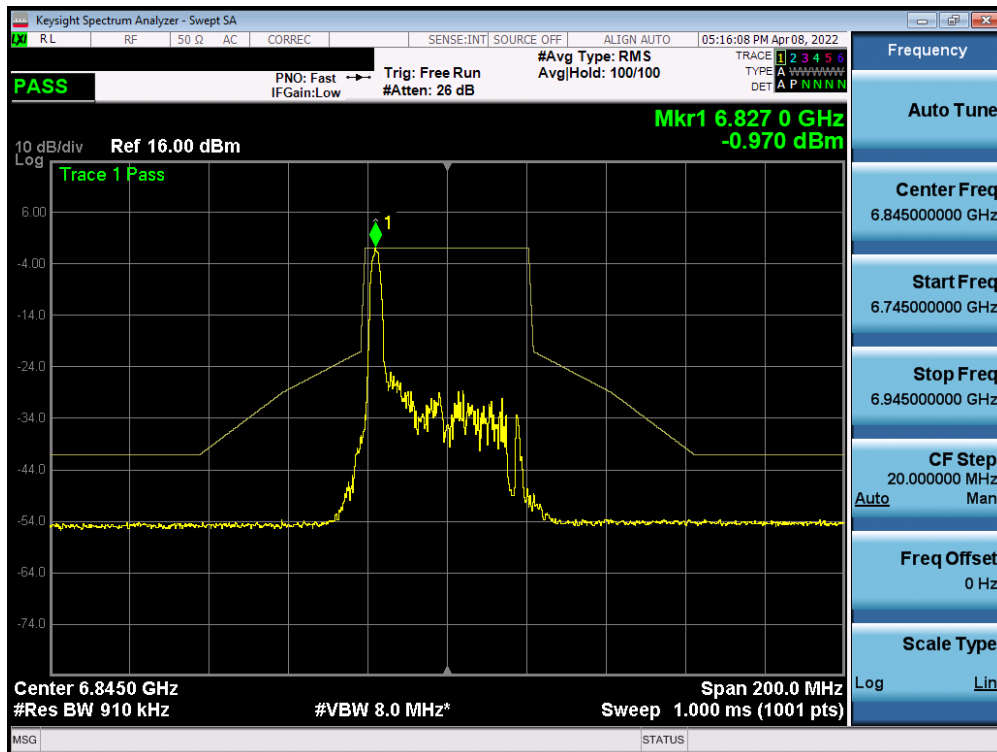


Plot 7-393. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 123)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 229 of 302 |

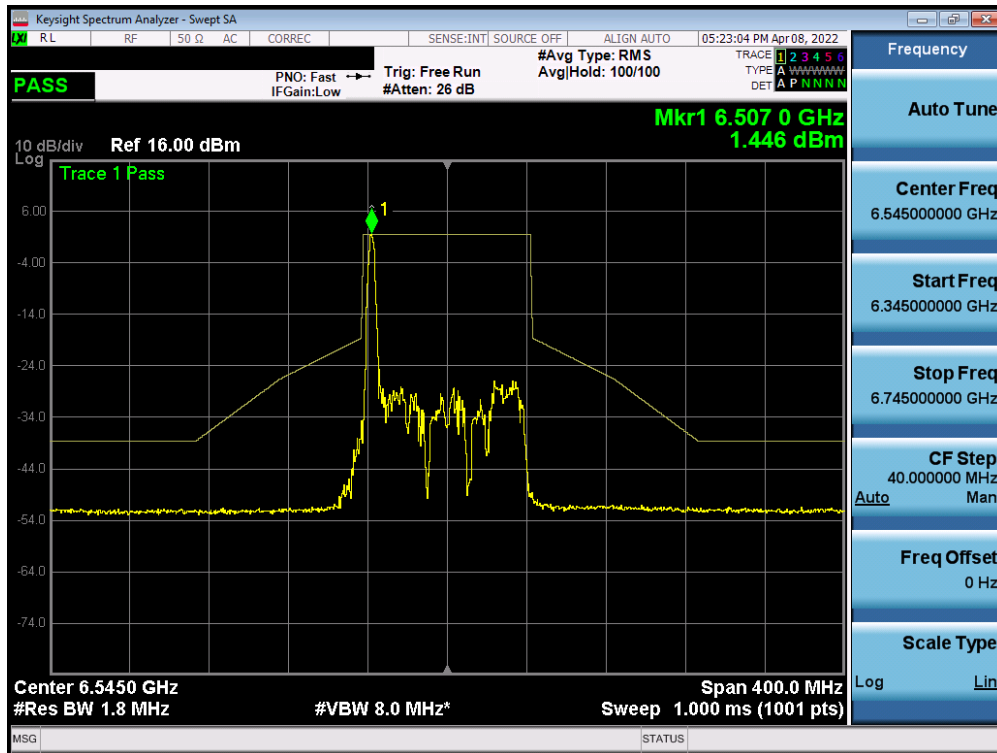


Plot 7-394. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 155)

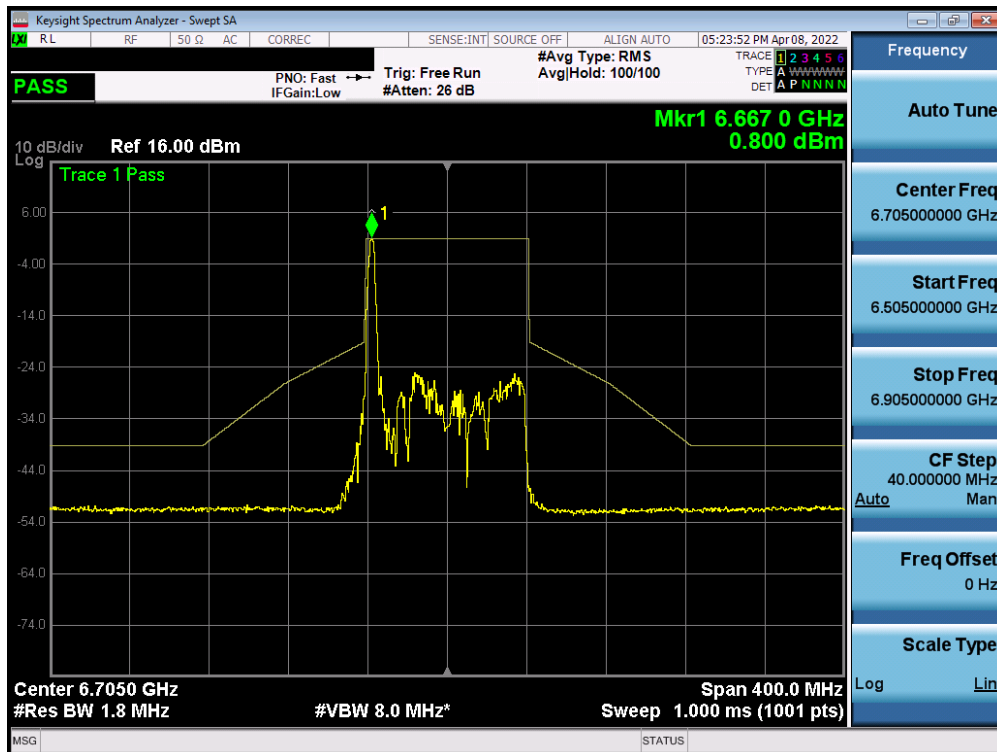


Plot 7-395. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 179)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 230 of 302 |

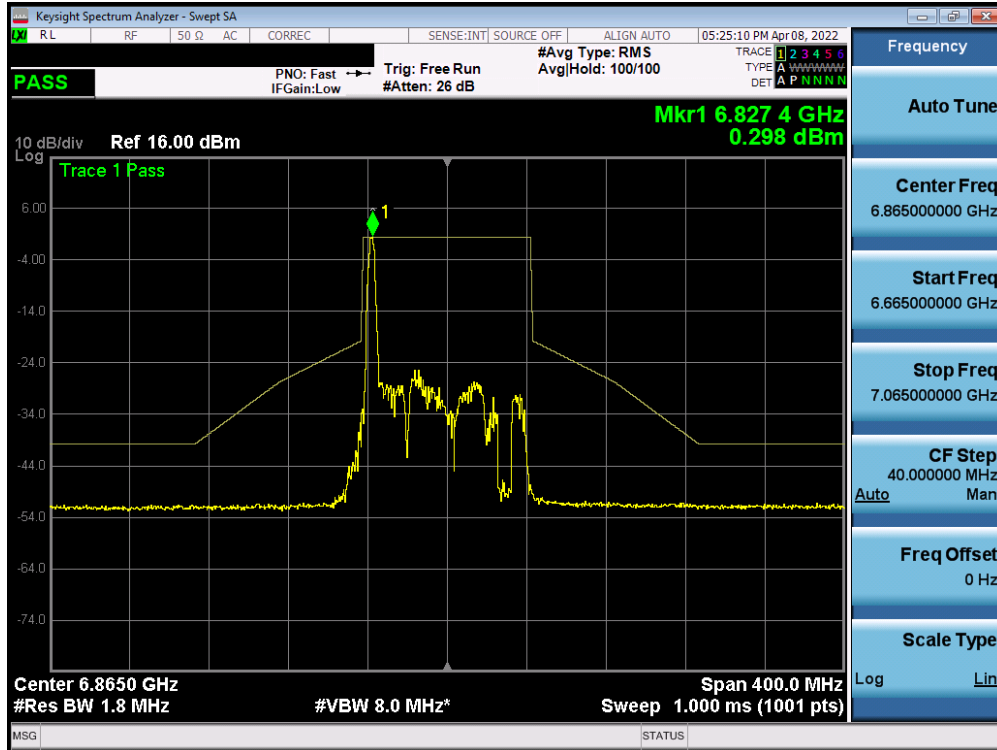


Plot 7-396. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 119)

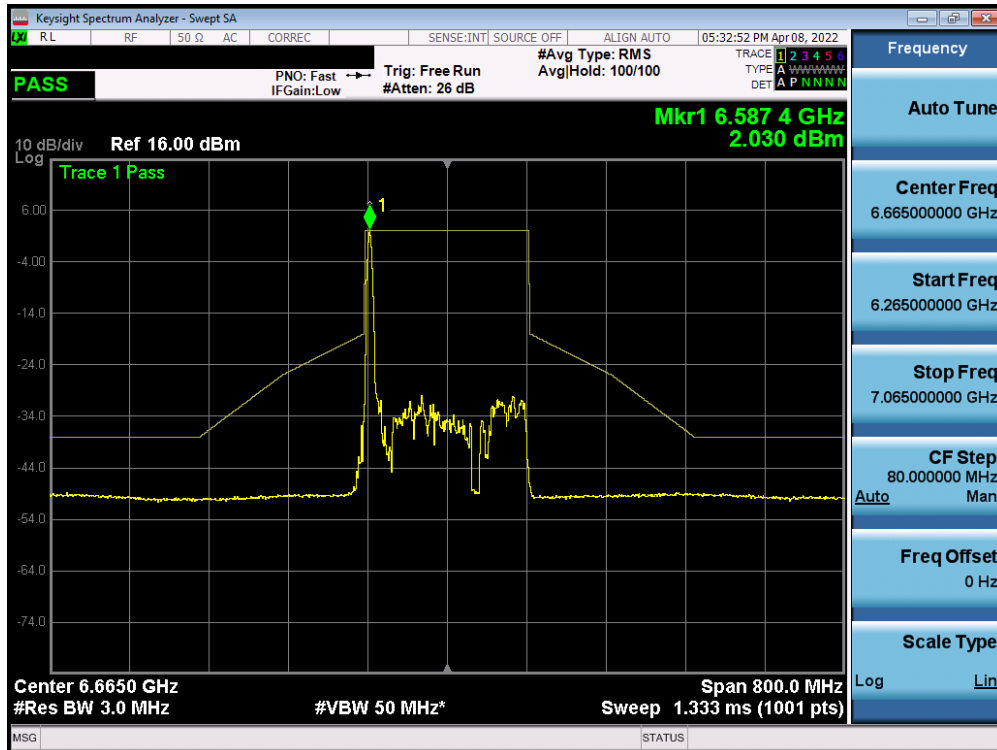


Plot 7-397. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 151)

| | | | |
|---|---|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 231 of 302 |

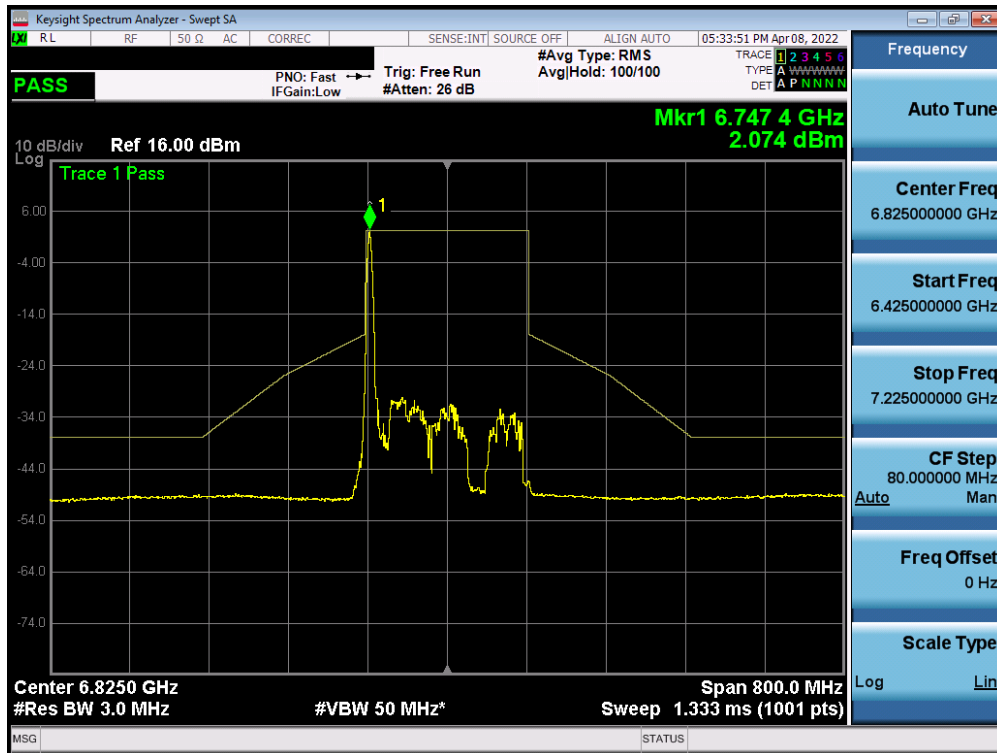


Plot 7-398. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 183)



Plot 7-399. In-Band Emission Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 143)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 232 of 302 |

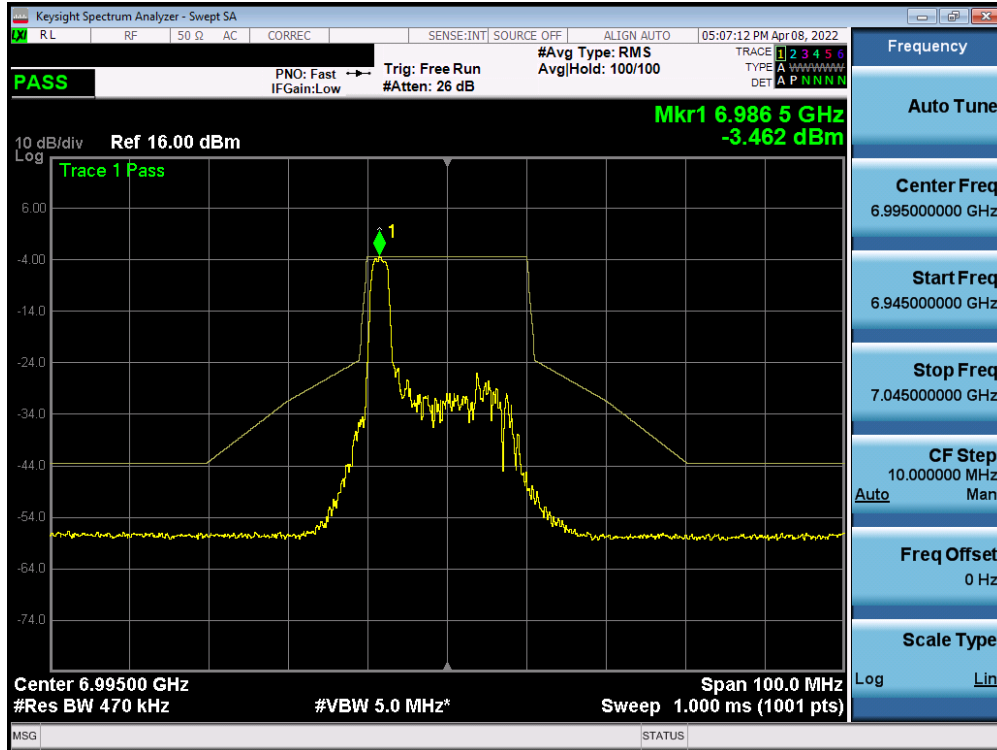


Plot 7-400. In-Band Emission Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 7) – Ch. 175)

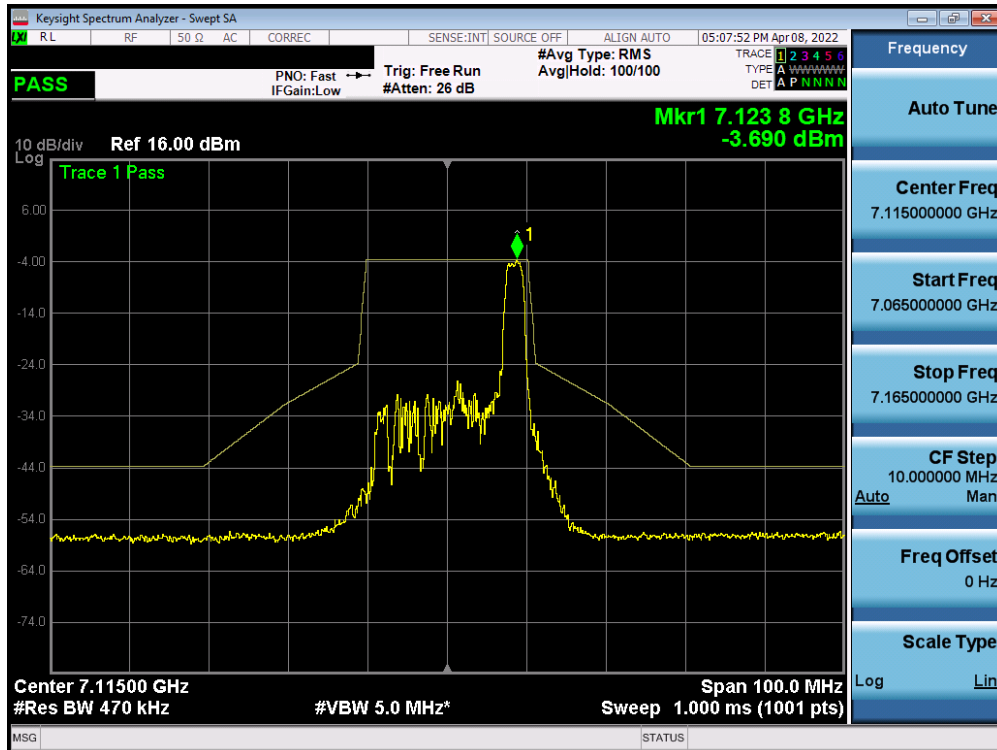


Plot 7-401. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 189)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 233 of 302 |

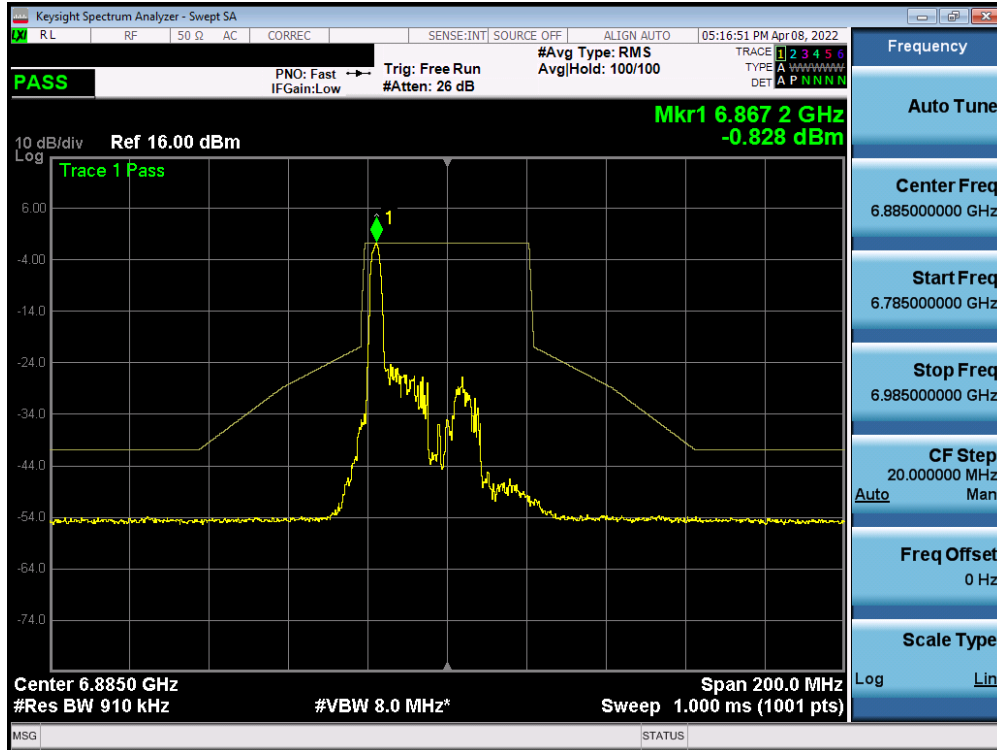


Plot 7-402. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 209)

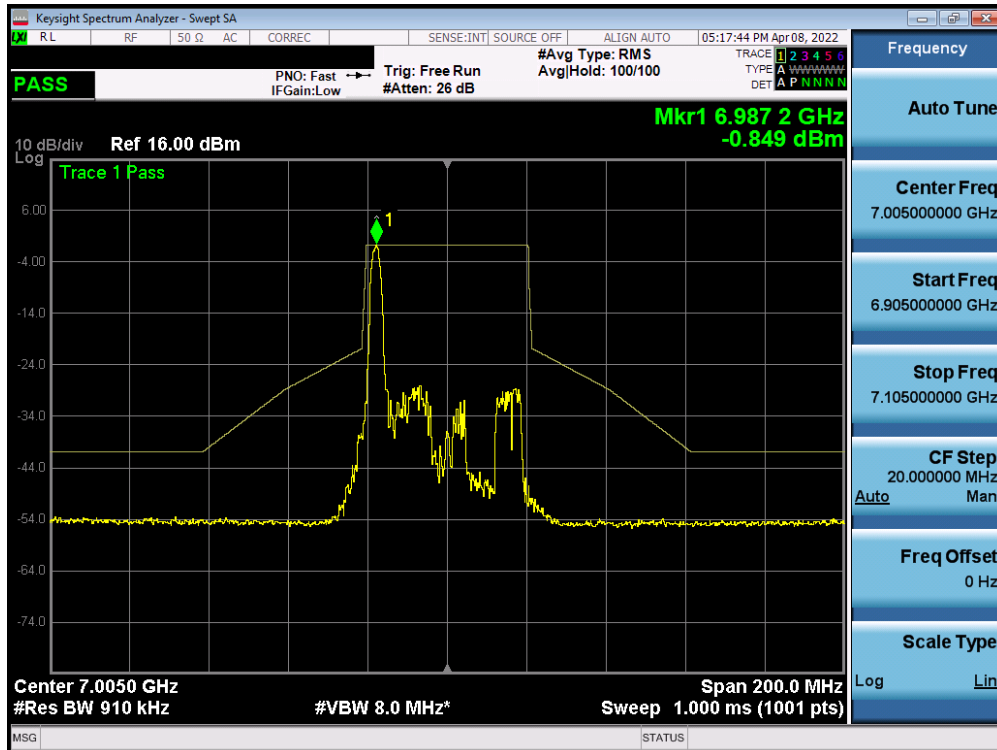


Plot 7-403. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 233)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 234 of 302 |

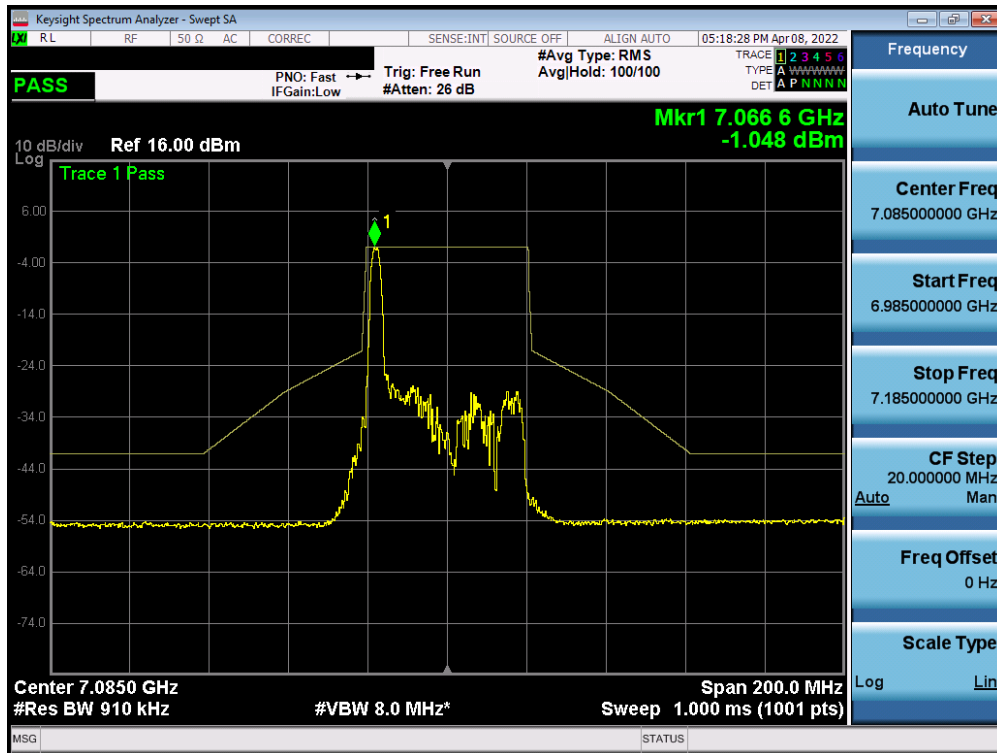


Plot 7-404. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 187)

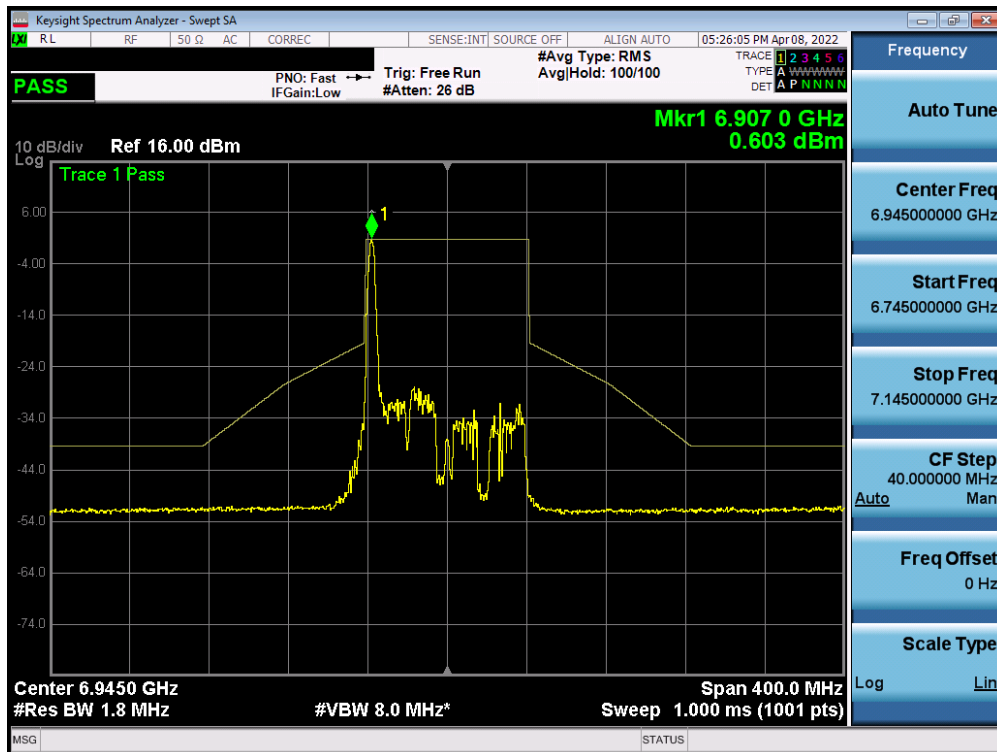


Plot 7-405. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 211)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 235 of 302 |



Plot 7-406. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 227)

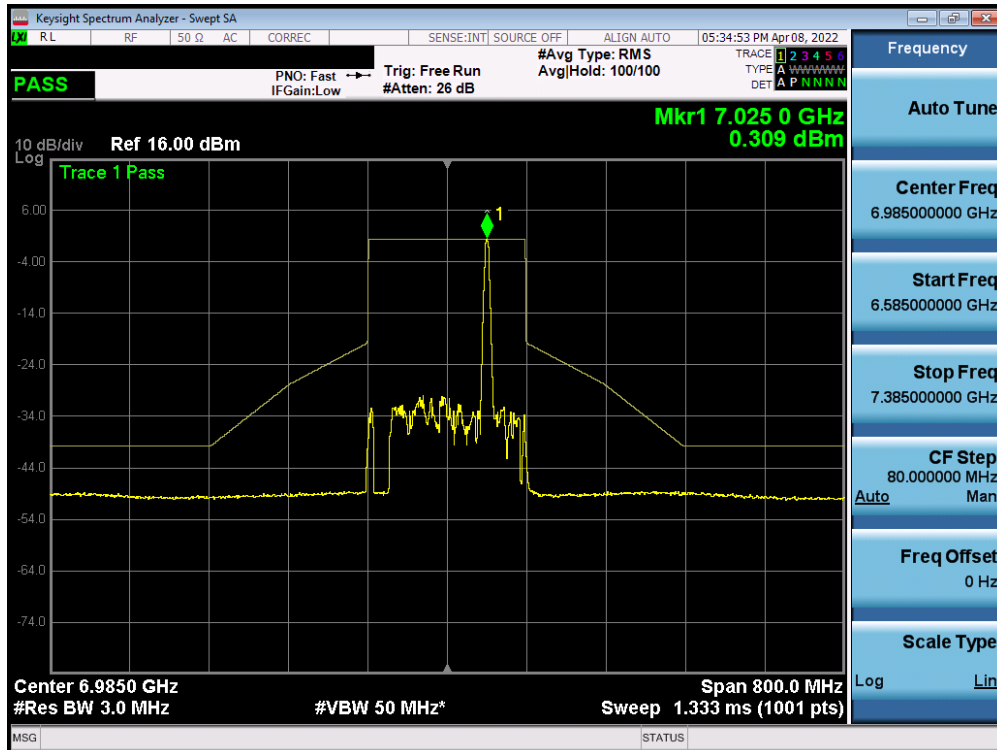


Plot 7-407. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 199)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 236 of 302 |

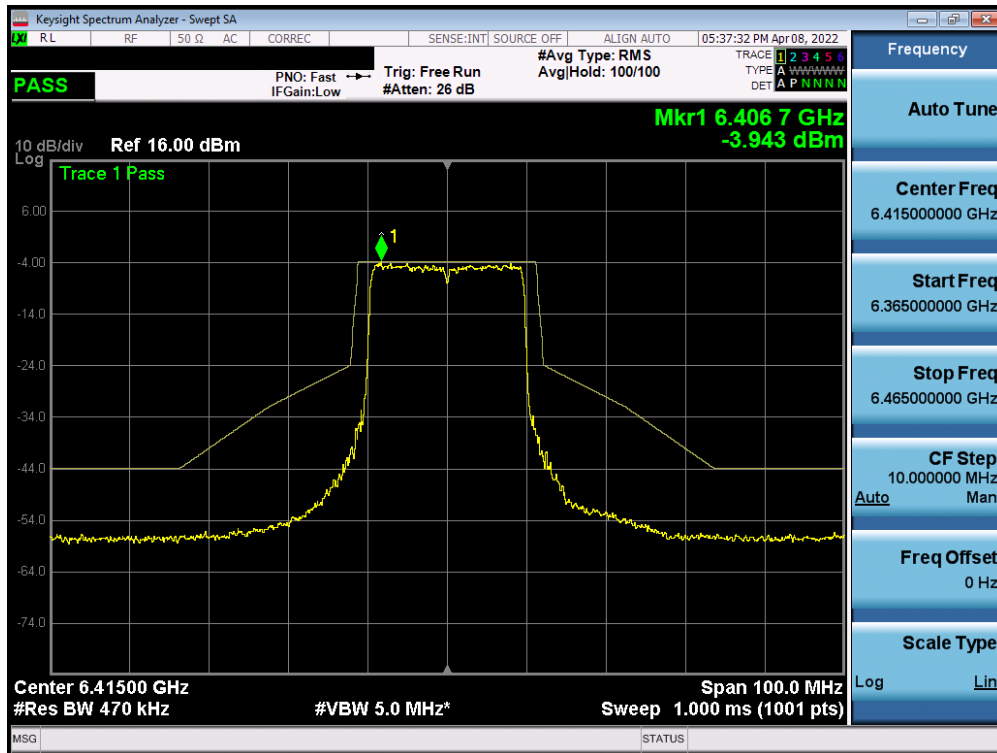


Plot 7-408. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 215)

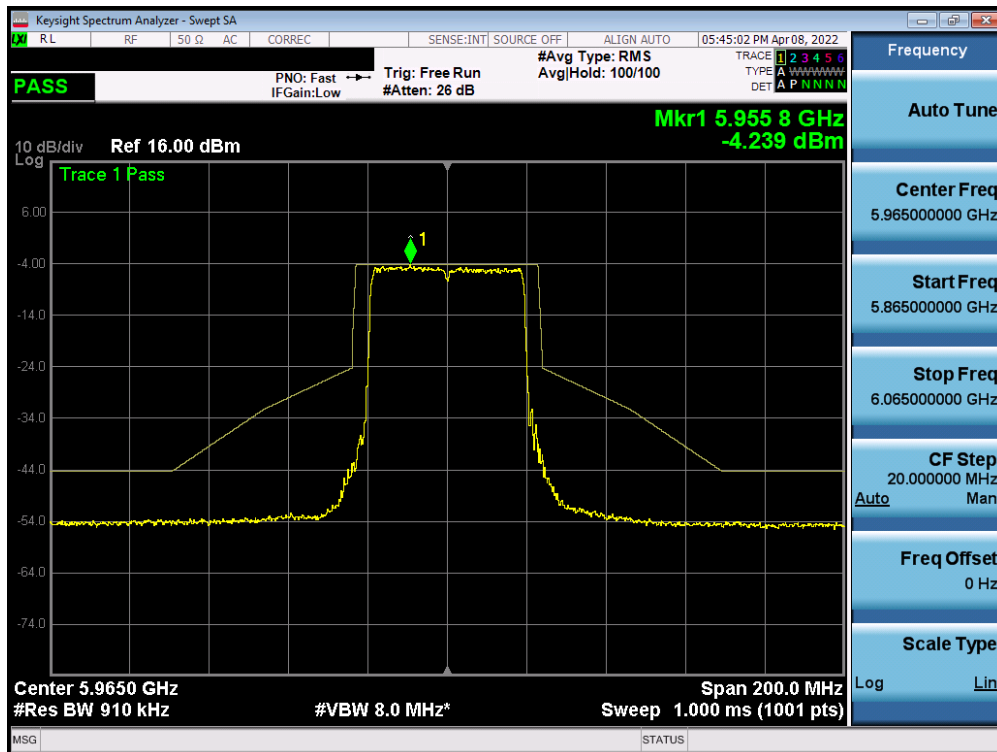


Plot 7-409. In-Band Emission Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 8) – Ch. 207)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 237 of 302 |

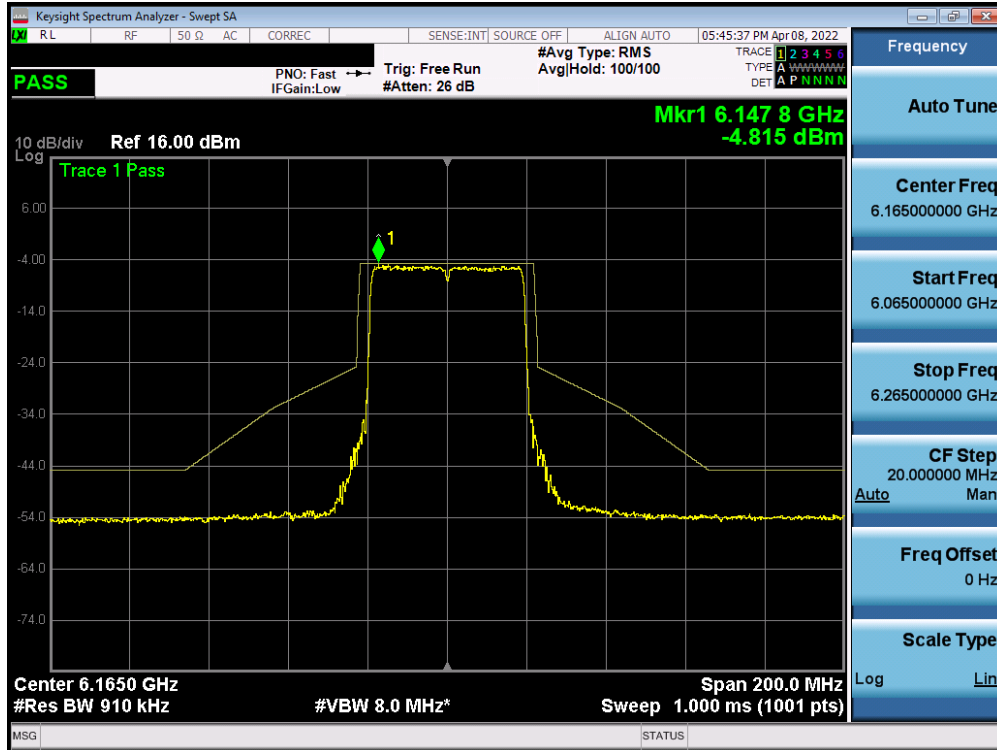


Plot 7-412. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) UNII Band 5) – Ch. 93

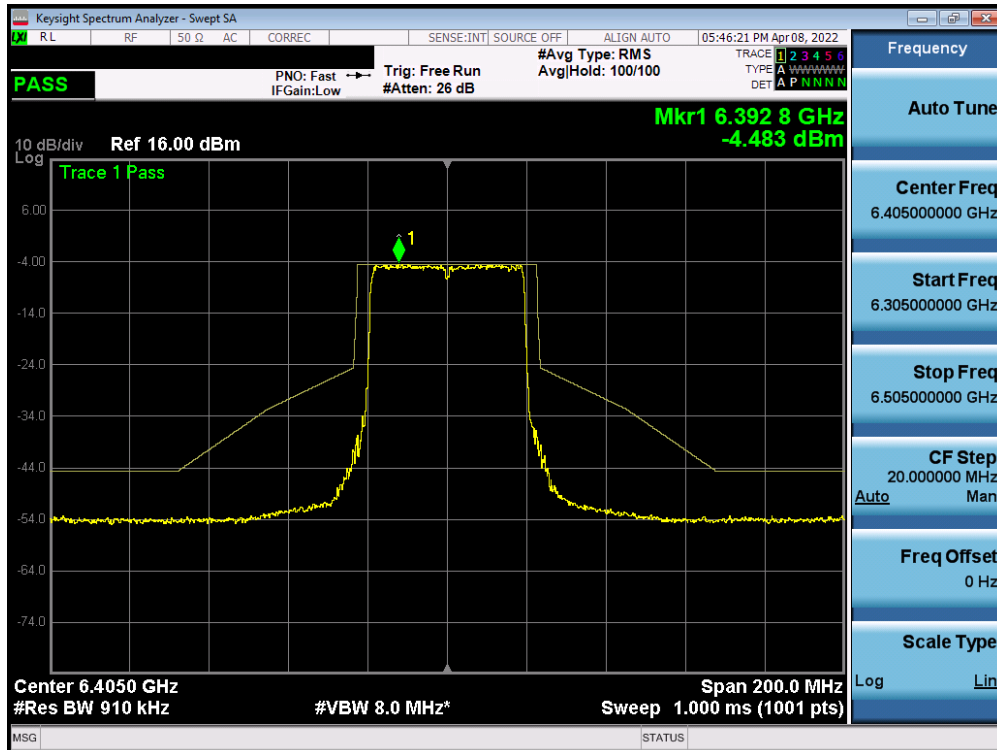


Plot 7-413. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 5) – Ch. 3)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 239 of 302 |

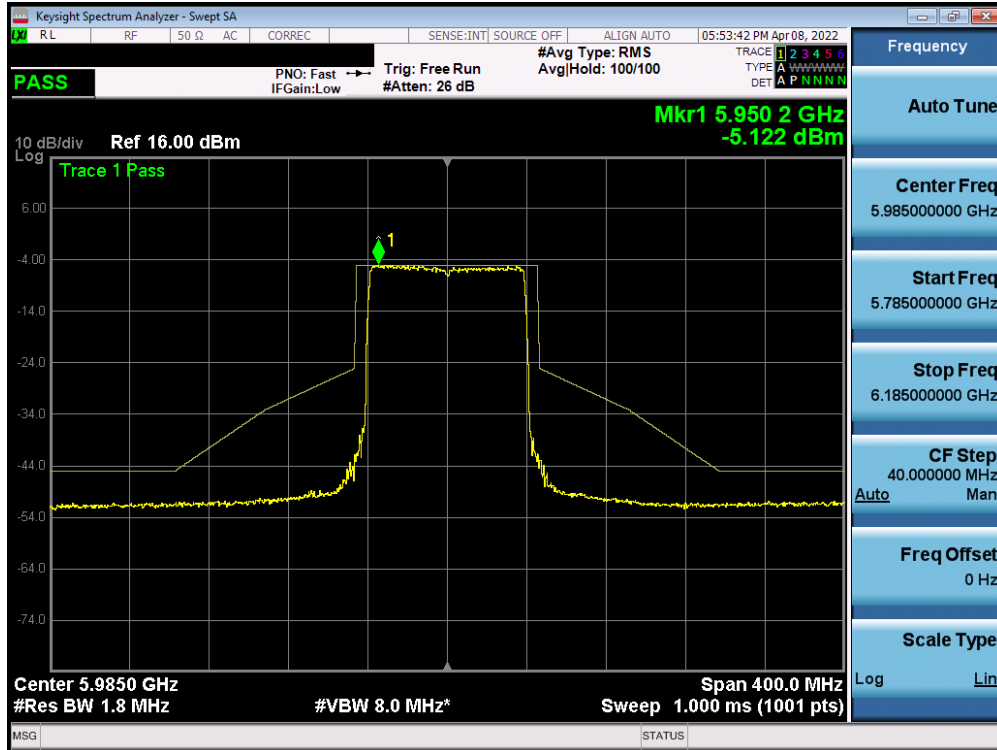


Plot 7-414. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 5) – Ch. 43)

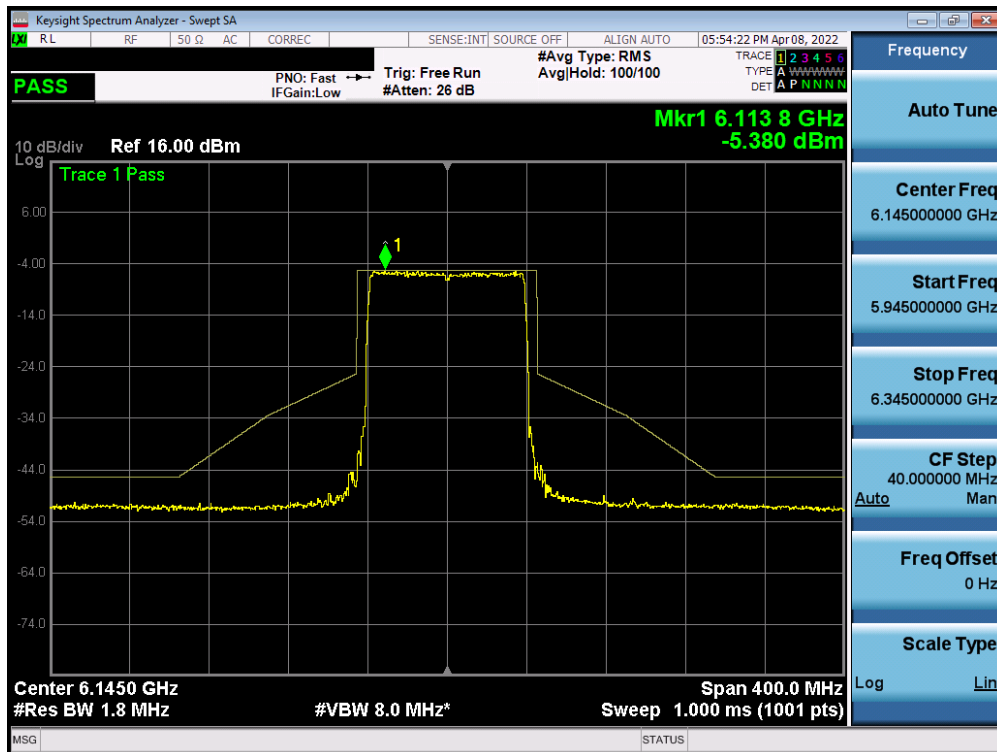


Plot 7-415. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 5) – Ch. 91)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 240 of 302 |

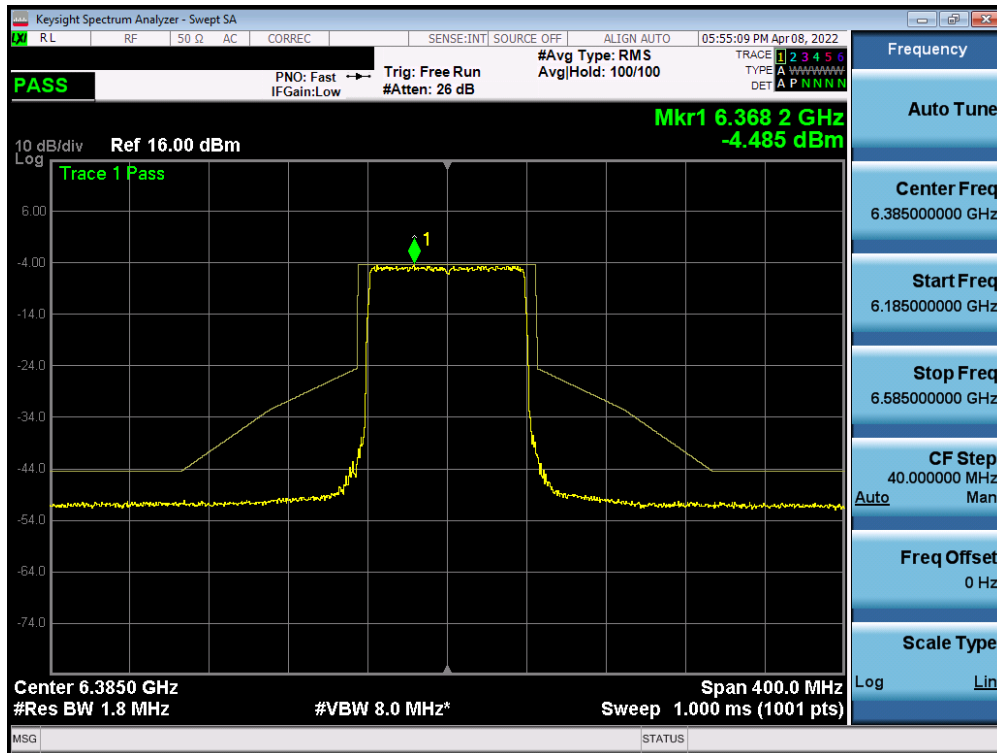


Plot 7-416. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 5) – Ch. 7)

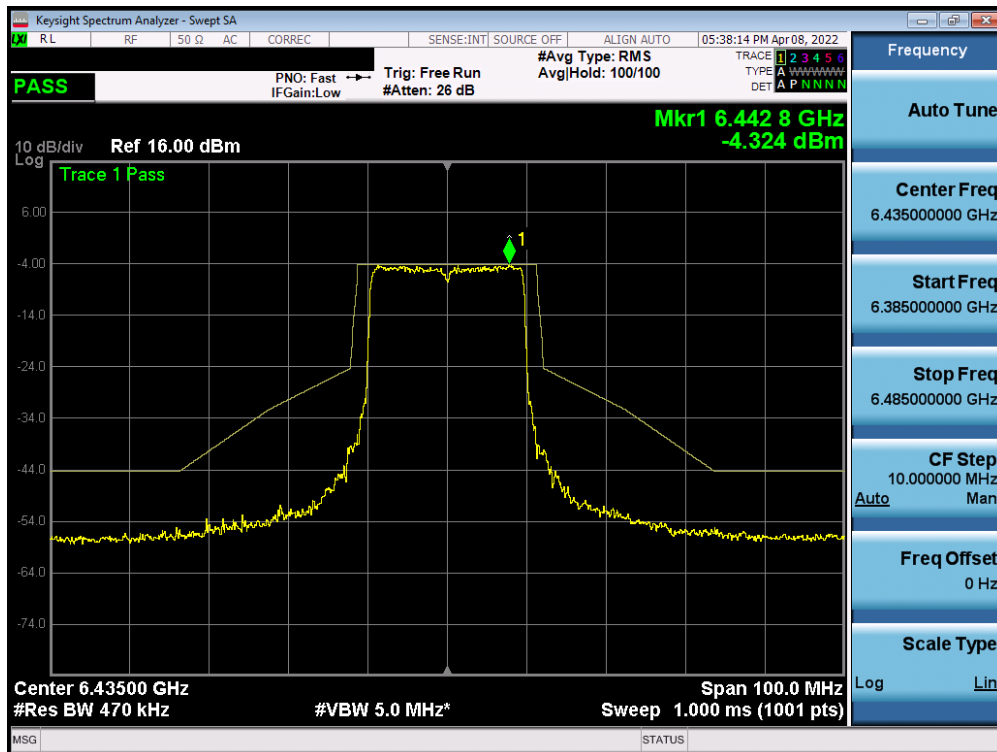


Plot 7-417. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 5) – Ch. 39)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 241 of 302 |

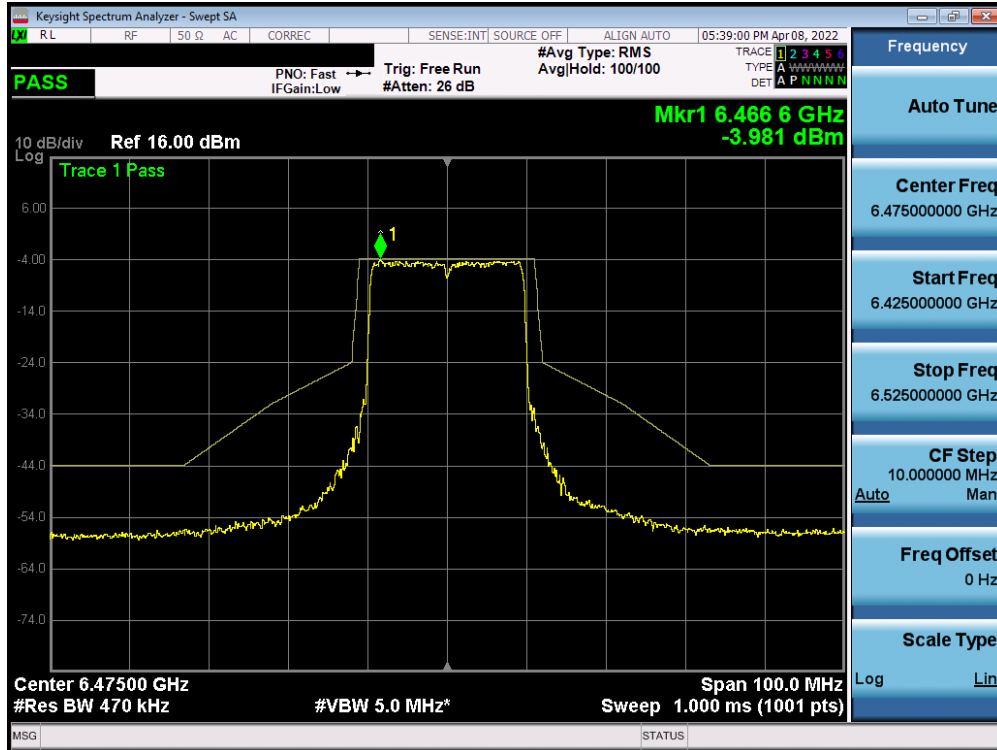


Plot 7-418. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 5) – Ch. 87)

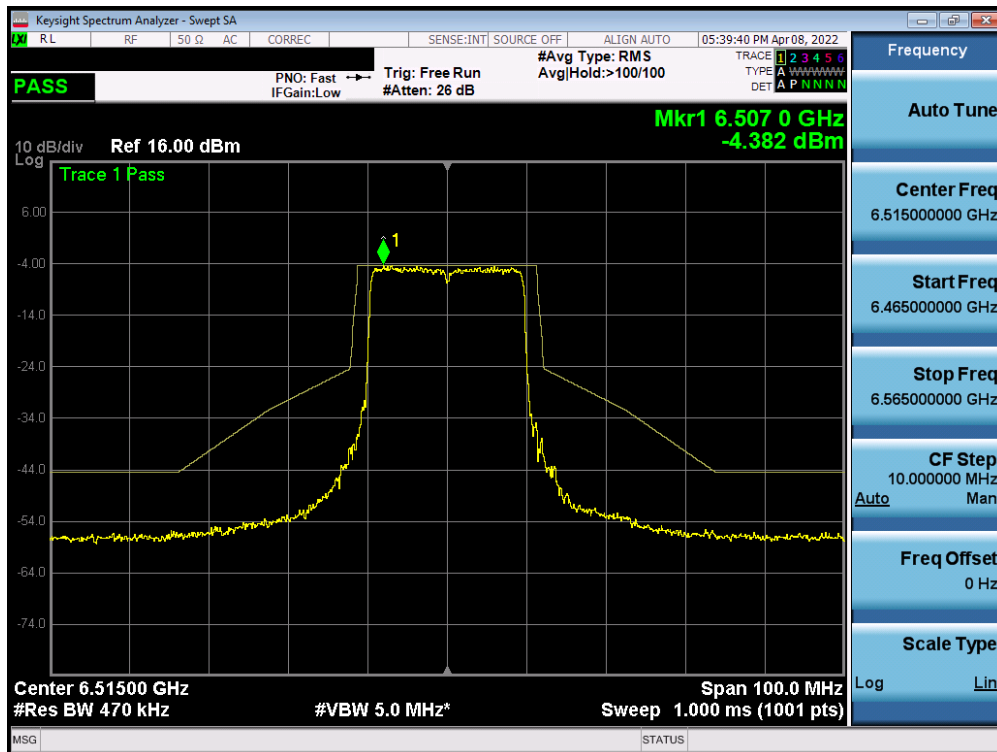


Plot 7-419. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 6) – Ch. 97)

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 242 of 302 |

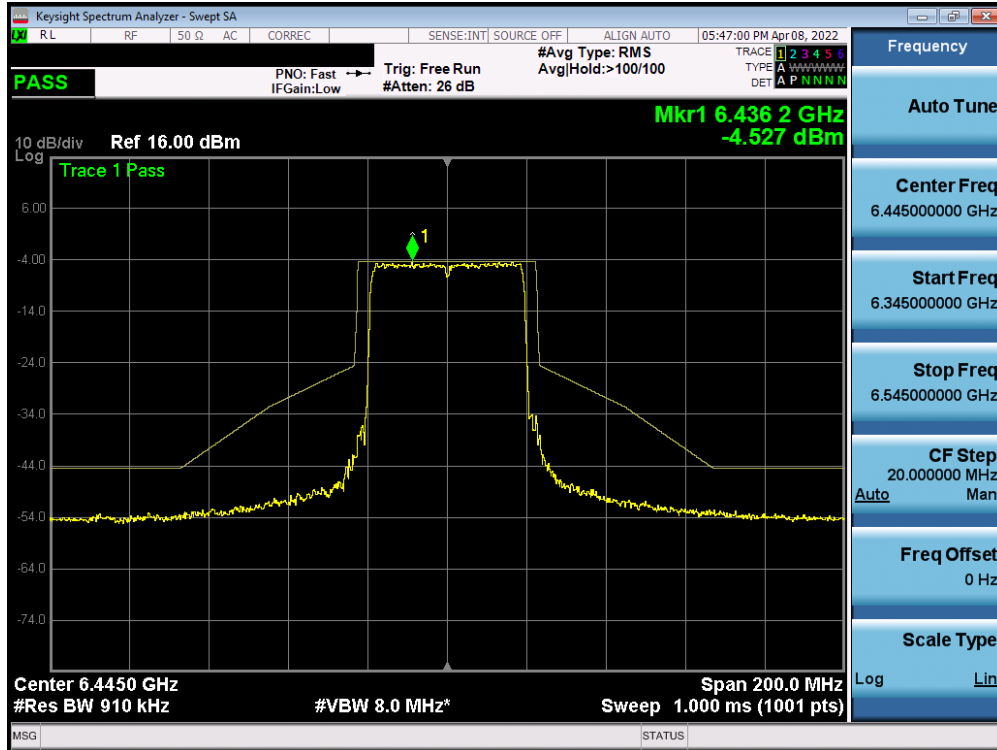


Plot 7-420. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 6) – Ch. 105)

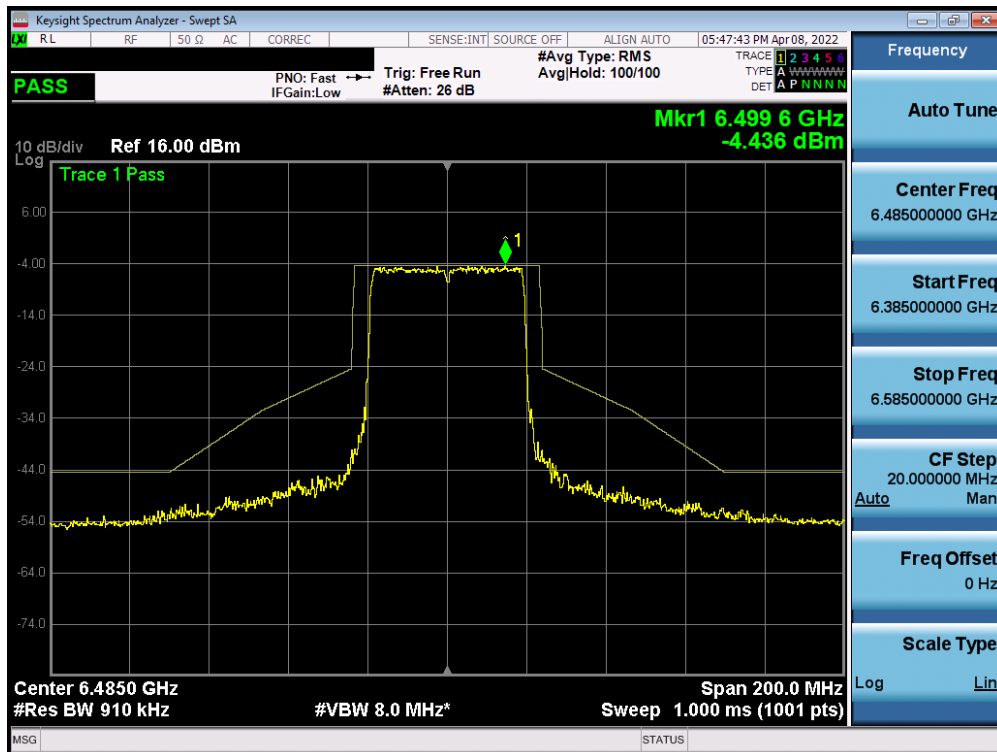


Plot 7-421. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 6) – Ch. 113)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 243 of 302 |

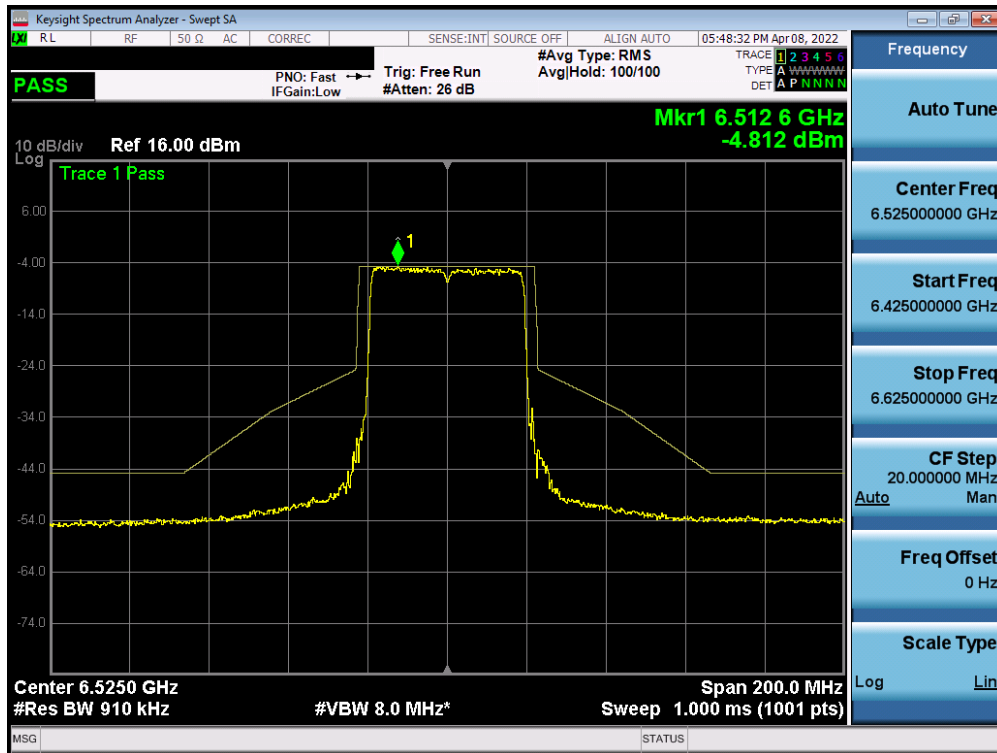


Plot 7-422. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 6) – Ch. 99)

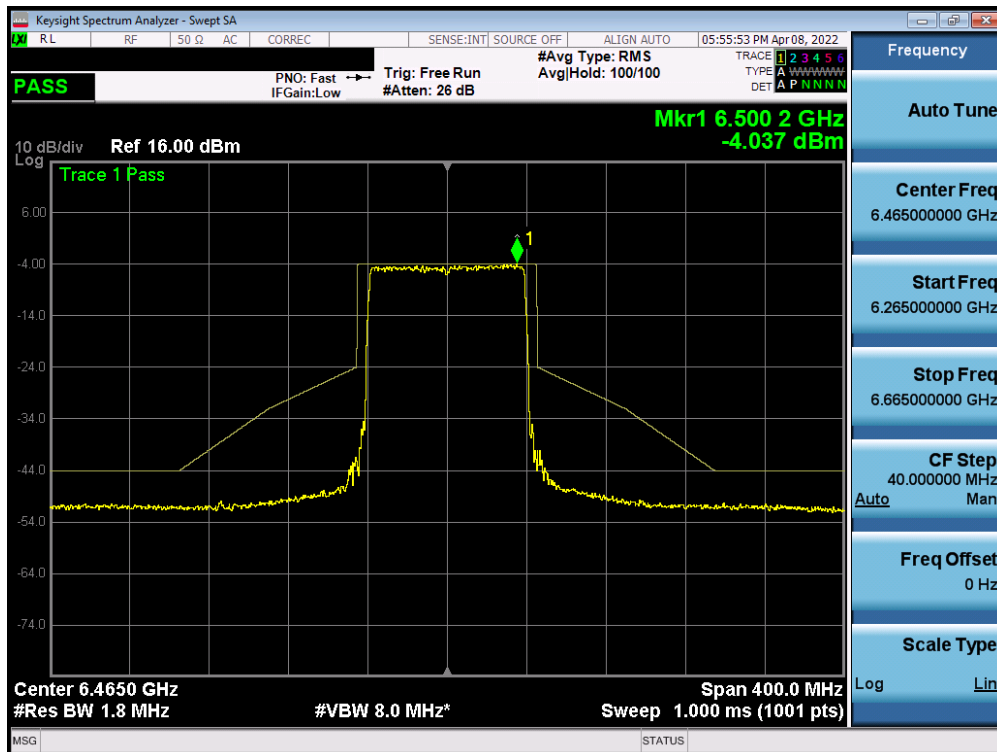


Plot 7-423. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 6) – Ch. 107)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 244 of 302 |

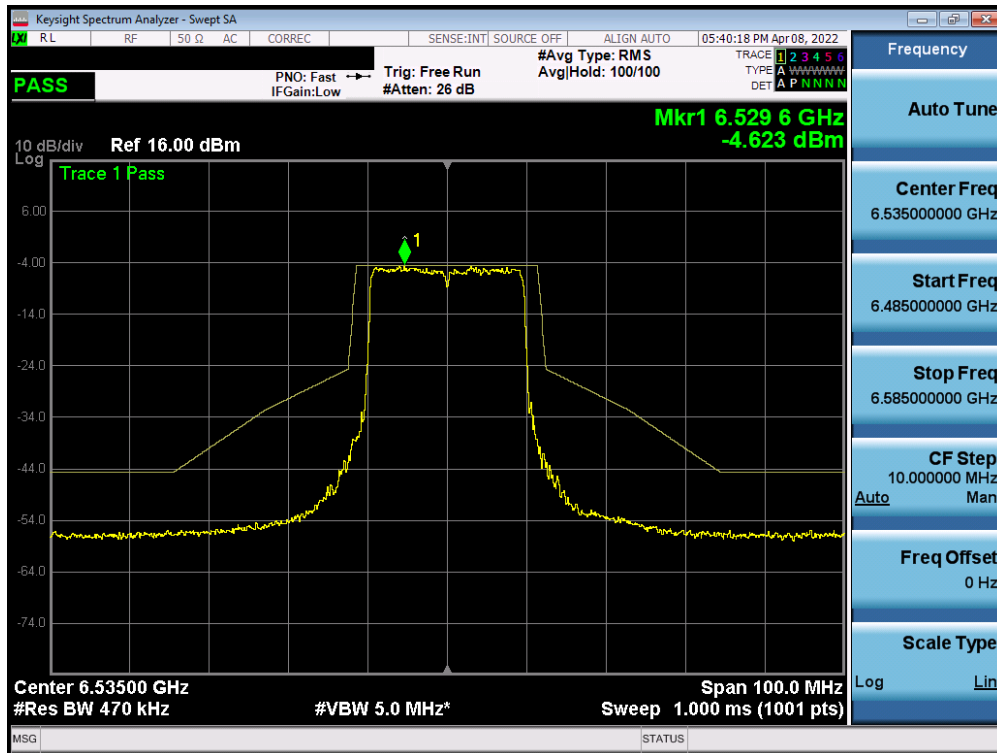


Plot 7-424. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 6) – Ch. 115)

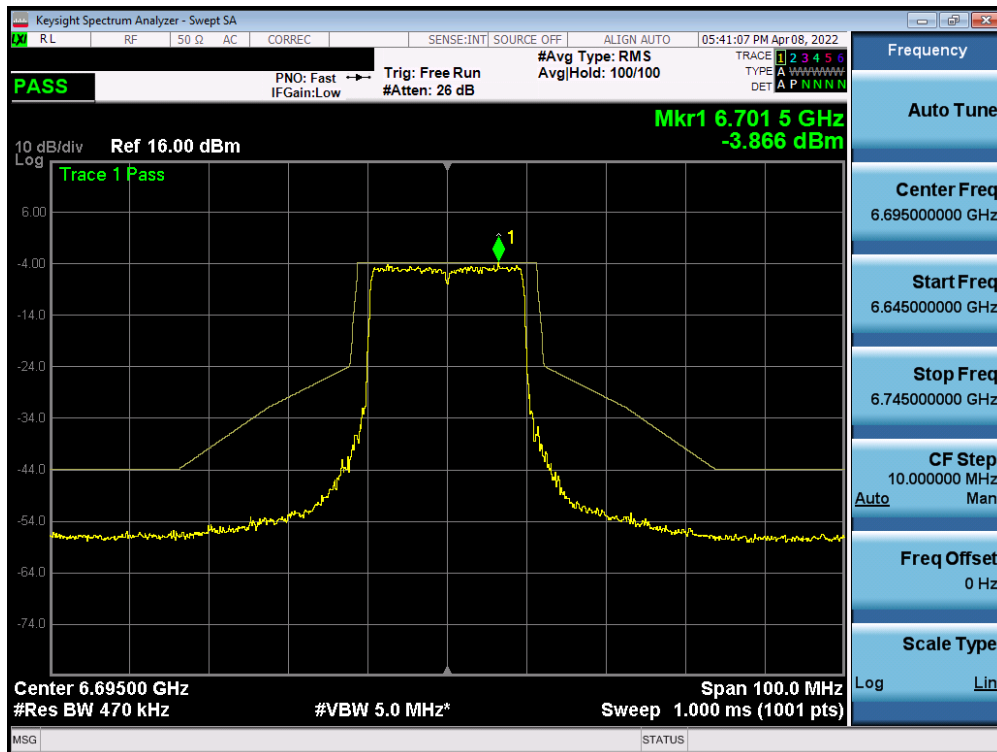


Plot 7-425. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 6) – Ch. 103)

| | | | |
|---|---|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 245 of 302 |

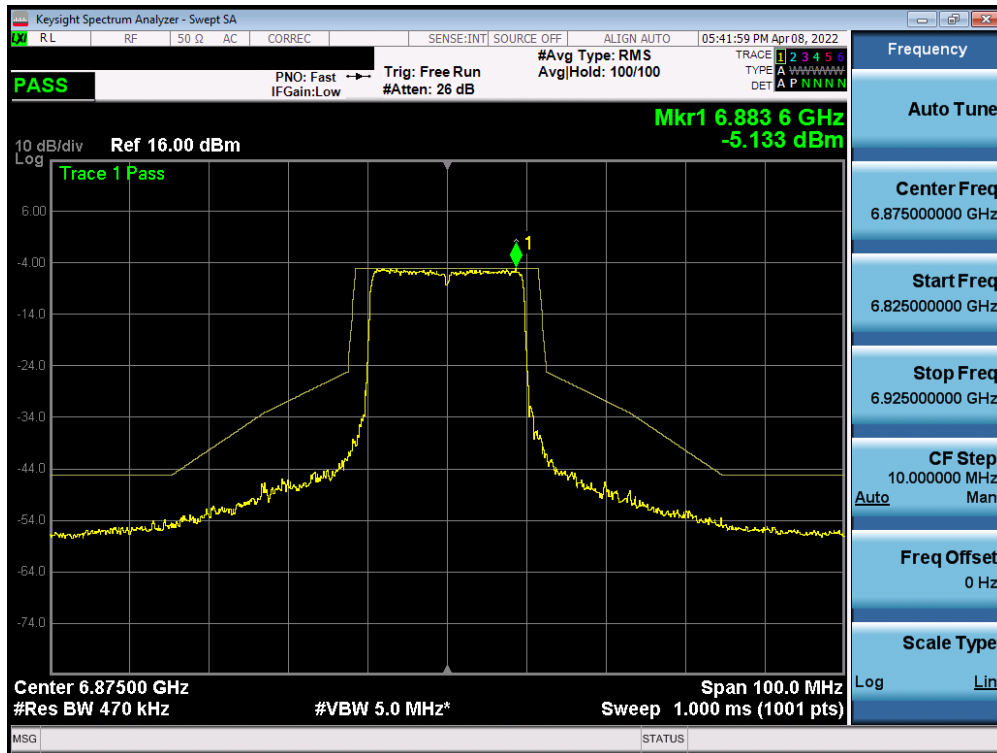


Plot 7-426. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 117)

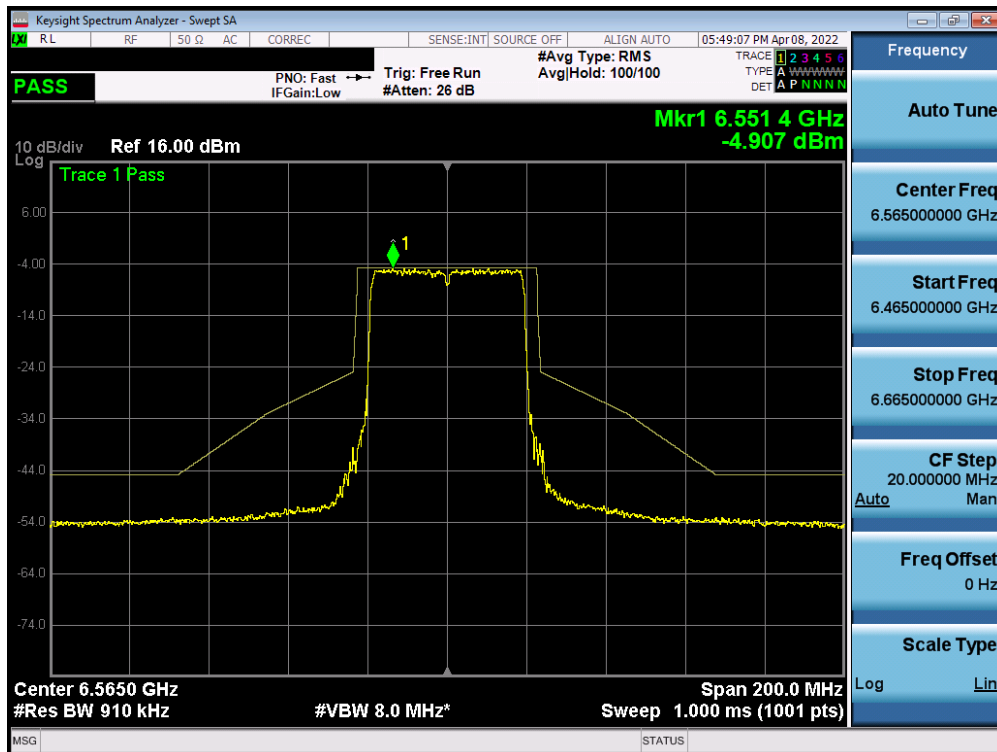


Plot 7-427. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 149)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 246 of 302 |

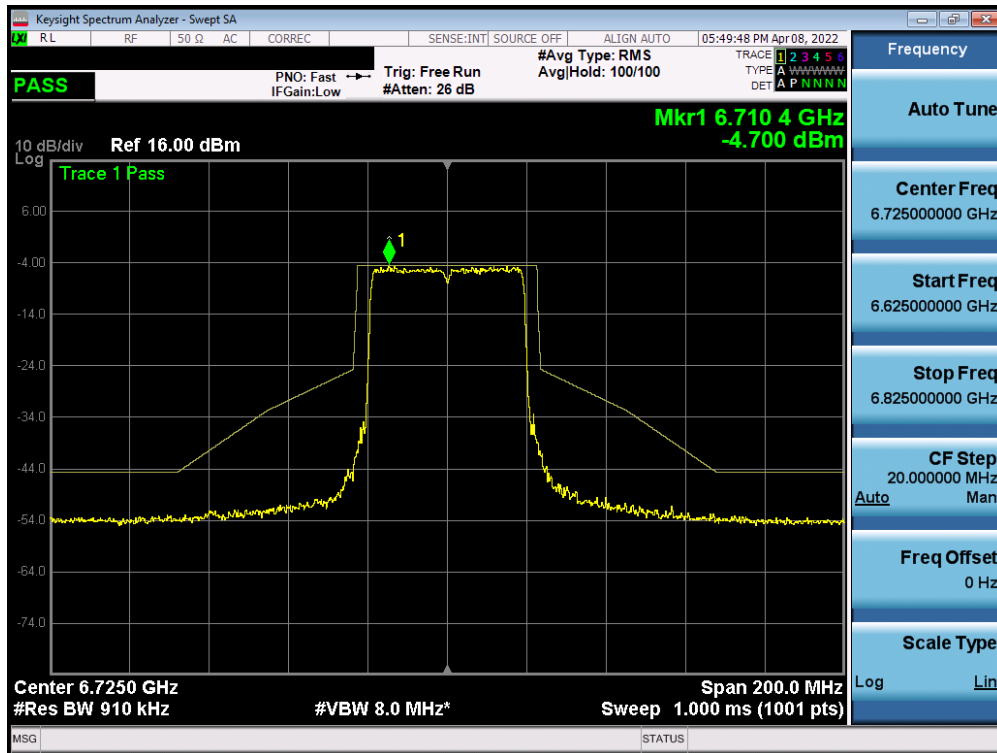


Plot 7-428. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 185)

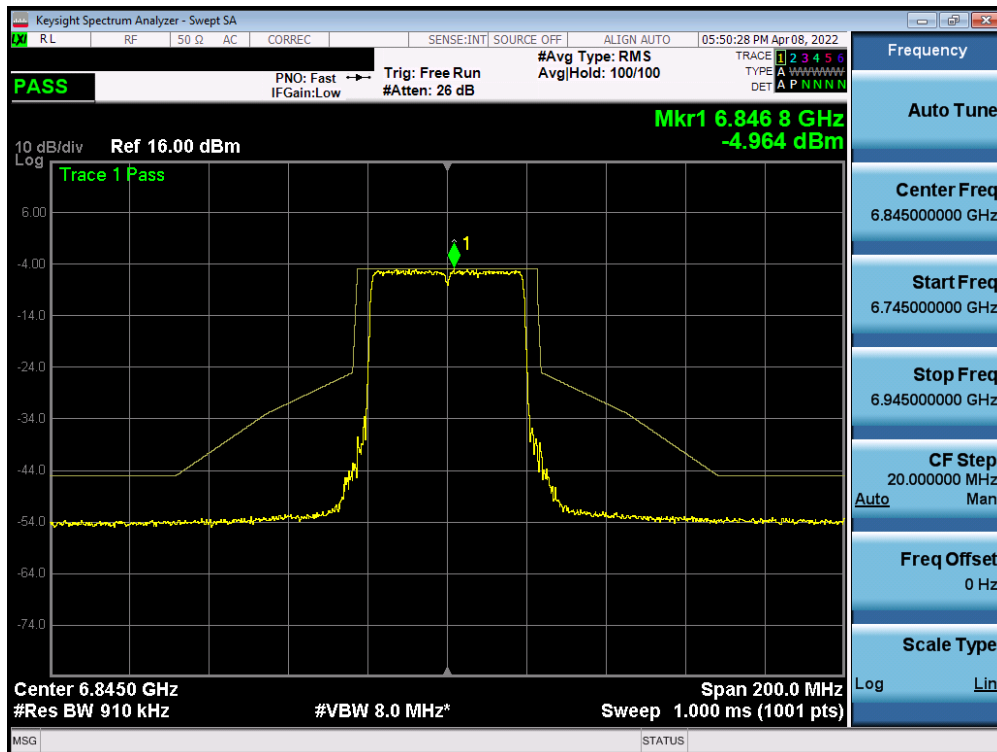


Plot 7-429. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 123)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 247 of 302 |

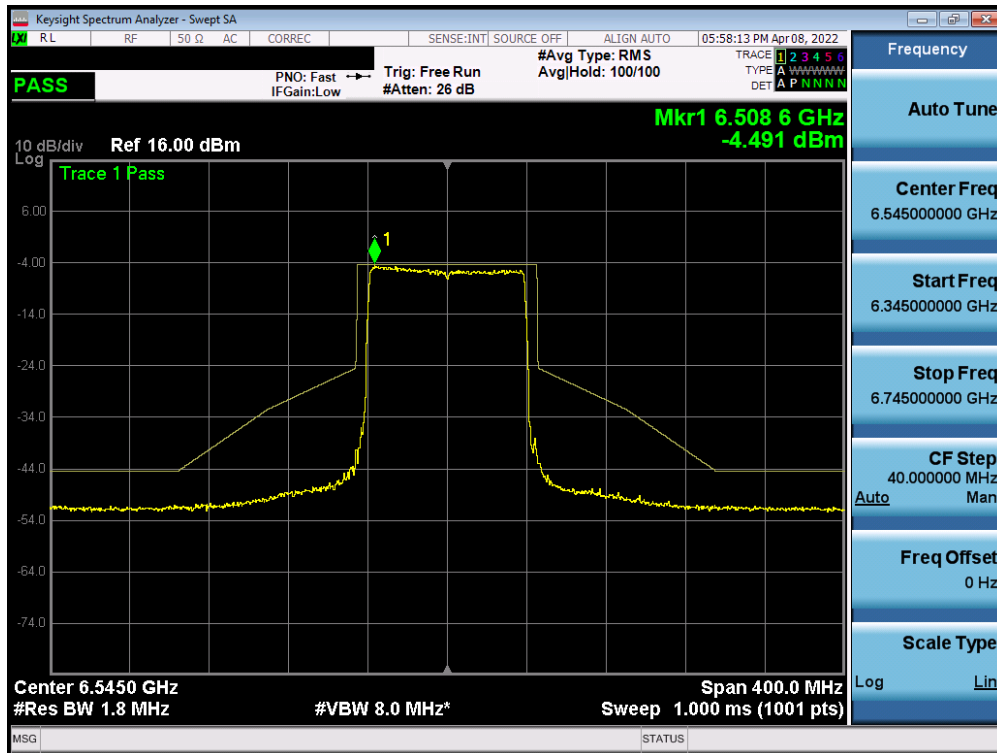


Plot 7-430. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 155)

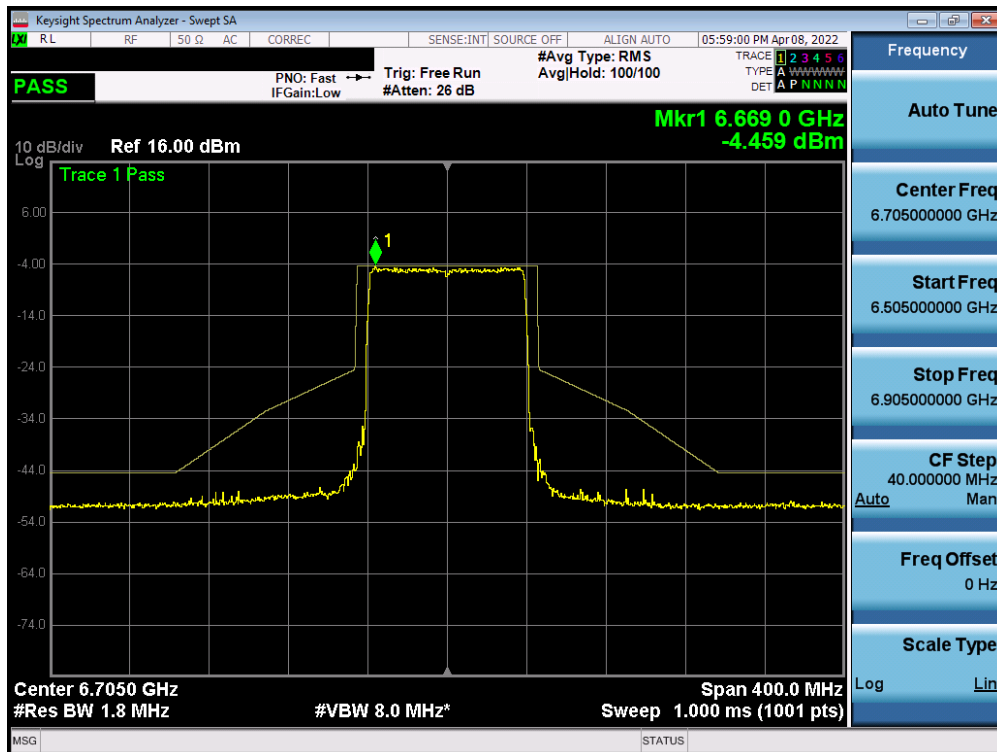


Plot 7-431. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 179)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 248 of 302 |

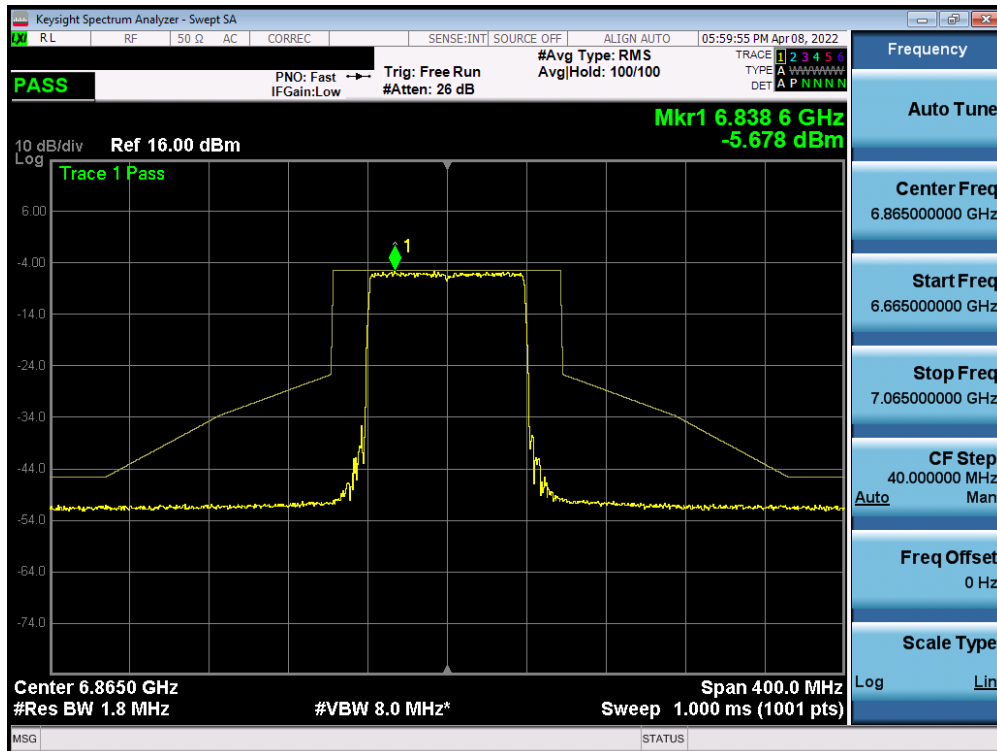


Plot 7-432. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 119)

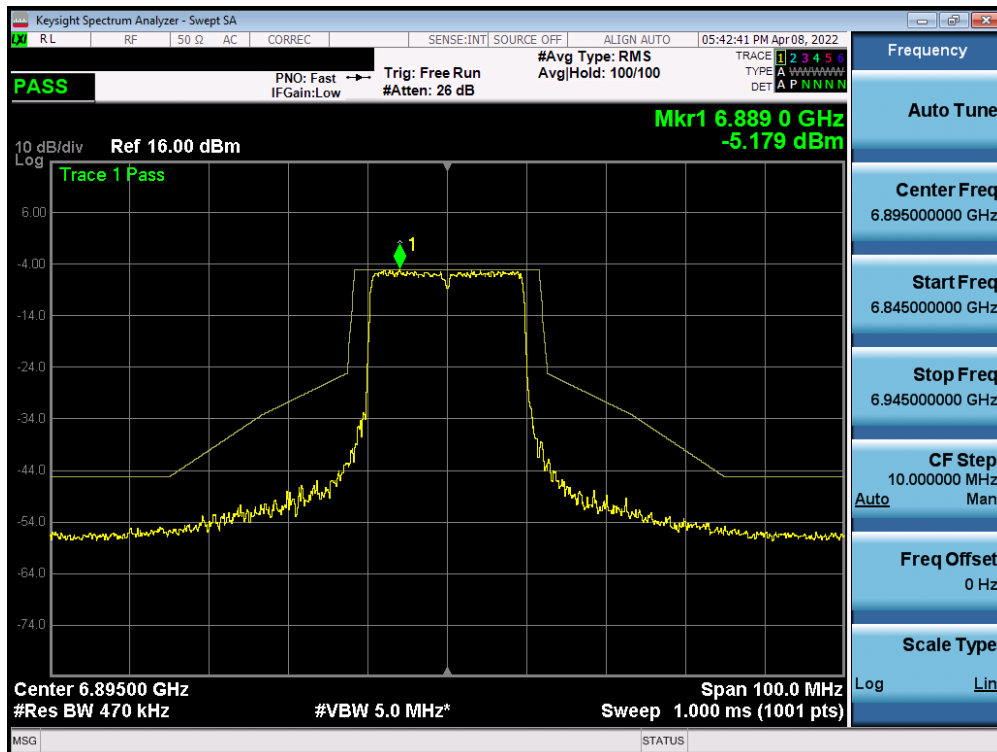


Plot 7-433. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 151)

| | | | |
|---|--------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 249 of 302 |

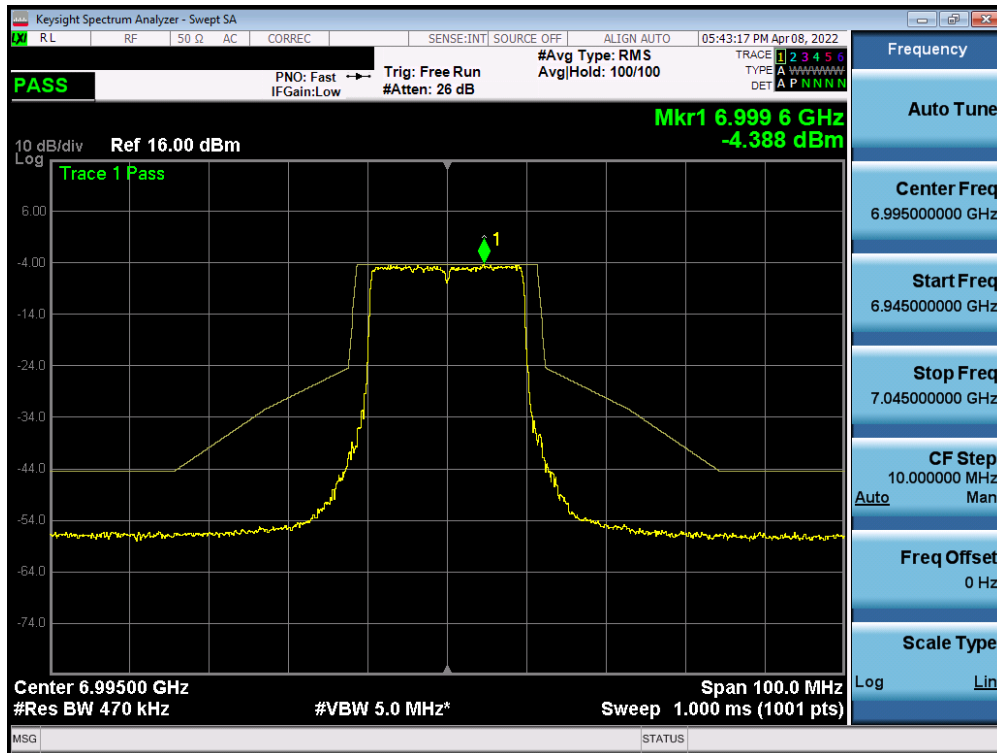


Plot 7-434. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 7) – Ch. 183)

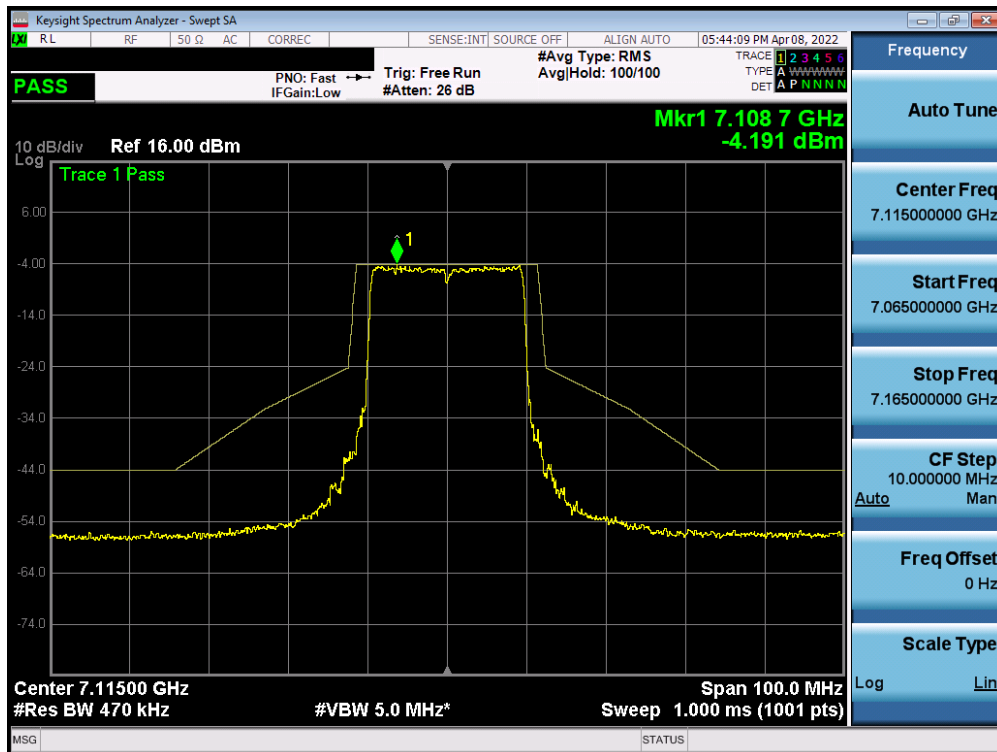


Plot 7-435. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 8) – Ch. 189)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 250 of 302 |

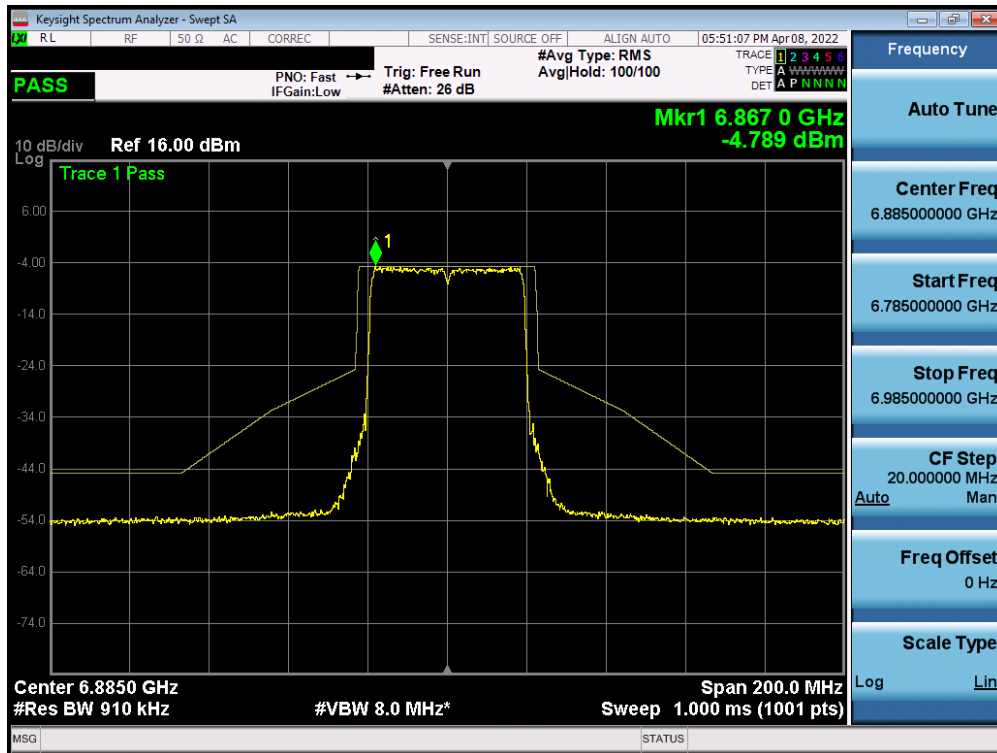


Plot 7-436. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 8) – Ch. 209)

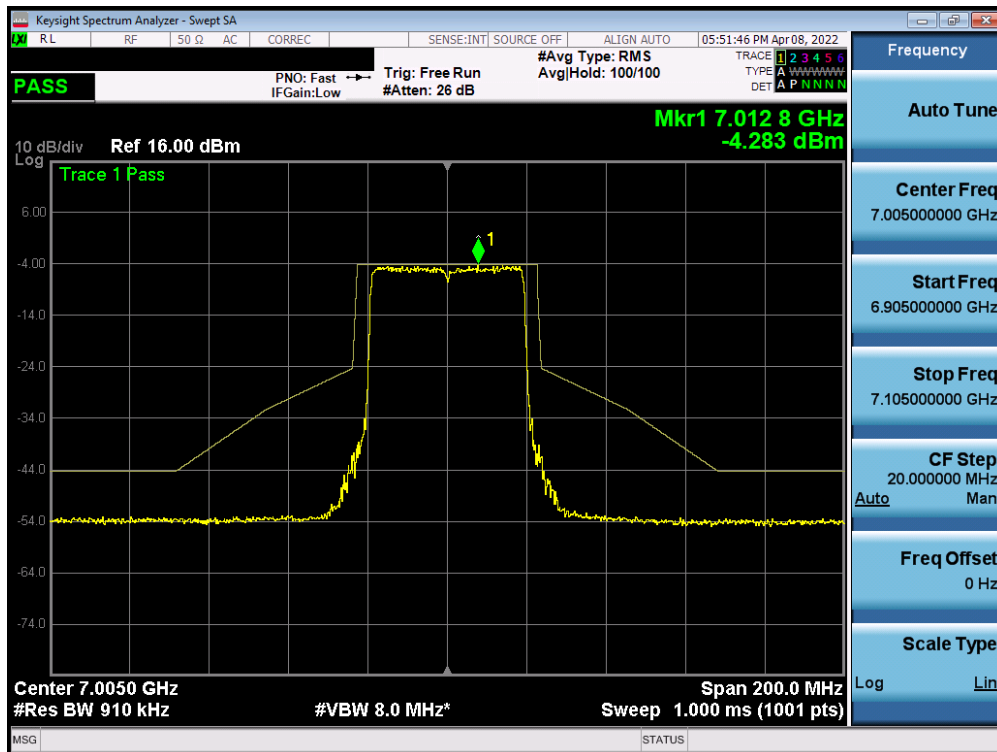


Plot 7-437. In-Band Emission Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tone) (UNII Band 8) – Ch. 233)

| | | | |
|---|---|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 251 of 302 |

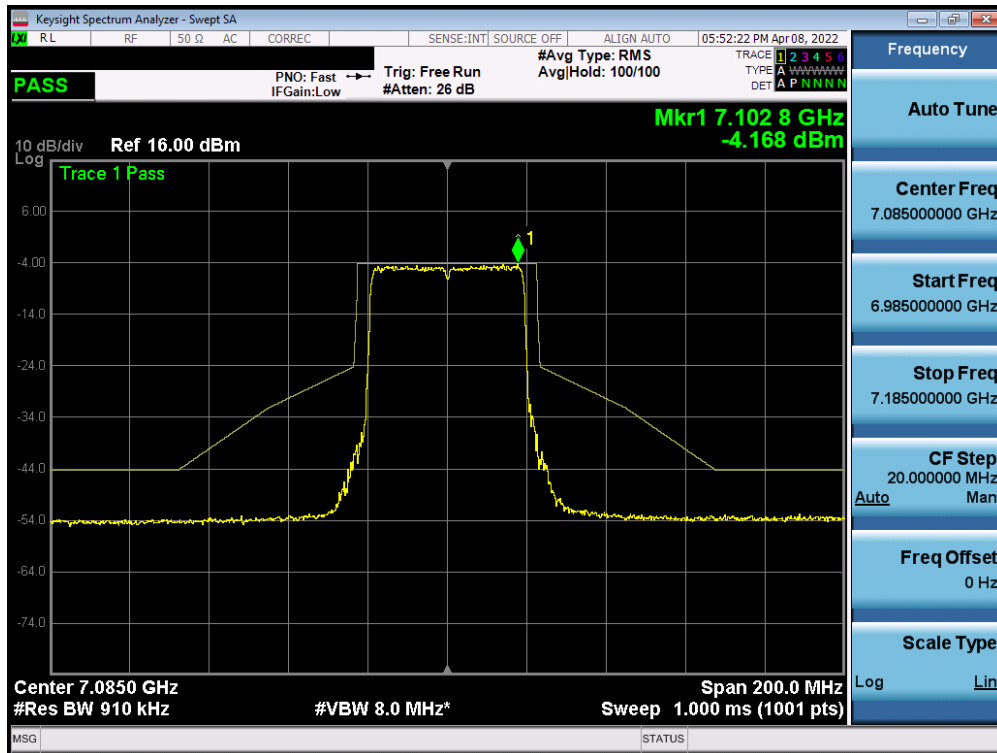


Plot 7-438. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 8) – Ch. 187)

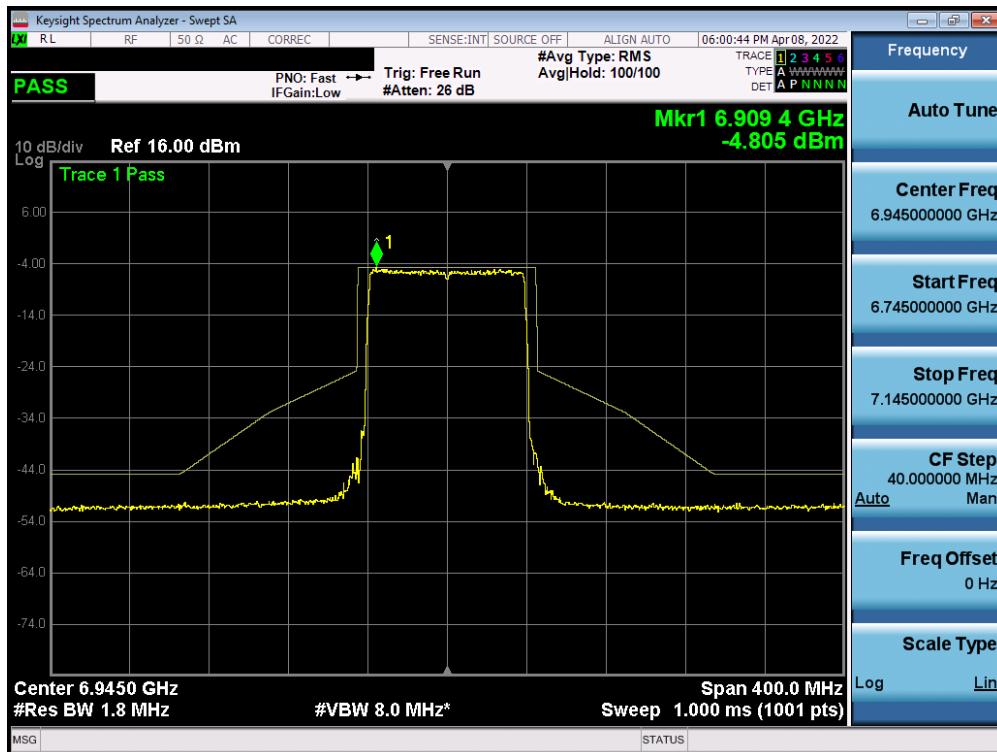


Plot 7-439. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 8) – Ch. 211)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 252 of 302 |

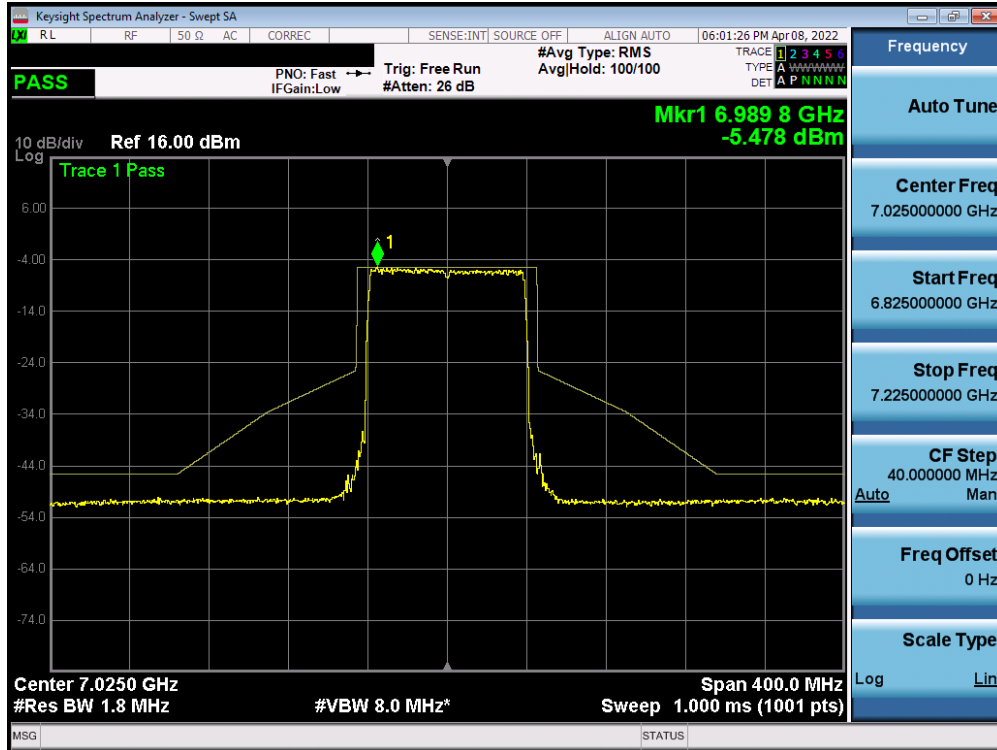


Plot 7-440. In-Band Emission Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tone) (UNII Band 8) – Ch. 227)



Plot 7-441. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 8) – Ch. 199)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 253 of 302 |



Plot 7-442. In-Band Emission Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tone) (UNII Band 8) – Ch. 215)

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 254 of 302 |

7.6 Contention Based Protocol – 802.11ax §15.407(d)(6)

Test Overview and Limit

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel and stay off the channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2
KDB 987594 D02 v01r01

Test Settings

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
3. Set the signal analyzer center frequency to the nominal EEUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
4. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
5. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
9. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
10. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

| | | | |
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| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 255 of 302 |

Test Setup

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

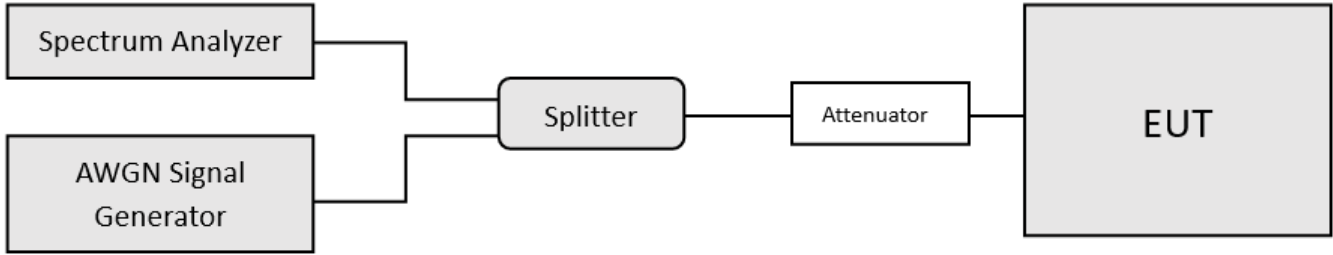


Figure 7-5. Contention-based protocol test setup, conducted method

Test Notes

1. Per guidance from KDB 987594 D02 v01r01, contention based protocol was tested using an AWGN signal with a bandwidth of 10MHz (see Plot 7-349). The amplitude of the signal was increased until detected by the EUT, signaled by the ceasing of transmission (see Plot 7-365), marker indicates the point at which the AWGN signal is introduced.
2. 15 trials were ran in order to assure that at least 90% of certainty was met.
3. Per Guidance from KDB 987594 D04 v01, contention based protocol was tested with receiver with the lowest antenna gain.
4. All CBP Timing Plots shown are for the ceased condition. Some spikes that may be shown are from adjacent portions of the spectrum that are still transmitting.

$$\text{Detection Level} = \text{Injected AWGN Power (dBm)} - \text{Antenna Gain (dBi)} + \text{Path Loss (dB)}$$

Equation 7-1. Detection Level Calculation

| 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 5 | 53 | 6215 | 20 | 6215 | -73.30 | -3.42 | -69.88 | -62.0 | -7.88 |
| | | | | 6110 | -73.50 | -3.42 | -70.08 | -62.0 | -8.08 |
| | 47 | 6185 | 160 | 6185 | -73.20 | -3.42 | -69.78 | -62.0 | -7.78 |
| | | | | 6260 | -72.20 | -3.42 | -68.78 | -62.0 | -6.78 |
| UNII Band 6 | 101 | 6455 | 20 | 6455 | -73.15 | -10.50 | -62.65 | -62.0 | -0.65 |
| | | | | 6430 | -73.10 | -10.50 | -62.60 | -62.0 | -0.60 |
| | 111 | 6505 | 160 | 6505 | -73.20 | -10.50 | -62.70 | -62.0 | -0.70 |
| | | | | 6580 | -73.72 | -10.50 | -63.22 | -62.0 | -1.22 |
| UNII Band 7 | 149 | 6695 | 20 | 6695 | -74.10 | -8.64 | -65.46 | -62.0 | -3.46 |
| | | | | 6750 | -71.40 | -8.64 | -62.76 | -62.0 | -0.76 |
| | 175 | 6825 | 160 | 6825 | -74.27 | -8.64 | -65.63 | -62.0 | -3.63 |
| | | | | 6900 | -74.45 | -8.64 | -65.81 | -62.0 | -3.81 |
| UNII Band 8 | 197 | 6935 | 20 | 6935 | -75.30 | -11.46 | -63.84 | -62.0 | -1.84 |
| | | | | 6910 | -74.96 | -11.46 | -63.50 | -62.0 | -1.50 |
| | 207 | 6985 | 160 | 6985 | -76.37 | -11.46 | -64.91 | -62.0 | -2.91 |
| | | | | 7060 | -73.90 | -11.46 | -62.44 | -62.0 | -0.44 |

Table 7-31. Contention Based Protocol – Incumbent Detection Results

| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|---|--------------------------------------|-------------------------------|-----------------------------------|
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 256 of 302 |

| Band | Channel | Channel Freq [MHz] | Channel BW [MHz] | Incumbent Freq [MHz] | EUT Transmission Status | | |
|-------------|---------|--------------------|------------------|----------------------|---------------------------|---------|--------|
| | | | | | Adjusted AWGN Power (dBm) | | |
| | | | | | Normal | Minimal | Ceased |
| UNII Band 5 | 53 | 6215 | 20 | 6215 | -81.88 | -72.88 | -69.88 |
| | 47 | 6185 | 160 | 6110 | -82.08 | -73.08 | -70.08 |
| | | | | 6185 | -81.78 | -72.78 | -69.78 |
| | | | | 6260 | -80.78 | -71.78 | -68.78 |
| UNII Band 6 | 101 | 6455 | 20 | 6455 | -74.65 | -65.65 | -62.65 |
| | 111 | 6505 | 160 | 6430 | -74.60 | -65.60 | -62.60 |
| | | | | 6505 | -74.70 | -65.70 | -62.70 |
| | | | | 6580 | -75.22 | -66.22 | -63.22 |
| UNII Band 7 | 149 | 6695 | 20 | 6695 | -77.46 | -68.46 | -65.46 |
| | 175 | 6825 | 160 | 6750 | -74.76 | -65.76 | -62.76 |
| | | | | 6825 | -77.63 | -68.63 | -65.63 |
| | | | | 6900 | -77.81 | -68.81 | -65.81 |
| UNII Band 8 | 197 | 6935 | 20 | 6935 | -75.84 | -66.84 | -63.84 |
| | 207 | 6985 | 160 | 6910 | -75.50 | -66.50 | -63.50 |
| | | | | 6985 | -76.91 | -67.91 | -64.91 |
| | | | | 7060 | -74.44 | -65.44 | -62.44 |

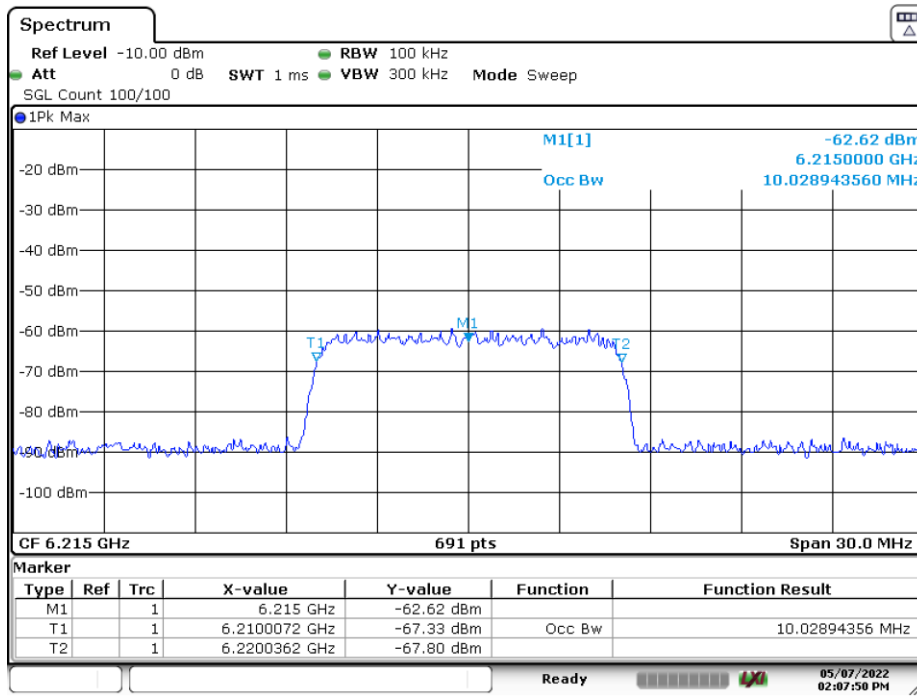
Table 7-32. Contention Based Protocol – Detection Results – All Tx Cases

| Band | Channel | Channel Freq [MHz] | Channel BW [MHz] | Incumbent Freq [MHz] | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | Detection Rate (%) | | |
|-------------|---------|--------------------|------------------|----------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|--------------------|-----|-----|
| UNII Band 5 | 53 | 6215 | 20 | 6215 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | | |
| | 47 | 6185 | 160 | 6110 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | |
| | | | | 6185 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| | | | | 6260 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| UNII Band 6 | 101 | 6455 | 20 | 6455 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | | |
| | 111 | 6505 | 160 | 6430 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | |
| | | | | 6505 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| | | | | 6580 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| UNII Band 7 | 149 | 6695 | 20 | 6695 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | | |
| | 175 | 6825 | 160 | 6750 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | |
| | | | | 6825 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| | | | | 6900 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| UNII Band 8 | 197 | 6935 | 20 | 6935 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | | |
| | 207 | 6985 | 160 | 6910 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 | |
| | | | | 6985 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 100 |
| | | | | 7060 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Table 7-33. Contention Based Protocol – Incumbent Detection Trial Results

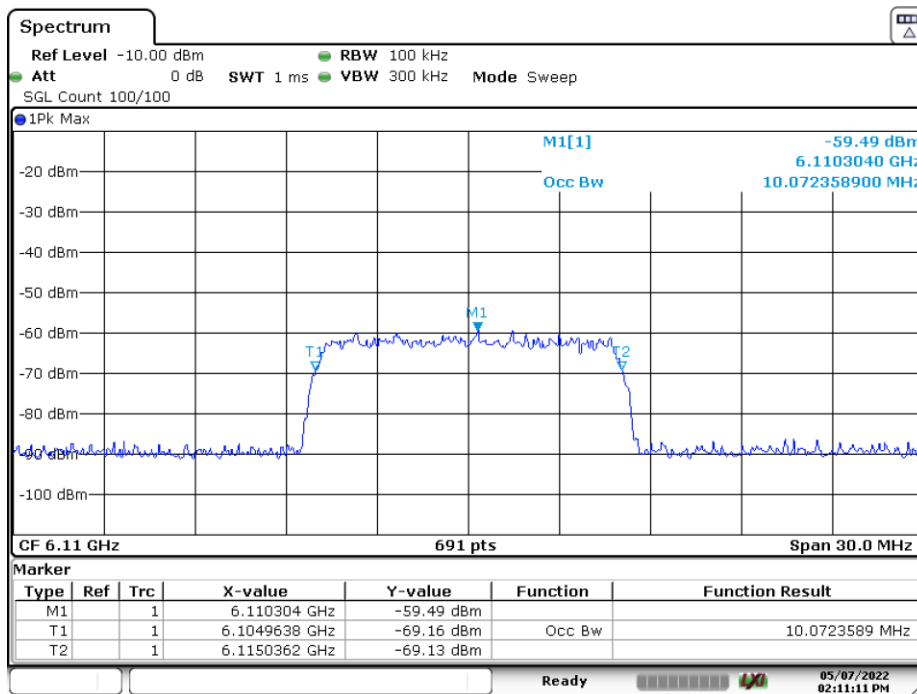
| | | | |
|--|---|--------------------------------------|--|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 257 of 302 |

AWGN Plots



Date: 7.MAY.2022 14:07:50

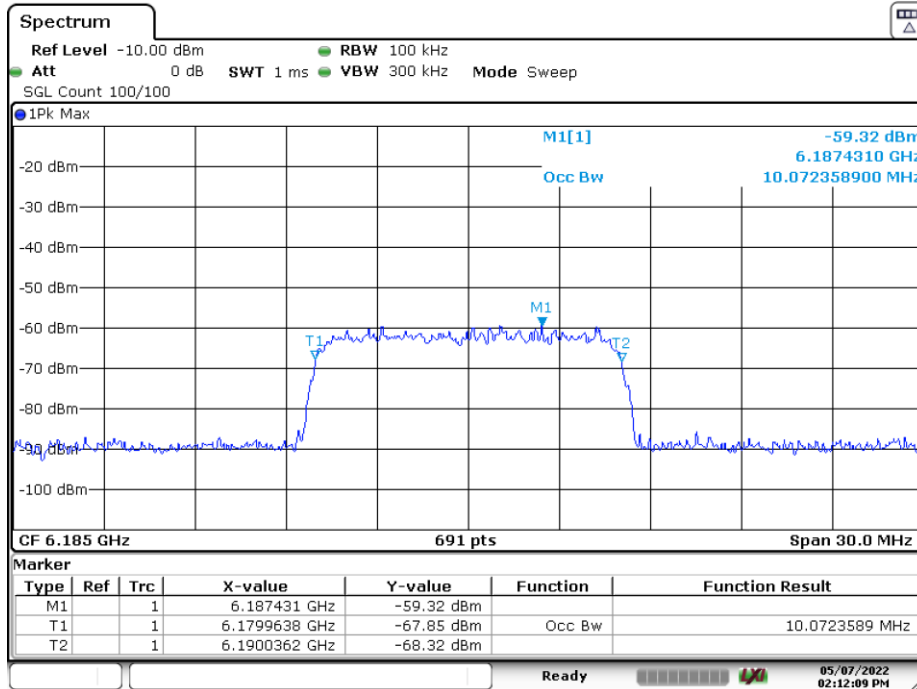
Plot 7-443. AWGN Signal – UNII 5 – 20MHz



Date: 7.MAY.2022 14:11:11

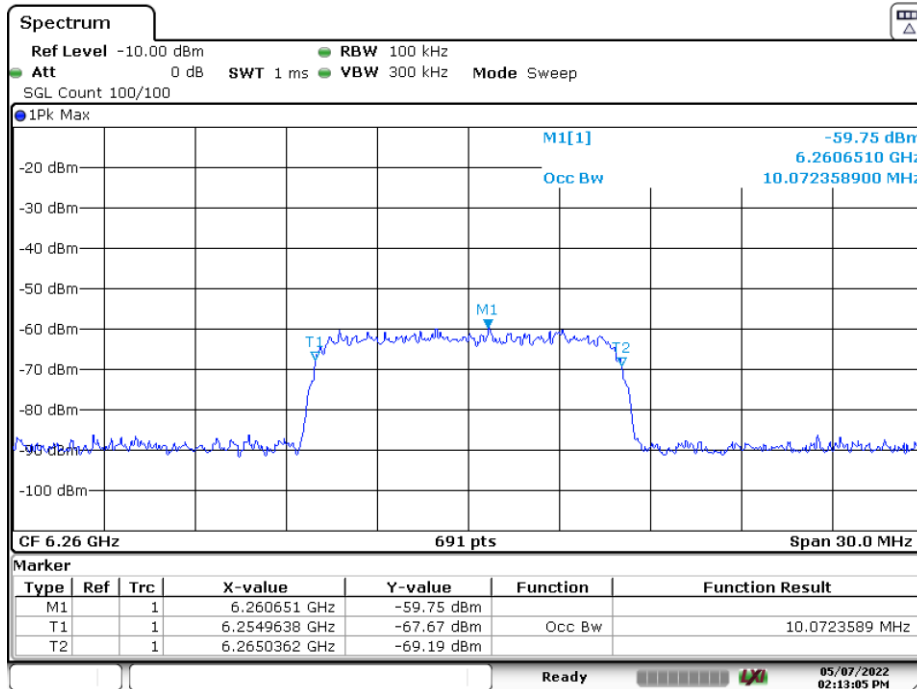
Plot 7-444. AWGN Signal – UNII 5 – 160MHz - Low

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 258 of 302 |



Date: 7.MAY.2022 14:12:09

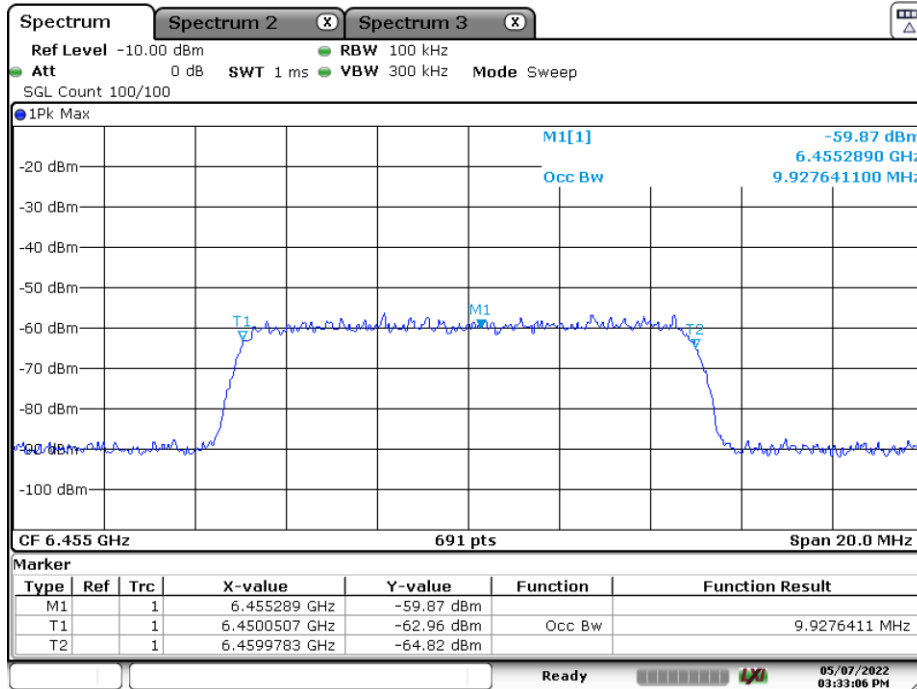
Plot 7-445. AWGN Signal – UNII 5 – 160MHz – Mid



Date: 7.MAY.2022 14:13:05

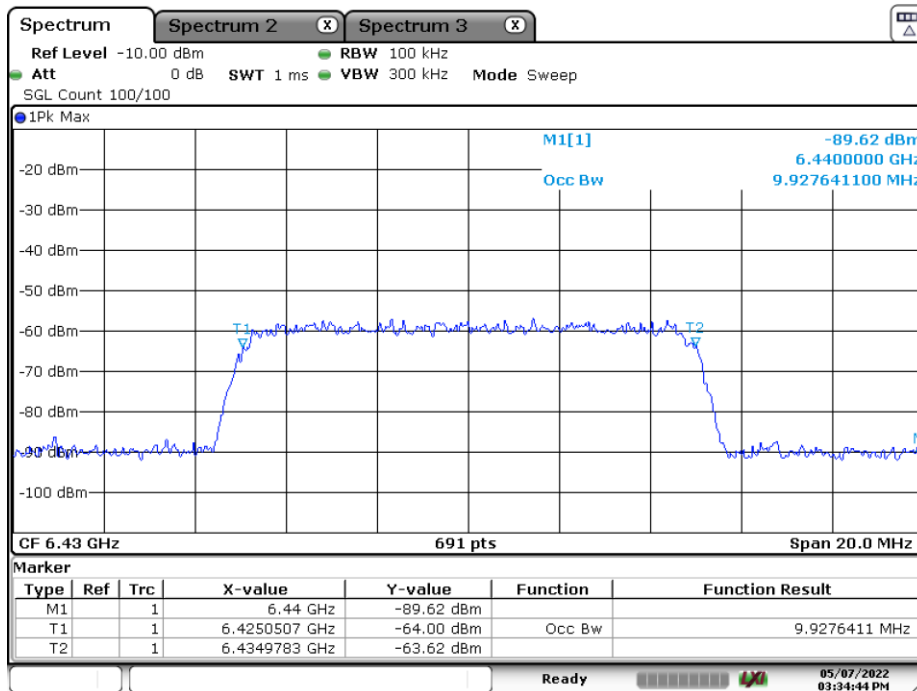
Plot 7-446. AWGN Signal – UNII 5 – 160MHz - High

| FCC ID: A3LSMF936B | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|---|--------------------------------------|------------------------------------|--|-----------------------------------|
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | | Page 259 of 302 |



Date: 7.MAY.2022 15:33:06

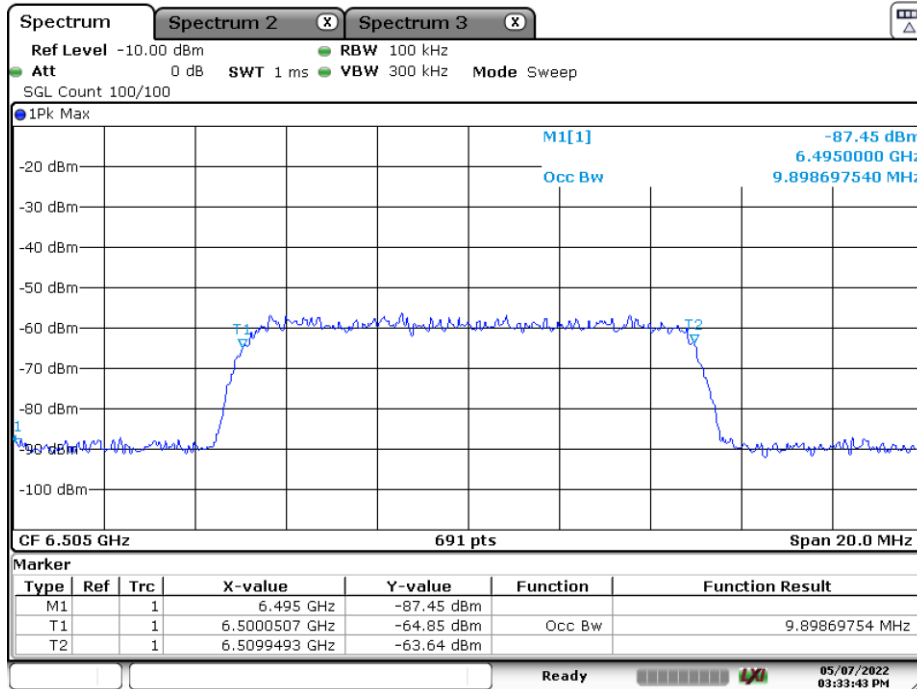
Plot 7-447. AWGN Signal – UNII 6 – 20MHz



Date: 7.MAY.2022 15:34:43

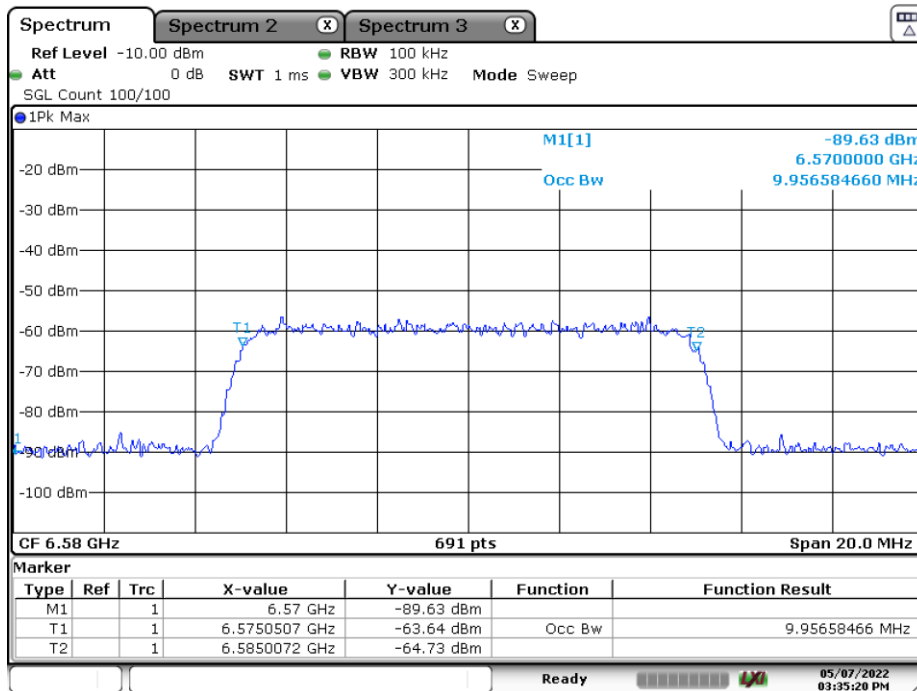
Plot 7-448. AWGN Signal – UNII 6 – 160MHz - Low

| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 260 of 302 |



Date: 7.MAY.2022 15:33:43

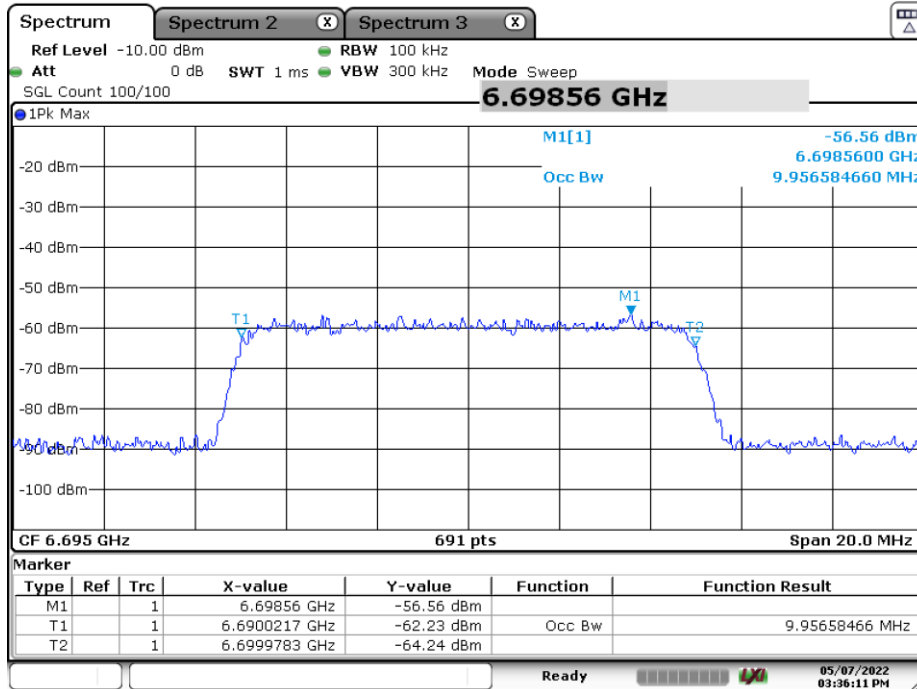
Plot 7-449. AWGN Signal – UNII 6 – 160MHz - Mid



Date: 7.MAY.2022 15:35:20

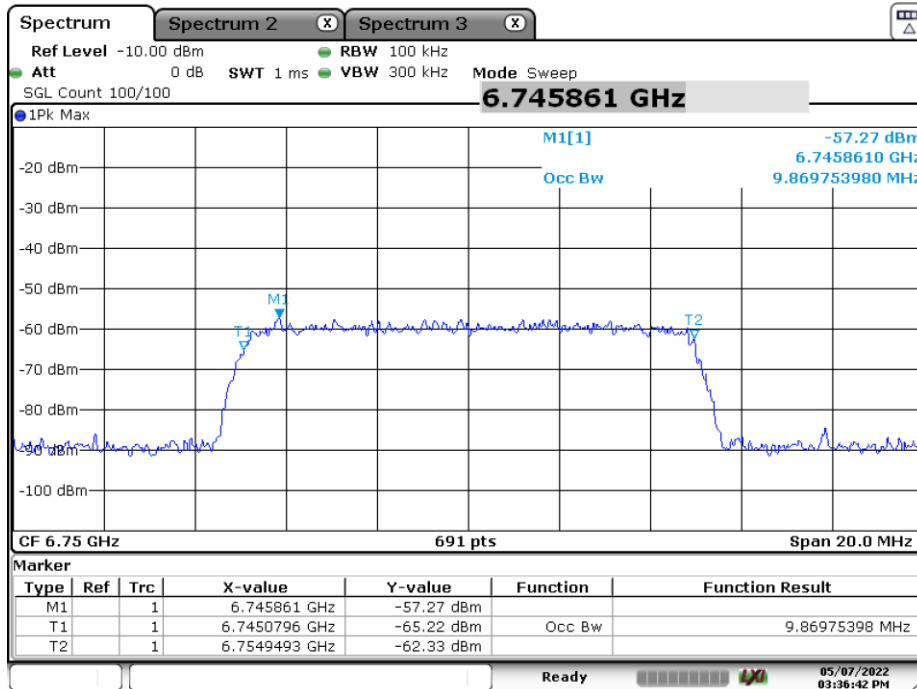
Plot 7-450. AWGN Signal – UNII 6 – 160MHz - High

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
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| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 261 of 302 |



Date: 7.MAY.2022 15:36:11

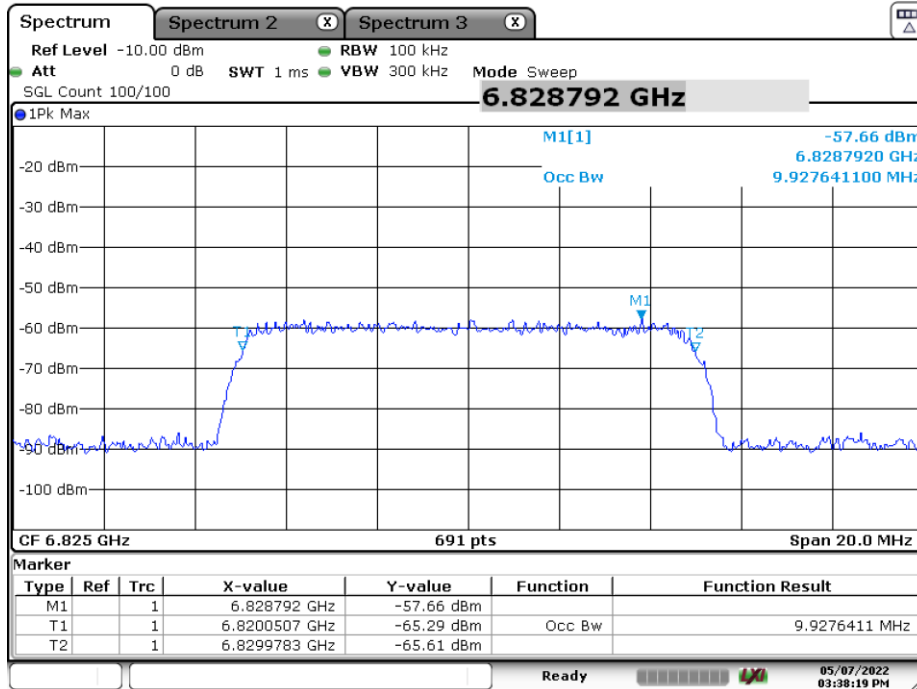
Plot 7-451. AWGN Signal – UNII 7 – 20MHz



Date: 7.MAY.2022 15:36:42

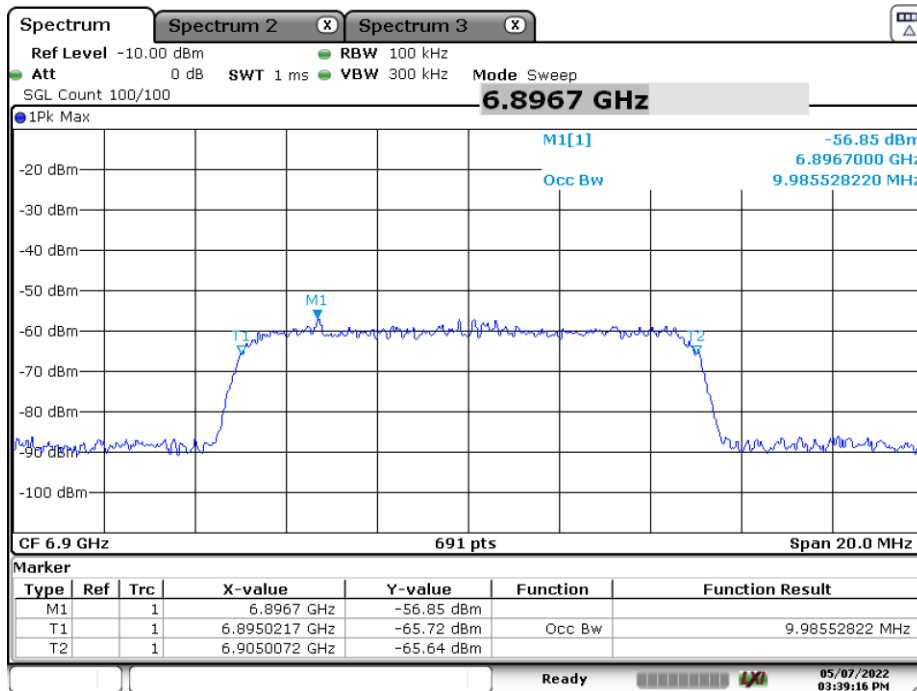
Plot 7-452. AWGN Signal – UNII 7 – 160MHz - Low

| | | | |
|---|---------------------------------------|-------------------------------|-----------------------------------|
| FCC ID: A3LSMF936B | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | Page 262 of 302 |



Date: 7.MAY.2022 15:38:18

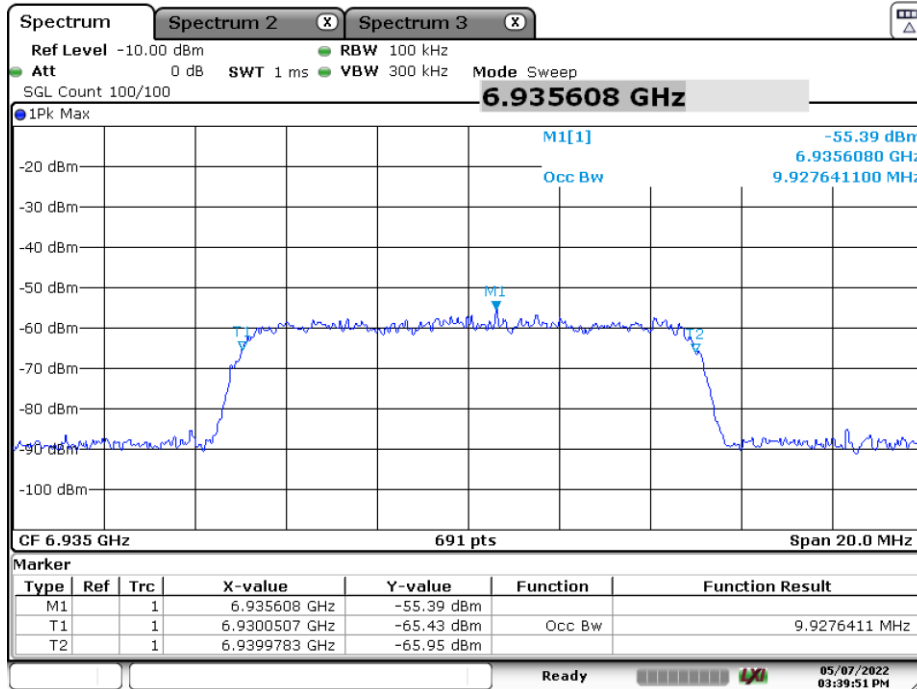
Plot 7-453. AWGN Signal – UNII 7 – 160MHz - Mid



Date: 7.MAY.2022 15:39:16

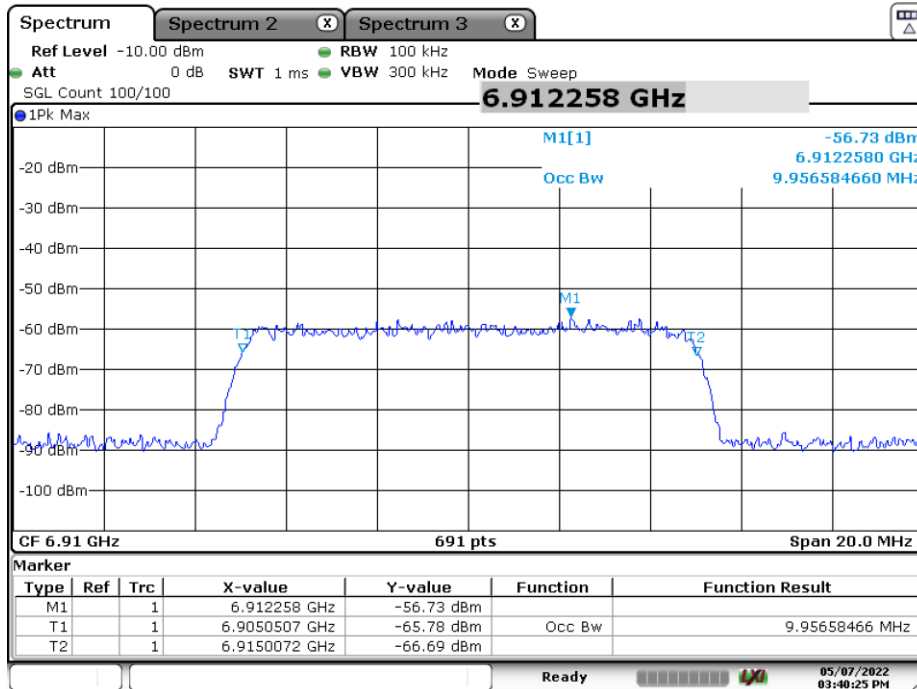
Plot 7-454. AWGN Signal – UNII 7 – 160MHz - High

| FCC ID: A3LSMF936B | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|---|--------------------------------------|------------------------------------|--|-----------------------------------|
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | | Page 263 of 302 |



Date: 7.MAY.2022 15:39:51

Plot 7-455. AWGN Signal – UNII 8 – 20MHz



Date: 7.MAY.2022 15:40:24

Plot 7-456. AWGN Signal – UNII 8 – 160MHz - Low

| FCC ID: A3LSMF936B | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|---|--------------------------------------|------------------------------------|--|-----------------------------------|
| Test Report S/N: 1M2204110052-14.A3L | Test Dates: 4/1/2022 – 06/29/2022 | EUT Type: Portable Handset | | Page 264 of 302 |