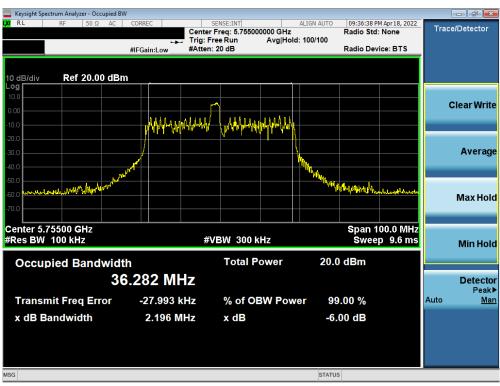




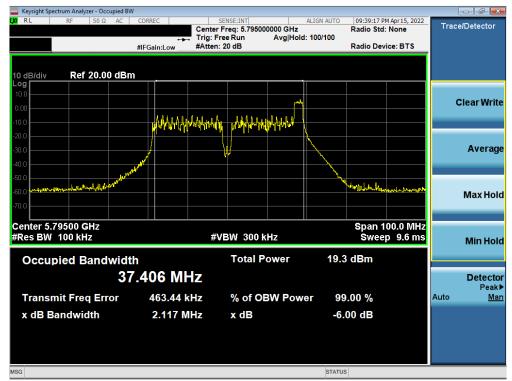
Plot 7-123. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 165)



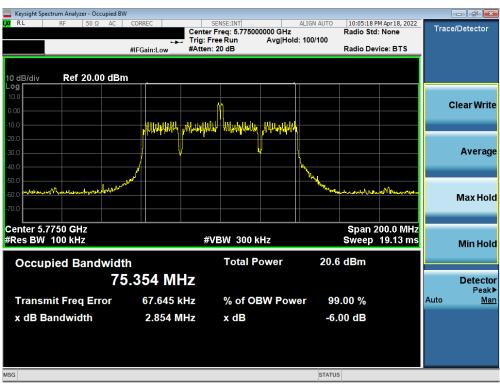
Plot 7-124. 6dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|------------------|--|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dege 80 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 89 of 236 | | |
| | • | | V 9 0 02/01/2019 | | |





Plot 7-125. 6dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 159)



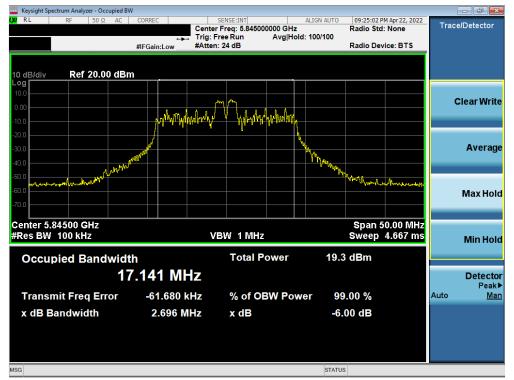
Plot 7-126. 6dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|------------------|--|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 00 of 226 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 90 of 236 | | |
| | - | | V 9 0 02/01/2019 | | |



| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|----------|--------------------|----------------|---------------|-------|------------------|------------------------------------|
| Band 3/4 | 5845 | 169 | ax (20MHz) | 26T | MCS0 | 2.70 |
| Band 4 | 5865 | 173 | ax (20MHz) | 26T | MCS0 | 2.68 |
| Dallu 4 | 5885 | 177 | ax (20MHz) | 26T | MCS0 | 2.13 |
| Band 3/4 | 5835 | 167 | ax (40MHz) | 26T | MCS0 | 2.14 |
| Band 4 | 5875 | 175 | ax (40MHz) | 26T | MCS0 | 2.16 |
| | 5855 | 171 | ax (80MHz) | 26T | MCS0 | 2.37 |
| Band 3/4 | 5815 | 163 | ax (160MHz L) | 26T | MCS0 | 2.49 |
| | 5815 | 163 | ax (160MHz U) | 26T | MCS0 | 3.00 |

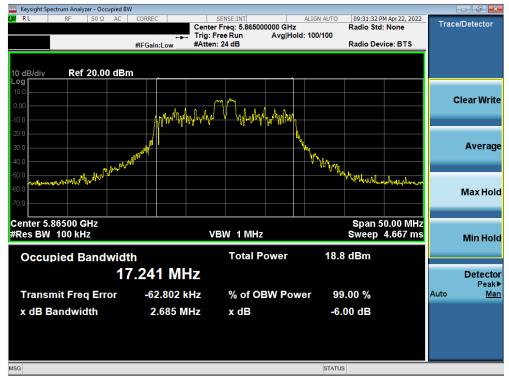
Table 7-11. Conducted Bandwidth Measurements MIMO ANT2 (26 Tones)



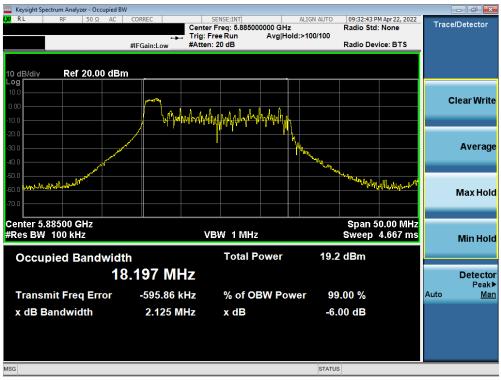
Plot 7-127. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 169)

| FCC ID: A3LSMF936U | | Approved by: Technical Manager | |
|------------------------|-------------------|-----------------------------------|------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 01 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 91 of 236 |
| | | | V 9.0 02/01/2019 |





Plot 7-128. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 173)



Plot 7-129. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 177)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 02 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 92 of 236 |
| | | | V 9 0 02/01/2019 |





Plot 7-130. 6dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 167)



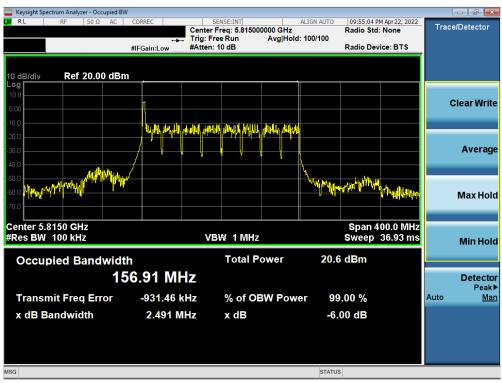
Plot 7-131. 6dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 175)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 02 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 93 of 236 |
| | | | V 9 0 02/01/2019 |



| Keysight Spectrum Analyzer - Occupied BW | | | | | | | |
|--|------------|--|------------------------------|---------------|----------------|--------|-------------|
| LX RL RF 50Ω AC | CORREC | SENSE:INT | ALIGN AL | | M Apr 22, 2022 | Trac | e/Detector |
| | | Center Freq: 5.85500 Trig: Free Run | 0000 GHz Avg Hold: 100/10 | Radio Std | : None | in act | CIDELECTO |
| | | #Atten: 12 dB | Angineta. Teorre | Radio Dev | rice: BTS | | |
| | | | | | | | |
| | | | | | | | |
| 10 dB/div Ref 20.00 dBm Log | | | | | | | |
| 10.0 | | | | | | | |
| 0.00 | n | | | | | | Clear Write |
| | | | | | | | |
| -10.0 | Youth My M | ikanilla illandulla | 机构相称 | | | | |
| -20.0 | | | 1 × 0 | | | | |
| -30.0 | / V | | | | | | Average |
| -40.0 | | | | | | | |
| -50.0 | | | ` | | | | |
| | | | | man when when | ATTANTANA | | |
| -60.0 Mana and the Manual Line | | | | www.www.i | 10 June 10 | | Max Hold |
| -70.0 | | | | | | | |
| | | | | | | | |
| Center 5.8550 GHz | | | | _Span 2 | 00.0 MHz | | |
| #Res BW 100 kHz | | VBW 1 MHz | | Sweep | 18.47 ms | | Min Hold |
| | | Total P | | 21.0 dBm | | | |
| Occupied Bandwidt | | | ower 2 | 21.0 aBm | | | |
| 77 | .065 MHz | 7 | | | | | Detector |
| | | | | | | | Peak▶ |
| Transmit Freq Error | -791.51 kH | z % of OE | BW Power | 99.00 % | | Auto | <u>Man</u> |
| x dB Bandwidth | 2.374 MH | z xdB | | -6.00 dB | | | |
| X dB Balldwidth | 2.314 1111 | | | -0.00 GB | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| MSG | | | S | TATUS | | | |

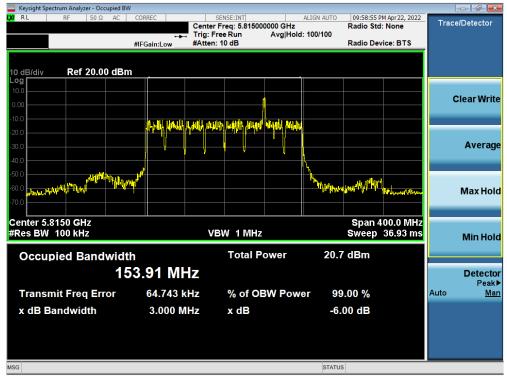
Plot 7-132. 6dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 171)



Plot 7-133. 6dB Bandwidth Plot MIMO ANT2 (160MHz BW (L) 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 163)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|------------------|--|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 04 of 226 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 94 of 236 | | |
| | • | | V 9 0 02/01/2019 | | |





Plot 7-134. 6dB Bandwidth Plot MIMO ANT2 (160MHz BW (U) 802.11ax – 26 Tones (UNII Band 3/4) – Ch. 163)

| FCC ID: A3LSMF936U | | Approved by: Technical Manager | |
|------------------------|-------------------|-----------------------------------|------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dege 05 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 95 of 236 |
| L | | · | V 9.0 02/01/2019 |



MIMO Antenna-2 6dB Bandwidth Measurements (Full Tones)

| _ | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|------|--------------------|----------------|-------------|-------|---------------------|------------------------------------|
| | 5745 | 149 | ax (20MHz) | 242T | MCS0 | 19.03 |
| | 5785 | 157 | ax (20MHz) | 242T | MCS0 | 19.01 |
| 1d 3 | 5825 | 165 | ax (20MHz) | 242T | MCS0 | 18.85 |
| Band | 5755 | 151 | ax (40MHz) | 484T | MCS0 | 38.17 |
| | 5795 | 159 | ax (40MHz) | 484T | MCS0 | 38.15 |
| | 5775 | 155 | ax (80MHz) | 996T | MCS0 | 78.20 |

Table 7-12. Conducted Bandwidth Measurements MIMO ANT2 (Full Tones)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager | | |
|------------------------|---------------------------------------|------------------|-----------------------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 00 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 96 of 236 | | |
| V 9 0 02/01/2019 | | | | | |



| www.www.com analyzer - Occupied BW | | | | | | | |
|---|-----------------------|-----------------------|-------------------|--|----------------------|-------|---------------------------------|
| | | | ALIGN AUTO | 10:14:56 Pl Radio Std: Radio Dev | | Trace | e/Detector |
| 10 dB/div Ref 20.00 dBm | | | . | | | | |
| 10.0 | mandlineduraderla | portendenantilipinana | | | | c | Clear Write |
| -10.0 -20.0 -30.0 month all and and a start and a | | | Arlow-woodly / La | hannapathyly | Michahan 1 | | Average |
| -30.0 | | | | | | | Average |
| -60.0 | | | | | | | Max Hold |
| Center 5.74500 GHz #Res BW 100 kHz | #VI | BW 300 kHz | | | 0.00 MHz p 4.8 ms | | Min Hold |
| Occupied Bandwidth | 40 MIL- | Total Power | 24.3 | dBm | | | |
| | 43 MHz -45.058 kHz | % of OBW Pow | ver 99 | .00 % | | Auto | Detector Peak► <u>Man</u> |
| x dB Bandwidth | 19.03 MHz | x dB | -6.0 | 00 dB | | | |
| | | | | | | | |
| MSG | | | STATUS | | | | |

Plot 7-135. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 242 Tones (UNII Band 3) - Ch. 149)



Plot 7-136. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 242 Tones (UNII Band 3) - Ch. 157)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 07 of 226 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 97 of 236 | | |
| | | | V 9 0 02/01/2019 | | |



| 🔤 Keysight Spectrum Analyzer - Occupied BW | | | | | | [| |
|--|----------------------------|--|---|---|----------------------|-------|-------------------|
| | T | SENSE:INT Center Freq: 5.825000 Trig: Free Run Atten: 20 dB | ALIGN AUTO 0000 GHz Avg Hold: 100/100 | 10:16:57 PM Radio Std: Radio Devi | | Trace | e/Detector |
| 10 dB/div Ref 20.00 dBm | | | | | | | |
| Log 10.0 0.00 | angetronger | uprover and a source of the second second | Portorio antinga | | | c | lear Write |
| -10.0 -20.0 -30.0 -40.0 | <i>, , , , , , , , , ,</i> | | hand the states | Maring Marine | alantana dha | | Average |
| -50.0 -60.0 -70.0 | | | | | | | Max Hold |
| Center 5.82500 GHz #Res BW 100 kHz | | #VBW 300 k | | Sweep | 0.00 MHz 5 4.8 ms | | Min Hold |
| Occupied Bandwidth 19. | 031 MHz | Total Po | ower 24.3 | dBm | | | Detector Peak▶ |
| Transmit Freq Error | -62.216 kHz | z % of OE | W Power 99 | .00 % | | Auto | Man |
| x dB Bandwidth | 18.85 MHz | z x dB | -6. | 00 dB | | | |
| MSG | | | STATUS | 5 | | | |

Plot 7-137. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 242 Tones (UNII Band 3) - Ch. 165)



Plot 7-138. 6dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax - 484 Tones (UNII Band 3) - Ch. 151)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dege 00 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 98 of 236 | | |
| | • | - | V 9 0 02/01/2019 | | |



| www.www.com analyzer - Occupied BW | | | | | | | - 6 💌 |
|---------------------------------------|-----------------------|---|------------|--|----------------------|------|---------------------------------|
| | | | ALIGN AUTO | 10:36:42 Pl Radio Std: Radio Dev | | Trac | e/Detector |
| 10 dB/div Ref 25.00 dBm | | | | | | | |
| Log 15.0 5.00 | | | | | | (| Clear Write |
| -5.00 | malinetonestrum | Alley and a start and a start and a start and a | | | | | |
| -25.0 -35.0 <mark></mark> | | | | hllwh, | Underhalle | | Average |
| -45.0 -55.0 -65.0 | | | | | | | Max Hold |
| Center 5.79500 GHz #Res BW 100 kHz | #VE | 300 kHz | | | 00.0 MHz p 9.6 ms | | Min Hold |
| Occupied Bandwidth | | Total Power | 23.6 | dBm | | | |
| | 54 MHz -67.553 kHz | % of OBW Pow | er 99 | .00 % | | Auto | Detector Peak▶ <u>Man</u> |
| x dB Bandwidth | 38.15 MHz | x dB | | 00 dB | | | |
| MSG | | | STATUS | | | | |

Plot 7-139. 6dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax - 484 Tones (UNII Band 3) - Ch. 159)



Plot 7-140. 6dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax - 996 Tones (UNII Band 3) - Ch. 155)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 00 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 99 of 236 | | |
| | • | - | V 9 0 02/01/2019 | | |



| Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|--------------------|---|--|---|--|---|
| 5845 | 169 | ax (20MHz) | 242T | MCS0 | 19.08 |
| 5865 | 173 | ax (20MHz) | 242T | MCS0 | 19.12 |
| 5885 | 177 | ax (20MHz) | 242T | MCS0 | 19.12 |
| 5835 | 167 | ax (40MHz) | 484T | MCS0 | 38.15 |
| 5875 | 175 | ax (40MHz) | 484T | MCS0 | 38.11 |
| 5855 | 171 | ax (80MHz) | 996T | MCS0 | 78.22 |
| 5815 | 163 | ax (160MHz L) | 996T | MCS0 | 156.08 |
| 5815 | 163 | ax (160MHz U) | 996T | MCS0 | 157.13 |
| | [MHz] 5845 5865 5885 5835 5835 5875 5855 5855 5815 5815 | [MHz] No. 5845 169 5865 173 5885 177 5835 167 5875 175 5855 171 5815 163 | [MHz]No.802.11 Mode5845169ax (20MHz)5865173ax (20MHz)5885177ax (20MHz)5835167ax (40MHz)5875175ax (40MHz)5855171ax (80MHz)5815163ax (160MHz L)5815163ax (160MHz U) | [MHz]No.802.11 ModeI ones5845169ax (20MHz)242T5865173ax (20MHz)242T5885177ax (20MHz)242T5835167ax (20MHz)242T5835167ax (40MHz)484T5875175ax (40MHz)484T5855171ax (80MHz)996T5815163ax (160MHz L)996T5815163ax (160MHz U)996T | [MHz]No.802.11 ModeI onesData Rate [Mbps]5845169ax (20MHz)242TMCS05865173ax (20MHz)242TMCS05885177ax (20MHz)242TMCS05835167ax (40MHz)484TMCS05875175ax (40MHz)484TMCS05855171ax (80MHz)996TMCS05815163ax (160MHz L)996TMCS05815163ax (160MHz U)996TMCS0 |

Table 7-13. Conducted Bandwidth Measurements MIMO ANT2 (Full Tones)



Plot 7-141. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 242 Tones (UNII Band 3/4) - Ch. 169)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 100 of 220 | | | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 100 of 236 | | | | |
| | | | V 9.0 02/01/2019 | | | | |



| Keysight Spectrum Analyzer - Occup | pied BW | | | | | [| |
|---------------------------------------|--|---|------------------------|-------------------------|--|-------|------------|
| LXI RL RF 50 Ω | AC CORREC | SENSE:INT | ALIGN AUTO | | M Apr 22, 2022 | Trace | /Detector |
| | | enter Freq: 5.865000000 rig: Free Run Av | GHz g Hold: 100/100 | Radio Std | None | mace | Detector |
| | | Atten: 30 dB | g Hold. 100/100 | Radio Dev | ice: BTS | | |
| | MI Guilleow | | | | | | |
| | | | | | | | |
| 10 dB/div Ref 20.00 | dBm | | | | | | |
| Log | | | | | | | |
| 10.0 | | | 4 | | | | lear Write |
| 0.00 | merind portant ling | manyalanda | N'h (Ima | | | • | lear write |
| -10.0 | | <u></u> | | | | | |
| | d la | | | | | | |
| -20.0 -30.0 Mayshar Marshar Mars | MANN | | William | under off In | | | |
| -30.0 Kithow Why With 1 4-4 May - 10- | W | | 1 * 1.49 | an think a but a second | V water to provide the provided of the provide | | Average |
| -40.0 | | | | | | | |
| -50.0 | | | | | | | |
| | | | | | | | |
| -60.0 | | | | | | | Max Hold |
| -70.0 | | | | | | | |
| | | | | | | | |
| Center 5.86500 GHz | | | | Span 5 | 0.00 MHz | | |
| #Res BW 100 kHz | | VBW 1 MHz | | Sweep | 4.667 ms | | Min Hold |
| | | | | | | | Minitiona |
| Occupied Bandw | vidth | Total Powe | er 24.9 | dBm | | | |
| | | | | | | | |
| | 19.062 MHz | | | | | | Detector |
| | | | D | 00.0/ | | A | Peak► |
| Transmit Freq Erro | r -39.163 kHz | % of OBW | Power 99. | .00 % | | Auto | <u>Man</u> |
| x dB Bandwidth | 19.12 MHz | x dB | -6.0 | 00 dB | | | |
| | | | 010 | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| MSG | | | STATUS | | | | |
| MSG | | | STATUS | | | | |

Plot 7-142. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 242 Tones (UNII Band 4) - Ch. 173)



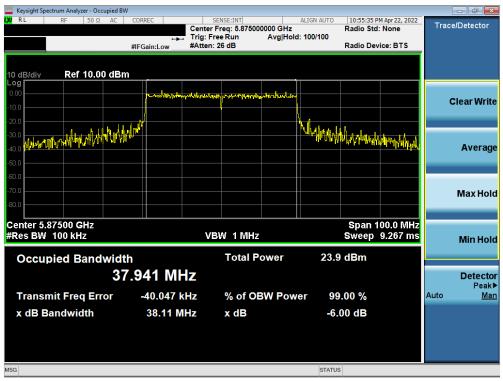
Plot 7-143. 6dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax - 242 Tones (UNII Band 4) - Ch. 177)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 101 of 226 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 101 of 236 | | |
| | - | | V 9 0 02/01/2019 | | |



| Keysight Spectrum Analyz | zer - Occupied BW | | | | | | | | | |
|--------------------------|-------------------|------------------|------------------|-------------|---------------|---------------|------------|----------------|------|-------------|
| LXIRL RF | 50 Ω AC C | ORREC | | VSE:INT | | ALIGN AUTO | | M Apr 22, 2022 | Trac | e/Detector |
| | | | | eq: 5.83500 | | d: 100/100 | Radio Std | : None | TTac | enderector |
| | # | ⊷ IFGain:Low | #Atten: 2 | | Avginoi | u. 100/100 | Radio Dev | ice: BTS | | |
| , | п | IF Gam.LOW | | | | | ituaro per | | | |
| | | | | | | | | | | |
| | 10.00 dBm | | | | | | | | | |
| Log | | | | | | | | | | |
| 0.00 | | and the Containe | malestanterenter | water | who have made | | | | | 01 |
| -10.0 | | | | | | | | | | Clear Write |
| -20.0 | | J. | | | | | | | | |
| -20.0 | t data data | μ ^μ | | | | Muu | chart a 🖡 | | | |
| -30.0 -40.0 | a ADANNY ANA A | | | | | . All the All | 14 AM WAY | altrudgene | | |
| -40.0 | | | | | | | | | | Average |
| -50.0 | | | | | | | | | | |
| | | | | | | | | | | |
| -60.0 | | | | | | | | | | |
| -70.0 | | | | | | | | | | Max Hold |
| -80.0 | | | | | | | | | | maxmora |
| | | | | | | | | | | |
| Center 5.83500 G | Hz | | | | | | Span 1 | 00.0 MHz | | |
| #Res BW 100 kH | | | VBV | N 1 MHz | | | | 9.267 ms | | Min Hold |
| | | | | | | | | | | Min Hold |
| Occupied B | andwidth | | | Total P | ower | 24.0 | dBm | | | |
| Occupied B | | | _ | - otai - i | 01101 | 2.113 | | | | |
| | 37. | 961 MF | Z | | | | | | | Detector |
| | | | | | | | | | | Peak▶ |
| Transmit Free | q Error | -39.893 k | Hz | % of OE | 3W Pow | ver 99 | .00 % | | Auto | <u>Man</u> |
| x dB Bandwid | lth | 38.15 M | Hz | x dB | | -6 | 00 dB | | | |
| | | 30.13 M | 112 | X UD | | -0. | 00 UB | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| MSG | | | | | | STATUS | 5 | | | |

Plot 7-144. 6dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax - 484 Tones (UNII Band 3/4) - Ch. 167)



Plot 7-145. 6dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax - 484 Tones (UNII Band 4) - Ch. 175)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 102 of 226 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 102 of 236 | | |
| | - | | V 9 0 02/01/2019 | | |



| | sight Spectrum Analyze | er - Occupied BW | | | | | | | | | |
|----------------------|--------------------------------------|------------------|-------------------|-----------------------|-----------------|-----------------------|------------|---------------|----------------|------|-------------|
| L <mark>XI</mark> RI | L RF | 50 Ω AC CO | RREC | | NSE:INT | | ALIGN AUTO | | M Apr 22, 2022 | Trac | e/Detector |
| | | | | | req: 5.85500 | | d: 100/100 | Radio Std | : None | mac | CIDECECTO |
| | | #1 | - Gain:Low | #Atten: 2 | | Avginoid | 1. 100/100 | Radio Dev | ice: BTS | | |
| | | mi | Gam.cow | | | | | | | | |
| | | | | | | | | | | | |
| 10 dE | 3/div Ref ' | 10.00 dBm | | | | | | | | | |
| Log | | | | | | | | | | | |
| 0.00 | | | Land Loop La | a dha ƙafa | | Ju. Land | | | | | |
| -10.0 | | | and the second of | an-18.200.00000000000 | hallow and read | a open /www.com/chare | 1 | | | | Clear Write |
| -20.0 | | | | | | | | | | | |
| | | | N I | | | | Ι. | | | | |
| -30.0 | | | 1 | | | | Walls | | dillan | | |
| -40.0 | a qis aayofaysoo yaalahayaafa | Jeway Williams | | | | | a. Al Mart | e Mar Halanda | | | Average |
| -50.0 | | | | | | | | | | | |
| | | | | | | | | | | | |
| -60.0 | | | | | | | | | | | |
| -70.0 | | | | | | | | | | | Max Hold |
| -80.0 | | | | | | | | | | | |
| | | | | | | | | | | | |
| Cen | ter 5.8550 GH | z | | | | | | Span 2 | 00.0 MHz | | |
| #Re: | s BW 100 kHz | z | | VB | N 1 MHz | | | | 18.47 ms | | Min Hold |
| | | | | | | | | | | | MIT HOID |
| 0 | ccupied Ba | andwidth | | | Total P | ower | 23.0 | dBm | | | |
| Ĭ | Coupied De | | | | | | | | | | |
| | | 77.6 | 691 MI | ΗZ | | | | | | | Detector |
| | | | | | | | | | | | Peak▶ |
| | ransmit Freq | Error | -23.986 | кНz | % of O | 3W Pow | er 99 | .00 % | | Auto | <u>Man</u> |
| v | dB Bandwid | th | 78.22 N | 147 | x dB | | -6 | 00 dB | | | |
| ^ | | | 10.22 1 | 11 12 | A UD | | -0. | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| MSG | | | | | | | STATUS | 5 | | | |

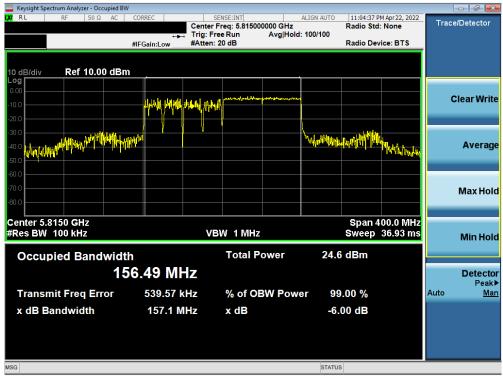
Plot 7-146. 6dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax - 996 Tones (UNII Band 3/4) - Ch. 171)



Plot 7-147. 6dB Bandwidth Plot MIMO ANT2 (160MHz BW (L) 802.11ax - 996 Tones (UNII Band 3/4) - Ch. 163)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
|------------------------|-------------------|---------------------------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dama 400 of 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 103 of 236 |
| | - | | V 9.0 02/01/2019 |





Plot 7-148. 6dB Bandwidth Plot MIMO ANT2 (160MHz BW (U) 802.11ax – 996 Tones (UNII Band 3/4) – Ch. 163)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
|------------------------|-------------------|---------------------------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 101 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 104 of 236 |
| | - | | V 9.0 02/01/2019 |



7.4 UNII Output Power Measurement – 802.11ax OFDMA §15.407(a.1.iv) §15.407(a.2) §15.407(a.3)

Test Overview and Limits

A transmitter antenna terminal of the EUT is connected to the input of an RF pulse power sensor. Measurement is made using a broadband average power meter while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies.

In the 5.15 – 5.25GHz band, the maximum permissible conducted output power is 250mW (23.98dBm). The maximum e.i.r.p. shall not exceed the lesser of 200 mW or 10 + 10 log10B, dBm.

In the 5.25 – 5.35GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) or 11 dBm + $10\log_{10}(26dB BW) = 11 dBm + 10\log_{10}(18.81) = 23.74dBm$. The maximum e.i.r.p. shall not exceed the lesser of 1.0 W or 17 + 10 log10B, dBm.

In the 5.47 – 5.725GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) or 11 dBm + $10\log_{10}(26dB BW) = 11 dBm + 10\log_{10}(18.74) = 23.73dBm$. The maximum e.i.r.p. shall not exceed the lesser of 1.0 W or 17 + 10 log10B, dBm.

In the 5.725 – 5.850GHz band, the maximum permissible conducted output power is 1W (30dBm). The maximum e.i.r.p. is 36 dBm.

In the 5.850 – 5.895 GHz band, the maximum permissible e.i.r.p is 30dBm.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G KDB 789033 D02 v02r01 – Section E)3)b) Method PM-G ANSI C63.10-2013 – Section 14.2 Measure-and-Sum Technique KDB 662911 v02r01 – Section E)1) Measure-and-Sum Technique

Test Settings

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

Test Setup

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



Figure 7-3. Test Instrument & Measurement Setup

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
|------------------------|-------------------|---------------------------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 105 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 105 of 236 |
| | | | V 9.0 02/01/2019 |



MIMO Maximum Conducted Output Power Measurements (26 Tones)

| | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|------------|---------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|------------|
| Freq [MHz] | Channel | Detector | Tones | | 0 | | | 4 | | | 8 | | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | |
| | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | сппп [авті] | margin (ub |
| 5180 | 36 | AVG | 26T | 10.96 | 10.64 | 13.81 | 10.94 | 10.53 | 13.75 | 10.90 | 10.45 | 13.69 | 23.98 | -10.17 | -0.96 | 12.85 | 22.39 | -9.54 |
| 5200 | 40 | AVG | 26T | 10.92 | 10.50 | 13.73 | 10.93 | 10.46 | 13.71 | 10.82 | 10.33 | 13.59 | 23.98 | -10.25 | -0.96 | 12.77 | 22.39 | -9.62 |
| 5240 | 48 | AVG | 26T | 10.99 | 10.81 | 13.91 | 10.93 | 10.68 | 13.82 | 10.86 | 10.63 | 13.76 | 23.98 | -10.07 | -0.96 | 12.95 | 22.39 | -9.44 |
| 5260 | 52 | AVG | 26T | 10.6 | 10.66 | 13.64 | 10.73 | 10.55 | 13.65 | 10.67 | 10.54 | 13.62 | 23.47 | -9.82 | -0.91 | 12.74 | 29.47 | -16.73 |
| 5280 | 56 | AVG | 26T | 10.62 | 10.72 | 13.68 | 10.70 | 10.60 | 13.66 | 10.56 | 10.59 | 13.59 | 23.47 | -9.79 | -0.91 | 12.77 | 29.47 | -16.70 |
| 5320 | 64 | AVG | 26T | 10.22 | 10.65 | 13.45 | 10.61 | 10.53 | 13.58 | 10.60 | 10.57 | 13.60 | 23.47 | -9.87 | -0.91 | 12.69 | 29.47 | -16.78 |
| 5500 | 100 | AVG | 26T | 10.88 | 10.65 | 13.78 | 10.94 | 10.55 | 13.76 | 10.84 | 10.68 | 13.77 | 22.80 | -9.02 | -1.91 | 11.87 | 28.80 | -16.93 |
| 5600 | 120 | AVG | 26T | 10.99 | 10.46 | 13.74 | 10.98 | 10.51 | 13.76 | 10.99 | 10.58 | 13.80 | 22.80 | -9.00 | -1.91 | 11.89 | 28.80 | -16.91 |
| 5720 | 144 | AVG | 26T | 10.8 | 10.64 | 13.73 | 10.77 | 10.53 | 13.66 | 10.79 | 10.68 | 13.75 | 22.80 | -9.05 | -1.91 | 11.84 | 28.80 | -16.96 |
| 5745 | 149 | AVG | 26T | 10.78 | 10.49 | 13.65 | 10.79 | 10.47 | 13.64 | 10.76 | 10.62 | 13.70 | 30.00 | -16.30 | -0.75 | 12.95 | - | |
| 5785 | 157 | AVG | 26T | 10.66 | 10.45 | 13.57 | 10.79 | 10.52 | 13.67 | 10.64 | 10.54 | 13.60 | 30.00 | -16.33 | -0.75 | 12.92 | - | - |
| 5825 | 165 | AVG | 26T | 10.99 | 10.44 | 13.73 | 10.99 | 10.48 | 13.75 | 10.98 | 10.40 | 13.71 | 30.00 | -16.25 | -0.75 | 13.00 | | - |
| 5845 | 169 | AVG | 26T | 10.94 | 10.43 | 13.70 | 10.98 | 10.40 | 13.71 | 10.90 | 10.34 | 13.64 | 30.00 | -16.29 | -0.75 | 12.96 | 30.00 | -17.04 |
| 5865 | 173 | AVG | 26T | 10.90 | 10.02 | 13.49 | 10.83 | 10.11 | 13.50 | 10.85 | 10.01 | 13.46 | 30.00 | -16.50 | -0.75 | 12.75 | 30.00 | -17.25 |
| 5885 | 177 | AVG | 26T | 10.75 | 10.83 | 13.80 | 10.72 | 10.79 | 13.77 | 10.78 | 10.63 | 13.72 | 30.00 | -16.20 | -0.75 | 13.05 | 30.00 | -16.95 |

Table 7-14. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| | | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|---------|--------|---------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------|
| Freq [M | (Hz] C | Channel | Detector | Tones | | 0 | | | 8 | | | 17 | | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | |
| - | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | Lapuil | Linin (ubin) | margin [ub] |
| 5190 | 0 | 38 | AVG | 26T | 10.86 | 10.43 | 13.66 | 10.64 | 10.08 | 13.38 | 10.74 | 10.09 | 13.44 | 23.98 | -10.32 | -0.96 | 12.70 | 22.39 | -9.69 |
| 5230 | 0 | 46 | AVG | 26T | 10.64 | 10.51 | 13.59 | 10.36 | 10.18 | 13.28 | 10.60 | 10.29 | 13.46 | 23.98 | -10.39 | -0.96 | 12.63 | 22.39 | -9.76 |
| 5270 | 0 | 54 | AVG | 26T | 10.64 | 10.44 | 13.55 | 10.73 | 10.13 | 13.45 | 10.86 | 10.21 | 13.56 | 23.47 | -9.91 | -0.91 | 12.65 | 29.47 | -16.82 |
| 5310 | 0 | 62 | AVG | 26T | 10.98 | 10.35 | 13.69 | 10.32 | 10.23 | 13.29 | 10.48 | 10.51 | 13.51 | 23.47 | -9.78 | -0.91 | 12.78 | 29.47 | -16.69 |
| 5510 | 0 | 102 | AVG | 26T | 10.74 | 10.44 | 13.60 | 10.54 | 10.57 | 13.57 | 10.64 | 10.91 | 13.79 | 22.80 | -9.01 | -1.91 | 11.88 | 28.80 | -16.92 |
| 5590 | 0 | 118 | AVG | 26T | 10.95 | 10.25 | 13.62 | 10.61 | 10.10 | 13.37 | 10.84 | 10.43 | 13.65 | 22.80 | -9.15 | -1.91 | 11.74 | 28.80 | -17.06 |
| 5710 | 0 | 142 | AVG | 26T | 10.76 | 10.48 | 13.63 | 10.54 | 10.35 | 13.46 | 10.63 | 10.70 | 13.68 | 22.80 | -9.12 | -1.91 | 11.77 | 28.80 | -17.03 |
| 5755 | 5 | 151 | AVG | 26T | 10.73 | 10.38 | 13.57 | 10.45 | 10.16 | 13.32 | 10.65 | 10.58 | 13.63 | 30.00 | -16.37 | -0.75 | 12.88 | | |
| 5795 | 5 | 159 | AVG | 26T | 10.97 | 10.25 | 13.64 | 10.60 | 10.02 | 13.33 | 10.86 | 10.28 | 13.59 | 30.00 | -16.36 | -0.75 | 12.89 | - | - |
| 5835 | 5 | 167 | AVG | 26T | 10.83 | 10.25 | 13.56 | 10.59 | 10.03 | 13.33 | 10.74 | 10.22 | 13.50 | 30.00 | -16.44 | -0.75 | 12.81 | 30.00 | -17.19 |
| 5875 | 5 | 175 | AVG | 26T | 10.80 | 10.52 | 13.67 | 10.42 | 10.21 | 13.33 | 10.71 | 10.39 | 13.56 | 30.00 | -16.33 | -0.75 | 12.92 | 30.00 | -17.08 |

Table 7-15. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| | | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|---|------------|---------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------|
| | Freq [MHz] | Channel | Detector | Tones | | 0 | | | 18 | | | 36 | | Power Limit | | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | |
| 2 | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Cunic [Opin] | margin [ub] |
| : | 5210 | 42 | AVG | 26T | 10.97 | 10.95 | 13.97 | 10.67 | 10.39 | 13.54 | 10.75 | 10.32 | 13.55 | 23.98 | -10.01 | -0.96 | 13.01 | 22.39 | -9.38 |
| ž | 5290 | 58 | AVG | 26T | 10.61 | 10.81 | 13.72 | 10.32 | 10.37 | 13.36 | 10.53 | 10.39 | 13.47 | 23.47 | -9.75 | -0.96 | 12.76 | 29.47 | -16.71 |
| é | 5530 | 106 | AVG | 26T | 10.84 | 10.19 | 13.54 | 10.81 | 10.48 | 13.66 | 10.82 | 10.97 | 13.91 | 22.80 | -8.89 | -1.91 | 12.00 | 28.80 | -16.80 |
| a | 5610 | 122 | AVG | 26T | 10.65 | 10.01 | 13.35 | 10.73 | 10.24 | 13.50 | 10.96 | 10.69 | 13.84 | 22.80 | -8.96 | -1.91 | 11.93 | 28.80 | -16.87 |
| 2 | 5690 | 138 | AVG | 26T | 10.94 | 10.58 | 13.77 | 10.62 | 10.50 | 13.57 | 10.73 | 10.99 | 13.87 | 22.80 | -8.93 | -1.91 | 11.96 | 28.80 | -16.84 |
| | 5775 | 155 | AVG | 26T | 10.73 | 10.27 | 13.52 | 10.48 | 10.19 | 13.35 | 10.43 | 10.55 | 13.50 | 30.00 | -16.48 | -0.75 | 12.77 | - | - |
| | 5855 | 171 | AVG | 26T | 10.93 | 10.20 | 13.59 | 10.67 | 10.01 | 13.36 | 10.74 | 10.08 | 13.43 | 30.00 | -16.41 | -0.75 | 12.84 | 30.00 | -17.16 |

Table 7-16. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| ≥ | - | | | | | | Average C | onducted Po | wer (dBm) | | | | Conducted | Conducted | Directional | | | |
|-------|---------------|---------|-------|-------|-------------|-------|-----------|--------------|-----------|-------|--------------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------------------|
| B | Freq [MHz] | Channel | Tones | | RU Index: 0 | | l | RU Index: 18 | ; | | RU Index: 36 | 5 | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin (dB) |
| ₽ つ | [INITIZ] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Linit [ubiii] | margin [ub] |
| l ≣ ⊂ | 5250 | 50 | 26T | 10.84 | 10.51 | 13.69 | 10.80 | 10.65 | 13.74 | 10.99 | 10.69 | 13.85 | 23.98 | -10.13 | -0.96 | 12.89 | 22.39 | -9.50 |
| 60 | 5570 | 114 | 26T | 10.96 | 10.50 | 13.75 | 10.88 | 10.05 | 13.50 | 10.77 | 10.01 | 13.42 | 23.47 | -9.72 | -0.75 | 13.00 | 28.80 | -15.80 |
| ÷. | 5815 | 163 | 26T | 10.95 | 10.18 | 13.59 | 10.94 | 9.93 | 13.47 | 10.82 | 9.97 | 13.43 | | | -0.75 | 12.84 | 36.00 | -23.16 |

Table 7-17. MIMO 160MHz BW L (UNII) Maximum Conducted Output Power (26 Tones)

| ≥ | Frea | | | | | | Average C | onducted Po | wer (dBm) | | | | Conducted | Conducted | Directional | | | |
|--------|----------|---------|-------|-------|-------------|-------|-----------|--------------|-----------|-------|--------------|-------|-------------|-------------|-------------|-----------------------|--------------|-------------------------|
| Ξ Ω | [MHz] | Channel | Tones | | RU Index: 0 | | l | RU Index: 18 | 3 | | RU Index: 36 | 5 | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. | e.i.r.p. Margin (dB) |
| ₽ 🕤 | [141112] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [0.5] | Emit [dBin] | indi gin [db] |
| ≣⊇ | 5250 | 50 | 26T | 10.92 | 10.71 | 13.83 | 10.90 | 10.76 | 13.84 | 10.80 | 10.73 | 13.78 | 23.98 | -10.14 | -0.96 | 12.88 | 22.39 | -9.51 |
| 60 | 5570 | 114 | 26T | 10.58 | 10.05 | 13.33 | 10.58 | 10.41 | 13.51 | 10.27 | 10.61 | 13.45 | 23.47 | -9.96 | -0.75 | 12.76 | 28.80 | -16.04 |
| Ť. | 5815 | 163 | 26T | 10.66 | 10.06 | 13.38 | 10.96 | 10.21 | 13.61 | 10.85 | 10.14 | 13.52 | | | -0.75 | 12.86 | 36.00 | -23.14 |

Table 7-18. MIMO 160MHz BW U (UNII) Maximum Conducted Output Power (26 Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
|------------------------|-------------------|---------------------------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dama 400 at 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 106 of 236 |
| | * | | V 9.0 02/01/2019 |



MIMO Conducted Output Power Measurements (52 Tones)

| | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|------------|---------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|------------|
| Freq [MHz] | Channel | Detector | Tones | | 37 | | | 39 | | | 40 | | Power Limit | | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | |
| | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | Lapuil | Cunic [Opin] | margin (uc |
| 5180 | 36 | AVG | 52T | 13.99 | 13.93 | 16.97 | 13.78 | 13.59 | 16.70 | 13.99 | 13.81 | 16.91 | 23.98 | -7.01 | -0.96 | 16.01 | 22.39 | -6.38 |
| 5200 | 40 | AVG | 52T | 13.99 | 13.87 | 16.94 | 13.79 | 13.64 | 16.73 | 13.95 | 13.84 | 16.91 | 23.98 | -7.04 | -0.96 | 15.98 | 22.39 | -6.41 |
| 5240 | 48 | AVG | 52T | 13.99 | 13.94 | 16.98 | 13.81 | 13.60 | 16.72 | 13.98 | 13.85 | 16.93 | 23.98 | -7.00 | -0.96 | 16.02 | 22.39 | -6.37 |
| 5260 | 52 | AVG | 52T | 13.96 | 13.94 | 16.96 | 13.71 | 13.67 | 16.70 | 13.92 | 13.91 | 16.93 | 23.47 | -6.51 | -0.91 | 16.05 | 29.47 | -13.42 |
| 5280 | 56 | AVG | 52T | 13.92 | 13.89 | 16.92 | 13.60 | 13.70 | 16.66 | 13.84 | 13.90 | 16.88 | 23.47 | -6.55 | -0.91 | 16.01 | 29.47 | -13.46 |
| 5320 | 64 | AVG | 52T | 13.31 | 13.73 | 16.54 | 13.50 | 13.83 | 16.68 | 13.24 | 13.70 | 16.49 | 23.47 | -6.79 | -0.91 | 15.77 | 29.47 | -13.70 |
| 5500 | 100 | AVG | 52T | 13.99 | 13.61 | 16.81 | 13.82 | 13.41 | 16.63 | 13.98 | 13.64 | 16.82 | 22.80 | -5.98 | -1.91 | 14.91 | 28.80 | -13.89 |
| 5600 | 120 | AVG | 52T | 13.65 | 13.12 | 16.40 | 13.90 | 13.93 | 16.93 | 13.62 | 13.25 | 16.45 | 22.80 | -5.87 | -1.91 | 15.02 | 28.80 | -13.78 |
| 5720 | 144 | AVG | 52T | 13.68 | 13.31 | 16.51 | 13.96 | 13.43 | 16.71 | 13.64 | 13.41 | 16.54 | 22.80 | -6.09 | -1.91 | 14.80 | 28.80 | -14.00 |
| 5745 | 149 | AVG | 52T | 13.63 | 13.20 | 16.43 | 13.89 | 13.31 | 16.62 | 13.56 | 13.32 | 16.45 | 30.00 | -13.38 | -0.75 | 15.87 | - | |
| 5785 | 157 | AVG | 52T | 13.98 | 13.81 | 16.91 | 13.77 | 13.61 | 16.70 | 13.99 | 13.84 | 16.93 | 30.00 | -13.07 | -0.75 | 16.18 | - | - |
| 5825 | 165 | AVG | 52T | 13.85 | 13.04 | 16.47 | 13.83 | 13.45 | 16.65 | 13.99 | 13.71 | 16.86 | 30.00 | -13.14 | -0.75 | 16.11 | - | - |
| 5845 | 169 | AVG | 52T | 13.99 | 13.59 | 16.80 | 13.76 | 13.34 | 16.57 | 13.98 | 13.52 | 16.77 | 30.00 | -13.20 | -0.75 | 16.05 | 30.00 | -13.95 |
| 5865 | 173 | AVG | 52T | 13.67 | 13.06 | 16.39 | 13.88 | 13.28 | 16.60 | 13.53 | 13.01 | 16.29 | 30.00 | -13.40 | -0.75 | 15.85 | 30.00 | -14.15 |
| 5885 | 177 | AVG | 52T | 13.42 | 13.74 | 16.59 | 13.48 | 13.95 | 16.73 | 13.38 | 13.66 | 16.53 | 30.00 | -13.27 | -0.75 | 15.98 | 30.00 | -14.02 |

Table 7-19. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| | | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|----|------------|---------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------|
| | Freq [MHz] | Channel | Detector | Tones | | 37 | | | 40 | | | 44 | | Power Limit | | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Linit [dbiii] | margin [db] |
| - | 5190 | 38 | AVG | 52T | 13.54 | 13.39 | 16.48 | 13.85 | 13.76 | 16.82 | 13.99 | 13.79 | 16.90 | 23.98 | -7.08 | -0.96 | 15.94 | 22.39 | -6.45 |
| 3 | 5230 | 46 | AVG | 52T | 13.60 | 13.97 | 16.80 | 13.78 | 13.99 | 16.90 | 13.52 | 13.80 | 16.67 | 23.98 | -7.08 | -0.96 | 15.94 | 22.39 | -6.45 |
| 3 | 5270 | 54 | AVG | 52T | 13.92 | 13.99 | 16.97 | 13.74 | 13.70 | 16.73 | 13.86 | 13.87 | 16.88 | 23.47 | -6.50 | -0.91 | 16.06 | 29.47 | -13.41 |
| | 5310 | 62 | AVG | 52T | 13.86 | 13.99 | 16.94 | 13.62 | 13.81 | 16.73 | 13.75 | 13.98 | 16.88 | 23.47 | -6.53 | -0.91 | 16.03 | 29.47 | -13.44 |
| | 5510 | 102 | AVG | 52T | 13.99 | 13.69 | 16.85 | 13.79 | 13.50 | 16.66 | 13.88 | 13.80 | 16.85 | 22.80 | -5.95 | -1.91 | 14.94 | 28.80 | -13.86 |
| | 5590 | 118 | AVG | 52T | 13.67 | 13.20 | 16.45 | 13.92 | 13.97 | 16.96 | 13.51 | 13.43 | 16.48 | 22.80 | -5.84 | -1.91 | 15.05 | 28.80 | -13.75 |
| 3 | 5710 | 142 | AVG | 52T | 13.73 | 13.42 | 16.59 | 13.99 | 13.62 | 16.82 | 13.63 | 13.65 | 16.65 | 22.80 | -5.98 | -1.91 | 14.91 | 28.80 | -13.89 |
| ונ | 5755 | 151 | AVG | 52T | 13.90 | 13.45 | 16.69 | 13.92 | 13.89 | 16.92 | 13.79 | 13.62 | 16.72 | 30.00 | -13.08 | -0.75 | 16.17 | | - |
| | 5795 | 159 | AVG | 52T | 13.81 | 13.49 | 16.66 | 13.79 | 13.85 | 16.83 | 13.75 | 13.59 | 16.68 | 30.00 | -13.17 | -0.75 | 16.08 | - | - |
| | 5755 | 151 | AVG | 52T | 13.88 | 13.08 | 16.51 | 13.87 | 13.53 | 16.71 | 13.99 | 13.76 | 16.89 | 30.00 | -13.11 | -0.75 | 16.14 | 30.00 | -13.86 |
| 1 | 5795 | 159 | AVG | 52T | 13.88 | 13.48 | 16.69 | 13.61 | 13.20 | 16.42 | 13.81 | 13.39 | 16.62 | 30.00 | -13.31 | -0.75 | 15.94 | 30.00 | -14.06 |

Table 7-20. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| | | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|------|---------|---------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|--------------|-------------|
| Freq | q [MHz] | Channel | Detector | Tones | | 37 | | | 44 | | | 52 | | Power Limit | | Ant. Gain | Max e.i.r.p. [dBm] | Limit [dBm] | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Cunic [Opin] | margin [ub] |
| 5 | 5210 | 42 | AVG | 52T | 13.35 | 13.79 | 16.59 | 13.51 | 13.87 | 16.70 | 13.63 | 13.72 | 16.69 | 23.98 | -7.28 | -0.96 | 15.74 | 22.39 | -6.65 |
| 5 | 5290 | 58 | AVG | 52T | 13.67 | 13.72 | 16.71 | 13.75 | 13.91 | 16.84 | 13.88 | 13.95 | 16.93 | 23.47 | -6.54 | -0.96 | 15.97 | 29.47 | -13.50 |
| 5 | 5530 | 106 | AVG | 52T | 13.99 | 13.62 | 16.82 | 13.74 | 13.55 | 16.66 | 13.80 | 13.88 | 16.85 | 22.80 | -5.95 | -1.91 | 14.94 | 28.80 | -13.86 |
| 5 | 5610 | 122 | AVG | 52T | 13.83 | 13.07 | 16.48 | 13.51 | 13.04 | 16.29 | 13.59 | 13.47 | 16.54 | 22.80 | -6.26 | -1.91 | 14.63 | 28.80 | -14.17 |
| 5 | 5690 | 138 | AVG | 52T | 13.70 | 13.07 | 16.41 | 13.96 | 13.59 | 16.79 | 13.97 | 13.98 | 16.99 | 22.80 | -5.81 | -1.91 | 15.08 | 28.80 | -13.72 |
| 5 | 5775 | 155 | AVG | 52T | 13.99 | 13.25 | 16.65 | 13.79 | 13.23 | 16.53 | 13.90 | 13.48 | 16.71 | 30.00 | -13.29 | -0.75 | 15.96 | - | |
| 5 | 5855 | 171 | AVG | 52T | 13.95 | 13.02 | 16.52 | 13.89 | 13.38 | 16.65 | 13.98 | 13.44 | 16.73 | 30.00 | -13.27 | -0.75 | 15.98 | 30.00 | -14.02 |

Table 7-21. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| ≥ | - | | | | | | Average C | onducted Po | ower (dBm) | | | | Conducted | Conducted | Directional | | | |
|-----|---------------|---------|-------|-------|--------------|-------|-----------|--------------|------------|-------|--------------|-------|-------------|-------------|-------------|-----------------------|--------------|-------------------------|
| B | Freq [MHz] | Channel | Tones | I | RU Index: 37 | , | | RU Index: 44 | 1 | | RU Index: 52 | 2 | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. | e.i.r.p. Margin [dB] |
| ₹ 🔒 | [141112] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Emit [dBir] | ina gir [ab] |
| 1 M | 5250 | 50 | 52T | 13.45 | 13.62 | 16.55 | 13.62 | 13.42 | 16.53 | 13.91 | 13.66 | 16.80 | 23.98 | -7.18 | -0.96 | 15.84 | 22.39 | -6.55 |
| 60N | 5570 | 114 | 52T | 13.69 | 12.94 | 16.34 | 13.86 | 13.01 | 16.47 | 13.63 | 12.93 | 16.30 | 23.47 | -7.00 | -0.75 | 15.72 | 28.80 | -13.08 |
| 7 | 5815 | 163 | 52T | 13.92 | 13.50 | 16.73 | 13.81 | 13.20 | 16.53 | 13.57 | 13.23 | 16.41 | | | -0.75 | 15.98 | 36.00 | -20.02 |

Table 7-22. MIMO 160MHz BW L (UNII) Maximum Conducted Output Power (52 Tones)

| ≥ | Frea | | | | | | Average C | onducted Po | ower (dBm) | | | | Conducted | Conducted | Directional | | | |
|-------|--------|---------|-------|-------|--------------|-------|-----------|--------------|------------|-------|--------------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------------------|
| m | [MHz] | Channel | Tones | I | RU Index: 37 | · | | RU Index: 44 | 1 | | RU Index: 52 | 2 | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin (dB) |
| ₽ 🕤 | [WITZ] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Emit [dBir] | margin [ab] |
| l ≣ ⊂ | 5250 | 50 | 52T | 13.89 | 13.80 | 16.86 | 13.79 | 13.81 | 16.81 | 13.67 | 13.86 | 16.78 | 23.98 | -7.12 | -0.96 | 15.90 | 22.39 | -6.49 |
| 80 | 5570 | 114 | 52T | 13.96 | 13.37 | 16.69 | 13.88 | 13.64 | 16.77 | 13.81 | 13.91 | 16.87 | 23.47 | -6.60 | -0.75 | 16.12 | 28.80 | -12.68 |
| ÷ | 5815 | 163 | 52T | 13.80 | 13.79 | 16.81 | 13.91 | 13.93 | 16.93 | 13.93 | 13.92 | 16.94 | | | -0.75 | 16.19 | 36.00 | -19.81 |

Table 7-23. MIMO 160MHz BW U (UNII) Maximum Conducted Output Power (52 Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
|------------------------|-------------------|---------------------------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dama 407 of 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 107 of 236 |
| | | | V 9.0 02/01/2019 |



MIMO Conducted Output Power Measurements (106 Tones)

| | | | | | | | RU li | ndex | | | Conducted | Conducted | Directional | | | |
|----------------|------------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------|
| dth | Freq [MHz] | Channel | Detector | Tones | | 53 | | | 54 | | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. |
| H | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | lapui | сппп [авта] | wargin [ub] |
| | 5180 | 36 | AVG | 106T | 15.35 | 15.55 | 18.46 | 15.75 | 15.99 | 18.88 | 23.98 | -5.10 | -0.96 | 17.92 | 22.39 | -4.47 |
| <u>≥</u> | 5200 | 40 | AVG | 106T | 15.7 | 15.99 | 18.86 | 15.68 | 15.86 | 18.78 | 23.98 | -5.12 | -0.96 | 17.90 | 22.39 | -4.49 |
| p | 5240 | 48 | AVG | 106T | 15.61 | 15.68 | 18.66 | 15.85 | 15.99 | 18.93 | 23.98 | -5.05 | -0.96 | 17.97 | 22.39 | -4.42 |
| an | 5260 | 52 | AVG | 106T | 15.65 | 15.99 | 18.83 | 15.60 | 15.92 | 18.77 | 23.47 | -4.64 | -0.91 | 17.92 | 29.47 | -11.55 |
| ш | 5280 | 56 | AVG | 106T | 15.61 | 15.99 | 18.81 | 15.62 | 15.91 | 18.78 | 23.47 | -4.66 | -0.91 | 17.90 | 29.47 | -11.57 |
| N | 5320 | 64 | AVG | 106T | 15.53 | 15.94 | 18.75 | 15.49 | 15.88 | 18.70 | 23.47 | -4.72 | -0.91 | 17.84 | 29.47 | -11.63 |
| Ϊ | 5500 | 100 | AVG | 106T | 15.79 | 15.80 | 18.81 | 15.78 | 15.82 | 18.81 | 22.80 | -3.99 | -1.91 | 16.90 | 28.80 | -11.90 |
| | 5600 | 120 | AVG | 106T | 15.76 | 15.99 | 18.89 | 15.80 | 15.98 | 18.90 | 22.80 | -3.90 | -1.91 | 16.99 | 28.80 | -11.81 |
| Mo | 5720 | 144 | AVG | 106T | 15.8 | 15.78 | 18.80 | 15.79 | 15.74 | 18.78 | 22.80 | -4.00 | -1.91 | 16.89 | 28.80 | -11.91 |
| N | 5745 | 149 | AVG | 106T | 15.78 | 15.57 | 18.69 | 15.73 | 15.62 | 18.69 | 30.00 | -11.31 | -0.75 | 17.94 | - | - |
| $\widetilde{}$ | 5785 | 157 | AVG | 106T | 15.77 | 15.78 | 18.79 | 15.72 | 15.85 | 18.80 | 30.00 | -11.20 | -0.75 | 18.05 | - | - |
| 4 | 5825 | 165 | AVG | 106T | 15.83 | 15.79 | 18.82 | 15.82 | 15.73 | 18.79 | 30.00 | -11.18 | -0.75 | 18.07 | - | - |
| 古 | 5845 | 169 | AVG | 106T | 15.80 | 15.69 | 18.76 | 15.77 | 15.65 | 18.72 | 30.00 | -11.24 | -0.75 | 18.01 | 30.00 | -11.99 |
| 5G | 5865 | 173 | AVG | 106T | 15.75 | 15.39 | 18.58 | 15.73 | 15.40 | 18.58 | 30.00 | -11.42 | -0.75 | 17.83 | 30.00 | -12.17 |
| - | 5885 | 177 | AVG | 106T | 15.07 | 15.75 | 18.43 | 15.07 | 15.66 | 18.39 | 30.00 | -11.57 | -0.75 | 17.68 | 30.00 | -12.32 |

Table 7-24. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|-----------|-----------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|--------------|------------|
| Freq [MHz |] Channel | Detector | Tones | | 53 | | | 54 | | | 56 | | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Limit [dBm] | |
| | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Linni (ubinj | margin (uc |
| 5190 | 38 | AVG | 106T | 15.78 | 15.93 | 18.87 | 15.62 | 15.74 | 18.69 | 15.76 | 15.78 | 18.78 | 23.98 | -5.11 | -0.96 | 17.91 | 22.39 | -4.48 |
| 5230 | 46 | AVG | 106T | 15.55 | 15.65 | 18.61 | 15.65 | 15.91 | 18.79 | 15.73 | 15.97 | 18.86 | 23.98 | -5.12 | -0.96 | 17.90 | 22.39 | -4.49 |
| 5270 | 54 | AVG | 106T | 15.65 | 15.98 | 18.83 | 15.56 | 15.79 | 18.69 | 15.54 | 15.84 | 18.70 | 23.47 | -4.64 | -0.91 | 17.92 | 29.47 | -11.55 |
| 5310 | 62 | AVG | 106T | 15.55 | 15.85 | 18.71 | 15.41 | 15.70 | 18.57 | 15.49 | 15.80 | 18.66 | 23.47 | -4.76 | -0.91 | 17.80 | 29.47 | -11.67 |
| 5510 | 102 | AVG | 106T | 15.83 | 15.73 | 18.79 | 15.62 | 15.55 | 18.60 | 15.68 | 15.83 | 18.77 | 22.80 | -4.01 | -1.91 | 16.88 | 28.80 | -11.92 |
| 5590 | 118 | AVG | 106T | 15.92 | 15.96 | 18.95 | 15.68 | 15.83 | 18.77 | 15.41 | 15.63 | 18.53 | 22.80 | -3.85 | -1.91 | 17.04 | 28.80 | -11.76 |
| 5710 | 142 | AVG | 106T | 15.92 | 15.72 | 18.83 | 15.72 | 15.62 | 18.68 | 15.84 | 15.94 | 18.90 | 22.80 | -3.90 | -1.91 | 16.99 | 28.80 | -11.81 |
| 5755 | 151 | AVG | 106T | 15.89 | 15.91 | 18.91 | 15.73 | 15.80 | 18.78 | 15.78 | 15.96 | 18.88 | 30.00 | -11.09 | -0.75 | 18.16 | - | - |
| 5795 | 159 | AVG | 106T | 15.86 | 15.70 | 18.79 | 15.66 | 15.53 | 18.61 | 15.76 | 15.75 | 18.77 | 30.00 | -11.21 | -0.75 | 18.04 | | - |
| 5755 | 151 | AVG | 106T | 15.86 | 15.81 | 18.85 | 15.63 | 15.62 | 18.64 | 15.72 | 15.80 | 18.77 | 30.00 | -11.15 | -0.75 | 18.10 | 30.00 | -11.90 |
| 5795 | 159 | AVG | 106T | 15.93 | 15.99 | 18.97 | 15.71 | 15.73 | 18.73 | 15.83 | 15.85 | 18.85 | 30.00 | -11.03 | -0.75 | 18.22 | 30.00 | -11.78 |

Table 7-25. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| | | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|------------|------------|---------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------|
| | Freq [MHz] | Channel | Detector | Tones | | 53 | | | 56 | | | 60 | | Power Limit | | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | |
| Ξ÷ | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | Lapui | Linin (ubin) | margin [ub] |
| 三書 | 5210 | 42 | AVG | 106T | 15.65 | 15.86 | 18.77 | 15.67 | 15.99 | 18.84 | 15.76 | 15.95 | 18.87 | 23.98 | -5.11 | -0.96 | 17.91 | 22.39 | -4.48 |
| <u>8</u> 3 | 5290 | 58 | AVG | 106T | 15.50 | 15.79 | 18.66 | 15.55 | 15.85 | 18.71 | 15.56 | 15.88 | 18.73 | 23.47 | -4.74 | -0.96 | 17.77 | 29.47 | -11.70 |
| N P | 5530 | 106 | AVG | 106T | 15.68 | 15.49 | 18.60 | 15.77 | 15.88 | 18.84 | 15.45 | 15.78 | 18.63 | 22.80 | -3.96 | -1.91 | 16.93 | 28.80 | -11.87 |
| ΞĿ | 5610 | 122 | AVG | 106T | 15.96 | 15.80 | 18.89 | 15.61 | 15.83 | 18.73 | 15.31 | 15.84 | 18.59 | 22.80 | -3.91 | -1.91 | 16.98 | 28.80 | -11.82 |
| бщ | 5690 | 138 | AVG | 106T | 15.85 | 15.35 | 18.62 | 15.99 | 15.92 | 18.97 | 15.55 | 15.81 | 18.69 | 22.80 | -3.83 | -1.91 | 17.06 | 28.80 | -11.74 |
| | 5775 | 155 | AVG | 106T | 15.94 | 15.77 | 18.87 | 15.67 | 15.72 | 18.71 | 15.73 | 15.97 | 18.86 | 30.00 | -11.13 | -0.75 | 18.12 | - | |
| | 5855 | 171 | AVG | 106T | 15.85 | 15.65 | 18.76 | 15.60 | 15.41 | 18.52 | 15.66 | 15.48 | 18.58 | 30.00 | -11.24 | -0.75 | 18.01 | 30.00 | -11.99 |

Table 7-26. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| ≥ | Frea | | | | | | Average C | onducted Po | ower (dBm) | | | | Conducted | Conducted | Directional | | | |
|----------|---------------------|-----|--------------|-------|-------|--------------|-----------|-------------|--------------|-------|-------------|-------|-----------|-----------------------|-----------------------------|-------------------------|--------------|-------------|
| m | [MHz] Channel Tones | I | RU Index: 53 | | I | RU Index: 56 | 3 | | RU Index: 60 |) | Power Limit | | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin (dB) | | |
| ₽∽ | [INITIZ] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Cinit [GDin] | margin [ub] |
| l ≣ ⊂ | 5250 | 50 | 106T | 15.85 | 15.99 | 18.93 | 15.91 | 15.97 | 18.95 | 15.67 | 15.69 | 18.69 | 23.98 | -5.03 | -0.96 | 17.99 | 22.39 | -4.40 |
| 60M | 5570 | 114 | 106T | 15.99 | 15.02 | 18.54 | 15.91 | 15.10 | 18.53 | 15.70 | 15.03 | 18.39 | 23.47 | -4.93 | -0.75 | 17.79 | 28.80 | -11.01 |
| - | 5815 | 163 | 106T | 15.82 | 15.18 | 18.52 | 15.75 | 15.36 | 18.57 | 15.56 | 15.35 | 18.47 | | | -0.75 | 17.82 | 36.00 | -18.18 |

Table 7-27. MIMO 160MHz BW L (UNII) Maximum Conducted Output Power (106 Tones)

| ≥ | Frea | | | | | | Average C | onducted Po | ower (dBm) | | | | Conducted | Conducted | Directional | | | |
|------------|---------------------|-----|--------------|-------|-------|--------------|-----------|-------------|--------------|-------|-------------|-------|-------------|-----------------------|-----------------------------|-------------------------|-------------|--------|
| Ξ Ω | [MHz] Channel Tones | I | RU Index: 53 | 3 | | RU Index: 56 | 3 | I | RU Index: 60 | 1 | Power Limit | | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin (dB) | | |
| ₽╗ | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [umin] | Emit [dBir] | margin [ab] | |
| ≣⊂ | 5250 | 50 | 106T | 15.73 | 15.76 | 18.76 | 15.65 | 15.82 | 18.75 | 15.52 | 15.88 | 18.71 | 23.98 | -5.22 | -0.96 | 17.80 | 22.39 | -4.59 |
| 60 | 5570 | 114 | 106T | 15.65 | 15.11 | 18.40 | 15.71 | 15.40 | 18.57 | 15.51 | 15.66 | 18.60 | 23.47 | -4.87 | -0.75 | 17.85 | 28.80 | -10.95 |
| 4 | 5815 | 163 | 106T | 15.57 | 15.44 | 18.52 | 15.69 | 15.54 | 18.63 | 15.68 | 15.55 | 18.63 | | | -0.75 | 17.88 | 36.00 | -18.12 |

Table 7-28. MIMO 160MHz BW U (UNII) Maximum Conducted Output Power (106 Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
|------------------------|-------------------|---------------------------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 100 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 108 of 236 |
| | • | | V 9.0 02/01/2019 |



MIMO Conducted Output Power Measurements (242 Tones)

| | | | | | | RU Index | | Conducted | Conducted | Directional | | | |
|-------------|------------|---------|----------|-------|-------|----------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------|
| | Freq [MHz] | Channel | Detector | Tones | | 61 | | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | |
| dt | | | | | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | | Margin [ub] |
| | 5180 | 36 | AVG | 242T | 17.45 | 17.99 | 20.74 | 23.98 | -3.24 | -0.96 | 19.78 | 22.39 | -2.61 |
| <u>></u> | 5200 | 40 | AVG | 242T | 17.42 | 17.97 | 20.71 | 23.98 | -3.27 | -0.96 | 19.75 | 22.39 | -2.64 |
| nd | 5240 | 48 | AVG | 242T | 17.28 | 17.61 | 20.46 | 23.98 | -3.52 | -0.96 | 19.50 | 22.39 | -2.89 |
| ar | 5260 | 52 | AVG | 242T | 17.05 | 17.58 | 20.33 | 23.47 | -3.14 | -0.91 | 19.42 | 29.47 | -10.05 |
| <u> </u> | 5280 | 56 | AVG | 242T | 17.03 | 17.59 | 20.33 | 23.47 | -3.14 | -0.91 | 19.42 | 29.47 | -10.05 |
| N | 5320 | 64 | AVG | 242T | 17.2 | 17.98 | 20.62 | 23.47 | -2.85 | -0.91 | 19.71 | 29.47 | -9.76 |
| Î | 5500 | 100 | AVG | 242T | 17.61 | 17.80 | 20.72 | 22.80 | -2.08 | -1.91 | 18.81 | 28.80 | -9.99 |
| | 5600 | 120 | AVG | 242T | 17.54 | 17.94 | 20.75 | 22.80 | -2.05 | -1.91 | 18.84 | 28.80 | -9.96 |
| δ | 5720 | 144 | AVG | 242T | 17.62 | 17.78 | 20.71 | 22.80 | -2.09 | -1.91 | 18.80 | 28.80 | -10.00 |
| 5 | 5745 | 149 | AVG | 242T | 17.52 | 17.66 | 20.60 | 30.00 | -9.40 | -0.75 | 19.85 | - | - |
| N N | 5785 | 157 | AVG | 242T | 17.66 | 17.82 | 20.75 | 30.00 | -9.25 | -0.75 | 20.00 | - | - |
| Ĩ | 5825 | 165 | AVG | 242T | 17.68 | 17.76 | 20.73 | 30.00 | -9.27 | -0.75 | 19.98 | - | - |
| Ū | 5845 | 169 | AVG | 242T | 17.57 | 17.66 | 20.63 | 30.00 | -9.37 | -0.75 | 19.88 | 30.00 | -10.12 |
| 2 | 5865 | 173 | AVG | 242T | 17.79 | 17.88 | 20.85 | 30.00 | -9.15 | -0.75 | 20.10 | 30.00 | -9.90 |
| | 5885 | 177 | AVG | 242T | 17.08 | 17.94 | 20.54 | 30.00 | -9.46 | -0.75 | 19.79 | 30.00 | -10.21 |

Table 7-29. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| | | | | | | | RU li | ndex | | | Conducted | Conducted | Directional | | | |
|------------|------------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------------|-------------|-------------|---------|-----------------------------|-------------------------|
| | Freq [MHz] | Channel | Detector | Tones | | 61 | | | 62 | | Power Limit | Power | Ant. Gain | | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
| N | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | | Margin [ub] |
| Ť | 5190 | 38 | AVG | 242T | 16.56 | 16.76 | 19.67 | 16.50 | 16.70 | 19.61 | 23.98 | -4.31 | -0.96 | 18.71 | 22.39 | -3.68 |
| t ≥ | 5230 | 46 | AVG | 242T | 16.53 | 16.82 | 19.69 | 16.50 | 16.71 | 19.62 | 23.98 | -4.29 | -0.96 | 18.73 | 22.39 | -3.66 |
| e b | 5270 | 54 | AVG | 242T | 16.47 | 16.80 | 19.65 | 16.43 | 16.73 | 19.59 | 23.47 | -3.82 | -0.91 | 18.74 | 29.47 | -10.73 |
| 4 S | 5310 | 62 | AVG | 242T | 16.32 | 16.85 | 19.60 | 16.27 | 16.74 | 19.52 | 23.47 | -3.87 | -0.91 | 18.69 | 29.47 | -10.78 |
| <u>, б</u> | 5510 | 102 | AVG | 242T | 16.54 | 16.65 | 19.61 | 16.46 | 16.68 | 19.58 | 22.80 | -3.19 | -1.91 | 17.70 | 28.80 | -11.10 |
| ΞĒ | 5590 | 118 | AVG | 242T | 16.57 | 16.73 | 19.66 | 16.45 | 16.82 | 19.65 | 22.80 | -3.14 | -1.91 | 17.75 | 28.80 | -11.05 |
| ia i | 5710 | 142 | AVG | 242T | 16.59 | 16.67 | 19.64 | 16.53 | 16.82 | 19.69 | 22.80 | -3.11 | -1.91 | 17.78 | 28.80 | -11.02 |
| ы п | 5755 | 151 | AVG | 242T | 16.65 | 16.75 | 19.71 | 16.58 | 16.80 | 19.70 | 30.00 | -10.29 | -0.75 | 18.96 | - | - |
| ~ | 5795 | 159 | AVG | 242T | 16.54 | 16.66 | 19.61 | 16.52 | 16.72 | 19.63 | 30.00 | -10.37 | -0.75 | 18.88 | - | - |
| | 5755 | 151 | AVG | 242T | 16.55 | 16.70 | 19.64 | 16.51 | 16.67 | 19.60 | 30.00 | -10.36 | -0.75 | 18.89 | 30.00 | -11.11 |
| | 5795 | 159 | AVG | 242T | 16.64 | 16.82 | 19.74 | 16.57 | 16.75 | 19.67 | 30.00 | -10.26 | -0.75 | 18.99 | 30.00 | -11.01 |

Table 7-30. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| | | | | | | | | | RU Index | | | | | Conducted | Conducted | Directional | | | |
|-----|------------|---------|----------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|----------------|------------|
| | Freq [MHz] | Channel | Detector | Tones | | 61 | | | 62 | | | 64 | | Power Limit | | Ant. Gain | Max e.i.r.p. [dBm] | Limit [dBm] | |
| 12 | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Cinine [GDini] | margin [ub |
| 主 | 5210 | 42 | AVG | 242T | 14.98 | 14.87 | 17.94 | 14.98 | 14.57 | 17.79 | 14.67 | 14.69 | 17.69 | 23.98 | -6.04 | -0.96 | 16.98 | 22.39 | -5.41 |
| N N | 5290 | 58 | AVG | 242T | 15.44 | 15.76 | 18.61 | 15.50 | 15.89 | 18.71 | 15.53 | 15.83 | 18.69 | 23.47 | -4.76 | -0.96 | 17.75 | 29.47 | -11.72 |
| 1 2 | 5530 | 106 | AVG | 242T | 15.99 | 15.89 | 18.95 | 15.85 | 15.87 | 18.87 | 15.43 | 15.69 | 18.57 | 22.80 | -3.85 | -1.91 | 17.04 | 28.80 | -11.76 |
| | 5610 | 122 | AVG | 242T | 15.91 | 15.73 | 18.83 | 15.69 | 15.78 | 18.75 | 15.65 | 15.99 | 18.83 | 22.80 | -3.97 | -1.91 | 16.92 | 28.80 | -11.88 |
| Зщ. | 5690 | 138 | AVG | 242T | 15.78 | 15.32 | 18.57 | 15.99 | 15.77 | 18.89 | 15.59 | 15.63 | 18.62 | 22.80 | -3.91 | -1.91 | 16.98 | 28.80 | -11.82 |
| | 5775 | 155 | AVG | 242T | 15.87 | 15.65 | 18.77 | 15.63 | 15.68 | 18.67 | 15.68 | 15.77 | 18.74 | 30.00 | -11.23 | -0.75 | 18.02 | - | |
| | 5855 | 171 | AVG | 242T | 15.78 | 15.55 | 18.68 | 15.62 | 15.43 | 18.54 | 15.64 | 15.33 | 18.50 | 30.00 | -11.32 | -0.75 | 17.93 | 30.00 | -12.07 |

Table 7-31. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| ≥ | - | | | | | | Average C | onducted Po | ower (dBm) | | | | Conducted | Conducted | Directional | | | |
|-------|---------------|---------|-------|-------|-------|-------|-------------|-------------|------------|-----------------------|-----------------------------|-------------------------|-----------|-------------|-------------|---------|-------------|--------------|
| m | Freq [MHz] | Channel | Tones | | | L . | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin (dB) | | | | | | |
| ₽ つ | [INIT IZ] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO [dBm | [dBm] | Margin [dB] | [dBi] | [ubiii] | Emit [dBir] | mar gin [ab] |
| l ≣ ⊂ | 5250 | 50 | 242T | 15.74 | 15.72 | 18.74 | 15.98 | 15.97 | 18.99 | 15.77 | 15.74 | 18.77 | 23.98 | -4.99 | -0.96 | 18.03 | 22.39 | -4.36 |
| 60 | 5570 | 114 | 242T | 15.68 | 14.76 | 18.25 | 15.65 | 14.71 | 18.22 | 15.71 | 15.05 | 18.40 | 23.47 | -5.07 | -0.75 | 17.65 | 28.80 | -11.15 |
| ÷ | 5815 | 163 | 242T | 15.92 | 15.31 | 18.64 | 15.89 | 15.39 | 18.66 | 15.50 | 15.39 | 18.46 | | 18.66 | -0.75 | 17.91 | 36.00 | -18.09 |

Table 7-32. MIMO 160MHz BW L (UNII) Maximum Conducted Output Power (242 Tones)

| ≥ | F | | | | | | Average C | onducted Po | ower (dBm) | | | | Conducted | Conducted | Directional | | | |
|--------|-----------------------------|-----|-------|-------|--------------|-------|-----------|--------------|------------|-------|--------------|-------|-------------|-------------|-------------|-----------------------|-------------|-------------------------|
| Ξ Ω | Freq [MHz] Channel Tones | | Tones | 1 | RU Index: 61 | I | | RU Index: 62 | 2 | | RU Index: 64 | ļ | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | | e.i.r.p. Margin [dB] |
| ₽́∩ | [wii iz] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [usin] | Emit [dBir] | inc. gin [ub] |
| l ≣ ⊂ | 5250 | 50 | 242T | 15.64 | 15.84 | 18.75 | 15.55 | 15.86 | 18.72 | 15.71 | 15.92 | 18.83 | 23.98 | -5.15 | -0.96 | 17.87 | 22.39 | -4.52 |
| 601 | 5570 | 114 | 242T | 15.73 | 15.20 | 18.48 | 15.68 | 15.37 | 18.54 | 15.65 | 15.68 | 18.68 | 23.47 | -4.79 | -0.75 | 17.93 | 28.80 | -10.87 |
| 7 | 5815 | 163 | 242T | 15.60 | 15.47 | 18.55 | 15.68 | 15.56 | 18.63 | 15.70 | 15.61 | 18.67 | | | -0.75 | 17.92 | 36.00 | -18.08 |

Table 7-33. MIMO 160MHz BW U (UNII) Maximum Conducted Output Power (242 Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager | |
|------------------------|-------------|---------------------------------------|-----------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Page 109 of 236 | |
| 1M2204010046-16-R1.A3L | | | | |
| | | | V 9 0 02/01/2019 | |



MIMO Conducted Output Power Measurements (484 Tones)

| | | | | | | RU Index | | Conducted | Conducted | Directional | | | |
|------------|------------|---------|----------|-------|-------|----------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------------------|
| | Freq [MHz] | Channel | Detector | Tones | | 65 | | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
| N | | | | | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Cinin [ubin] | wargin [ub] |
| ÷ 1 | 5190 | 38 | AVG | 484T | 14.72 | 14.45 | 17.60 | 23.98 | -6.38 | -0.96 | 16.64 | 22.39 | -5.75 |
| = ÷ | 5230 | 46 | AVG | 484T | 16.58 | 16.87 | 19.74 | 23.98 | -4.24 | -0.96 | 18.78 | 22.39 | -3.61 |
| 5 3 | 5270 | 54 | AVG | 484T | 16.51 | 16.81 | 19.67 | 23.47 | -3.80 | -0.91 | 18.76 | 29.47 | -10.71 |
| 4 | 5310 | 62 | AVG | 484T | 16.20 | 16.70 | 19.47 | 23.47 | -4.00 | -0.91 | 18.56 | 29.47 | -10.91 |
| | 5510 | 102 | AVG | 484T | 16.56 | 16.77 | 19.68 | 22.80 | -3.12 | -1.91 | 17.77 | 28.80 | -11.03 |
| P 3 | 5590 | 118 | AVG | 484T | 16.59 | 16.87 | 19.74 | 22.80 | -3.06 | -1.91 | 17.83 | 28.80 | -10.97 |
| | 5710 | 142 | AVG | 484T | 16.60 | 16.80 | 19.71 | 22.80 | -3.09 | -1.91 | 17.80 | 28.80 | -11.00 |
| 0 2 | 5755 | 151 | AVG | 484T | 16.65 | 16.78 | 19.73 | 30.00 | -10.27 | -0.75 | 18.98 | - | - |
| ~, | 5795 | 159 | AVG | 484T | 16.58 | 16.70 | 19.65 | 30.00 | -10.35 | -0.75 | 18.90 | - | |
| | 5755 | 151 | AVG | 484T | 16.56 | 16.69 | 19.64 | 30.00 | -10.36 | -0.75 | 18.89 | 30.00 | -11.11 |
| | 5795 | 159 | AVG | 484T | 16.63 | 16.75 | 19.70 | 30.00 | -10.30 | -0.75 | 18.95 | 30.00 | -11.05 |

Table 7-34. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

| | | | | | | | RU li | ndex | | | Conducted | Conducted | Directional | Manadana | Manadana | |
|--------|------------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------------|-------------|-------------|-----------------------|--------------|-------------|
| | Freq [MHz] | Channel | Detector | Tones | | 65 | | | 66 | | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Limit [dBm] | |
| ₽ c | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Chine [GBhij | margin [ub] |
| 医害 | 5210 | 42 | AVG | 484T | 15.45 | 15.36 | 18.42 | 15.39 | 15.40 | 18.41 | 23.98 | -5.56 | -0.96 | 17.46 | 22.39 | -4.93 |
| wic 80 | 5290 | 58 | AVG | 484T | 15.58 | 15.93 | 18.77 | 15.46 | 15.75 | 18.62 | 23.47 | -4.70 | -0.96 | 17.81 | 29.47 | -11.66 |
|) p | 5530 | 106 | AVG | 484T | 15.90 | 15.86 | 18.89 | 15.68 | 15.97 | 18.84 | 22.80 | -3.91 | -1.91 | 16.98 | 28.80 | -11.82 |
| тa | 5610 | 122 | AVG | 484T | 15.78 | 15.73 | 18.77 | 15.59 | 15.96 | 18.79 | 22.80 | -4.01 | -1.91 | 16.88 | 28.80 | -11.92 |
| B G | 5690 | 138 | AVG | 484T | 15.66 | 15.31 | 18.50 | 15.51 | 15.54 | 18.54 | 22.80 | -4.26 | -1.91 | 16.63 | 28.80 | -12.17 |
| | 5775 | 155 | AVG | 484T | 15.76 | 15.62 | 18.70 | 15.60 | 15.73 | 18.68 | 30.00 | -11.30 | -0.75 | 17.95 | - | - |
| | 5855 | 171 | AVG | 484T | 15.67 | 15.51 | 18.60 | 15.99 | 15.92 | 18.97 | 30.00 | -11.03 | -0.75 | 18.22 | 30.00 | -11.78 |

Table 7-35. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

| 2 | | | | | Avera | age Conduc | ted Power (| dBm) | | Conducted | Conducted | Directional | | | |
|----------------|---------------|---------|-------|-------|--------------|------------|-------------|--------------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------------------|
| B | Freq [MHz] | Channel | Tones | l | RU Index: 65 | | | RU Index: 66 | 3 | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin (dB) |
| - 4 | [INITIZ] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Emit [GBin] | margin [ab] |
| ц Ц | 5250 | 50 | 484T | 15.93 | 15.98 | 18.97 | 15.78 | 15.75 | 18.78 | 23.98 | -5.01 | -0.96 | 18.01 | 22.39 | -4.38 |
| 60 | 5570 | 114 | 484T | 15.99 | 15.11 | 18.58 | 15.73 | 15.01 | 18.40 | 23.47 | -4.89 | -0.75 | 17.83 | 28.80 | -10.97 |
| 1 | 5815 | 163 | 484T | 15.80 | 15.26 | 18.55 | 15.53 | 15.30 | 18.43 | | | -0.75 | 17.80 | 36.00 | -18.20 |

Table 7-36. MIMO 160MHz BW L (UNII) Maximum Conducted Output Power (484 Tones)

| 3 | | | | | Avera | age Conduc | ted Power (| dBm) | | Conducted | Conducted | Directional | | | |
|-----|---------------|---------|-------|-------|--------------|------------|-------------|--------------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------------------|
| B | Freq [MHz] | Channel | Tones | | RU Index: 65 | 1 | | RU Index: 66 | 3 | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin (dB) |
| ₹ ? | [101112] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [0.5.1.] | | |
| L M | 5250 | 50 | 484T | 15.53 | 15.81 | 18.68 | 15.63 | 15.89 | 18.77 | 23.98 | -5.21 | -0.96 | 17.81 | 22.39 | -4.58 |
| 60 | 5570 | 114 | 484T | 15.63 | 15.21 | 18.44 | 15.58 | 15.54 | 18.57 | 23.47 | -4.90 | -0.75 | 17.82 | 28.80 | -10.98 |
| 1 | 5815 | 163 | 484T | 15.52 | 15.53 | 18.54 | 15.70 | 15.56 | 18.64 | | | -0.75 | 17.89 | 36.00 | -18.11 |

Table 7-37. MIMO 160MHz BW U (UNII) Maximum Conducted Output Power (484 Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
|------------------------|-------------------|---------------------------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 110 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 110 of 236 |
| | | | V 9.0 02/01/2019 |



MIMO Conducted Output Power Measurements (996 Tones)

| | | | | | | RU Index | | Conducted | Conducted | Directional | | | |
|--------|------------|---------|----------|-------|-------|----------|-------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------|
| | Freq [MHz] | Channel | Detector | Tones | | 67 | | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. |
| Ŧ c | | | | | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [abiii] | сппп [авті] | wargin [ub] |
| E E | 5210 | 42 | AVG | 996T | 15.75 | 15.97 | 18.87 | 23.98 | -5.11 | -0.96 | 17.91 | 22.39 | -4.48 |
| w i: | 5290 | 58 | AVG | 996T | 15.51 | 15.85 | 18.69 | 23.47 | -4.78 | -0.96 | 17.73 | 29.47 | -11.74 |
|) z (| 5530 | 106 | AVG | 996T | 15.83 | 15.81 | 18.83 | 22.80 | -3.97 | -1.91 | 16.92 | 28.80 | -11.88 |
| arit | 5610 | 122 | AVG | 996T | 15.69 | 15.76 | 18.74 | 22.80 | -4.06 | -1.91 | 16.83 | 28.80 | -11.97 |
| В Э | 5690 | 138 | AVG | 996T | 15.99 | 15.89 | 18.95 | 22.80 | -3.85 | -1.91 | 17.04 | 28.80 | -11.76 |
| | 5775 | 155 | AVG | 996T | 15.69 | 15.63 | 18.67 | 30.00 | -11.33 | -0.75 | 17.92 | - | |
| | 5855 | 171 | AVG | 996T | 15.58 | 15.30 | 18.45 | 30.00 | -11.55 | -0.75 | 17.70 | 30.00 | -12.30 |

Table 7-38. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (996 Tones)

| ≥ | | | | Average C | onducted Po | ower (dBm) | Conducted | Conducted | Directional | | | |
|----------|---------------|---------|-------|-----------|--------------|------------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------------------|
| M | Freq [MHz] | Channel | Tones | | RU Index: 67 | 7 | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
| L) Hz | [14112] | | | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Emit [GBit] | margin [ab] |
| | 5250 | 50 | 996T | 15.82 | 15.72 | 18.78 | 23.98 | -5.20 | -0.96 | 17.82 | 22.39 | -4.57 |
| 160M | 5570 | 114 | 996T | 15.78 | 14.90 | 18.37 | 23.47 | -5.10 | -0.75 | 17.62 | 28.80 | -11.18 |
| 7 | 5815 | 163 | 996T | 15.63 | 15.15 | 18.41 | | | -0.75 | 17.66 | 36.00 | -18.34 |

Table 7-39. MIMO 160MHz BW L (UNII) Maximum Conducted Output Power (996 Tones)

| N | E | | | Average Co | onducted Po | ower (dBm) | Conducted | Conducted | Directional | | | |
|-------|---------------|---------|-------|------------|--------------|------------|-------------|-------------|-------------|-----------------------|-----------------------------|-------------------------|
| B | Freq [MHz] | Channel | Tones | 1 | RU Index: 67 | 7 | Power Limit | Power | Ant. Gain | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
| U) | [INITIZ] | | | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | [dBi] | [ubiii] | Emit [GBit] | margin [ab] |
| N ≥ ⊂ | 5250 | 50 | 996T | 15.53 | 15.71 | 18.63 | 23.98 | -5.35 | -0.96 | 17.67 | 22.39 | -4.72 |
| 60 | 5570 | 114 | 996T | 15.61 | 15.24 | 18.44 | 23.47 | -5.03 | -0.75 | 17.69 | 28.80 | -11.11 |
| 1 | 5815 | 163 | 996T | 15.60 | 15.34 | 18.48 | | | -0.75 | 17.73 | 36.00 | -18.27 |

Table 7-40. MIMO 160MHz BW U (UNII) Maximum Conducted Output Power (996 Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
|------------------------|-------------------|---------------------------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 111 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 111 of 236 |
| | | | V 9.0 02/01/2019 |



Note:

Per ANSI C63.10-2013 and KDB 662911 v02r01 Section E)1), the conducted powers at Antenna 1 and Antenna 2 were first measured separately during MIMO transmission 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.

Directional gain = $10 \log[(10^{G_{1/20}} + 10^{G_{2/20}} + ... + 10^{G_{N/20}})^2 / N_{ANT}] dBi$

Sample MIMO Calculation:

At 5180MHz in 802.11ax (20MHz BW) mode, the average conducted output power was measured to be 17.45 dBm for Antenna 1 and 17.99 dBm for Antenna 2.

Antenna 1 + Antenna 2 = MIMO

(17.45 dBm + 17.99 dBm) = (55.59 mW + 62.95 mW) = 118.54 mW = 20.74 dBm

Sample e.i.r.p. Calculation:

At 5180MHz in 802.11ax (20MHz BW) mode, the average MIMO conducted power was calculated to be 20.74 dBm with directional gain of -1.98 dBi.

e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

20.74 dBm + -1.98 dBi = 18.76 dBm

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 112 of 226 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 112 of 236 | | |
| | | | V 9.0 02/01/2019 | | |



7.5 Maximum Power Spectral Density – 802.11ax OFDMA §15.407(a.1.iv) §15.407(a.2) §15.407(a.3)

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 KDB 789033 D02 v02r01, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, was used to measure the power spectral density.

In the 5.15 – 5.25GHz band, the maximum permissible power spectral density is 11dBm/MHz. For ISED operation, the maximum e.i.r.p. spectral density is 10dBm/MHz.

In the 5.25 – 5.35GHz and 5.47 – 5.725GHz bands, the maximum permissible power spectral density is 11dBm/MHz.

In the 5.725 – 5.850GHz band, the maximum permissible power spectral density is 30dBm/500kHz.

In the 5.850 – 5.855GHz band, the maximum permissible power spectral density is 14dBm/MHz e.i.r.p.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2 KDB 789033 D02 v02r01 – Section F ANSI C63.10-2013 – Section 14.3.2.2 Measure-and-Sum Technique KDB 662911 v02r01 – Section E)2) Measure-and-Sum Technique

Test Settings

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

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 112 of 226 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 113 of 236 | | |
| | - | | V 9.0 02/01/2019 | | |



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

The power spectral density for each channel was measured with the RU index showing the highest conducted power

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dama 444 at 000 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 114 of 236 | | |
| | | | V 9 0 02/01/2019 | | |



Power Spectral Density Measurements (26 Tones)

| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Summed MIMO Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|--------------|--------------------|----------------|---------------|-------|---------------------|-------------------------------------|-------------------------------------|---------------------------------------|-----------------------------------|----------------|
| | 5180 | 36 | ax (20MHz) | 26T | MCS0 | 8.12 | 7.71 | 10.93 | 11.00 | -0.07 |
| | 5200 | 40 | ax (20MHz) | 26T | MCS0 | 8.04 | 7.77 | 10.92 | 11.00 | -0.08 |
| d 1 | 5240 | 48 | ax (20MHz) | 26T | MCS0 | 8.01 | 7.53 | 10.79 | 11.00 | -0.21 |
| Band 1 | 5190 | 38 | ax (40MHz) | 26T | MCS0 | 7.30 | 6.96 | 10.14 | 11.00 | -0.86 |
| | 5230 | 46 | ax (40MHz) | 26T | MCS0 | 7.11 | 7.35 | 10.24 | 11.00 | -0.76 |
| | 5210 | 42 | ax (80MHz) | 26T | MCS0 | 5.49 | 5.92 | 8.72 | 11.00 | -2.28 |
| Band 1/2A | 5210 | 50 | ax (160MHz L) | 26T | MCS0 | 8.21 | 7.09 | 10.70 | 11.00 | -0.30 |
| 1/2 1/2 | 5210 | 50 | ax (160MHz U) | 26T | MCS0 | 5.93 | 6.83 | 9.41 | 11.00 | -1.59 |
| | 5260 | 52 | ax (20MHz) | 26T | MCS0 | 7.00 | 6.64 | 9.83 | 11.00 | -1.17 |
| ∢ | 5280 | 56 | ax (20MHz) | 26T | MCS0 | 7.72 | 7.46 | 10.60 | 11.00 | -0.40 |
| Band 2A | 5320 | 64 | ax (20MHz) | 26T | MCS0 | 7.68 | 7.20 | 10.45 | 11.00 | -0.55 |
| an | 5270 | 54 | ax (40MHz) | 26T | MCS0 | 6.83 | 7.24 | 10.05 | 11.00 | -0.95 |
| ш | 5310 | 62 | ax (40MHz) | 26T | MCS0 | 6.44 | 7.26 | 9.88 | 11.00 | -1.12 |
| | 5290 | 58 | ax (80MHz) | 26T | MCS0 | 6.63 | 7.67 | 10.19 | 11.00 | -0.81 |
| | 5500 | 100 | ax (20MHz) | 26T | MCS0 | 8.04 | 7.85 | 10.95 | 11.00 | -0.05 |
| | 5600 | 120 | ax (20MHz) | 26T | MCS0 | 8.12 | 7.61 | 10.88 | 11.00 | -0.12 |
| | 5720 | 144 | ax (20MHz) | 26T | MCS0 | 7.84 | 7.84 | 10.85 | 11.00 | -0.15 |
| | 5510 | 102 | ax (40MHz) | 26T | MCS0 | 6.94 | 7.39 | 10.18 | 11.00 | -0.82 |
| 2C | 5590 | 118 | ax (40MHz) | 26T | MCS0 | 7.17 | 7.26 | 10.22 | 11.00 | -0.78 |
| Band 2C | 5710 | 142 | ax (40MHz) | 26T | MCS0 | 6.65 | 7.55 | 10.14 | 11.00 | -0.86 |
| Ba | 5530 | 106 | ax (80MHz) | 26T | MCS0 | 6.52 | 8.30 | 10.51 | 11.00 | -0.49 |
| | 5610 | 122 | ax (80MHz) | 26T | MCS0 | 6.60 | 7.92 | 10.32 | 11.00 | -0.68 |
| | 5690 | 138 | ax (80MHz) | 26T | MCS0 | 5.93 | 7.95 | 10.07 | 11.00 | -0.93 |
| | 5570 | 114 | ax (160MHz L) | 26T | MCS0 | 8.65 | 6.77 | 10.82 | 11.00 | -0.18 |
| | 5570 | 114 | ax (160MHz U) | 26T | MCS0 | 6.46 | 6.16 | 9.32 | 11.00 | -1.68 |

Table 7-41. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements MIMO (26 Tones)

| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Antenna-1 Power Density [dBm] | | Summed MIMO Power Density [dBm] | Max Permissible Power Density | Margin [dB] |
|------|--------------------|----------------|-------------|-------|---------------------|-------------------------------------|------|---------------------------------------|--|----------------|
| | 5745 | 149 | ax (20MHz) | 26T | MCS0 | 5.08 | 5.23 | 8.16 | 30.00 | -21.84 |
| ~ | 5785 | 157 | ax (20MHz) | 26T | MCS0 | 5.19 | 5.01 | 8.11 | 30.00 | -21.89 |
| | 5825 | 165 | ax (20MHz) | 26T | MCS0 | 5.50 | 5.15 | 8.34 | 30.00 | -21.66 |
| Band | 5755 | 151 | ax (40MHz) | 26T | MCS0 | 4.34 | 4.67 | 7.52 | 30.00 | -22.48 |
| | 5795 | 159 | ax (40MHz) | 26T | MCS0 | 4.80 | 4.82 | 7.82 | 30.00 | -22.18 |
| | 5775 | 155 | ax (80MHz) | 26T | MCS0 | 3.45 | 4.15 | 6.82 | 30.00 | -23.18 |

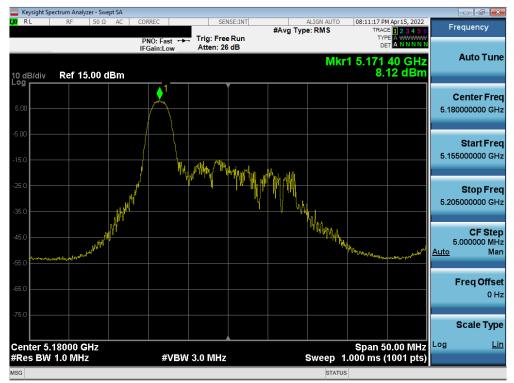
Table 7-42. Band 3 Conducted Power Spectral Density Measurements MIMO (26 Tones)

| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Antenna-1 Power Density [dBm/MHz] | Antenna-2 Power Density [dBm/MHz] | MIMO Summed Power Density [dBm/MHz] | Max Permissible Power Density [dBm/500kHz] | Margin [dB] | Directional Antenna Gain [dBi] | EIRP Power Density [dBm/MHz] | Max EIRP Power Density [dBm/MHz] | Margin [dB] |
|----------|--------------------|----------------|---------------|-------|---------------------|---|---|---|--|----------------|--------------------------------------|------------------------------------|--|----------------|
| Band 3/4 | 5845 | 169 | ax (20MHz) | 26T | MCS0 | 7.03 | 6.72 | 9.89 | 30.00 | -20.11 | -0.75 | 9.14 | 14.00 | -4.86 |
| Band 4 | 5865 | 173 | ax (20MHz) | 26T | MCS0 | 6.93 | 6.40 | 9.69 | | | -0.75 | 8.94 | 14.00 | -5.06 |
| Dallu 4 | 5885 | 177 | ax (20MHz) | 26T | MCS0 | 7.82 | 8.05 | 10.94 | | | -0.75 | 10.19 | 14.00 | -3.81 |
| Band 3/4 | 5835 | 167 | ax (40MHz) | 26T | MCS0 | 7.54 | 7.86 | 10.71 | 30.00 | -19.29 | -0.75 | 9.96 | 14.00 | -4.04 |
| Band 4 | 5875 | 175 | ax (40MHz) | 26T | MCS0 | 7.50 | 7.74 | 10.63 | | | -0.75 | 9.88 | 14.00 | -3.70 |
| | 5855 | 171 | ax (80MHz) | 26T | MCS0 | 7.82 | 8.24 | 11.05 | 30.00 | -18.95 | -0.75 | 10.30 | 14.00 | -3.99 |
| Band 3/4 | 5815 | 163 | ax (160MHz L) | 26T | MCS0 | 8.11 | 7.37 | 10.76 | 30.00 | -19.24 | -0.75 | 10.01 | 14.00 | -3.99 |
| | 5815 | 163 | ax (160MHz U) | 26T | MCS0 | 6.84 | 6.19 | 9.54 | 30.00 | -20.46 | -0.75 | 8.79 | 14.00 | -5.21 |

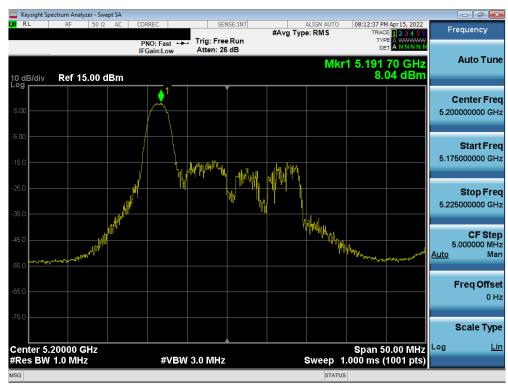
Table 7-43. Band 4 MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 115 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 115 of 236 | | |
| | | | V 9 0 02/01/2019 | | |





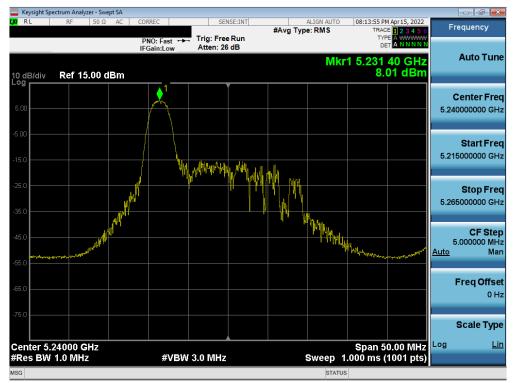
Plot 7-149. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 36)



Plot 7-150. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 40)

| FCC ID: A3LSMF936U | | Approved by: Technical Manager | |
|------------------------|-------------------|-----------------------------------|------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 116 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 116 of 236 |
| | | | V 9.0 02/01/2019 |





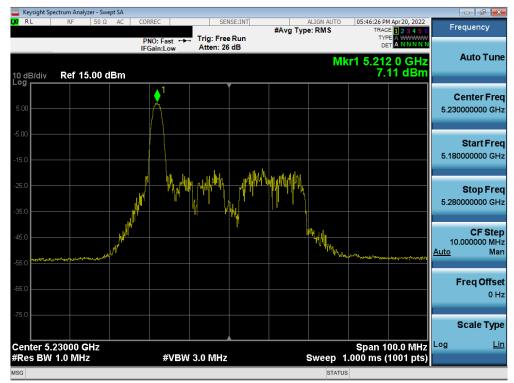
Plot 7-151. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 48)



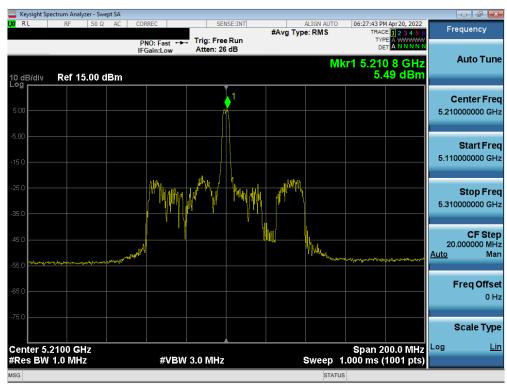
Plot 7-152. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 38)

| FCC ID: A3LSMF936U | | Approved by: Technical Manager | |
|------------------------|-------------------|-----------------------------------|------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 117 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 117 of 236 |
| L | | | V 9.0 02/01/2019 |





Plot 7-153. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 46)



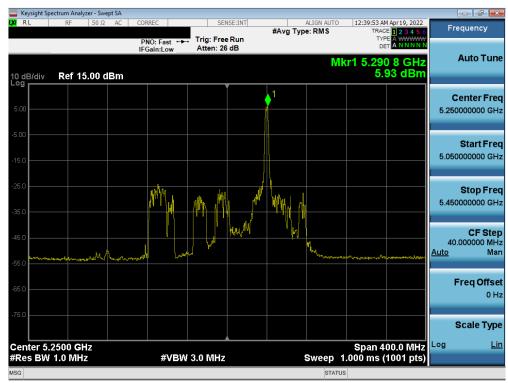
Plot 7-154. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 42)

| FCC ID: A3LSMF936U | | Approved by: Technical Manager | |
|------------------------|-------------------|-----------------------------------|------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 119 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 118 of 236 |
| | | | V 9 0 02/01/2019 |





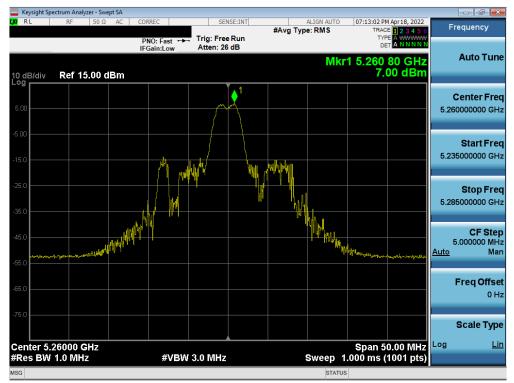
Plot 7-155. Power Spectral Density Plot MIMO ANT1 (160MHz (L) BW 802.11ax - 26 Tones (UNII Band 1/2A) - Ch. 50)



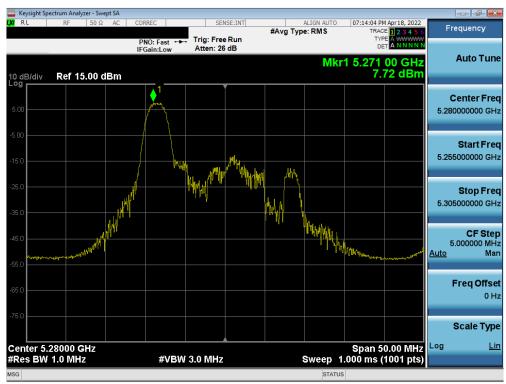
Plot 7-156. Power Spectral Density Plot MIMO ANT1 (160MHz (U) BW 802.11ax – 26 Tones (UNII Band 1/2A) – Ch. 50)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 110 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 119 of 236 | | |
| | | | V 9.0 02/01/2019 | | |





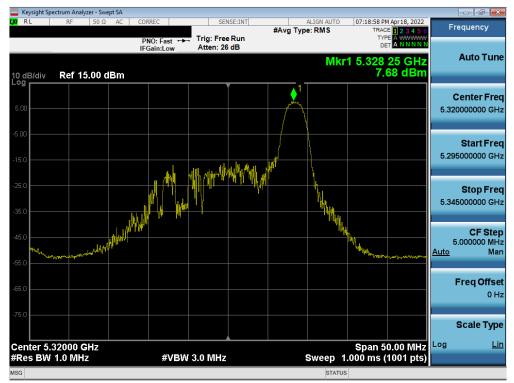
Plot 7-157. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 52)



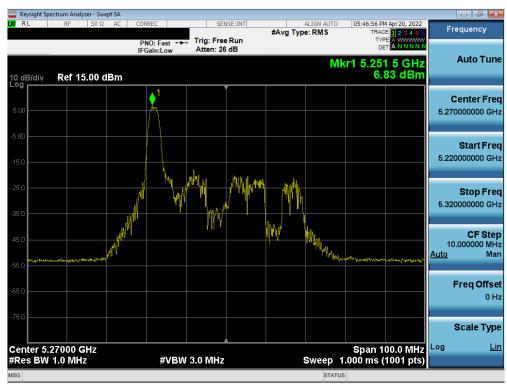
Plot 7-158. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 56)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 100 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 120 of 236 | | |
| | | · | V 9.0 02/01/2019 | | |





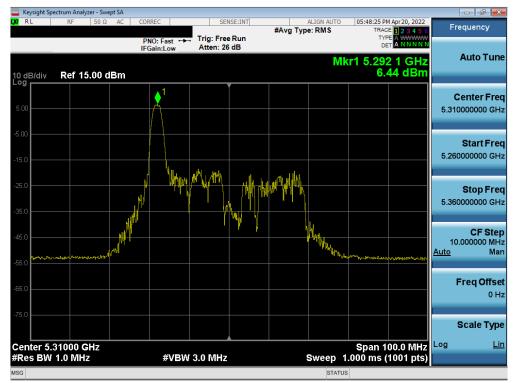
Plot 7-159. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 64)



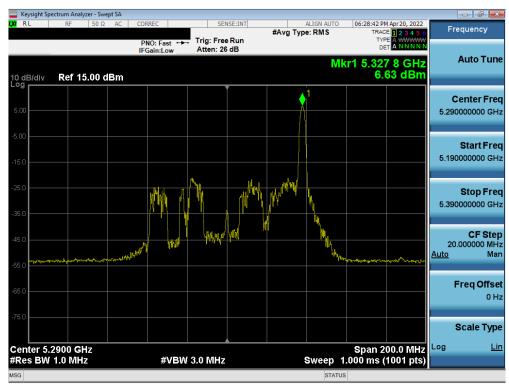
Plot 7-160. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 54)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Page 121 of 236 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | |
| | | | V 9.0 02/01/2019 |





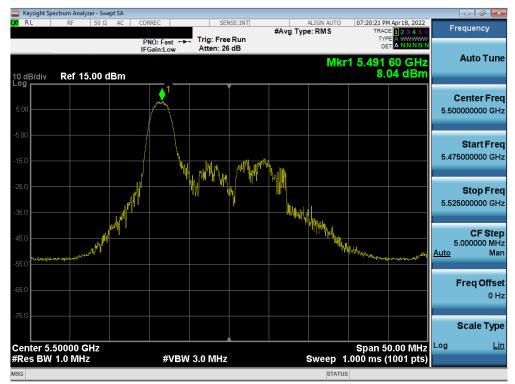
Plot 7-161. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 62)



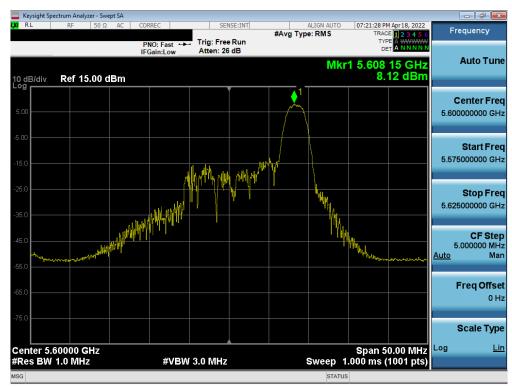
Plot 7-162. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 58)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Page 122 of 236 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | |
| | | | V 9.0 02/01/2019 |





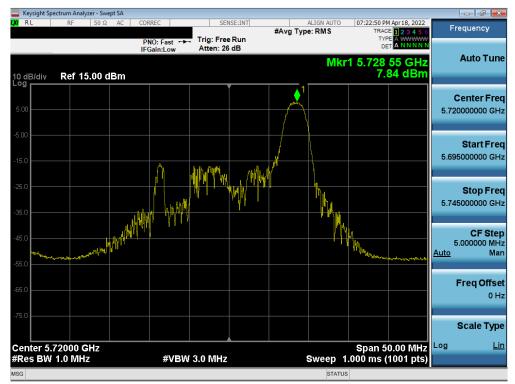
Plot 7-163. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 100)



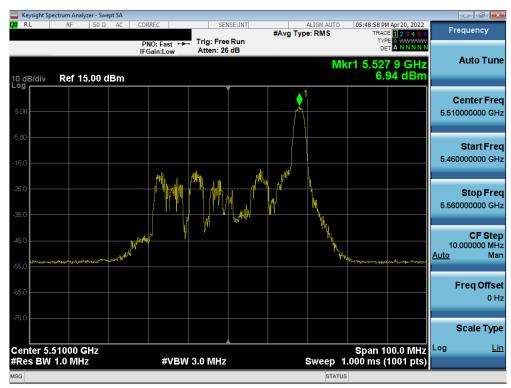
Plot 7-164. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Page 123 of 236 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | |
| | | | V 9.0 02/01/2019 |





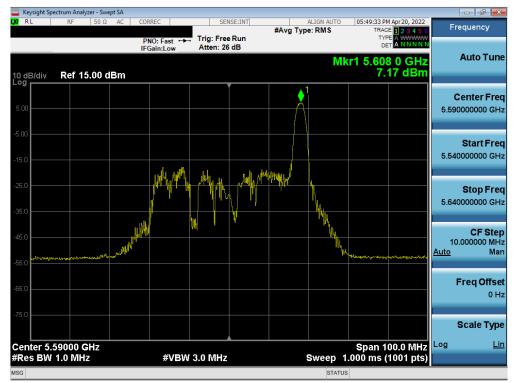
Plot 7-165. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 144)



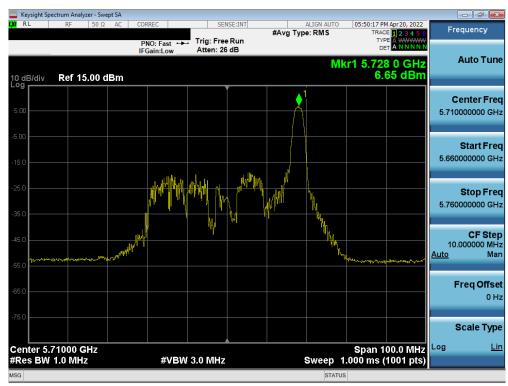
Plot 7-166. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 102)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Page 124 of 236 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | |
| | | · | V 9.0 02/01/2019 |





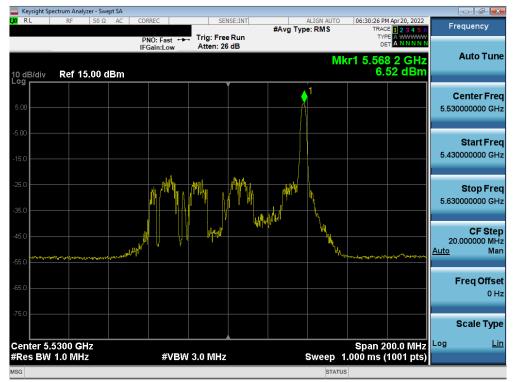
Plot 7-167. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 118)



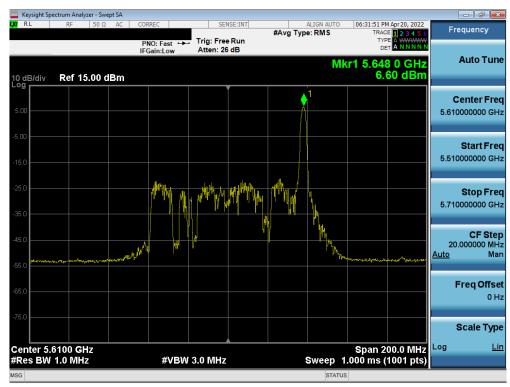
Plot 7-168. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 142)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 105 of 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 125 of 236 |
| L | | | V 9.0 02/01/2019 |





Plot 7-169. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 106)



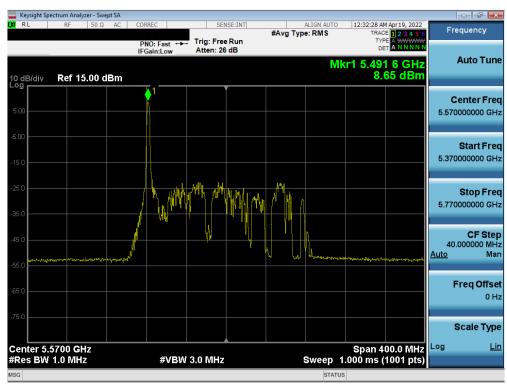
Plot 7-170. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 100 of 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 126 of 236 |
| | | | V 9 0 02/01/2019 |





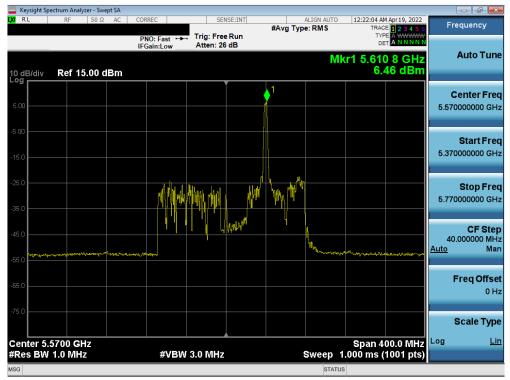
Plot 7-171. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)



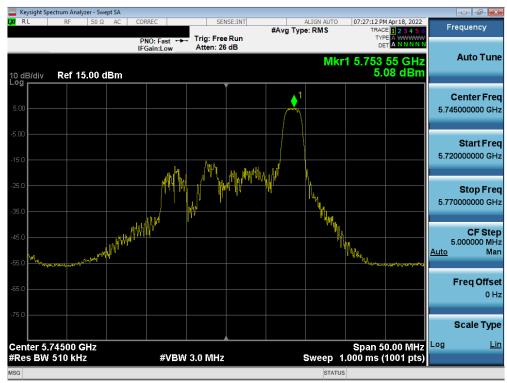
Plot 7-172. Power Spectral Density Plot MIMO ANT1 (160MHz (L) BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 107 of 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 127 of 236 |
| | • | | V 9.0 02/01/2019 |





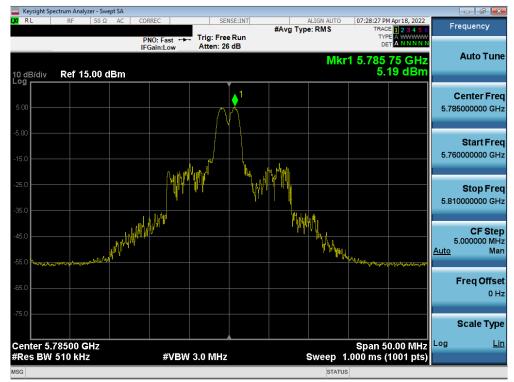
Plot 7-173. Power Spectral Density Plot MIMO ANT1 (160MHz (U) BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)



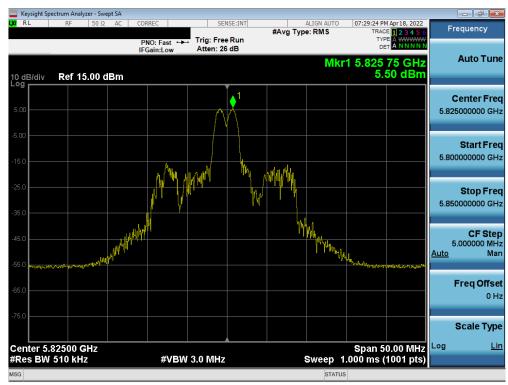
Plot 7-174. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 149)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 100 of 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 128 of 236 |
| | • | | V 9 0 02/01/2019 |





Plot 7-175. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 157)



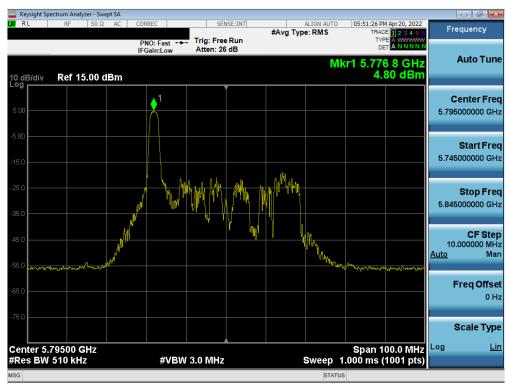
Plot 7-176. Power Spectral Density Plot MIMO ANT1 (20 MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 165)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 100 of 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 129 of 236 |
| | • | | V 9 0 02/01/2019 |





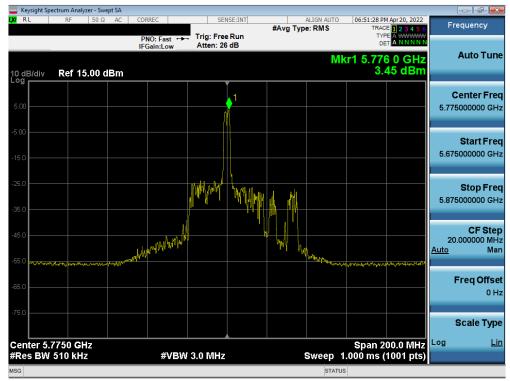
Plot 7-177. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)



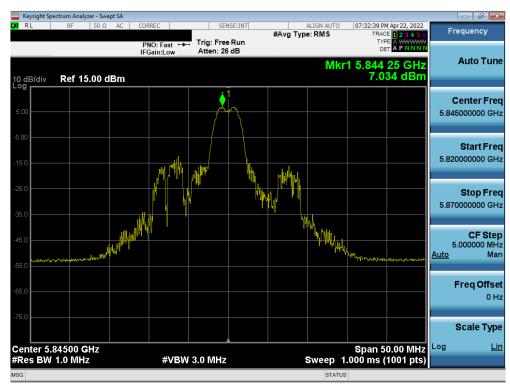
Plot 7-178. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 159)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 120 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 130 of 236 |
| | · | | V 9.0 02/01/2019 |





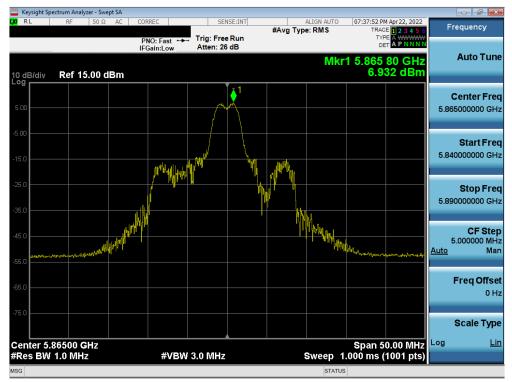
Plot 7-179. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)



Plot 7-180. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 169)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Degs 121 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 131 of 236 |
| | · | · | V 9.0 02/01/2019 |





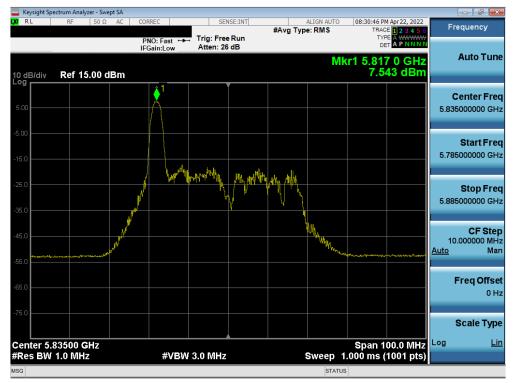
Plot 7-181. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 173)



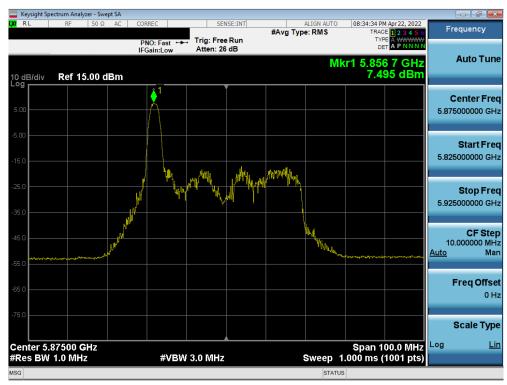
Plot 7-182. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 177)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 122 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 132 of 236 |
| | | | V 9.0 02/01/2019 |





Plot 7-183. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 167)



Plot 7-184. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 175)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 100 of 000 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 133 of 236 |
| | | | V 9 0 02/01/2019 |





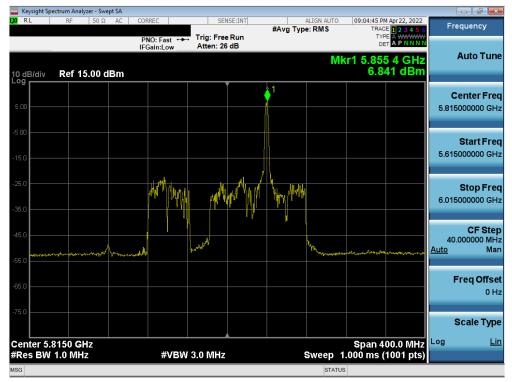
Plot 7-185. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 3/4) – Ch. 171)



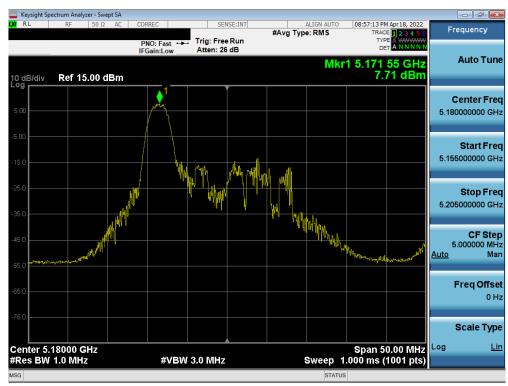
Plot 7-186. Power Spectral Density Plot MIMO ANT1 (160MHz BW (L) 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 163)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 124 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 134 of 236 |
| | - | · | V 9.0 02/01/2019 |





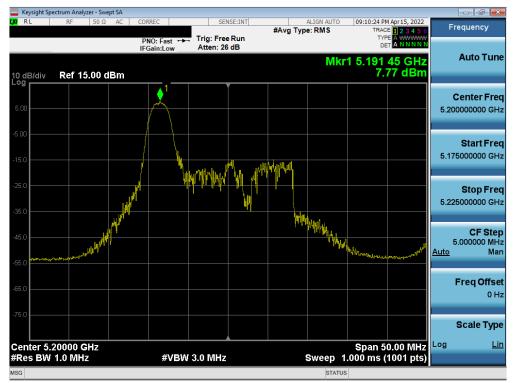
Plot 7-187. Power Spectral Density Plot MIMO ANT1 (160MHz BW (U) 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 163)



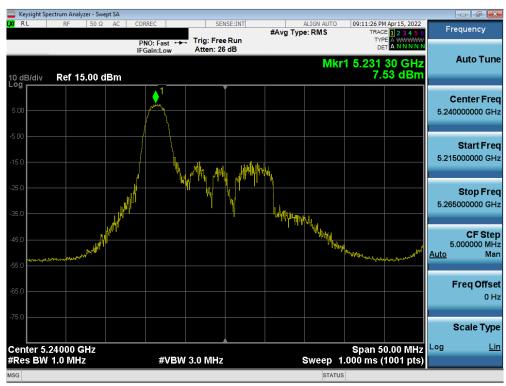
Plot 7-188. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 36)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 125 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 135 of 236 |
| | | • | V 9.0 02/01/2019 |





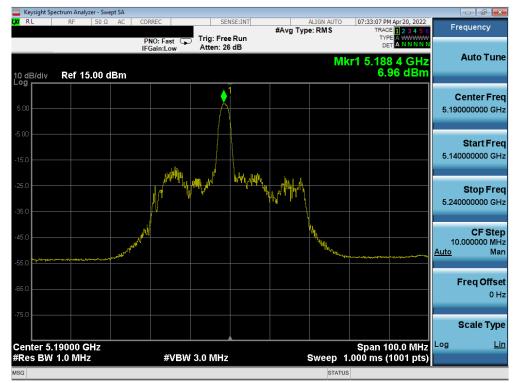
Plot 7-189. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 40)



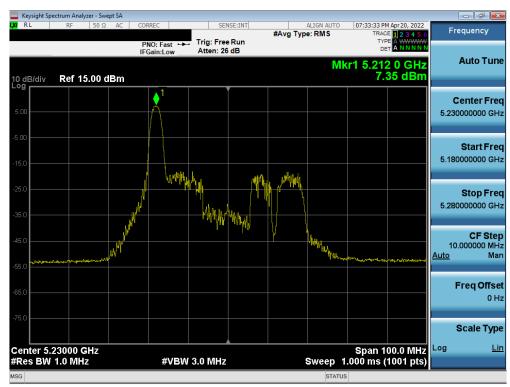
Plot 7-190. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 48)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 126 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 136 of 236 |
| | | • | V 9.0 02/01/2019 |





Plot 7-191. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 38)



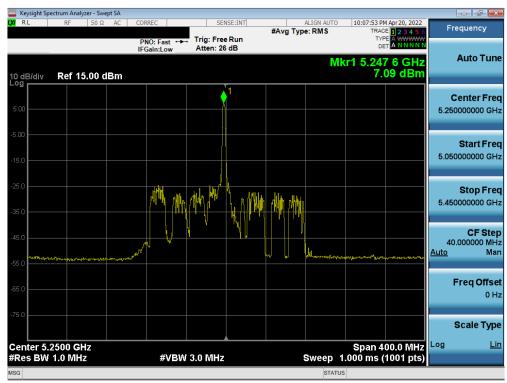
Plot 7-192. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 46)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 127 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 137 of 236 |
| | | | V 9.0 02/01/2019 |





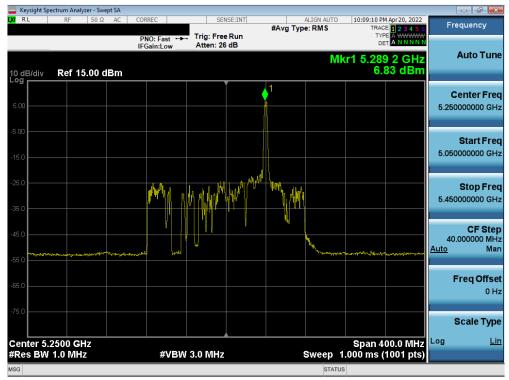
Plot 7-193. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 42)



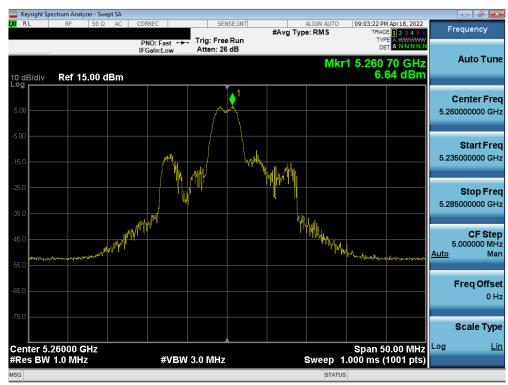
Plot 7-194. Power Spectral Density Plot MIMO ANT2 (160MHz (L) BW 802.11ax - 26 Tones (UNII Band 1/2A) - Ch. 50)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 120 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 138 of 236 |
| | | | V 9.0 02/01/2019 |





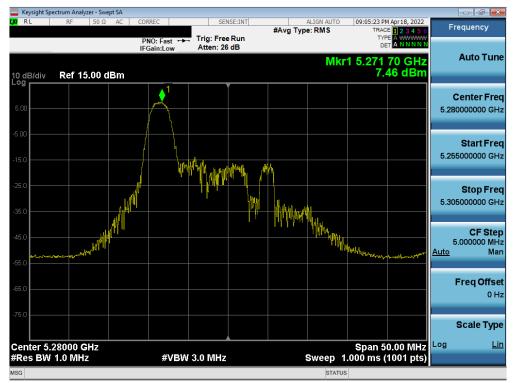
Plot 7-195. Power Spectral Density Plot MIMO ANT2 (160MHz (U) BW 802.11ax – 26 Tones (UNII Band 1/2A) – Ch. 50)



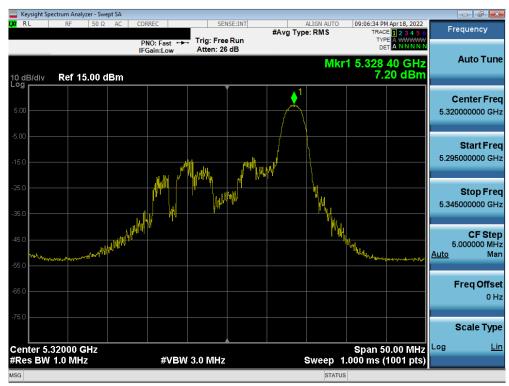
Plot 7-196. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 52)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 120 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 139 of 236 |
| L | - | · | V 9.0 02/01/2019 |





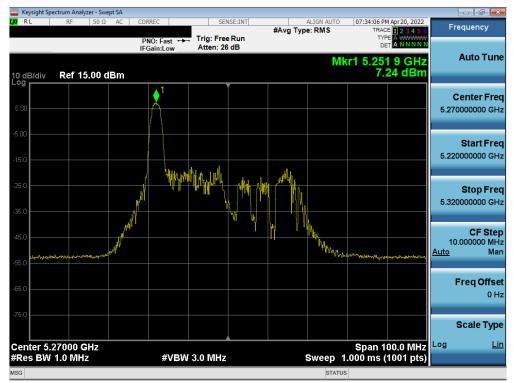
Plot 7-197. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 56)



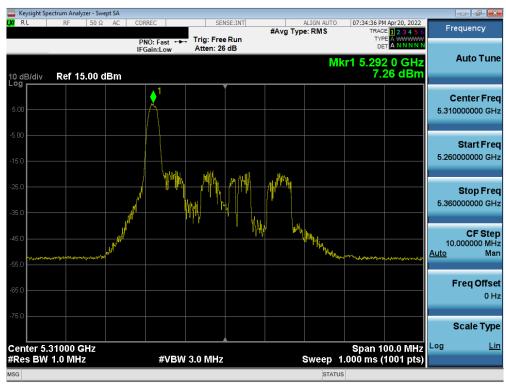
Plot 7-198. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 64)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 140 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 140 of 236 |
| | | · | V 9.0 02/01/2019 |





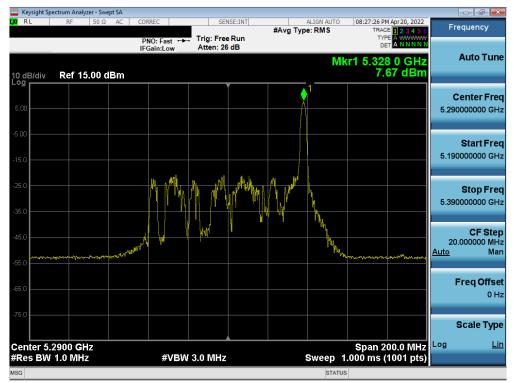
Plot 7-199. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 54)



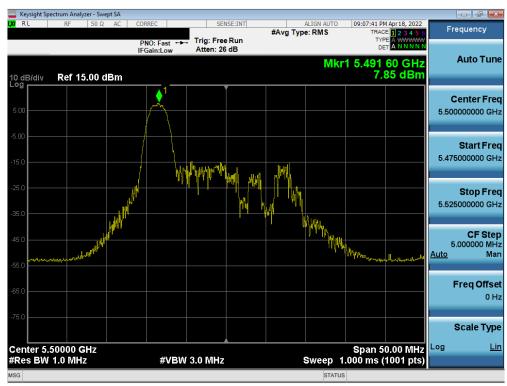
Plot 7-200. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 62)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 141 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 141 of 236 |
| | • | | V 9.0 02/01/2019 |





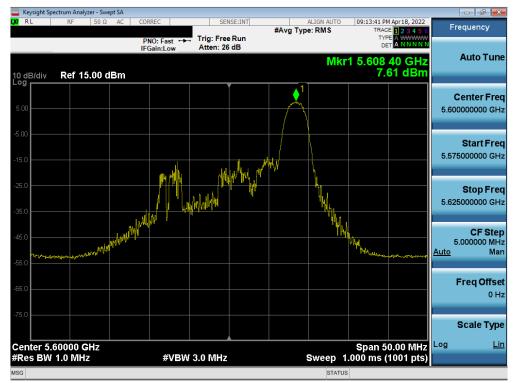
Plot 7-201. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 58)



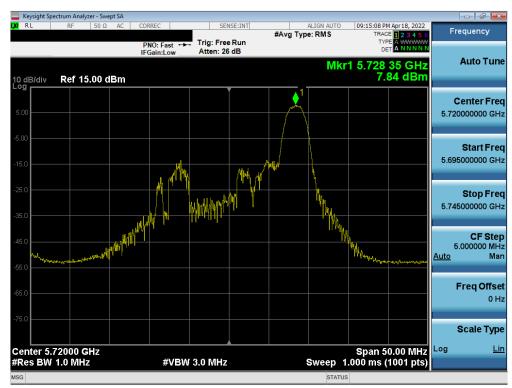
Plot 7-202. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 100)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 142 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 142 of 236 |
| | | | V 9.0 02/01/2019 |





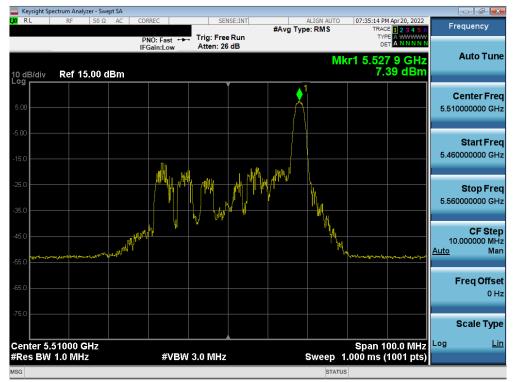
Plot 7-203. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 120)



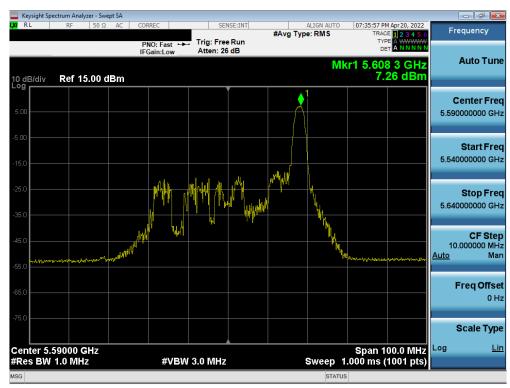
Plot 7-204. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 144)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 142 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 143 of 236 |
| | | · | V 9.0 02/01/2019 |





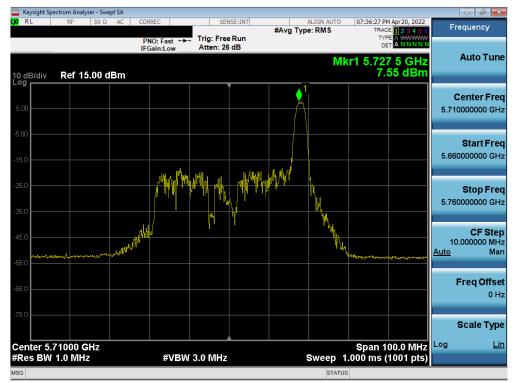
Plot 7-205. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 102)



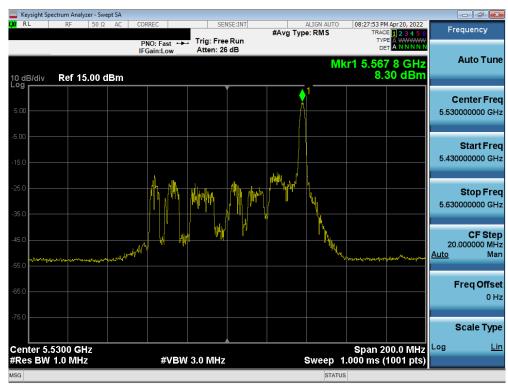
Plot 7-206. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 118)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 111 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 144 of 236 |
| | - | | V 9.0 02/01/2019 |





Plot 7-207. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 142)



Plot 7-208. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 106)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 145 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 145 of 236 |
| | | | V 9 0 02/01/2019 |





Plot 7-209. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 122)



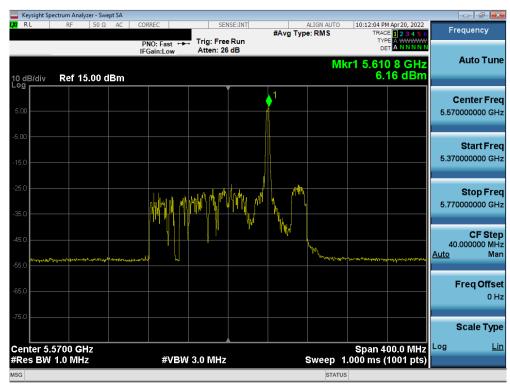
Plot 7-210. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 146 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 146 of 236 |
| L | - | | V 9.0 02/01/2019 |





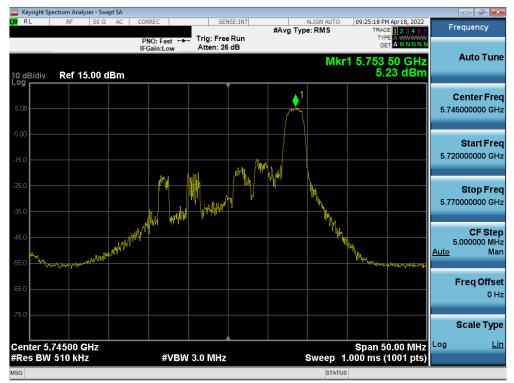
Plot 7-211. Power Spectral Density Plot MIMO ANT2 (160MHz (L) BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)



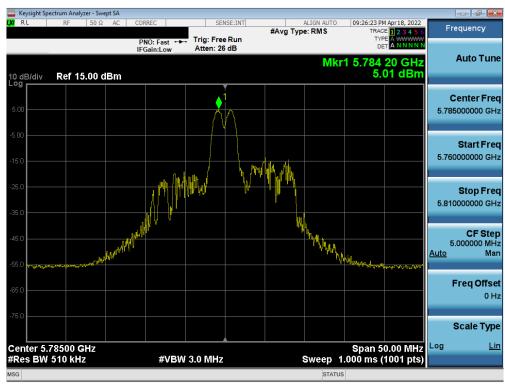
Plot 7-212. Power Spectral Density Plot MIMO ANT2 (160MHz (U) BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 147 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 147 of 236 |
| | | • | V 9.0 02/01/2019 |





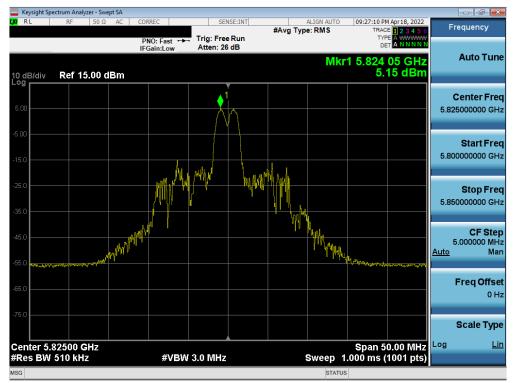
Plot 7-213. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 149)



Plot 7-214. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 157)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 149 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 148 of 236 |
| L | | • | V 9.0 02/01/2019 |





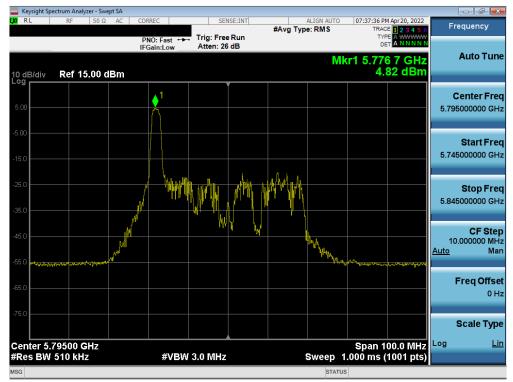
Plot 7-215. Power Spectral Density Plot MIMO ANT2 (20 MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 165)



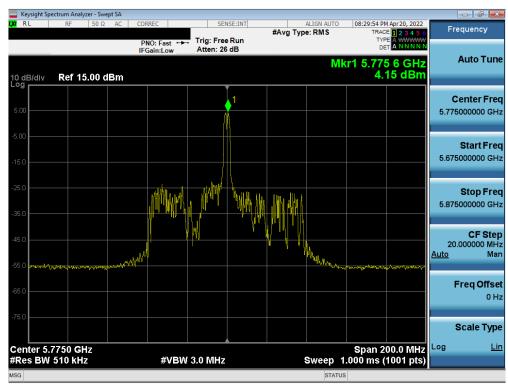
Plot 7-216. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Page 149 of 236 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | /01 - 6/10/2022 Portable Handset | | | |
| | | - | V 9 0 02/01/2019 | | |





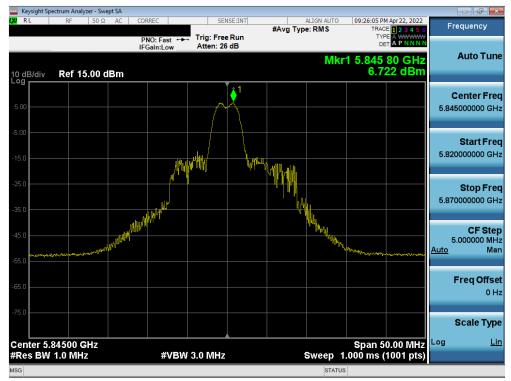
Plot 7-217. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 159)



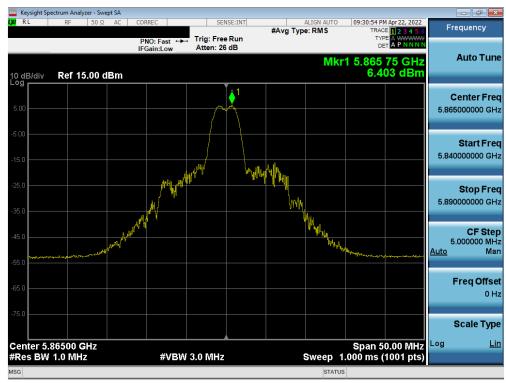
Plot 7-218. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 150 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 150 of 236 | | |
| | • | | V 9.0 02/01/2019 | | |





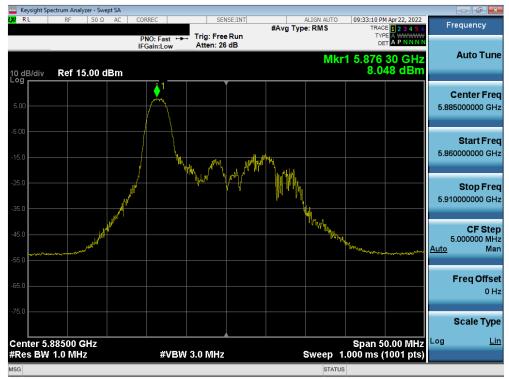
Plot 7-219. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3/4) – Ch. 169)



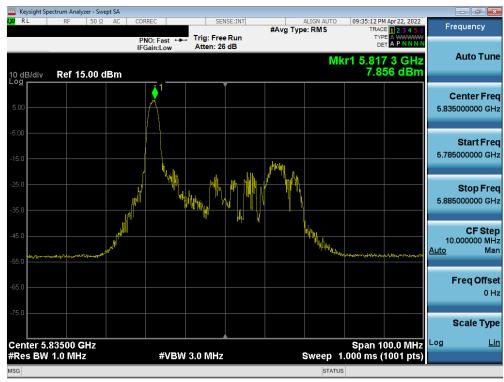
Plot 7-220. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 173)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dama 454 at 000 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 151 of 236 | | |
| | • | | V 9 0 02/01/2019 | | |





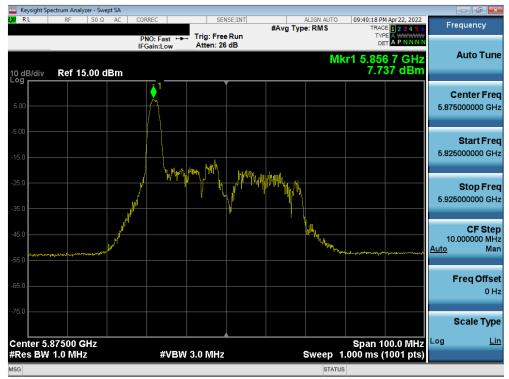
Plot 7-221. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 177)



Plot 7-222. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3/4) – Ch. 167)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Page 152 of 236 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | 04/01 - 6/10/2022 Portable Handset | | | |
| | • | | V 9 0 02/01/2019 | | |





Plot 7-223. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 175)



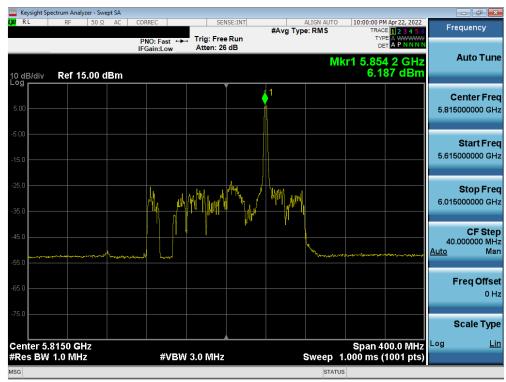
Plot 7-224. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 3/4) – Ch. 171)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dama 450 at 000 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 153 of 236 | | |
| | - | | V 9 0 02/01/2019 | | |





Plot 7-225. Power Spectral Density Plot MIMO ANT2 (160MHz BW (L) 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 163)



Plot 7-226. Power Spectral Density Plot MIMO ANT2 (160MHz BW (U) 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 163)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 454 of 220 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 154 of 236 | | |
| | • | · | V 9.0 02/01/2019 | | |



MIMO Power Spectral Density Measurements (Full Tones)

| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Summed MIMO Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|--------------|--------------------|----------------|---------------|-------|---------------------|-------------------------------------|-------------------------------------|---------------------------------------|-----------------------------------|----------------|
| | 5180 | 36 | ax (20MHz) | 242T | MCS0 | 6.01 | 6.08 | 9.06 | 11.00 | -1.94 |
| | 5200 | 40 | ax (20MHz) | 242T | MCS0 | 5.97 | 6.17 | 9.08 | 11.00 | -1.92 |
| Band 1 | 5240 | 48 | ax (20MHz) | 242T | MCS0 | 5.66 | 5.86 | 8.77 | 11.00 | -2.23 |
| Bar | 5190 | 38 | ax (40MHz) | 484T | MCS0 | 1.89 | 1.89 | 4.90 | 11.00 | -6.10 |
| | 5230 | 46 | ax (40MHz) | 484T | MCS0 | 2.06 | 1.96 | 5.02 | 11.00 | -5.98 |
| | 5210 | 42 | ax (80MHz) | 996T | MCS0 | -1.69 | -1.79 | 1.27 | 11.00 | -9.73 |
| Band 1/2A | 5250 | 50 | ax (160MHz L) | 996T | MCS0 | -1.97 | -2.02 | 1.02 | 11.00 | -9.98 |
| Ba 1/1 | 5250 | 50 | ax (160MHz U) | 996T | MCS0 | -2.58 | -2.62 | 0.41 | 11.00 | -10.59 |
| | 5260 | 52 | ax (20MHz) | 242T | MCS0 | 5.45 | 6.05 | 8.77 | 11.00 | -2.23 |
| | 5280 | 56 | ax (20MHz) | 242T | MCS0 | 5.32 | 5.33 | 8.33 | 11.00 | -2.67 |
| Band 2A | 5320 | 64 | ax (20MHz) | 242T | MCS0 | 5.73 | 6.11 | 8.93 | 11.00 | -2.07 |
| Banc | 5270 | 54 | ax (40MHz) | 484T | MCS0 | 1.68 | 2.24 | 4.98 | 11.00 | -6.02 |
| | 5310 | 62 | ax (40MHz) | 484T | MCS0 | 1.72 | 1.84 | 4.79 | 11.00 | -6.21 |
| | 5290 | 58 | ax (80MHz) | 996T | MCS0 | -2.24 | -1.87 | 0.96 | 11.00 | -10.04 |
| | 5500 | 100 | ax (20MHz) | 242T | MCS0 | 5.72 | 5.84 | 8.79 | 11.00 | -2.21 |
| | 5600 | 120 | ax (20MHz) | 242T | MCS0 | 6.01 | 6.06 | 9.05 | 11.00 | -1.95 |
| | 5720 | 144 | ax (20MHz) | 242T | MCS0 | 5.97 | 6.11 | 9.05 | 11.00 | -1.95 |
| | 5510 | 102 | ax (40MHz) | 484T | MCS0 | 1.85 | 1.74 | 4.81 | 11.00 | -6.19 |
| S S | 5590 | 118 | ax (40MHz) | 484T | MCS0 | 2.42 | 2.10 | 5.27 | 11.00 | -5.73 |
| Band 2C | 5710 | 142 | ax (40MHz) | 484T | MCS0 | 1.98 | 2.05 | 5.03 | 11.00 | -5.97 |
| ä | 5530 | 106 | ax (80MHz) | 996T | MCS0 | -1.98 | -1.96 | 1.04 | 11.00 | -9.96 |
| | 5610 | 122 | ax (80MHz) | 996T | MCS0 | -2.02 | -1.94 | 1.03 | 11.00 | -9.97 |
| | 5690 | 138 | ax (80MHz) | 996T | MCS0 | -2.16 | -2.18 | 0.84 | 11.00 | -10.16 |
| | 5570 | 114 | ax (160MHz L) | 26T | MCS0 | -1.97 | -2.56 | 0.76 | 11.00 | -10.24 |
| | 5570 | 114 | ax (160MHz U) | 26T | MCS0 | -2.40 | -1.95 | 0.84 | 11.00 | -10.16 |

Table 7-44. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements MIMO (Full Tones)

| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Summed MIMO Power Density [dBm] | Max Permissible Power Density | Margin [dB] |
|------|--------------------|----------------|-------------|-------|---------------------|-------------------------------------|-------------------------------------|---------------------------------------|--|----------------|
| | 5745 | 149 | ax (20MHz) | 242T | MCS0 | 2.90 | 3.38 | 6.16 | 30.00 | -23.84 |
| | 5785 | 157 | ax (20MHz) | 242T | MCS0 | 2.98 | 3.37 | 6.19 | 30.00 | -23.81 |
| nd 3 | 5825 | 165 | ax (20MHz) | 242T | MCS0 | 3.26 | 3.56 | 6.42 | 30.00 | -23.58 |
| Band | 5755 | 151 | ax (40MHz) | 484T | MCS0 | -0.81 | -0.75 | 2.23 | 30.00 | -27.77 |
| | 5795 | 159 | ax (40MHz) | 484T | MCS0 | -0.96 | -0.71 | 2.18 | 30.00 | -27.82 |
| | 5775 | 155 | ax (80MHz) | 996T | MCS0 | -2.17 | -4.85 | -0.30 | 30.00 | -30.30 |

Table 7-45. Band 3 Conducted Power Spectral Density Measurements MIMO (Full Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | | |
|------------------------|---|---------------------------------------|------------------|--|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Page 155 of 236 | | | |
| 1M2204010046-16-R1.A3L | 04010046-16-R1.A3L 04/01 - 6/10/2022 Portable Handset | | | | | |
| | | | V 9 0 02/01/2019 | | | |

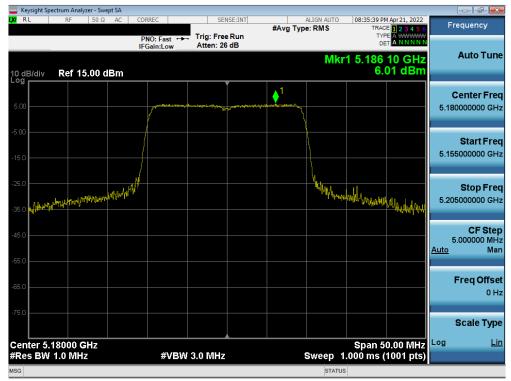


| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Antenna-1 Power Density [dBm/MHz] | Antenna-2 Power Density [dBm/MHz] | MIMO Summed Power Density [dBm/MHz] | Max Permissible Power Density [dBm/500kHz] | Margin [dB] | Directional Antenna Gain [dBi] | EIRP Power Density [dBm/MHz] | Max EIRP Power Density [dBm/MHz] | Margin [dB] |
|----------|--------------------|----------------|---------------|-------|---------------------|---|---|---|--|----------------|--------------------------------------|------------------------------------|--|----------------|
| Band 3/4 | 5845 | 169 | ax (20MHz) | 242T | MCS0 | 6.05 | 6.62 | 9.36 | 30.00 | -20.64 | -0.75 | 8.61 | 14.00 | -5.39 |
| Band 4 | 5865 | 173 | ax (20MHz) | 242T | MCS0 | 6.37 | 6.41 | 9.40 | | | -0.75 | 8.65 | 14.00 | -5.35 |
| Danu 4 | 5885 | 177 | ax (20MHz) | 242T | MCS0 | 5.72 | 6.41 | 9.09 | | | -0.75 | 8.34 | 14.00 | -5.66 |
| Band 3/4 | 5835 | 167 | ax (40MHz) | 484T | MCS0 | 1.98 | 2.20 | 5.11 | 30.00 | -24.89 | -0.75 | 4.36 | 14.00 | -9.64 |
| Band 4 | 5875 | 175 | ax (40MHz) | 484T | MCS0 | 2.27 | 2.11 | 5.20 | | | -0.75 | 4.45 | 14.00 | -9.55 |
| | 5855 | 171 | ax (80MHz) | 996T | MCS0 | -2.04 | -2.27 | 0.85 | 30.00 | -29.15 | -0.75 | 0.11 | 14.00 | -13.89 |
| Band 3/4 | 5815 | 163 | ax (160MHz L) | 996T | MCS0 | -2.11 | -2.65 | 0.64 | 30.00 | -29.36 | -0.75 | -0.11 | 14.00 | -14.11 |
| | 5815 | 163 | ax (160MHz U) | 996T | MCS0 | -2.34 | -2.56 | 0.56 | 30.00 | -29.44 | -0.75 | -0.19 | 14.00 | -14.19 |

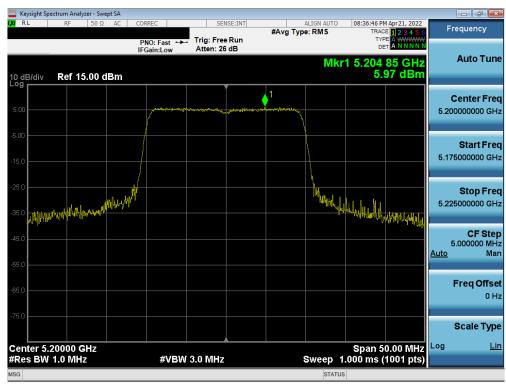
Table 7-46. Band 4 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 156 of 226 | | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 156 of 236 | | | |
| | | | V 9 0 02/01/2019 | | | |





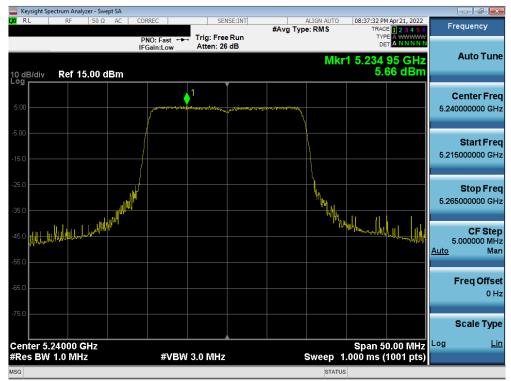
Plot 7-227. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 36)



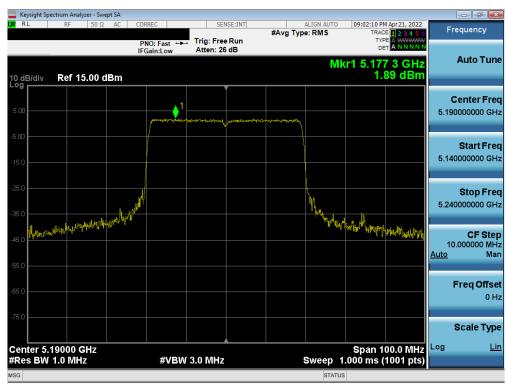
Plot 7-228. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)

| FCC ID: A3LSMF936U | | MEASUREMENT REPORT (CERTIFICATION) | | | |
|------------------------|-------------------|---------------------------------------|------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Page 157 of 236 | | |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | 4/01 - 6/10/2022 Portable Handset | | | |
| | | | V 9 0 02/01/2019 | | |





Plot 7-229. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 48)



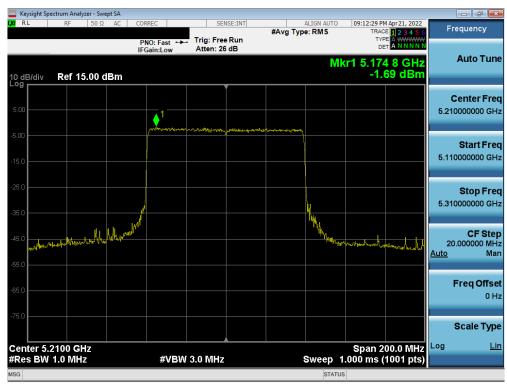
Plot 7-230. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 38)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 459 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 158 of 236 |
| L | | | V 9.0 02/01/2019 |





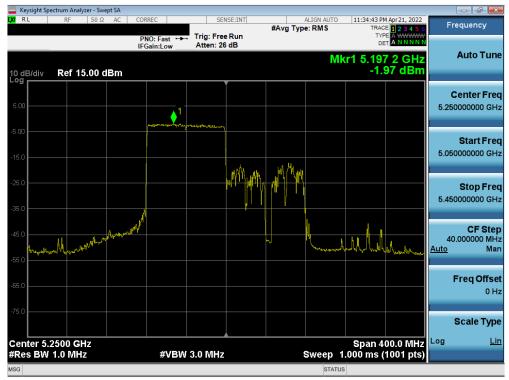
Plot 7-231. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 46)



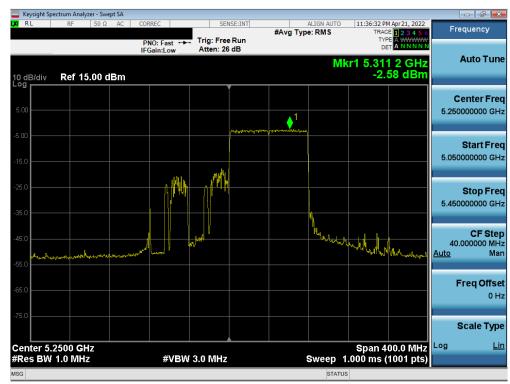
Plot 7-232. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 42)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 150 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 159 of 236 |
| | • | | V 9 0 02/01/2019 |





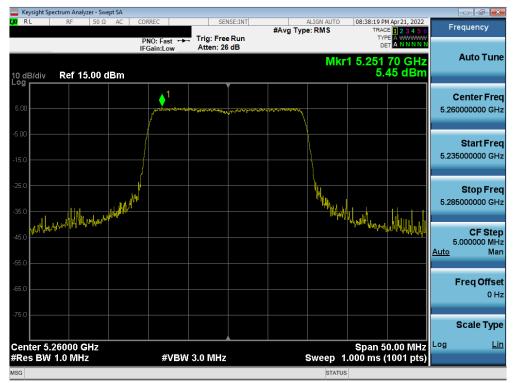
Plot 7-233. Power Spectral Density Plot MIMO ANT1 (160MHz (L) BW 802.11ax - Full Tones (UNII Band 1/2A) - Ch. 50)



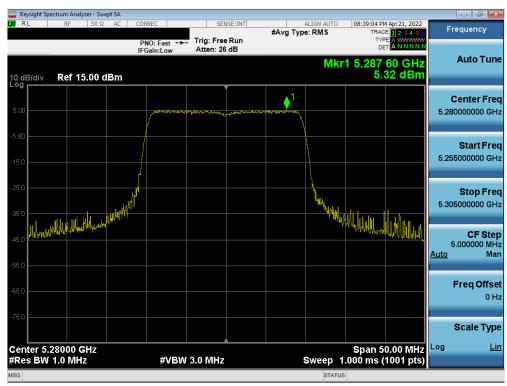
Plot 7-234. Power Spectral Density Plot MIMO ANT1 (160MHz (U) BW 802.11ax - Full Tones (UNII Band 1/2A) - Ch. 50)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 160 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 160 of 236 |
| | | | V 9 0 02/01/2019 |





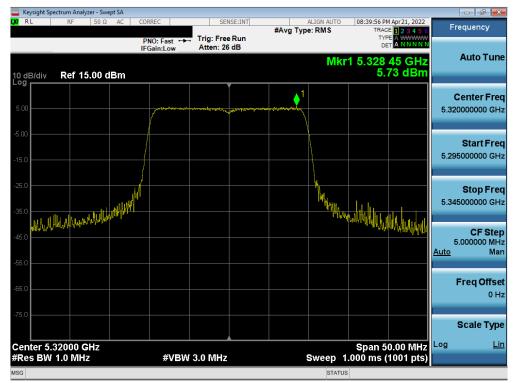
Plot 7-235. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)



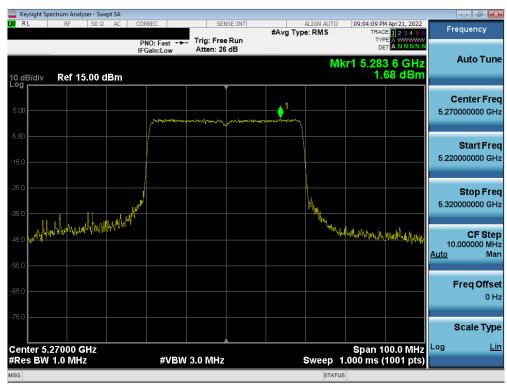
Plot 7-236. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 56)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 161 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 161 of 236 |
| | - | • | V 9.0 02/01/2019 |





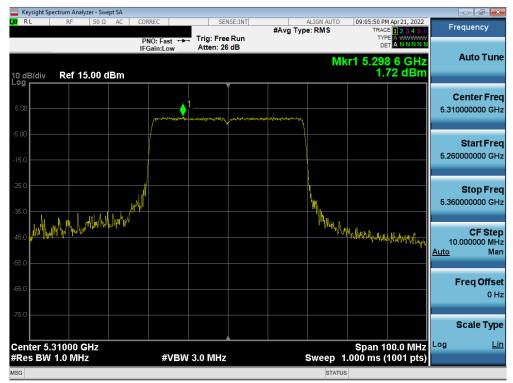
Plot 7-237. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 64)



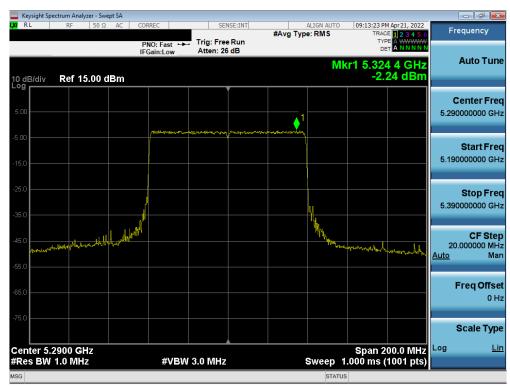
Plot 7-238. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 54)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 462 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 162 of 236 |
| | | | V 9.0 02/01/2019 |





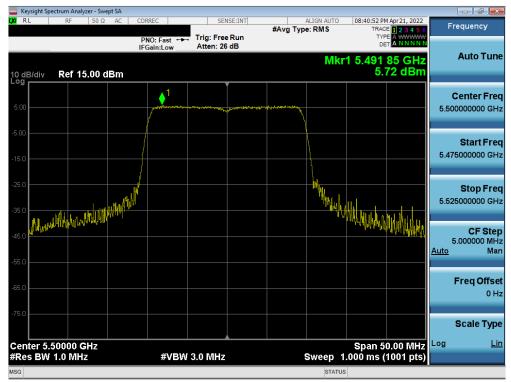
Plot 7-239. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 62)



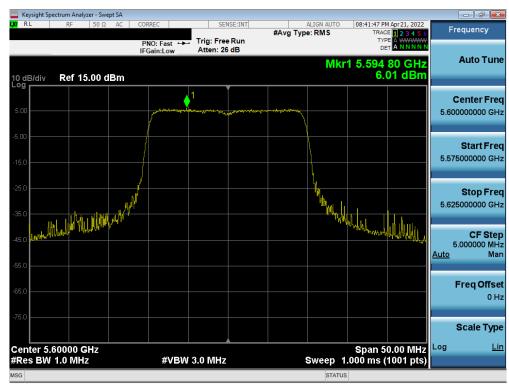
Plot 7-240. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 462 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 163 of 236 |
| | | | V 9.0 02/01/2019 |





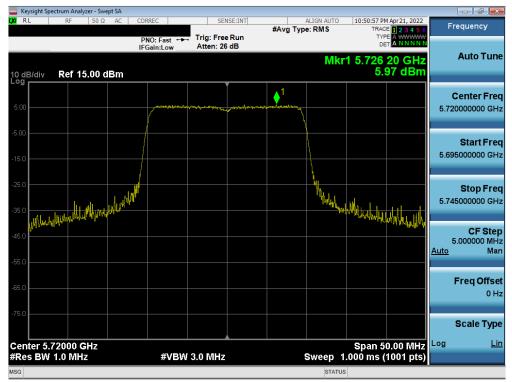
Plot 7-241. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 100)



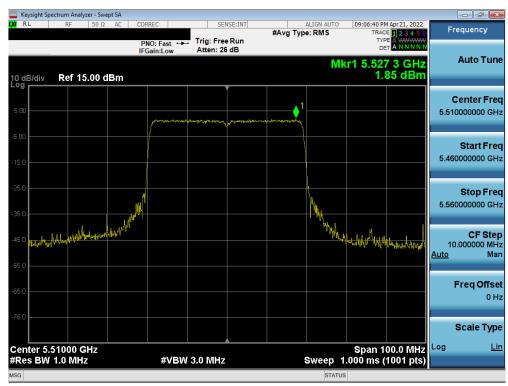
Plot 7-242. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 464 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 164 of 236 |
| | | | V 9.0 02/01/2019 |





Plot 7-243. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 144)



Plot 7-244. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 102)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 105 of 220 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 165 of 236 |
| L | | | V 9.0 02/01/2019 |





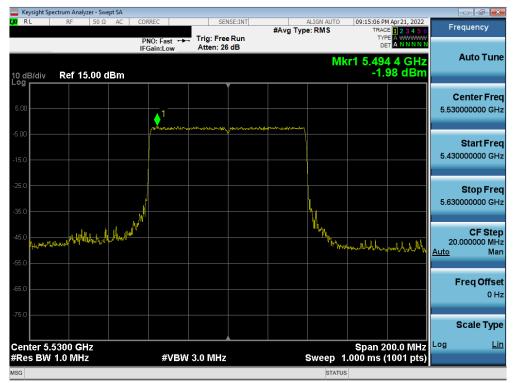
Plot 7-245. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 118)



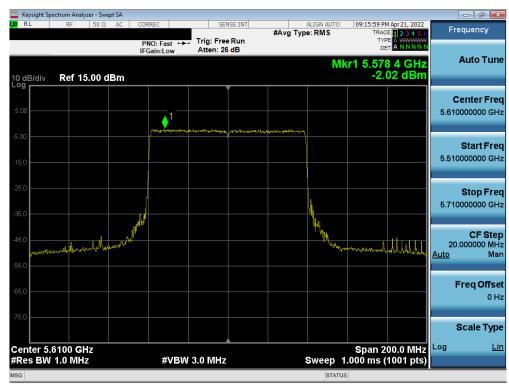
Plot 7-246. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 142)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 466 of 026 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 166 of 236 |
| | | | V 9.0 02/01/2019 |





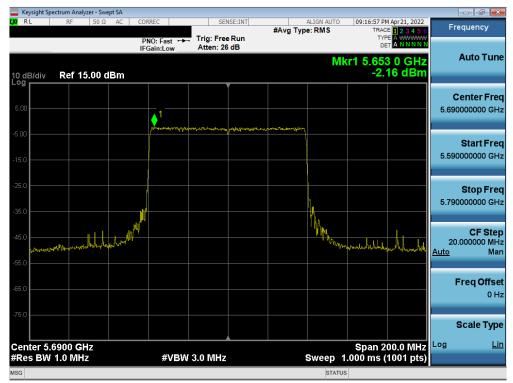
Plot 7-247. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 106)



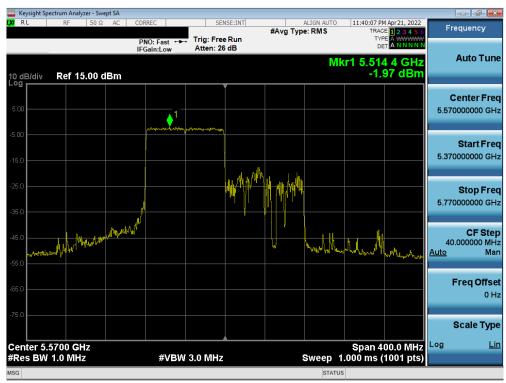
Plot 7-248. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 122)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 167 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 167 of 236 |
| L | | | V 9.0 02/01/2019 |





Plot 7-249. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 138)



Plot 7-250. Power Spectral Density Plot MIMO ANT1 (160MHz (L) BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 114)

| FCC ID: A3LSMF936U | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
|------------------------|---------------------------------------|------------------|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 169 of 226 |
| 1M2204010046-16-R1.A3L | 04/01 - 6/10/2022 | Portable Handset | Page 168 of 236 |
| | | | V 9.0 02/01/2019 |