

| Keysight Spectrum Analyzer - Occupied E | | | | | | | J X |
|---|-------------|----------------------|---|--------------------|---------------------|------------|-----------------|
| XX RL RF 50Ω AC | CORREC | | ALIGN A 00000 GHz Avg Hold: 100/1 | Radio Std: 00 | | Trace/Dete | ctor |
| | #IFGain:Low | #Atten: 36 dB | | Radio Dev | ice: BTS | | |
| 10 dB/div Ref 20.00 dB | m | | | | | | |
| Log 10.0 | | | | | | Clear | Write |
| -10.0 | withyenth | medledrewky romandat | Magninia | | | Cicui | ••••• |
| -20.0 | | | | | | | |
| -30.0 | mini | | | a lange to a lange | 1 million and | Av | erage |
| -50.0 | | | | | | | |
| -60.0 | | | | | | Мах | (Hold |
| -70.0 | | | | | | | |
| Center 6.16500 GHz #Res BW 390 kHz | | #VBW 1.5 N | ЛНz | | 00.0 MHz ep 1 ms | Min | Hold |
| Occupied Bandwid | th | Total F | ower | 16.5 dBm | | | |
| 3 | 7.570 MI | lz | | | | | tector Peak▶ |
| Transmit Freq Error | -62.046 | KHz % of O | BW Power | 99.00 % | | Auto | Man |
| x dB Bandwidth | 39.80 N | lHz x dB | | -26.00 dB | | | |
| | | | | | | | |
| | | | | | | | |
| MSG | | | s | STATUS | | | |

Plot 7-118. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 43)



Plot 7-119. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 5) – Ch. 91)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Daga 76 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 76 of 293 |
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| Keysight Spectrum Analyzer - Occupied | | | | | |
|--|---------------------|--|-------------------|---|---|
| LXI RL RF 50Ω AC | CORREC | SENSE:INT Center Freq: 5.98500 | ALIGN AUTO | 10:54:03 PM Oct 26, 2020 Radio Std: None | Trace/Detector |
| | ↔ | Tatas Francis Biran | Avg Hold: 100/100 | | |
| | #IFGain:Low | #Atten: 36 dB | | Radio Device: BTS | T I I I I I I I I I I I I I I I I I I I |
| | _ | | | | |
| 10 dB/div Ref 10.00 dl | Bm | | | | |
| 0.00 | | and mound with a some of | | | |
| -10.0 | nt water the server | Alter in the second states in the second | M. unport and pro | | Clear Write |
| -20.0 | | | | | |
| -30.0 | <u> </u> | | | | |
| -40.0 Almandation and all the and and all and a second sec | www.mv | | Maral Maral Maran | In the second second | Average |
| -50.0 | | | | | |
| -60.0 | | | | | |
| -70.0 | | | | | Max Hold |
| -80.0 | | | | | Μάλ Ποιά |
| | | | | | |
| Center 5.9850 GHz #Res BW 470 kHz | | #VBW 1.5 M | IU-7 | Span 200.0 MHz Sweep 1 ms | |
| #Res DW 470 KHZ | | #VDVV 1.51V | Π2 | aweep rms | Min Hold |
| Occupied Bandwi | dth | Total P | ower 17. |) dBm | |
| | 77.178 MI | 47 | | | Detector |
| | 1.170 101 | 12 | | | Peak► |
| Transmit Freq Error | -62.117 | kHz % of O | BW Power 99 | 9.00 % | Auto <u>Man</u> |
| x dB Bandwidth | 80.17 N | 1Hz xdB | -26 | 00 dB | |
| | | | | | |
| | | | | | |
| | | | | | |
| MSG | | | STATU | s | |
| | | | | | |

Plot 7-120. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 7)



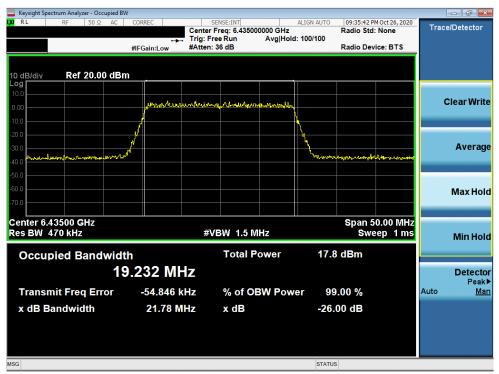
Plot 7-121. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 39)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Daga 77 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 77 of 293 |
| © 2020 PCTEST | | | V 9.0 02/01/2019 |



| Keysight Spectrum Analyzer - Occupied | | | | | | | x |
|---------------------------------------|------------------|--|-------------------|-----------|-----------------------|----------------|-----|
| LX/ R L RF 50 Ω AC | CORREC | SENSE:INT Center Freq: 6.38500 | | Radio Std | MOct 26, 2020 None | Trace/Detector | |
| | ↔ #IFGain:Low | Trig: Free Run #Atten: 36 dB | Avg Hold: 100/100 | Radio Dev | ice: BTS | | |
| | | | | | | | |
| 10 dB/div Ref 20.00 df | 3m | | | | | | |
| Log | | | | | | | |
| 10.0 | | | | | | Clear Wri | ite |
| 0.00 | - trailwin that | mmunhandran | mahamaah | | | | |
| -10.0 | | | | | | | |
| -20.0 | | | | | | Avera | an |
| -40.0 When when many property | mm | | human | manthe | a man work | Avera | gc |
| -50.0 | | | | | | | |
| -60.0 | | | | | | | |
| -70.0 | | | | | | Max Ho | a |
| | | | | | | | |
| Center 6.3850 GHz #Res BW 470 kHz | | #VBW 1.5 M | | | 00.0 MHz | | |
| #RES DW 470 KHZ | | | ΠZ | SWE | ep 1ms | Min Ho | d |
| Occupied Bandwig | dth | Total P | ower 16 | .5 dBm | | | |
| 7 | 7.231 M | 7 | | | | Detect | tor |
| | | | | | | Pea | k▶ |
| Transmit Freq Error | -149.33 | KHZ % of O | BW Power | 99.00 % | | Auto <u>M</u> | an |
| x dB Bandwidth | 80.60 N | Hz xdB | -2 | 6.00 dB | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| MSG | | | STA | TUS | | | |

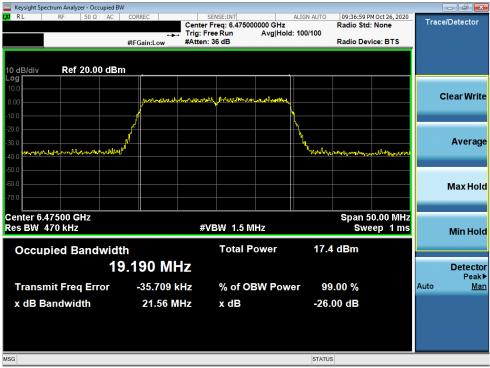
Plot 7-122. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 87)



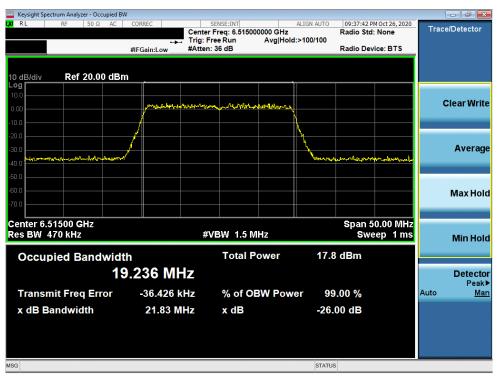
Plot 7-123. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 6) – Ch. 97)

| FCC ID: A3LSMG998U | PECTEST Presal to be patried @ | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager | | |
|--------------------------------|-----------------------------------|---------------------------------------|--|---------------------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | | Dage 70 of 202 | | |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | | Page 78 of 293 | | |
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Plot 7-124. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 105)



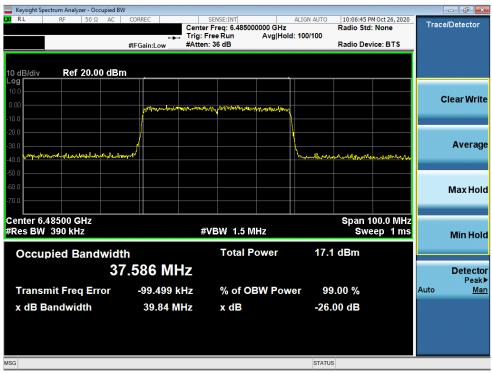
Plot 7-125. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 6) – Ch. 113)

| FCC ID: A3LSMG998U | PECTEST Presad to be patir of @ | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
|------------------------|------------------------------------|---------------------------------------|--|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Dogo 70 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | 2/14/2020 Portable Handset | | Page 79 of 293 |
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| Keysight Spectrum Analyzer - Occupied B | W | | | | |
|--|------------------|---------------------------------------|----------------|---------------------------------------|-------------------|
| KL RF 50Ω AC | CORREC | SENSE:INT ter Freg: 6.445000000 GH | | 06:22 PM Oct 26, 2020 io Std: None | Trace/Detector |
| | | | old: 100/100 | io sta. None | |
| | #IFGain:Low #Att | en: 36 dB | Radi | io Device: BTS | |
| | | | | | |
| 10 dB/div Ref 20.00 dB | m | | | | |
| Log | | | | | |
| 10.0 | | | | | Clear Write |
| 0.00 | MINUMAN | and umany hand | M-1 | | Clear write |
| -10.0 | | | | | |
| -20.0 | | | | | |
| -30.0 | | | | | Average |
| -40 0 programming and a strange of the strange of t | herbert | | Laboranismedie | mon mark man window | ····· |
| -40.0 | | | | | |
| -50.0 | | | | | |
| -60.0 | | | | | Max Hold |
| -70.0 | | | | | |
| | | | | | |
| Center 6.44500 GHz #Res BW 390 kHz | | #VBW 1.5 MHz | sp | an 100.0 MHz Sweep 1 ms | |
| #Res BW J90 KH2 | | | | sweep This | Min Hold |
| Occupied Bandwid | th | Total Power | 17.1 dB | m | |
| | | | | | |
| 3 | 7.679 MHz | | | | Detector Peak▶ |
| Transmit Freq Error | -20.085 kHz | % of OBW Po | wer 99.00 | % | Auto <u>Man</u> |
| x dB Bandwidth | 39.79 MHz | x dB | -26.00 d | D | |
| | 55.75 WHZ | X UB | -20.00 u | B | |
| | | | | | |
| | | | | | |
| | | | | | |
| MSG | | | STATUS | | |

Plot 7-126. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 99)



Plot 7-127. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 107)

| FCC ID: A3LSMG998U | PETEST Presad to Law patt of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|-----------------------------------|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Da at 00 at 000 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 80 of 293 |
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| 🔤 Keysight Spectrum Ana | alyzer - Occu | pied BW | | | | | | | | | |
|-------------------------|---------------|-----------|---------|-------------|-------------------------|-----------|------------|-------------------------|---|------|-------------|
| LXI RL RF | 50 Ω | AC COR | REC | | NSE:INT reg: 6.52500 | 0000 CH- | ALIGN AUTO | 10:06:02 P Radio Std | M Oct 26, 2020 | Trac | e/Detector |
| | | | | Taken Frank | | | d: 100/100 | Radio Sta | None | | |
| | | #IFG | ain:Low | #Atten: 3 | | | | Radio Dev | ice: BTS | | |
| | | | | | | | | | | | |
| | ef 20.00 | dBm | | | | | | | | | |
| Log 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Clear Write |
| 0.00 | | | Mann | Mun man | or Markenhalow | www.mapro | | | | | |
| -10.0 | | | | | | | | | | | |
| -20.0 | | | | | | | <u> </u> | | | | |
| -30.0 | | | | | | | | | | | Average |
| -40.0 multon mentor | malunlym | runternet | | | | | martyman | non la anna an | with the second s | | |
| -50.0 | | | | | | | | | | | |
| -60.0 | | | | | | | | | | | |
| | | | | | | | | | | | Max Hold |
| -70.0 | | | | | | | | | | _ | |
| Center 6.52500 | GH7 | | | | | 1 | | Span 1 | 00.0 MHz | | |
| #Res BW 390 k | | | | #VE | 3W 1.5 M | Hz | | | ep 1 ms | | Min Hold |
| | | | | | | | | | · . | | Mill Hold |
| Occupied I | Bandv | vidth | | | Total P | ower | 16.9 | dBm | | | |
| | | 37 6 | 05 MI | 7 | | | | | | | Detector |
| | | 57.0 | | | | | | | | | Peak► |
| Transmit Fre | eq Erro | or - | 109.51 | kHz | % of O | 3W Pow | ver 99 | .00 % | | Auto | Man |
| x dB Bandw | idth | | 39.80 N | H7 | x dB | | -26 | 00 dB | | | |
| x ab ballan | Tati | | 00.00 1 | | Adb | | 20. | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| MSG | | | | | | | STATUS | 3 | | | |

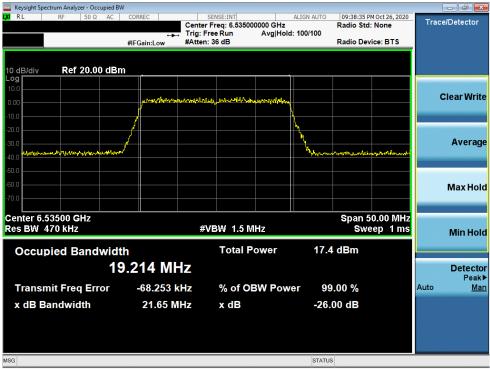
Plot 7-128. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 115)



Plot 7-129. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 103)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | SAMEUNE | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Da za 04 af 000 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 81 of 293 |
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Plot 7-130. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 117)



Plot 7-131. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 149)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Daga 82 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 82 of 293 |
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Plot 7-132. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 185)



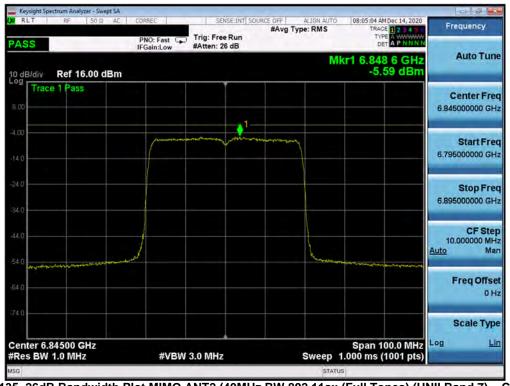
Plot 7-133. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 123)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | | |
|--------------------------------|--------------------|---------------------------------------|---------------------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Daga 82 of 202 | | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 83 of 293 | | |
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| Keysight Spectrum Analyzer - Occupied B | | | | | |
|---|----------------|---|---|----------------|-----------------|
| LX RL RF 50Ω AC | CORREC | SENSE:INT | | M Oct 26, 2020 | Trace/Detector |
| | | r Freq: 6.725000000 GHz Free Run Avg Hol | Radio Std d: 100/100 | : None | 11400120100101 |
| | | n: 36 dB | Radio Dev | vice: BTS | |
| | in dameon | | | | |
| | | | | | |
| 10 dB/div Ref 20.00 dB | m | | | | |
| Log 10.0 | | | | | |
| | | | | | Clear Write |
| 0.00 | My Mar Marthal | wet mon multiple al supported with the | | | |
| -10.0 | | | | | |
| -20.0 | | | | | |
| -30.0 | | | | | Average |
| | | | | | Average |
| -40.0 Automatication - Marthachardon | กใหล่งกู-โ | | Marian marine and a strategic | and the Market | |
| -50.0 | | | | | |
| -60.0 | | | | | |
| | | | | | Max Hold |
| -70.0 | | | | | |
| Center 6.72500 GHz | | | Snan 1 | 00.0 MHz | |
| #Res BW 390 kHz | - | VBW 1.5 MHz | | eep 1 ms | |
| #Res BW 390 RHz | " | | 300 | eep mis | Min Hold |
| Occupied Bandwid | th. | Total Power | 16.8 dBm | | |
| | | | 10.0 0.0111 | | |
| 3 | 7.598 MHz | | | | Detector |
| | | | | | Peak► |
| Transmit Freq Error | -55.653 kHz | % of OBW Pow | ver 99.00 % | | Auto <u>Man</u> |
| x dB Bandwidth | 39.84 MHz | x dB | -26.00 dB | | |
| | 33.04 MHZ | X UB | -20.00 uB | | |
| | | | | | |
| | | | | | |
| | | | | | |
| MSG | | | STATUS | | |
| mou | | | 014103 | | |

Plot 7-134. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 155)



Plot 7-135. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 179)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit tol @www.med | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|---|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 84 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 84 of 293 |
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| Keysight Spectrum Analyzer - Occupied | | | | | - đ <mark>x</mark> |
|---------------------------------------|-------------|----------------------------------|---------------------|---|--------------------|
| LX RL RF 50Ω AC | CORREC | SENSE:INT Center Freg: 6.5450 | ALIGN AUTO | 10:56:58 PM Oct 26, 2020 Radio Std: None | Trace/Detector |
| | ↔ | Trig: Free Run | Avg Hold: 100/100 | | |
| | #IFGain:Low | #Atten: 36 dB | | Radio Device: BTS | |
| | | | | | |
| 10 dB/div Ref 20.00 dE | 3m | | , | , | |
| 10.0 | | | | | |
| 0.00 | | | | | Clear Write |
| -10.0 | Montheman | anter and the man | 147Lander-141111-14 | | |
| -20.0 | l | | | | |
| -30.0 | | | | | Average |
| -40.0 www.waynamaey.wom.waliowy | nennight | | holomonte | western and the source we | |
| -50.0 | | | | | |
| -60.0 | | | | | |
| | | | | | Max Hold |
| -70.0 | | | | | |
| Center 6.5450 GHz | | | | Span 200.0 MHz | |
| #Res BW 470 kHz | | #VBW 1.5 N | 1Hz | Sweep 1 ms | Min Hold |
| Occupied Dandwid | déla | Total F | lower 17 | 1 dBm | |
| Occupied Bandwig | | | | r ubili | |
| | 7.139 MI | HZ | | | Detector Peak▶ |
| Transmit Freq Error | -152.83 | kHz % of O | BW Power 99 | 9.00 % | Auto <u>Man</u> |
| x dB Bandwidth | 80.59 N | lHz x dB | -26. | 00 dB | |
| | | | | | |
| | | | | | |
| | | | | | |
| MSG | | | STATU | 5 | |
| | | | 01110 | - | |

Plot 7-136. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 119)



Plot 7-137. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 151)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | | |
|--------------------------------|--------------------|---------------------------------------|---------------------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 95 of 202 | | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 85 of 293 | | |
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| Keysight Spectrum Analyzer - Occupied B | | | | | | - ¢ × |
|---|---|-----------------------------------|---|---------------------------------|----------|------------------|
| LX/ RL RF 50 Ω AC | CORREC | SENSE:INT Center Freg: 6.86500 | ALIGN AUTO | 10:57:37 PM Oc Radio Std: No | | Trace/Detector |
| | ·→ | Trig: Free Run | Avg Hold: 100/100 | | | |
| | #IFGain:Low | #Atten: 36 dB | | Radio Device: | BTS | |
| | | | | | | |
| 10 dB/div Ref 10.00 dBr Log | n | | , <u>, , , , , , , , , , , , , , , , , , </u> | | | |
| | | | | | | |
| -10.0 | shuren when | Marwal willing conten recovered | rever willing | | | Clear Write |
| -20.0 | | | | | | |
| -30.0 | | | | | | |
| -40.0 Maleston maleston - 40.0 | have been a start of the start | | htelpostana | where where the second second | horismle | Average |
| -50.0 | | | | | | |
| -60.0 | | | | | | |
| -70.0 | | | | | | |
| | | | | | | Max Hold |
| -80.0 | | | | | | |
| Center 6.8650 GHz | | | | Span 200. | .0 MHz | |
| #Res BW 470 kHz | | #VBW 1.5 № | 1Hz | Sweep | 1 ms | Min Hold |
| | u. | Total P | lower 46 | .9 dBm | | |
| Occupied Bandwid | | | ower 10 | .9 ubiii | | |
| 7 | 7.129 MI | Hz | | | | Detector |
| Transmit Freg Error | -32.237 | (Hz % of O | BW Power 9 | 9.00 % | AL | Peak▶ uto Man |
| · · · · · | | | | | | |
| x dB Bandwidth | 80.90 N | lHz xdB | -20 | 6.00 dB | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| MSG | | | STAT | US | | |

Plot 7-138. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 183)



Plot 7-139. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 189)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | | |
|--------------------------------|--------------------|---------------------------------------|---------------------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Daga 86 of 202 | | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 86 of 293 | | |
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Plot 7-140. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 209)



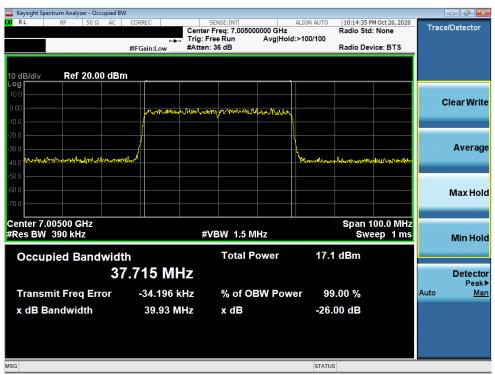
Plot 7-141. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 233)

| FCC ID: A3LSMG998U | PECTEST Presal to be patried @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | | |
|--------------------------------|-----------------------------------|---------------------------------------|---------------------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 97 of 202 | | |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 87 of 293 | | |
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| Keysight Spectrum Analyzer - Occupied I | | | | | | J X |
|---|----------------------------|----------------------------------|-------------------|------------------------------------|-------|--------|
| LXI RL RF 50Ω AC | CORREC | SENSE:INT Center Freg: 6.8850 | ALIGN AUT | 0 10:11:31 PM Oct Radio Std: No | | ctor |
| | ++ | Trig: Free Run | Avg Hold: 100/100 | | | |
| | #IFGain:Low | #Atten: 36 dB | | Radio Device: | BTS | |
| | | | | | | |
| 10 dB/div Ref 20.00 dB | im | | | | | |
| Log | | | | | | |
| 0.00 | | | | | Clear | Write |
| | www. | mon maker with some on | www.summers | | | |
| -10.0 | <u> </u> | | | | | |
| -20.0 | / | | | | A., | orago |
| -30.0 | Restance of the local days | | Mustereller | walkannalar | | erage |
| -40.0 | | | | | | |
| -50.0 | | | | | | |
| -60.0 | | | | | Max | (Hold |
| -70.0 | | | | | | _ |
| Center 6.88500 GHz | | | | Span 100. | 0 MHz | |
| #Res BW 390 kHz | | #VBW 1.5 M | //Hz | Sweep | 1 mag | n Hold |
| | | | | | | molu |
| Occupied Bandwid | lth | Total F | Power 17 | 7.0 dBm | | |
| 3 | 7.534 M | Hz | | | Det | tector |
| | | | | | | Peak▶ |
| Transmit Freq Error | -69.342 | kHz % of O | BW Power | 99.00 % | Auto | Man |
| x dB Bandwidth | 39.96 N | /Hz xdB | -2 | 6.00 dB | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| MSG | | | STA | TUS | | |
| | | | | | | |

Plot 7-142. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 187)



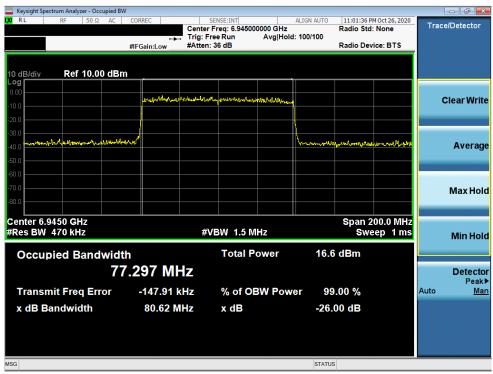
Plot 7-143. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 211)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | | |
|--------------------------------|--------------------|---------------------------------------|---------------------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 80 of 202 | | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 88 of 293 | | |
| © 2020 PCTEST V 9.0 02/01/2019 | | | | | |



| Keysight Spectrum Analyzer - Occupie | d BW | | | | | |
|--------------------------------------|-----------------------|--------------------------------------|-------------------|------------|----------------------|-------------------|
| LXI RL RF 50Ω A(| | SENSE:INT er Freg: 7.005000000 GH | ALIGN AUTO | 10:14:35 P | M Oct 26, 2020 | Trace/Detector |
| | | | z old:>100/100 | Radio Sta | None | |
| | #IFGain:Low #Atte | en: 36 dB | | Radio Dev | ice: BTS | |
| | | | | | | |
| 10 dB/div Ref 20.00 d | Bm | | | | | |
| Log | | | | | | |
| | | | | | | Clear Write |
| 0.00 | nonumunum | www.www.wh.wh. | | | | |
| -10.0 | | | | | | |
| -20.0 | <mark>/</mark> | | | | | |
| -30.0 | | | | | | Average |
| -40.0 Martin Martin Martin | nwnjilwn ^a | | Mandhene | Advertise | aliya Nan Tanaliykan | |
| -50.0 | | | | | | |
| -60.0 | | | | | | Max Hold |
| -70.0 | | | | | | Muxitoru |
| | | | | | | |
| Center 7.00500 GHz | | | | | 00.0 MHz | |
| #Res BW 390 kHz | | #VBW 1.5 MHz | | Swe | eep 1 ms | Min Hold |
| Occupied Bandwi | dth | Total Power | 17.1 | dBm | | |
| | | | | | | |
| | 37.715 MHz | | | | | Detector Peak► |
| Transmit Freq Error | -34.196 kHz | % of OBW Po | wer 99 | .00 % | | Auto <u>Man</u> |
| x dB Bandwidth | 39.93 MHz | x dB | -26 (| 00 dB | | |
| | 55.55 MITZ | A UD | -20.0 | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| MSG | | | STATUS | | | |

Plot 7-144. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 227)



Plot 7-145. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 199)

| FCC ID: A3LSMG998U | PETEST Presad to Law part of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | | |
|------------------------------|-----------------------------------|---------------------------------------|---------------------------------|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dama 00 of 000 | | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 89 of 293 | | |
| 2020 PCTEST V 9.0 02/01/2019 | | | | | |



| Center 7.0250 GHz Res BW 470 kHz Transmit Freq Error x dB Bandwidth x dB b | 🔤 Keysight Spectrum Analyzer - Occupie | ed BW | | | | |
|--|--|--|-------------------------|-----------------------|--|-----------------|
| Image: Span Low Trig: Free Run #Atten: 36 dB Avg Hold: 100/100 Radio Device: BTS 10 dB/div Ref 20.00 dBm Image: Span Low Ima | <mark>ιχ)</mark> RL RF 50Ω A | C CORREC | | | | Trace/Detector |
| 10 dB/div Ref 20.00 dBm 10 dB/div Ref 20.00 dBm 10 dB/div Automatication 20 dB/div | | +→ | | | Radio Stu. None | |
| Log Image: Clear Write 000 Image: Clear Write Wax Hold Max Hold Max Hold Min Hold 000 Image: Clear Write WB andwidth Total Power 16.6 dBm 700 Image: Clear Write Max Max Max Max Max Max | | #IFGain:Low | #Atten: 36 dB | | Radio Device: BTS | |
| Log Image: Clear Write 000 Image: Clear Write Wax Hold Max Hold Max Hold Min Hold 000 Image: Clear Write WB andwidth Total Power 16.6 dBm 700 Image: Clear Write Max Min Hold Min Hold Max X dB Bandwidth | | | | | | |
| 100 1 | 10 dB/div Ref 20.00 d | Bm | | | | |
| 000 0000 0000 000 000 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<> | | | | | | |
| 000 1 | | | | | | Clear Write |
| 2001 | 0.00 | Anna | andervalue Maderalianty | und an overflow a sta | | |
| 30.0 Image: Content of the second of the | -10.0 | | | | | |
| 40.0 Image: Automatical Multiple Content of Aut | -20.0 | | | | | |
| auto | | <u>/</u> | | h. | | Average |
| Center 7.0250 GHz #VBW 1.5 MHz Span 200.0 MHz Max Hold Center 7.0250 GHz #VBW 1.5 MHz Span 200.0 MHz Min Hold Occupied Bandwidth Total Power 16.6 dBm Detector 77.036 MHz % of OBW Power 99.00 % Auto x dB Bandwidth 80.10 MHz x dB -26.00 dB | -40.0 -40.0 | hand a start of the start of th | | Service and | ม <i>างและใหญ่ปลุ่มหน้าสูญในสูงและกันกระบุ</i> ประ | |
| 70.0 Center 7.0250 GHz Span 200.0 MHz Min Hold Center 7.0250 GHz #VBW 1.5 MHz Span 200.0 MHz Min Hold Occupied Bandwidth Total Power 16.6 dBm Detector 77.036 MHz Transmit Freq Error -65.743 kHz % of OBW Power 99.00 % x dB Bandwidth 80.10 MHz x dB -26.00 dB Man | -50.0 | | | | | |
| Z00 Center 7.0250 GHz Span 200.0 MHz Span 200.0 MHz Min Hold Center 7.0250 GHz #VBW 1.5 MHz Sweep 1 ms Min Hold Occupied Bandwidth Total Power 16.6 dBm Detector 77.036 MHz Transmit Freq Error -65.743 kHz % of OBW Power 99.00 % x dB Bandwidth 80.10 MHz x dB -26.00 dB Man | -60.0 | | | | | May Hold |
| Center 7.0250 GHz #Res BW 470 kHz Span 200.0 MHz Sweep 1 ms Min Hold Occupied Bandwidth Total Power 16.6 dBm 77.036 MHz Total Power 99.00 % x dB Bandwidth 80.10 MHz x dB -26.00 dB | -70.0 | | | | | Max Holu |
| #Res BW 470 kHz #VBW 1.5 MHz Sweep 1 ms Occupied Bandwidth Total Power 16.6 dBm 77.036 MHz Transmit Freq Error -65.743 kHz % of OBW Power 99.00 % x dB Bandwidth 80.10 MHz x dB -26.00 dB | | | | | | |
| Occupied Bandwidth Total Power 16.6 dBm 77.036 MHz Detector Transmit Freq Error -65.743 kHz % of OBW Power 99.00 % x dB Bandwidth 80.10 MHz x dB -26.00 dB | | | | | | |
| Transmit Freq Error -65.743 kHz % of OBW Power 99.00 % Detector x dB Bandwidth 80.10 MHz x dB -26.00 dB | #Res BW 470 kHz | | #VBW 1.5 N | IHz | Sweep 1 ms | Min Hold |
| Transmit Freq Error -65.743 kHz % of OBW Power 99.00 % Detector x dB Bandwidth 80.10 MHz x dB -26.00 dB | Occupied Dendu | | Total P | ower 16 f | dBm | |
| Transmit Freq Error -65.743 kHz % of OBW Power 99.00 % x dB Bandwidth 80.10 MHz x dB -26.00 dB | | | | | , abiii | |
| Transmit Freq Error -65.743 kHz % of OBW Power 99.00 % Auto Man x dB Bandwidth 80.10 MHz x dB -26.00 dB | | 77.036 MI | HZ | | | |
| x dB Bandwidth 80.10 MHz x dB -26.00 dB | Transmit Fred Error | -65 7/3 | kHz % of O | BW Power 00 | 0.00% | |
| | | | | | | Mato <u>man</u> |
| MSG STATUS | x dB Bandwidth | 80.10 N | MHz x dB | -26. | 00 dB | |
| MSG STATUS | | | | | | |
| MSG STATUS | | | | | | |
| MSG STATUS | | | | | | |
| 011100 | MSG | | | STATUS | 5 | |

Plot 7-146. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 215)

| FCC ID: A3LSMG998U | PECTEST Presad To Law justif of @ | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
|------------------------|--------------------------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Dogo 00 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 90 of 293 |
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7.3 UNII Output Power Measurement – 802.11ax § 2.1046, §15.407(a)(11), §15.407(a)(8)

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.

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 7-2. Test Instrument & Measurement Setup

Test Notes

None.

| FCC ID: A3LSMG998U | PREMA THE SPACE ST | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 01 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 91 of 293 |
| © 2020 PCTEST | | | V 9.0 02/01/2019 |



MIMO Maximum Conducted Output Power Measurements (26 Tones)

| | | F | | | | | A | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|-----|------|---------------|---------|-------|-------|-------------|------|-----------|-------------|-----------|-------|-----------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | I | RU Index: (| 0 | F | RU Index: 4 | 4 | | RU Index: | 8 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | [INIT2] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 5935 | 2 | 26T | -2.46 | -1.21 | 1.22 | -1.85 | -0.67 | 1.79 | -2.48 | -1.36 | 1.13 | -2.93 | -1.14 | 24.00 | -25.14 |
| ≥ | 5 | 6175 | 45 | 26T | -2.08 | -1.30 | 1.34 | -1.72 | -0.75 | 1.80 | -2.06 | -1.51 | 1.23 | -2.93 | -1.13 | 24.00 | -25.13 |
| m | | 6415 | 93 | 26T | -1.58 | -1.30 | 1.57 | -1.35 | -0.75 | 1.97 | -1.52 | -1.55 | 1.48 | -2.93 | -0.96 | 24.00 | -24.96 |
| N | | 6435 | 97 | 26T | -1.83 | -1.52 | 1.34 | -1.47 | -1.27 | 1.64 | -1.86 | -1.70 | 1.23 | -3.78 | -2.14 | 24.00 | -26.14 |
| Ϊ | 6 | 6475 | 105 | 26T | -1.92 | -0.92 | 1.62 | -1.82 | -0.46 | 1.92 | -2.33 | -1.03 | 1.38 | -3.78 | -1.86 | 24.00 | -25.86 |
| 5 | | 6515 | 113 | 26T | -2.22 | -1.47 | 1.18 | -1.67 | -0.63 | 1.89 | -2.17 | -1.26 | 1.32 | -3.78 | -1.89 | 24.00 | -25.89 |
| 20M | | 6535 | 117 | 26T | -1.92 | -1.27 | 1.43 | -1.27 | -1.29 | 1.73 | -1.83 | -1.87 | 1.16 | -3.68 | -1.95 | 24.00 | -25.95 |
| Ñ | 7 | 6695 | 149 | 26T | -2.09 | -1.73 | 1.10 | -2.05 | -1.49 | 1.25 | -2.45 | -1.11 | 1.28 | -3.68 | -2.40 | 24.00 | -26.40 |
| | | 6875 | 185 | 26T | -2.14 | -1.27 | 1.33 | -1.78 | -0.48 | 1.93 | -2.35 | -0.97 | 1.40 | -3.68 | -1.75 | 24.00 | -25.75 |
| | | 6895 | 189 | 26T | -1.81 | -1.82 | 1.20 | -1.52 | -0.86 | 1.83 | -1.89 | -1.96 | 1.09 | -3.78 | -1.95 | 24.00 | -25.95 |
| | 8 | 6995 | 209 | 26T | -1.91 | -1.91 | 1.10 | -1.65 | -1.29 | 1.54 | -1.62 | -1.33 | 1.54 | -3.78 | -2.24 | 24.00 | -26.24 |
| | | 7115 | 233 | 26T | -1.66 | -0.88 | 1.76 | -1.16 | -0.91 | 1.98 | -2.05 | -1.80 | 1.09 | -3.78 | -1.80 | 24.00 | -25.80 |

Table 7-2. MIMO 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | _ | | | | | A | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|----------|------|---------------|---------|-------|-------|-----------|------|-----------|-----------|-----------|-------|------------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | F | RU Index: | 0 | I | RU Index: | 8 | R | U Index: 1 | 7 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | [INIT2] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 5965 | 3 | 26T | -2.03 | -0.47 | 1.83 | -2.09 | -0.22 | 1.96 | -2.45 | -0.19 | 1.84 | -2.93 | -0.97 | 24.00 | -24.97 |
| > | 5 | 6165 | 43 | 26T | -1.43 | -0.82 | 1.90 | -1.54 | -0.94 | 1.78 | -1.44 | -1.09 | 1.75 | -2.93 | -1.03 | 24.00 | -25.03 |
| M | | 6405 | 91 | 26T | -1.06 | -0.98 | 1.99 | -1.62 | -1.60 | 1.40 | -1.26 | -0.94 | 1.91 | -2.93 | -0.94 | 24.00 | -24.94 |
| | | 6445 | 99 | 26T | -1.22 | -0.92 | 1.94 | -1.41 | -1.15 | 1.73 | -1.63 | -0.81 | 1.81 | -3.78 | -1.84 | 24.00 | -25.84 |
| Ĥ | 6 | 6485 | 107 | 26T | -1.42 | -0.82 | 1.90 | -1.45 | -0.78 | 1.91 | -1.41 | -0.96 | 1.83 | -3.78 | -1.87 | 24.00 | -25.87 |
| 5 | | 6525 | 115 | 26T | -1.67 | -1.01 | 1.68 | -1.47 | -0.74 | 1.92 | -1.77 | -0.91 | 1.69 | -3.78 | -1.86 | 24.00 | -25.86 |
| 40MHz | | 6565 | 123 | 26T | -1.21 | -0.93 | 1.94 | -1.42 | -0.91 | 1.85 | -1.51 | -0.87 | 1.83 | -3.68 | -1.74 | 24.00 | -25.74 |
| 4 | 7 | 6725 | 155 | 26T | -1.56 | -1.03 | 1.72 | -1.88 | -0.85 | 1.68 | -1.60 | -0.90 | 1.77 | -3.68 | -1.91 | 24.00 | -25.91 |
| | | 6885 | 187 | 26T | -1.29 | -0.84 | 1.95 | -1.55 | -0.86 | 1.82 | -1.32 | -1.04 | 1.83 | -3.68 | -1.73 | 24.00 | -25.73 |
| | | 6925 | 195 | 26T | -1.56 | -1.86 | 1.30 | -0.90 | -1.20 | 1.96 | -1.77 | -1.84 | 1.21 | -3.78 | -1.82 | 24.00 | -25.82 |
| | 8 | 7005 | 211 | 26T | -1.11 | -1.32 | 1.80 | -1.77 | -1.45 | 1.40 | -0.92 | -1.15 | 1.98 | -3.78 | -1.80 | 24.00 | -25.80 |
| | | 7085 | 227 | 26T | -1.13 | -0.97 | 1.96 | -1.08 | -1.01 | 1.97 | -0.93 | -1.11 | 1.99 | -3.78 | -1.79 | 24.00 | -25.79 |

Table 7-3. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | From | | | | | А | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | Maxainn | e.i.r.p. |
|-----|------|---------------|---------|-------|-------|-----------|------|-----------|------------|-----------|-------|-------------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | F | RU Index: |) | R | U Index: 1 | 8 | R | RU Index: 3 | 6 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | [10112] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| 2 | | 5985 | 7 | 26T | -1.92 | -0.65 | 1.77 | -2.45 | -0.81 | 1.46 | -2.39 | -0.36 | 1.75 | -2.93 | -1.16 | 24.00 | -25.16 |
| Ξ | 5 | 6145 | 39 | 26T | -2.09 | -1.15 | 1.42 | -1.63 | -0.54 | 1.96 | -1.78 | -1.21 | 1.52 | -2.93 | -0.97 | 24.00 | -24.97 |
| N | | 6385 | 87 | 26T | -1.46 | -1.68 | 1.44 | -1.47 | -1.38 | 1.59 | -1.13 | -0.92 | 1.99 | -2.93 | -0.94 | 24.00 | -24.94 |
| I | 6 | 6465 | 103 | 26T | -1.49 | -1.25 | 1.64 | -1.69 | -1.03 | 1.66 | -1.84 | -1.02 | 1.60 | -3.78 | -2.12 | 24.00 | -26.12 |
| 80M | | 6545 | 119 | 26T | -1.68 | -1.52 | 1.41 | -1.99 | -1.33 | 1.36 | -1.94 | -1.11 | 1.51 | -3.68 | -2.17 | 24.00 | -26.17 |
| l S | 7 | 6705 | 151 | 26T | -1.90 | -1.38 | 1.38 | -2.38 | -1.43 | 1.13 | -1.89 | -1.23 | 1.46 | -3.68 | -2.22 | 24.00 | -26.22 |
| ~ | | 6865 | 183 | 26T | -0.91 | -1.23 | 1.94 | -2.17 | -0.91 | 1.52 | -1.51 | -1.19 | 1.66 | -3.68 | -1.74 | 24.00 | -25.74 |
| | 8 | 6945 | 199 | 26T | -0.83 | -1.21 | 1.99 | -1.62 | -1.47 | 1.47 | -1.03 | -1.21 | 1.89 | -3.78 | -1.79 | 24.00 | -25.79 |
| | 0 | 7025 | 215 | 26T | -1.10 | -1.10 | 1.91 | -1.33 | -1.11 | 1.79 | -0.96 | -1.11 | 1.98 | -3.78 | -1.80 | 24.00 | -25.80 |

Table 7-4. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | Farm | | | | | А | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|------|-------------|---|---|---|--|---|--|---|--|--|---|--|---|--|---|---|
| Band | | Channel | Tones | F | RU Index: (| 0 | F | U Index: 1 | 8 | R | U Index: 3 | 6 | Ant. Gain | e.i.r.p. | | Margin |
| | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | сили [автиј | [dB] |
| | 6025 | 15 | 26T | -1.73 | -0.63 | 1.87 | -2.23 | -1.18 | 1.34 | -2.05 | -0.48 | 1.82 | -2.93 | -1.06 | 24.00 | -25.06 |
| 5 | 6185 | 47 | 26T | -2.25 | -0.98 | 1.44 | -1.85 | -1.12 | 1.54 | -2.12 | -1.12 | 1.42 | -2.93 | -1.39 | 24.00 | -25.39 |
| | 6345 | 79 | 26T | -1.86 | -1.67 | 1.25 | -1.83 | -1.61 | 1.29 | -1.87 | -1.55 | 1.30 | -2.93 | -1.63 | 24.00 | -25.63 |
| 6 | 6505 | 111 | 26T | -2.18 | -1.22 | 1.34 | -2.11 | -1.31 | 1.32 | -2.12 | -0.94 | 1.52 | -3.78 | -2.26 | 24.00 | -26.26 |
| 7 | 6665 | 143 | 26T | -1.26 | -1.12 | 1.82 | -1.49 | -1.81 | 1.36 | -1.12 | -1.14 | 1.88 | -3.68 | -1.80 | 24.00 | -25.80 |
| ' | 6825 | 175 | 26T | -2.02 | -1.32 | 1.35 | -1.77 | -1.29 | 1.49 | -1.92 | -1.75 | 1.18 | -3.68 | -2.19 | 24.00 | -26.19 |
| 8 | 6985 | 207 | 26T | -1.78 | -1.92 | 1.16 | -1.63 | -1.25 | 1.57 | -1.23 | -2.09 | 1.37 | -3.78 | -2.21 | 24.00 | -26.21 |
| | 5 6 7 | [MHz] 6025 6185 6345 6 6505 7 6665 6825 | Band [MH2] Channel 6025 15 6185 47 6345 79 6 6505 111 7 6665 143 6825 175 | Band [MHz] Channel Tones 6025 15 26T 5 6185 47 26T 6345 79 26T 6 6505 111 26T 7 6665 143 26T 6825 175 26T 26T | Band [MHz] Channel Tones ANT1 6025 15 26T -1.73 5 6185 47 26T -2.25 6345 79 26T -1.86 6 6505 111 26T -2.18 7 6665 143 26T -1.26 6825 175 26T -2.02 | Band [MHz] Channel Tones RU Index: 1 6025 15 26T -1.73 -0.63 5 6185 47 26T -2.25 -0.98 6345 79 26T -1.86 -1.67 6 6505 111 26T -2.18 -1.22 7 6665 143 26T -1.26 -1.12 6825 175 26T -2.02 -1.32 | Band Freq [MHz] Channel Tones RUIndex: 0 6025 15 26T -1.73 -0.63 1.87 6185 47 26T -2.25 -0.98 1.44 6345 79 26T -1.86 -1.67 1.25 6 6505 111 26T -2.18 -1.22 1.34 7 6665 143 26T -1.26 -1.12 1.82 6825 175 26T -2.02 -1.32 1.35 | Band Freq [MHz] Channel Tones RU Index: 0 R 6025 15 26T -1.73 -0.63 1.87 -2.23 6185 47 26T -2.25 -0.98 1.44 -1.85 6345 79 26T -1.86 -1.67 1.25 -1.83 6 6505 111 26T -2.18 -1.22 1.34 -2.11 7 6665 143 26T -1.26 -1.12 1.82 -1.49 6 6825 175 26T -2.02 -1.32 1.35 -1.77 | Band Freq [MHz] Channel Tones RU Index: 0 RU Index: 1 ANT1 ANT2 MIMO ANT1 ANT2 6025 15 26T -1.73 -0.63 1.87 -2.23 -1.18 6185 47 26T -2.25 -0.98 1.44 -1.85 -1.12 6345 79 26T -1.86 -1.67 1.25 -1.83 -1.61 6 6505 111 26T -2.18 -1.22 1.34 -2.11 -1.31 7 6665 143 26T -1.26 -1.12 1.82 -1.49 -1.81 6825 175 26T -2.02 -1.32 1.35 -1.77 -1.29 | Band Freq [MHz] Channel Tones RU Index: 0 RU Index: 18 ANT1 ANT2 MIMO ANT1 ANT2 MIMO 6025 15 26T -1.73 -0.63 1.87 -2.23 -1.18 1.34 6185 47 26T -2.25 -0.98 1.44 -1.85 -1.12 1.54 6345 79 26T -1.86 -1.67 1.25 -1.13 1.32 6 6505 111 26T -2.18 -1.22 1.34 -2.11 -1.31 1.32 7 6665 143 26T -1.26 -1.12 1.35 -1.48 1.36 6825 175 26T -2.02 -1.32 1.35 -1.77 -1.29 1.49 | Band [MHz] Channel Tones RU index: 0 RU index: 18 RR index: 18 R index: 18 <thr 18<="" index:="" th=""> R index: 18</thr> | Band Freq [MHz] Channel Tones RU Index: 0 RU Index: 18 RU Index: 31 6025 15 26T -1.73 -0.63 1.87 -2.23 -1.18 1.34 -2.05 -0.48 6025 15 26T -1.73 -0.63 1.87 -2.23 -1.18 1.34 -2.05 -0.48 6185 47 26T -2.25 -0.98 1.44 -1.85 -1.12 1.54 -2.12 -1.12 6345 79 26T -1.86 -1.67 1.25 -1.81 1.29 -1.87 -1.55 6 6505 111 26T -2.12 -1.21 1.34 -2.11 -1.31 1.32 -2.12 -0.94 7 6665 143 26T -1.22 -1.32 1.49 -1.81 1.36 -1.12 -1.41 7 66825 175 26T -2.02 -1.32 1.35 -1.77 -1.29 1.49 -1.92 | Band Freq [MHz] Channel Tones RU Index: 0 RU Index: 18 RU Index: 36 6025 15 26T -1.73 -0.63 1.87 -2.23 -1.18 1.34 -2.05 -0.48 1.82 6025 15 26T -1.73 -0.63 1.87 -2.23 -1.18 1.34 -2.05 -0.48 1.82 6185 47 26T -2.25 -0.98 1.44 -1.85 -1.12 1.54 -2.12 -1.12 1.42 6345 79 26T -1.86 -1.67 1.25 -1.83 -1.61 1.29 -1.87 -1.55 1.30 6 6505 111 26T -1.22 1.34 -2.11 -1.31 1.32 -2.12 -0.94 1.52 7 6665 143 26T -1.22 1.34 -2.11 -1.31 1.36 -1.12 1.49 7 6665 143 26T -1.26 -1.12 1 | Band Freq [MHz] Channel Tones RU Index: 3 RU Index: 3 Ant. Gain [dBi] 6025 15 26T -1.73 -0.63 1.87 -2.23 -1.18 1.34 -2.05 -0.48 1.82 -2.93 6185 47 26T -2.25 -0.98 1.44 -1.85 -1.12 1.54 -2.12 -1.12 1.42 -2.93 6 6345 79 26T -1.86 -1.67 1.25 -1.81 -1.12 1.29 -1.87 -1.55 1.30 -2.93 6 6505 111 26T -2.16 -1.22 1.34 -2.11 1.54 -2.94 1.52 -2.93 7 6665 143 26T -1.12 1.24 -1.131 1.32 -2.12 -0.94 1.52 -3.78 7 6665 143 26T -1.12 1.42 -1.49 -1.81 1.36 -1.12 1.14 1.88 -3.68 < | Band Freq [MHz] Channel Tones RU Index: 0 RU Index: 18 RU Index: 36 Ant. Gain [dBi] e.i.r.p. [dBm] 6025 15 26T -1.73 -0.63 1.87 -2.23 -1.18 1.34 -2.05 -0.48 1.82 -2.93 -1.06 6185 47 26T -2.25 -0.98 1.44 -1.85 -1.12 1.54 -2.12 -1.12 1.42 -2.93 -1.06 6345 79 26T -1.66 -1.67 1.25 -1.83 -1.12 1.54 -2.12 -1.12 1.42 -2.93 -1.63 6 6505 111 26T -2.18 -1.22 1.34 -2.12 -0.94 1.52 -3.78 -2.23 7 6665 143 26T -1.12 1.82 -1.49 -1.81 1.36 -1.12 -9.44 1.82 -3.78 -2.26 7 6665 143 26T -1.26 -1.12 1.82 | $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ |

Table 7-5. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Lower 996T Block

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNE | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Daga 02 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 92 of 293 |
| © 2020 PCTEST | | | | V 9.0 02/01/2019 |



| | | _ | | | | | А | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|----------|------|---------------|---------|-------|-------|-------------|------|-----------|------------|-----------|-------|------------|------|-------------|----------|-----------------------------|----------|
| > | Band | Freq [MHz] | Channel | Tones | F | RU Index: (|) | R | U Index: 1 | 8 | R | U Index: 3 | 6 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| M | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | стлік [автіј | [dB] |
| | | 6025 | 15 | 26T | -2.34 | -0.85 | 1.48 | -2.27 | -1.09 | 1.37 | -2.43 | -1.02 | 1.34 | -2.93 | -1.45 | 24.00 | -25.45 |
| ₽⊇ | 5 | 6185 | 47 | 26T | -2.12 | -1.45 | 1.24 | -2.32 | -1.31 | 1.22 | -2.06 | -1.06 | 1.48 | -2.93 | -1.45 | 24.00 | -25.45 |
| 14 8 | | 6345 | 79 | 26T | -1.58 | -0.96 | 1.75 | -2.04 | -1.53 | 1.23 | -1.72 | -1.65 | 1.33 | -2.93 | -1.18 | 24.00 | -25.18 |
| 6 | 6 | 6505 | 111 | 26T | -2.35 | -1.08 | 1.34 | -1.78 | -1.11 | 1.58 | -1.94 | -1.26 | 1.42 | -3.78 | -2.20 | 24.00 | -26.20 |
| 00 | 7 | 6665 | 143 | 26T | -1.45 | -1.62 | 1.48 | -1.35 | -1.49 | 1.59 | -1.71 | -1.52 | 1.40 | -3.68 | -2.09 | 24.00 | -26.09 |
| ~ | 1 | 6825 | 175 | 26T | -1.86 | -1.72 | 1.22 | -1.34 | -1.54 | 1.57 | -1.69 | -1.81 | 1.26 | -3.68 | -2.11 | 24.00 | -26.11 |
| | 8 | 6985 | 207 | 26T | -2.12 | -1.04 | 1.46 | -1.82 | -1.31 | 1.45 | -1.81 | -1.57 | 1.32 | -3.78 | -2.32 | 24.00 | -26.32 |

Table 7-6. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Upper 996T Block

| FCC ID: A3LSMG998U | PREAST TO BE PART OF COMPANY | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
|------------------------|------------------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Dago 02 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | | Page 93 of 293 |
| © 2020 PCTEST | • | · | | V 9.0 02/01/2019 |



MIMO Maximum Conducted Output Power Measurements (52 Tones)

| | | | | | | | Δ | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|------|------|---------------|---------|-------|------|------------|------|-----------|------------|-----------|------|------------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 3 | 7 | F | U Index: 3 | 9 | R | U Index: 4 | 0 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 5935 | 2 | 52T | 1.31 | 1.70 | 4.52 | 1.17 | 2.06 | 4.65 | 0.88 | 2.38 | 4.70 | -2.93 | 1.77 | 24.00 | -22.23 |
| ≥ | 5 | 6175 | 45 | 52T | 0.76 | 1.44 | 4.12 | 1.88 | 2.08 | 4.99 | 0.88 | 1.34 | 4.13 | -2.93 | 2.06 | 24.00 | -21.94 |
| m | | 6415 | 93 | 52T | 0.95 | 2.06 | 4.55 | 1.67 | 1.73 | 4.71 | 0.93 | 1.53 | 4.25 | -2.93 | 1.78 | 24.00 | -22.22 |
| N | | 6435 | 97 | 52T | 0.65 | 1.65 | 4.19 | 1.50 | 2.16 | 4.85 | 0.79 | 1.56 | 4.20 | -3.78 | 1.07 | 24.00 | -22.93 |
| Ϊ | 6 | 6475 | 105 | 52T | 1.08 | 1.56 | 4.34 | 0.87 | 1.91 | 4.43 | 0.58 | 1.43 | 4.04 | -3.78 | 0.65 | 24.00 | -23.35 |
| 20MH | | 6515 | 113 | 52T | 0.60 | 1.93 | 4.33 | 1.02 | 2.32 | 4.73 | 0.68 | 1.99 | 4.39 | -3.78 | 0.95 | 24.00 | -23.05 |
| 0 | | 6535 | 117 | 52T | 1.72 | 1.85 | 4.80 | 1.98 | 1.96 | 4.98 | 1.40 | 1.70 | 4.56 | -3.68 | 1.30 | 24.00 | -22.70 |
| Ñ | 7 | 6695 | 149 | 52T | 0.96 | 1.57 | 4.29 | 1.20 | 1.90 | 4.57 | 0.81 | 1.60 | 4.23 | -3.68 | 0.89 | 24.00 | -23.11 |
| | | 6875 | 185 | 52T | 1.30 | 1.98 | 4.66 | 1.15 | 2.16 | 4.69 | 1.02 | 1.98 | 4.54 | -3.68 | 1.01 | 24.00 | -22.99 |
| | | 6895 | 189 | 52T | 1.65 | 2.16 | 4.92 | 1.70 | 1.78 | 4.75 | 1.25 | 1.27 | 4.27 | -3.78 | 1.14 | 24.00 | -22.86 |
| | 8 | 6995 | 209 | 52T | 1.30 | 1.62 | 4.47 | 1.72 | 2.05 | 4.90 | 1.70 | 2.04 | 4.88 | -3.78 | 1.12 | 24.00 | -22.88 |
| | | 7115 | 233 | 52T | 1.73 | 1.53 | 4.64 | 1.90 | 1.72 | 4.82 | 0.97 | 1.54 | 4.27 | -3.78 | 1.04 | 24.00 | -22.96 |

Table 7-7. MIMO 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | F | | | | | A | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|-------|------|---------------|---------|-------|------|------------|------|-----------|------------|-----------|------|------------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 3 | 7 | R | U Index: 4 | 0 | R | U Index: 4 | 4 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | Linic [abiii] | [dB] |
| | | 5965 | 3 | 52T | 1.25 | 2.61 | 4.99 | 0.87 | 2.29 | 4.65 | 1.04 | 2.65 | 4.93 | -2.93 | 2.06 | 24.00 | -21.94 |
| > | 5 | 6165 | 43 | 52T | 1.50 | 2.25 | 4.90 | 1.25 | 1.54 | 4.41 | 1.09 | 2.17 | 4.67 | -2.93 | 1.97 | 24.00 | -22.03 |
| B | | 6405 | 91 | 52T | 1.04 | 1.33 | 4.20 | 1.58 | 1.82 | 4.71 | 1.36 | 1.45 | 4.42 | -2.93 | 1.78 | 24.00 | -22.22 |
| | | 6445 | 99 | 52T | 1.83 | 2.12 | 4.99 | 1.44 | 1.89 | 4.68 | 1.70 | 2.25 | 4.99 | -3.78 | 1.21 | 24.00 | -22.79 |
| 40MHz | 6 | 6485 | 107 | 52T | 1.59 | 2.34 | 4.99 | 1.35 | 1.86 | 4.62 | 1.28 | 2.16 | 4.75 | -3.78 | 1.21 | 24.00 | -22.79 |
| 5 | | 6525 | 115 | 52T | 1.38 | 2.31 | 4.88 | 1.13 | 1.93 | 4.56 | 1.15 | 2.26 | 4.75 | -3.78 | 1.10 | 24.00 | -22.90 |
| 5 | | 6565 | 123 | 52T | 1.66 | 2.01 | 4.85 | 1.51 | 2.04 | 4.79 | 1.41 | 1.90 | 4.67 | -3.68 | 1.17 | 24.00 | -22.83 |
| 4 | 7 | 6725 | 155 | 52T | 1.30 | 2.33 | 4.86 | 1.05 | 1.71 | 4.40 | 1.34 | 1.85 | 4.61 | -3.68 | 1.18 | 24.00 | -22.82 |
| | | 6885 | 187 | 52T | 1.62 | 2.12 | 4.89 | 1.61 | 2.02 | 4.83 | 1.60 | 2.21 | 4.93 | -3.68 | 1.25 | 24.00 | -22.75 |
| | | 6925 | 195 | 52T | 1.32 | 1.48 | 4.41 | 1.60 | 1.63 | 4.63 | 1.16 | 1.33 | 4.26 | -3.78 | 0.85 | 24.00 | -23.15 |
| | 8 | 7005 | 211 | 52T | 1.16 | 1.17 | 4.18 | 1.87 | 1.85 | 4.87 | 1.16 | 1.03 | 4.11 | -3.78 | 1.09 | 24.00 | -22.91 |
| | | 7085 | 227 | 52T | 1.24 | 1.34 | 4.30 | 2.09 | 1.65 | 4.89 | 1.28 | 1.09 | 4.20 | -3.78 | 1.11 | 24.00 | -22.89 |

Table 7-8. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | From | | | | | А | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | Maxainn | e.i.r.p. |
|-----|------|---------------|---------|-------|------|------------|------|-----------|------------|-----------|------|------------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 3 | 7 | R | U Index: 4 | 4 | R | U Index: 5 | 2 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | [IWITZ] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | Linii [ubiii] | [dB] |
| 3 | | 5985 | 7 | 52T | 0.84 | 2.45 | 4.73 | 0.63 | 2.32 | 4.57 | 0.84 | 2.74 | 4.90 | -2.93 | 1.97 | 24.00 | -22.03 |
| m | 5 | 6145 | 39 | 52T | 1.56 | 1.96 | 4.77 | 0.75 | 1.94 | 4.40 | 1.30 | 1.80 | 4.57 | -2.93 | 1.84 | 24.00 | -22.16 |
| N | | 6385 | 87 | 52T | 1.72 | 2.10 | 4.92 | 1.85 | 1.90 | 4.89 | 1.81 | 2.10 | 4.97 | -2.93 | 2.04 | 24.00 | -21.96 |
| I | 6 | 6465 | 103 | 52T | 1.71 | 2.13 | 4.94 | 1.36 | 1.78 | 4.59 | 1.21 | 2.18 | 4.73 | -3.78 | 1.16 | 24.00 | -22.84 |
| 80M | | 6545 | 119 | 52T | 1.97 | 1.58 | 4.79 | 1.03 | 1.66 | 4.37 | 1.33 | 1.78 | 4.57 | -3.68 | 1.11 | 24.00 | -22.89 |
| l S | 7 | 6705 | 151 | 52T | 1.19 | 1.57 | 4.39 | 1.06 | 1.64 | 4.37 | 1.24 | 1.74 | 4.51 | -3.68 | 0.83 | 24.00 | -23.17 |
| ~ | | 6865 | 183 | 52T | 1.04 | 1.72 | 4.40 | 1.07 | 1.74 | 4.43 | 1.32 | 1.25 | 4.30 | -3.68 | 0.75 | 24.00 | -23.25 |
| | 8 | 6945 | 199 | 52T | 1.82 | 1.89 | 4.87 | 1.95 | 1.79 | 4.88 | 2.10 | 1.62 | 4.88 | -3.78 | 1.10 | 24.00 | -22.90 |
| | 0 | 7025 | 215 | 52T | 1.96 | 1.96 | 4.97 | 1.93 | 1.80 | 4.88 | 2.08 | 1.72 | 4.91 | -3.78 | 1.19 | 24.00 | -22.81 |

Table 7-9. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | Farm | | | | | А | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|------|--------------------------|---|---|---|--|--|--|---|---|--|--|--|--|---|---|---|
| Band | • | Channel | Tones | R | U Index: 3 | 7 | R | U Index: 4 | 4 | R | U Index: 5 | 52 | Ant. Gain | e.i.r.p. | | Margin |
| | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | стлік (автлі | [dB] |
| | 6025 | 15 | 52T | 1.22 | 2.23 | 4.76 | 1.21 | 2.58 | 4.96 | 1.13 | 2.65 | 4.97 | -2.93 | 2.04 | 24.00 | -21.96 |
| 5 | 6185 | 47 | 52T | 1.22 | 2.31 | 4.81 | 0.98 | 2.23 | 4.66 | 1.15 | 1.74 | 4.47 | -2.93 | 1.88 | 24.00 | -22.12 |
| | 6345 | 79 | 52T | 1.15 | 1.31 | 4.24 | 1.02 | 1.68 | 4.37 | 1.32 | 1.21 | 4.28 | -2.93 | 1.44 | 24.00 | -22.56 |
| 6 | 6505 | 111 | 52T | 1.02 | 1.78 | 4.43 | 1.13 | 1.91 | 4.55 | 0.84 | 1.72 | 4.31 | -3.78 | 0.77 | 24.00 | -23.23 |
| 7 | 6665 | 143 | 52T | 1.15 | 1.52 | 4.35 | 1.21 | 1.62 | 4.43 | 1.24 | 1.28 | 4.27 | -3.68 | 0.75 | 24.00 | -23.25 |
| ' | 6825 | 175 | 52T | 1.03 | 1.49 | 4.28 | 0.78 | 2.11 | 4.51 | 1.12 | 1.57 | 4.36 | -3.68 | 0.83 | 24.00 | -23.17 |
| 8 | 6985 | 207 | 52T | 1.41 | 1.13 | 4.28 | 1.83 | 1.15 | 4.51 | 1.65 | 1.12 | 4.40 | -3.78 | 0.73 | 24.00 | -23.27 |
| | Band 5 6 7 8 | [MHz] 6025 5 6185 6345 6 6505 7 6665 6825 | Band [MHz] Channel 6025 15 6185 47 6345 79 6 6505 111 7 6665 143 6825 175 | Band [MH2] Channel Iones 6025 15 52T 6185 47 52T 6345 79 52T 6 6505 111 52T 7 6665 143 52T 6825 175 52T | Band [MHz] Channel Iones ANT1 6025 15 52T 1.22 6185 47 52T 1.15 6345 79 52T 1.15 6 6505 111 52T 1.02 7 6665 143 52T 1.15 6 6825 175 52T 1.03 | Band [MHz] Channel Fores RU index: 3 4NT1 ANT2 ANT1 ANT2 5 15 52T 1.22 2.23 6185 47 52T 1.22 2.31 6345 79 52T 1.15 1.31 6 6505 111 52T 1.02 1.78 7 6665 143 52T 1.15 1.52 6825 175 52T 1.03 1.49 | Band Freq [MH2] Channel Tones RU Index: 3/ 6025 15 52T 1.22 2.23 4.76 6 6185 47 52T 1.22 2.31 4.81 6 6345 79 52T 1.15 1.31 4.24 6 6605 111 52T 1.02 1.78 4.43 7 6665 143 52T 1.03 1.49 4.28 | Band Freq [MHz] Channel Tones RU Index: 37 F ANT1 ANT2 MIMO ANT1 6025 15 52T 1.22 2.23 4.76 1.21 6185 47 52T 1.22 2.31 4.81 0.98 6355 79 52T 1.15 1.31 4.24 1.02 6 6505 111 52T 1.02 1.78 4.43 1.13 7 6665 143 52T 1.03 1.49 4.28 0.78 | Band Freq [MHz] Channel Tones RU Index: 37 R U Index: 44 ANT1 ANT2 MIMO ANT1 ANT2 6025 15 52T 1.22 2.23 4.76 1.21 2.58 6185 47 52T 1.22 2.31 4.81 0.98 2.23 6365 79 52T 1.15 1.31 4.24 1.02 1.68 6 6505 111 52T 1.02 1.78 4.43 1.13 1.91 7 6665 143 52T 1.15 1.52 4.35 1.21 1.62 6825 175 52T 1.03 1.49 4.28 0.78 2.11 | Band Freq [MHz] Channel Tones RU Index: 37 ICRU Index: 44 ANT1 ANT2 MIMO ANT1 ANT2 MIMO ANT1 ANT2 MIMO 6025 15 52T 1.22 2.23 4.76 1.21 2.58 4.96 6185 47 52T 1.22 2.31 4.81 0.98 2.23 4.66 6345 79 52T 1.15 1.31 4.24 1.02 1.68 4.37 6 6505 111 52T 1.02 1.78 4.43 1.191 4.55 7 6665 143 52T 1.02 1.78 4.43 1.12 1.62 4.43 6825 175 52T 1.03 1.49 4.28 0.78 2.11 4.51 | Band Image: | Band Freq [MHz] Channel Tomes RU Index: 37 RU Index: 4 RU Index: 55 6025 15 52T 1.22 2.23 4.76 1.21 2.58 4.96 1.13 2.65 6 6165 47 52T 1.22 2.23 4.76 1.21 2.58 4.96 1.13 2.65 6 6505 171 52T 1.22 2.23 4.76 1.21 2.58 4.96 1.13 2.65 6 6505 179 52T 1.22 2.31 4.81 0.98 2.23 4.66 1.15 1.74 6 6505 111 52T 1.02 1.78 4.43 1.01 1.91 4.55 0.84 1.72 7 6665 143 52T 1.02 1.78 4.35 1.21 1.62 4.43 1.24 1.28 6825 143 52T 1.03 1.49 4.28 0.78 2.11 | Band Freq [MHz] Channel Tones RU Index: 37 R U Index: 44 RU Index: 52 ANT1 ANT2 MIMO ANT1 ANT2 AIR1 I.02 I.02 I.03 I.04 I.02 I.03 I.428 I.03 I.14 I.21 I.24 I.24 I.24 I.24 I.24 I.24 I.24 I.24 I.24 I.24 | $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ |

Table 7-10. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Lower 996T Block

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNE | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Dago 04 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | | Page 94 of 293 |
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| | | Farm | | | | | А | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|----------|------|---------------|---------|-------|------|------------|------|-----------|------------|-----------|------|------------|------|-------------|----------|-----------------------------|----------|
| > | Band | Freq [MHz] | Channel | Tones | R | U Index: 3 | 7 | R | U Index: 4 | 4 | R | U Index: 5 | 2 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| B | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | стлік (автлі | [dB] |
| | | 6025 | 15 | 52T | 0.81 | 1.88 | 4.39 | 0.61 | 1.63 | 4.16 | 0.78 | 1.72 | 4.29 | -2.93 | 1.46 | 24.00 | -22.54 |
| N N | 5 | 6185 | 47 | 52T | 0.91 | 2.12 | 4.57 | 0.62 | 2.07 | 4.42 | 0.62 | 2.37 | 4.59 | -2.93 | 1.66 | 24.00 | -22.34 |
| ЛF 80 | | 6345 | 79 | 52T | 1.14 | 1.75 | 4.47 | 1.54 | 2.06 | 4.82 | 1.21 | 1.56 | 4.40 | -2.93 | 1.89 | 24.00 | -22.11 |
| 0 | 6 | 6505 | 111 | 52T | 0.78 | 1.73 | 4.29 | 1.02 | 1.42 | 4.23 | 0.81 | 1.76 | 4.32 | -3.78 | 0.54 | 24.00 | -23.46 |
| 0 | 7 | 6665 | 143 | 52T | 1.54 | 1.27 | 4.42 | 1.86 | 1.67 | 4.78 | 2.01 | 1.54 | 4.79 | -3.68 | 1.11 | 24.00 | -22.89 |
| ~ | 1 | 6825 | 175 | 52T | 1.81 | 1.92 | 4.88 | 1.21 | 1.45 | 4.34 | 1.16 | 1.52 | 4.35 | -3.68 | 1.20 | 24.00 | -22.80 |
| | 8 | 6985 | 207 | 52T | 0.91 | 1.65 | 4.31 | 1.08 | 2.51 | 4.86 | 1.54 | 2.01 | 4.79 | -3.78 | 1.08 | 24.00 | -22.92 |

Table 7-11. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Upper 996T Block

| FCC ID: A3LSMG998U | PECTEST | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNE | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Dage OF of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | | Page 95 of 293 |
| © 2020 PCTEST | | | | V 9.0 02/01/2019 |



MIMO Maximum Conducted Output Power Measurements (106 Tones)

| | | _ | | | | Averag | ge Conduc | ted Power | (dBm) | | Directional | Max | | e.i.r.p. |
|----|------|---------------|---------|-------|------|------------|-----------|-----------|------------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 5 | 3 | R | U Index: 5 | 4 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | נאויזצן | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 5935 | 2 | 106T | 3.72 | 4.92 | 7.37 | 3.69 | 4.78 | 7.28 | -2.93 | 4.44 | 24.00 | -19.56 |
| ≥ | 5 | 6175 | 45 | 106T | 3.63 | 4.90 | 7.32 | 3.69 | 4.84 | 7.31 | -2.93 | 4.39 | 24.00 | -19.61 |
| m | | 6415 | 93 | 106T | 4.56 | 5.02 | 7.81 | 4.32 | 4.52 | 7.43 | -2.93 | 4.88 | 24.00 | -19.12 |
| N | | 6435 | 97 | 106T | 4.51 | 4.75 | 7.64 | 4.55 | 4.63 | 7.60 | -3.78 | 3.86 | 24.00 | -20.14 |
| Ϋ́ | 6 | 6475 | 105 | 106T | 4.22 | 4.69 | 7.47 | 4.01 | 4.63 | 7.34 | -3.78 | 3.69 | 24.00 | -20.31 |
| | | 6515 | 113 | 106T | 4.13 | 4.71 | 7.44 | 3.94 | 4.61 | 7.30 | -3.78 | 3.66 | 24.00 | -20.34 |
| MO | | 6535 | 117 | 106T | 4.19 | 4.47 | 7.34 | 4.11 | 4.50 | 7.32 | -3.68 | 3.66 | 24.00 | -20.34 |
| Ñ | 7 | 6695 | 149 | 106T | 3.91 | 4.71 | 7.34 | 3.82 | 4.45 | 7.16 | -3.68 | 3.66 | 24.00 | -20.34 |
| | | 6875 | 185 | 106T | 3.83 | 4.82 | 7.36 | 3.86 | 4.69 | 7.31 | -3.68 | 3.68 | 24.00 | -20.32 |
| | | 6895 | 189 | 106T | 4.70 | 4.56 | 7.64 | 4.46 | 4.63 | 7.56 | -3.78 | 3.86 | 24.00 | -20.14 |
| | 8 | 6995 | 209 | 106T | 4.88 | 4.91 | 7.91 | 4.41 | 4.08 | 7.26 | -3.78 | 4.13 | 24.00 | -19.87 |
| | | 7115 | 233 | 106T | 4.46 | 4.48 | 7.48 | 4.66 | 4.23 | 7.46 | -3.78 | 3.70 | 24.00 | -20.30 |

Table 7-12. MIMO 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | Farm | | | | | A | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|-------|------|---------------|---------|-------|------|------------|------|-----------|------------|-----------|------|------------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 5 | 3 | R | U Index: 5 | 4 | R | U Index: 5 | 6 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 5965 | 3 | 106T | 3.86 | 5.50 | 7.77 | 3.81 | 5.17 | 7.55 | 4.41 | 5.44 | 7.97 | -2.93 | 5.04 | 24.00 | -18.96 |
| ≥ | 5 | 6165 | 43 | 106T | 4.88 | 5.08 | 7.99 | 3.91 | 4.93 | 7.46 | 4.64 | 5.27 | 7.98 | -2.93 | 5.06 | 24.00 | -18.94 |
| m | | 6405 | 91 | 106T | 4.79 | 5.14 | 7.98 | 4.72 | 4.72 | 7.73 | 4.88 | 5.07 | 7.99 | -2.93 | 5.06 | 24.00 | -18.94 |
| | | 6445 | 99 | 106T | 4.61 | 5.15 | 7.90 | 4.37 | 4.61 | 7.50 | 4.65 | 5.28 | 7.99 | -3.78 | 4.21 | 24.00 | -19.79 |
| Ϋ́ | 6 | 6485 | 107 | 106T | 4.78 | 5.05 | 7.93 | 3.92 | 4.55 | 7.26 | 4.52 | 5.25 | 7.91 | -3.78 | 4.15 | 24.00 | -19.85 |
| 40MHz | | 6525 | 115 | 106T | 4.33 | 5.08 | 7.73 | 4.04 | 4.80 | 7.45 | 4.59 | 5.28 | 7.96 | -3.78 | 4.18 | 24.00 | -19.82 |
| 5 | | 6565 | 123 | 106T | 4.77 | 4.85 | 7.82 | 4.36 | 4.60 | 7.49 | 4.48 | 4.85 | 7.68 | -3.68 | 4.14 | 24.00 | -19.86 |
| 4 | 7 | 6725 | 155 | 106T | 4.33 | 5.34 | 7.87 | 3.75 | 4.82 | 7.33 | 4.16 | 5.02 | 7.62 | -3.68 | 4.19 | 24.00 | -19.81 |
| | | 6885 | 187 | 106T | 4.66 | 5.24 | 7.97 | 4.27 | 4.70 | 7.50 | 4.75 | 5.08 | 7.93 | -3.68 | 4.29 | 24.00 | -19.71 |
| | | 6925 | 195 | 106T | 5.13 | 4.74 | 7.95 | 4.89 | 4.38 | 7.65 | 4.40 | 4.44 | 7.43 | -3.78 | 4.17 | 24.00 | -19.83 |
| | 8 | 7005 | 211 | 106T | 4.30 | 3.90 | 7.11 | 4.93 | 4.70 | 7.83 | 4.52 | 4.10 | 7.33 | -3.78 | 4.05 | 24.00 | -19.95 |
| | | 7085 | 227 | 106T | 4.19 | 4.15 | 7.18 | 4.87 | 4.58 | 7.74 | 4.74 | 4.12 | 7.45 | -3.78 | 3.96 | 24.00 | -20.04 |

Table 7-13. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | Farm | | | | | A | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|----------|------|---------------|---------|-------|------|------------|------|-----------|------------|-----------|------|------------|------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 5 | 3 | R | U Index: 5 | 6 | R | U Index: 6 | 0 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| <u> </u> | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | сти (авти | [dB] |
| 2 | | 5985 | 7 | 106T | 4.35 | 5.53 | 7.99 | 3.80 | 5.17 | 7.55 | 3.85 | 5.82 | 7.96 | -2.93 | 5.06 | 24.00 | -18.94 |
| B | 5 | 6145 | 39 | 106T | 4.19 | 5.17 | 7.72 | 3.64 | 4.81 | 7.27 | 4.75 | 5.05 | 7.91 | -2.93 | 4.98 | 24.00 | -19.02 |
| N | | 6385 | 87 | 106T | 5.02 | 4.94 | 7.99 | 4.85 | 4.71 | 7.79 | 4.20 | 4.19 | 7.21 | -2.93 | 5.06 | 24.00 | -18.94 |
| I | 6 | 6465 | 103 | 106T | 4.74 | 5.10 | 7.93 | 4.11 | 4.54 | 7.34 | 4.52 | 4.76 | 7.65 | -3.78 | 4.15 | 24.00 | -19.85 |
| 80M | | 6545 | 119 | 106T | 4.37 | 4.77 | 7.58 | 4.08 | 4.50 | 7.31 | 4.38 | 4.73 | 7.57 | -3.68 | 3.90 | 24.00 | -20.10 |
| l S | 7 | 6705 | 151 | 106T | 4.16 | 4.50 | 7.34 | 4.56 | 5.33 | 7.97 | 4.02 | 4.47 | 7.26 | -3.68 | 4.29 | 24.00 | -19.71 |
| ~ | | 6865 | 183 | 106T | 4.48 | 5.13 | 7.83 | 3.95 | 4.68 | 7.34 | 4.64 | 4.70 | 7.68 | -3.68 | 4.15 | 24.00 | -19.85 |
| | 8 | 6945 | 199 | 106T | 4.70 | 4.45 | 7.59 | 4.82 | 4.57 | 7.71 | 5.21 | 4.66 | 7.95 | -3.78 | 4.17 | 24.00 | -19.83 |
| | 0 | 7025 | 215 | 106T | 4.96 | 4.63 | 7.81 | 4.56 | 4.55 | 7.57 | 4.66 | 4.44 | 7.56 | -3.78 | 4.03 | 24.00 | -19.97 |
| | | - | | BAIBA | | | | | /1 15 1115 | | | | | | - | | |

Table 7-14. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | Free | | | | | A | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | Maxainn | e.i.r.p. |
|----------|------|---------------|---------|-------|------|------------|------|-----------|------------|-----------|------|------------|------|-------------|----------|-----------------------------|----------|
| > | Band | Freq [MHz] | Channel | Tones | R | U Index: 5 | 3 | R | U Index: 5 | i6 | R | U Index: 6 | 0 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| ā | | [IVII'12] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 6025 | 15 | 106T | 4.35 | 5.12 | 7.76 | 3.78 | 4.61 | 7.23 | 3.65 | 4.87 | 7.31 | -2.93 | 4.83 | 24.00 | -19.17 |
| 4 | 5 | 6185 | 47 | 106T | 4.10 | 5.44 | 7.83 | 3.77 | 4.82 | 7.34 | 3.82 | 4.77 | 7.33 | -2.93 | 4.90 | 24.00 | -19.10 |
| MH 08 | | 6345 | 79 | 106T | 4.77 | 4.98 | 7.89 | 4.98 | 4.97 | 7.99 | 4.74 | 5.06 | 7.91 | -2.93 | 5.06 | 24.00 | -18.94 |
| 6 | 6 | 6505 | 111 | 106T | 3.86 | 4.42 | 7.16 | 3.62 | 4.76 | 7.24 | 3.68 | 4.52 | 7.13 | -3.78 | 3.46 | 24.00 | -20.54 |
| 90 | 7 | 6665 | 143 | 106T | 4.72 | 4.75 | 7.75 | 4.02 | 4.57 | 7.31 | 4.61 | 4.92 | 7.78 | -3.68 | 4.10 | 24.00 | -19.90 |
| ~ | ' | 6825 | 175 | 106T | 4.55 | 4.67 | 7.62 | 4.67 | 4.98 | 7.84 | 4.77 | 4.86 | 7.83 | -3.68 | 4.16 | 24.00 | -19.84 |
| | 8 | 6985 | 207 | 106T | 4.78 | 4.43 | 7.62 | 4.46 | 4.51 | 7.50 | 4.41 | 4.43 | 7.43 | -3.78 | 3.84 | 24.00 | -20.16 |

Table 7-15. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Lower 996T Block

| FCC ID: A3LSMG998U | PREMA To be patter & | MEASUREMENT REPORT (CERTIFICATION) | SAMEUNE | Approved by: Quality Manager |
|------------------------|----------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Page 96 of 293 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | | Page 96 01 293 |
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| | | East | | | | | А | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|----------|------|---------------|---------|-------|------|------------|------|-----------|------------|-----------|------|------------|------|-------------|----------|-----------------------------|----------|
| > | Band | Freq [MHz] | Channel | Tones | R | U Index: 5 | 3 | R | U Index: 5 | 6 | R | U Index: 6 | 0 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| M | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | сили (автиј | [dB] |
| | | 6025 | 15 | 106T | 4.12 | 5.65 | 7.96 | 3.91 | 5.01 | 7.51 | 4.16 | 4.97 | 7.59 | -2.93 | 5.03 | 24.00 | -18.97 |
| ₽ 2 | 5 | 6185 | 47 | 106T | 4.14 | 5.35 | 7.80 | 3.89 | 4.75 | 7.35 | 3.81 | 4.91 | 7.41 | -2.93 | 4.87 | 24.00 | -19.13 |
| 14 8 | | 6345 | 79 | 106T | 4.11 | 4.78 | 7.47 | 4.17 | 4.36 | 7.28 | 4.21 | 4.28 | 7.26 | -2.93 | 4.54 | 24.00 | -19.46 |
| 6 | 6 | 6505 | 111 | 106T | 3.91 | 5.72 | 7.92 | 3.65 | 5.12 | 7.46 | 4.04 | 4.78 | 7.44 | -3.78 | 4.14 | 24.00 | -19.86 |
| 00 | 7 | 6665 | 143 | 106T | 4.31 | 4.34 | 7.34 | 4.93 | 4.85 | 7.90 | 4.83 | 4.27 | 7.57 | -3.68 | 4.22 | 24.00 | -19.78 |
| T | 1 | 6825 | 175 | 106T | 4.93 | 4.98 | 7.97 | 4.81 | 4.75 | 7.79 | 4.88 | 4.85 | 7.88 | -3.68 | 4.29 | 24.00 | -19.71 |
| | 8 | 6985 | 207 | 106T | 4.06 | 4.93 | 7.53 | 3.97 | 5.27 | 7.68 | 4.31 | 4.62 | 7.48 | -3.78 | 3.90 | 24.00 | -20.10 |

Table 7-16. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Upper 996T Block

| FCC ID: A3LSMG998U | PREAST TO BE PART OF COMPANY | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
|------------------------|------------------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Daga 07 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | | Page 97 of 293 |
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| | Band | Freq | Channel | Tones | Average | Conducte (dBm) | d Power | Directional Ant. Gain | Max | Max e.i.r.p. | e.i.r.p. |
|-------|------|-------|---------|-------|---------|-------------------|---------|--------------------------|-------------------|--------------|----------------|
| | Danu | [MHz] | Channel | Tones | R | U Index: 6 | 1 | [dBi] | e.i.r.p. [dBm] | Limit [dBm] | Margin [dB] |
| | | | | | ANT1 | ANT2 | MIMO | [abi] | [abiii] | | [ab] |
| | | 5935 | 2 | 242T | 8.47 | 8.93 | 11.72 | -2.93 | 8.79 | 24.00 | -15.21 |
| BW | 5 | 6175 | 45 | 242T | 8.50 | 8.57 | 11.55 | -2.93 | 8.62 | 24.00 | -15.38 |
| m | | 6415 | 93 | 242T | 8.84 | 8.57 | 11.72 | -2.93 | 8.79 | 24.00 | -15.21 |
| N | | 6435 | 97 | 242T | 8.81 | 8.73 | 11.78 | -3.78 | 8.00 | 24.00 | -16.00 |
| | 6 | 6475 | 105 | 242T | 8.69 | 8.86 | 11.79 | -3.78 | 8.01 | 24.00 | -15.99 |
| Σ | | 6515 | 113 | 242T | 8.38 | 8.86 | 11.64 | -3.78 | 7.86 | 24.00 | -16.14 |
| 20MHz | | 6535 | 117 | 242T | 8.75 | 8.48 | 11.63 | -3.68 | 7.95 | 24.00 | -16.05 |
| | 7 | 6695 | 149 | 242T | 8.30 | 8.62 | 11.47 | -3.68 | 7.79 | 24.00 | -16.21 |
| | | 6875 | 185 | 242T | 8.42 | 8.69 | 11.57 | -3.68 | 7.89 | 24.00 | -16.11 |
| | | 6895 | 189 | 242T | 8.72 | 8.79 | 11.77 | -3.78 | 7.99 | 24.00 | -16.01 |
| | 8 | 6995 | 209 | 242T | 8.99 | 8.81 | 11.91 | -3.78 | 8.13 | 24.00 | -15.87 |
| | | 7115 | 233 | 242T | 8.79 | 8.68 | 11.75 | -3.78 | 7.97 | 24.00 | -16.03 |

MIMO Maximum Conducted Output Power Measurements (242 Tones)

Table 7-17. MIMO 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | F aran | | | | Averag | ge Conduc | ted Power | (dBm) | | Directional | Max | Man | e.i.r.p. |
|----------|------|---------------|---------|--------|------|------------|------------|-----------|------------|----------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 6 | 51 | R | U Index: 6 | 2 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | נאווזצן | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | Cinii (abiii) | [dB] |
| | | 5965 | 3 | 242T | 8.37 | 8.97 | 11.69 | 8.38 | 8.96 | 11.69 | -2.93 | 8.76 | 24.00 | -15.24 |
| ≥ | 5 | 6165 | 43 | 242T | 8.46 | 8.53 | 11.51 | 8.45 | 8.69 | 11.58 | -2.93 | 8.65 | 24.00 | -15.35 |
| D | | 6405 | 91 | 242T | 8.68 | 8.46 | 11.58 | 8.82 | 8.74 | 11.79 | -2.93 | 8.86 | 24.00 | -15.14 |
| | | 6445 | 99 | 242T | 8.86 | 8.64 | 11.76 | 8.68 | 8.92 | 11.81 | -3.78 | 8.03 | 24.00 | -15.97 |
| Ηz | 6 | 6485 | 107 | 242T | 8.73 | 8.70 | 11.73 | 8.44 | 8.82 | 11.64 | -3.78 | 7.95 | 24.00 | -16.05 |
| | | 6525 | 115 | 242T | 8.33 | 8.66 | 11.51 | 8.45 | 8.96 | 11.72 | -3.78 | 7.94 | 24.00 | -16.06 |
| 40MH | | 6565 | 123 | 242T | 8.63 | 8.56 | 11.61 | 8.81 | 8.72 | 11.78 | -3.68 | 8.10 | 24.00 | -15.90 |
| 4 | 7 | 6725 | 155 | 242T | 8.07 | 8.72 | 11.42 | 8.34 | 8.94 | 11.66 | -3.68 | 7.98 | 24.00 | -16.02 |
| | | 6885 | 187 | 242T | 8.62 | 8.72 | 11.68 | 8.79 | 8.88 | 11.85 | -3.68 | 8.17 | 24.00 | -15.83 |
| | | 6925 | 195 | 242T | 8.83 | 8.92 | 11.89 | 8.91 | 8.88 | 11.91 | -3.78 | 8.13 | 24.00 | -15.87 |
| | 8 | 7005 | 211 | 242T | 8.80 | 8.99 | 11.91 | 8.98 | 8.83 | 11.92 | -3.78 | 8.14 | 24.00 | -15.86 |
| | | 7085 | 227 | 242T | 8.93 | 8.92 | 11.94 | 8.87 | 8.82 | 11.86 | -3.78 | 8.16 | 24.00 | -15.84 |
| | - | Tabla 7 | 40 MIN | 10 100 | | 00244 | (a) // IN | | : | Com du s | | Day | | |

Table 7-18. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | Farm | | | | | A | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|-------|------|---------------|---------|-------|------|------------|-------|-----------|------------|-----------|------|------------|-------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 6 | 1 | R | U Index: 6 | 2 | R | U Index: 6 | 4 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | [IWITZ] | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| 3 | | 5985 | 7 | 242T | 8.32 | 8.97 | 11.67 | 8.32 | 8.98 | 11.67 | 8.36 | 8.96 | 11.68 | -2.93 | 8.75 | 24.00 | -15.25 |
| Ω | 5 | 6145 | 39 | 242T | 8.12 | 8.77 | 11.47 | 8.28 | 8.91 | 11.62 | 8.64 | 8.47 | 11.57 | -2.93 | 8.69 | 24.00 | -15.31 |
| N | | 6385 | 87 | 242T | 8.98 | 8.55 | 11.78 | 8.91 | 8.56 | 11.75 | 8.96 | 8.46 | 11.73 | -2.93 | 8.85 | 24.00 | -15.15 |
| I I I | 6 | 6465 | 103 | 242T | 8.78 | 8.82 | 11.81 | 8.63 | 8.84 | 11.75 | 8.65 | 8.78 | 11.73 | -3.78 | 8.03 | 24.00 | -15.97 |
| ≥ | | 6545 | 119 | 242T | 8.83 | 8.33 | 11.60 | 8.79 | 8.71 | 11.76 | 8.47 | 8.64 | 11.57 | -3.68 | 8.08 | 24.00 | -15.92 |
| 80M | 7 | 6705 | 151 | 242T | 8.27 | 8.47 | 11.38 | 8.35 | 8.98 | 11.69 | 8.26 | 8.84 | 11.57 | -3.68 | 8.01 | 24.00 | -15.99 |
| ω. | | 6865 | 183 | 242T | 8.30 | 8.75 | 11.54 | 8.35 | 8.80 | 11.59 | 8.50 | 8.64 | 11.58 | -3.68 | 7.91 | 24.00 | -16.09 |
| | 8 | 6945 | 199 | 242T | 8.90 | 8.53 | 11.73 | 8.66 | 8.85 | 11.77 | 8.79 | 8.75 | 11.78 | -3.78 | 8.00 | 24.00 | -16.00 |
| | 0 | 7025 | 215 | 242T | 8.83 | 8.79 | 11.82 | 8.70 | 8.75 | 11.74 | 8.82 | 8.64 | 11.74 | -3.78 | 8.04 | 24.00 | -15.96 |

Table 7-19. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| FCC ID: A3LSMG998U | PREMA Tip be patt of @ minuted | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNE | Approved by: Quality Manager |
|------------------------|--------------------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Dogo 00 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 98 of 293 |
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| | | F | | | | | A | verage Co | nducted P | ower (dBr | n) | | | Directional | Max | | e.i.r.p. |
|-------------|------|---------------|---------|-------|------|------------|-------|-----------|------------|-----------|------|------------|-------|-------------|----------|-----------------------------|----------|
| > | Band | Freq [MHz] | Channel | Tones | R | U Index: 6 | 1 | R | U Index: 6 | 2 | R | U Index: 6 | 4 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| δ Ω | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | сили (автиј | [dB] |
| | | 6025 | 15 | 242T | 7.88 | 8.75 | 11.35 | 7.93 | 8.96 | 11.49 | 7.28 | 8.96 | 11.21 | -2.93 | 8.56 | 24.00 | -15.44 |
| Ч <u></u> Ч | 5 | 6185 | 47 | 242T | 7.65 | 8.85 | 11.30 | 8.06 | 8.97 | 11.55 | 7.87 | 8.86 | 11.40 | -2.93 | 8.62 | 24.00 | -15.38 |
| | | 6345 | 79 | 242T | 8.25 | 8.14 | 11.21 | 8.32 | 8.54 | 11.44 | 8.96 | 8.78 | 11.88 | -2.93 | 8.95 | 24.00 | -15.05 |
| 6 | 6 | 6505 | 111 | 242T | 8.02 | 8.52 | 11.29 | 8.21 | 8.73 | 11.49 | 7.56 | 8.72 | 11.19 | -3.78 | 7.71 | 24.00 | -16.29 |
| 6 | 7 | 6665 | 143 | 242T | 8.56 | 8.98 | 11.79 | 7.89 | 8.42 | 11.17 | 8.45 | 8.96 | 11.72 | -3.68 | 8.11 | 24.00 | -15.89 |
| ~ | 1 | 6825 | 175 | 242T | 8.61 | 8.84 | 11.74 | 8.12 | 8.43 | 11.29 | 8.72 | 8.91 | 11.83 | -3.68 | 8.15 | 24.00 | -15.85 |
| | 8 | 6985 | 207 | 242T | 8.82 | 8.62 | 11.73 | 8.42 | 8.23 | 11.34 | 8.95 | 8.99 | 11.98 | -3.78 | 8.20 | 24.00 | -15.80 |

Table 7-20. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Lower 996T Block

| | | Farm | | | | | A | verage Co | nducted P | ower (dBn | n) | | | Directional | Max | | e.i.r.p. |
|-------------|------|---------------|---------|-------|------|------------|-------|-----------|------------|-----------|------|------------|-------|-------------|----------|-----------------------------|----------|
| > | Band | Freq [MHz] | Channel | Tones | R | U Index: 6 | 1 | R | U Index: 6 | 2 | R | U Index: 6 | 4 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| M | | נויוהצן | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | сили (автиј | [dB] |
| | | 6025 | 15 | 242T | 7.54 | 8.91 | 11.29 | 7.54 | 8.98 | 11.33 | 7.81 | 8.96 | 11.43 | -2.93 | 8.50 | 24.00 | -15.50 |
| 2 4 | 5 | 6185 | 47 | 242T | 7.57 | 8.72 | 11.19 | 7.74 | 8.99 | 11.42 | 7.61 | 8.97 | 11.35 | -2.93 | 8.49 | 24.00 | -15.51 |
| 1 2 8 | | 6345 | 79 | 242T | 8.32 | 8.61 | 11.48 | 7.87 | 8.92 | 11.44 | 8.01 | 8.63 | 11.34 | -2.93 | 8.55 | 24.00 | -15.45 |
| 6 | 6 | 6505 | 111 | 242T | 7.81 | 8.92 | 11.41 | 7.75 | 8.99 | 11.42 | 7.65 | 8.77 | 11.26 | -3.78 | 7.64 | 24.00 | -16.36 |
| õ | 7 | 6665 | 143 | 242T | 8.82 | 8.87 | 11.86 | 8.91 | 8.71 | 11.82 | 8.83 | 8.46 | 11.66 | -3.68 | 8.18 | 24.00 | -15.82 |
| <u> </u> | | 6825 | 175 | 242T | 8.82 | 8.96 | 11.90 | 8.65 | 8.46 | 11.57 | 8.98 | 8.83 | 11.92 | -3.68 | 8.24 | 24.00 | -15.76 |
| | 8 | 6985 | 207 | 242T | 8.11 | 8.92 | 11.54 | 7.97 | 8.98 | 11.51 | 8.01 | 8.52 | 11.28 | -3.78 | 7.76 | 24.00 | -16.24 |

Table 7-21. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Upper 996T Block

| FCC ID: A3LSMG998U | PETEST Presad To Law patt of @ | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
|------------------------|-----------------------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Daga 00 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 99 of 293 |
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| | Dand | Freq | | T | Average | Conducte (dBm) | d Power | Directional | Max | Max e.i.r.p. | e.i.r.p. |
|-------|------|-------|---------|----------|---------|-------------------|---------|--------------------|-------------------|--------------|----------------|
| | Band | [MHz] | Channel | Tones | R | U Index: 6 | 5 | Ant. Gain [dBi] | e.i.r.p. [dBm] | Limit [dBm] | Margin [dB] |
| | | | | | ANT1 | ANT2 | MIMO | Lapi | Lapini | | [ub] |
| | | 5965 | 3 | 484T | 7.88 | 8.83 | 11.39 | -2.93 | 8.46 | 24.00 | -15.54 |
| S . | 5 | 6165 | 43 | 484T | 8.82 | 8.98 | 11.91 | -2.93 | 8.98 | 24.00 | -15.02 |
| B | | 6405 | 91 | 484T | 8.23 | 8.27 | 11.26 | -2.93 | 8.33 | 24.00 | -15.67 |
| N | | 6445 | 99 | 484T | 8.44 | 8.57 | 11.52 | -3.78 | 7.74 | 24.00 | -16.26 |
| | 6 | 6485 | 107 | 484T | 8.25 | 8.44 | 11.36 | -3.78 | 7.58 | 24.00 | -16.42 |
| Σ | | 6525 | 115 | 484T | 8.06 | 8.61 | 11.35 | -3.78 | 7.57 | 24.00 | -16.43 |
| 40MHz | | 6565 | 123 | 484T | 8.29 | 8.50 | 11.41 | -3.68 | 7.73 | 24.00 | -16.27 |
| | 7 | 6725 | 155 | 484T | 7.92 | 8.49 | 11.22 | -3.68 | 7.54 | 24.00 | -16.46 |
| | | 6885 | 187 | 484T | 8.37 | 8.78 | 11.59 | -3.68 | 7.91 | 24.00 | -16.09 |
| | | 6925 | 195 | 484T | 8.47 | 8.46 | 11.48 | -3.78 | 7.70 | 24.00 | -16.30 |
| | 8 | 7005 | 211 | 484T | 8.55 | 8.70 | 11.64 | -3.78 | 7.86 | 24.00 | -16.14 |
| | | 7085 | 227 | 484T | 8.55 | 8.66 | 11.62 | -3.78 | 7.84 | 24.00 | -16.16 |

MIMO Maximum Conducted Output Power Measurements (484 Tones)

Table 7-22. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | F aran | | | | Averag | ge Conduc | ted Power | (dBm) | | Directional | Max | Mar | e.i.r.p. |
|----------|------|---------------|---------|-------|------|------------|-----------|-----------|------------|----------|-------------|----------|-----------------------------|----------|
| | Band | Freq [MHz] | Channel | Tones | R | U Index: 6 | 5 | R | U Index: 6 | 6 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| | | נואורזבן | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| 3 | | 5985 | 7 | 484T | 7.98 | 8.78 | 11.41 | 7.93 | 8.98 | 11.50 | -2.93 | 8.57 | 24.00 | -15.43 |
| m | 5 | 6145 | 39 | 484T | 8.63 | 8.95 | 11.80 | 8.94 | 8.98 | 11.97 | -2.93 | 9.04 | 24.00 | -14.96 |
| N | | 6385 | 87 | 484T | 8.40 | 8.08 | 11.25 | 8.42 | 8.34 | 11.39 | -2.93 | 8.46 | 24.00 | -15.54 |
| | 6 | 6465 | 103 | 484T | 8.27 | 8.34 | 11.32 | 8.31 | 8.61 | 11.47 | -3.78 | 7.69 | 24.00 | -16.31 |
| Σ | | 6545 | 119 | 484T | 8.46 | 8.15 | 11.32 | 8.35 | 8.50 | 11.44 | -3.68 | 7.76 | 24.00 | -16.24 |
| 80 | 7 | 6705 | 151 | 484T | 7.94 | 8.50 | 11.24 | 8.02 | 8.62 | 11.34 | -3.68 | 7.66 | 24.00 | -16.34 |
| | | 6865 | 183 | 484T | 8.09 | 8.75 | 11.44 | 8.27 | 8.68 | 11.49 | -3.68 | 7.81 | 24.00 | -16.19 |
| | 8 | 6945 | 199 | 484T | 8.10 | 8.40 | 11.26 | 8.57 | 8.26 | 11.43 | -3.78 | 7.65 | 24.00 | -16.35 |
| | 0 | 7025 | 215 | 484T | 8.58 | 8.33 | 11.47 | 8.58 | 8.46 | 11.53 | -3.78 | 7.75 | 24.00 | -16.25 |
| | - | - | 00 8418 | | | | . / | | • | <u> </u> | | | | |

Table 7-23. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| | | - | | | | Averaç | ge Conduc | ted Power | (dBm) | | Directional | Max | | e.i.r.p. |
|----------|------|---------------|---------|-------|------|------------|-----------|-----------|------------|-------|-------------|----------|-----------------------------|----------|
| > | Band | Freq [MHz] | Channel | Tones | R | U Index: 6 | 5 | R | U Index: 6 | 6 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | Margin |
| B | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 6025 | 15 | 484T | 7.72 | 8.63 | 11.21 | 7.81 | 8.92 | 11.41 | -2.93 | 8.48 | 24.00 | -15.52 |
| Hz 0L | 5 | 6185 | 47 | 484T | 7.93 | 8.84 | 11.42 | 8.12 | 8.91 | 11.54 | -2.93 | 8.61 | 24.00 | -15.39 |
| | | 6345 | 79 | 484T | 8.34 | 8.72 | 11.54 | 8.18 | 8.43 | 11.32 | -2.93 | 8.61 | 24.00 | -15.39 |
| | 6 | 6505 | 111 | 484T | 8.02 | 8.51 | 11.28 | 8.03 | 8.75 | 11.42 | -3.78 | 7.64 | 24.00 | -16.36 |
| 60 | 7 | 6665 | 143 | 484T | 8.97 | 8.81 | 11.90 | 8.98 | 8.91 | 11.96 | -3.68 | 8.28 | 24.00 | -15.72 |
| ~ | / | 6825 | 175 | 484T | 8.64 | 8.98 | 11.82 | 8.34 | 8.57 | 11.47 | -3.68 | 8.14 | 24.00 | -15.86 |
| | 8 | 6985 | 207 | 484T | 8.86 | 8.96 | 11.92 | 8.16 | 8.51 | 11.35 | -3.78 | 8.14 | 24.00 | -15.86 |

Table 7-24. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Lower 996T Block

| FCC ID: A3LSMG998U | PCTEST Presad to be patt of @www. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
|------------------------|--------------------------------------|---------------------------------------|---------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | | Dogo 100 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 100 of 293 |
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| | | - | | | | Averaç | je Conduc | ted Power | (dBm) | | Directional | Max | | e.i.r.p. |
|----------|------|---------------|---------|-------|------|------------|-----------|-----------|------------|-------|-------------|----------|-----------------------------|----------|
| > | Band | Freq [MHz] | Channel | Tones | R | U Index: 6 | 5 | R | U Index: 6 | 6 | Ant. Gain | e.i.r.p. | Max e.i.r.p. Limit [dBm] | |
| M | | נייוויבן | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 6025 | 15 | 484T | 7.52 | 8.97 | 11.32 | 8.11 | 8.98 | 11.58 | -2.93 | 8.65 | 24.00 | -15.35 |
| 5 H | 5 | 6185 | 47 | 484T | 7.78 | 8.96 | 11.42 | 8.01 | 8.91 | 11.49 | -2.93 | 8.56 | 24.00 | -15.44 |
| | | 6345 | 79 | 484T | 8.03 | 8.87 | 11.48 | 8.22 | 8.64 | 11.45 | -2.93 | 8.55 | 24.00 | -15.45 |
| 60N 8 | 6 | 6505 | 111 | 484T | 7.81 | 8.98 | 11.44 | 8.27 | 8.96 | 11.64 | -3.78 | 7.86 | 24.00 | -16.14 |
| 0 | 7 | 6665 | 143 | 484T | 8.35 | 8.31 | 11.34 | 8.91 | 8.88 | 11.91 | -3.68 | 8.23 | 24.00 | -15.77 |
| | ' | 6825 | 175 | 484T | 8.98 | 8.75 | 11.88 | 8.32 | 8.54 | 11.44 | -3.68 | 8.20 | 24.00 | -15.80 |
| | 8 | 6985 | 207 | 484T | 7.78 | 8.59 | 11.21 | 7.57 | 8.98 | 11.34 | -3.78 | 7.56 | 24.00 | -16.44 |

Table 7-25. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Upper 996T Block

| FCC ID: A3LSMG998U | PCTEST | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|--------------------|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 101 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 101 of 293 |
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MIMO Maximum Conducted Output Power Measurements (996 Tones)

| | | Freq | Channel | | Average | Conducte (dBm) | d Power | Directional | Max | Max e.i.r.p. | e.i.r.p. |
|-----|------|-------|---------|-------|--------------|-------------------|---------|-------------|----------|--------------|----------|
| | Band | [MHz] | | Tones | RU Index: 67 | | | Ant. Gain | e.i.r.p. | Limit [dBm] | Margin |
| ≥ | | | | | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| B | | 5985 | 7 | 996T | 8.15 | 8.97 | 11.59 | -2.93 | 8.66 | 24.00 | -15.34 |
| | 5 | 6145 | 39 | 996T | 8.21 | 8.65 | 11.45 | -2.93 | 8.52 | 24.00 | -15.48 |
| Hz | | 6385 | 87 | 996T | 8.71 | 8.42 | 11.58 | -2.93 | 8.65 | 24.00 | -15.35 |
| ЛF | 6 | 6465 | 103 | 996T | 8.47 | 8.49 | 11.49 | -3.78 | 7.71 | 24.00 | -16.29 |
| 80M | | 6545 | 119 | 996T | 8.48 | 8.27 | 11.39 | -3.68 | 7.71 | 24.00 | -16.29 |
| 8 | 7 | 6705 | 151 | 996T | 8.14 | 8.56 | 11.37 | -3.68 | 7.69 | 24.00 | -16.31 |
| | | 6865 | 183 | 996T | 8.22 | 8.62 | 11.43 | -3.68 | 7.75 | 24.00 | -16.25 |
| | 8 | 6945 | 199 | 996T | 8.64 | 8.34 | 11.50 | -3.78 | 7.72 | 24.00 | -16.28 |
| | 0 | 7025 | 215 | 996T | 8.64 | 8.43 | 11.55 | -3.78 | 7.77 | 24.00 | -16.23 |

Table 7-26. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

| N | Band | Freq [MHz] | Channel | Tones | (dBm) | | Directional Ant. Gain | Max e.i.r.p. | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin | |
|----------|------|---------------|---------|-------|-------|------|--------------------------|-----------------|-----------------------------|--------------------|--------|
| m | | [] | | | ANT1 | ANT2 | MIMO | [dBi] | [dBm] | | [dB] |
| | | 6025 | 15 | 996T | 7.87 | 8.98 | 11.47 | -2.93 | 8.54 | 24.00 | -15.46 |
| H 0 | 5 | 6185 | 47 | 996T | 8.01 | 8.93 | 11.50 | -2.93 | 8.57 | 24.00 | -15.43 |
| | | 6345 | 79 | 996T | 8.42 | 8.31 | 11.38 | -2.93 | 8.45 | 24.00 | -15.55 |
| 60M 8 | 6 | 6505 | 111 | 996T | 8.03 | 8.47 | 11.27 | -3.78 | 7.49 | 24.00 | -16.51 |
| | 7 | 6665 | 143 | 996T | 8.34 | 8.51 | 11.44 | -3.68 | 7.76 | 24.00 | -16.24 |
| ~ | 1 | 6825 | 175 | 996T | 7.93 | 8.62 | 11.30 | -3.68 | 7.62 | 24.00 | -16.38 |
| | 8 | 6985 | 207 | 996T | 8.34 | 8.46 | 11.41 | -3.78 | 7.63 | 24.00 | -16.37 |

Table 7-27. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Lower 996T Block

| 3 | Band | Freq [MHz] | Channel | Tones | (aBM) | | Directional Ant. Gain | Max e.i.r.p. | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin | |
|--------------|------|---------------|---------|-------|-------|------|--------------------------|-----------------|-----------------------------|--------------------|--------|
| B | | [] | | | ANT1 | | | [dBi] | [dBm] | | [dB] |
| | | 6025 | 15 | 996T | 7.54 | 8.89 | 11.28 | -2.93 | 8.35 | 24.00 | -15.65 |
| Π | 5 | 6185 | 47 | 996T | 8.01 | 8.98 | 11.53 | -2.93 | 8.60 | 24.00 | -15.40 |
| Σ∞ | | 6345 | 79 | 996T | 8.02 | 8.54 | 11.30 | -2.93 | 8.37 | 24.00 | -15.63 |
| 60MHz 80U | 6 | 6505 | 111 | 996T | 8.21 | 8.93 | 11.60 | -3.78 | 7.82 | 24.00 | -16.18 |
| 16 | 7 | 6665 | 143 | 996T | 8.91 | 8.56 | 11.75 | -3.68 | 8.07 | 24.00 | -15.93 |
| | 1 | 6825 | 175 | 996T | 8.26 | 8.34 | 11.31 | -3.68 | 7.63 | 24.00 | -16.37 |
| | 8 | 6985 | 207 | 996T | 8.42 | 8.92 | 11.69 | -3.78 | 7.91 | 24.00 | -16.09 |

Table 7-28. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – Upper 996T Block

| FCC ID: A3LSMG998U | PCTEST Presal to be part of @ allocat | MEASUREMENT REPORT (CERTIFICATION) | SAMEUNE | Approved by: Quality Manager | |
|------------------------|--|---------------------------------------|---------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | | Dage 102 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 102 of 293 | |
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Sample MIMO Calculation:

At 5935MHz in 802.11ax (20MHz BW – 26 Tones) mode, the average conducted output power was measured to be dBm for -1.85 Antenna-1 and -0.67 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

(-1.85 dBm + -0.67 dBm) = (0.653 mW + 0.857 mW) = 1.51 mW = 1.79 dBm

| FCC ID: A3LSMG998U | PETEST Presad To Law patt of @ | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager | |
|------------------------|-----------------------------------|---------------------------------------|---------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | | Dage 102 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 103 of 293 | |
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7.4 Maximum Power Spectral Density – 802.11ax §15.407(a)(8)

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 5.925-7.125 GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band

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.

Test Setup

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



Figure 7-3. Test Instrument & Measurement Setup

Test Notes

None

| FCC ID: A3LSMG998U | PREMA The be patter & demonstration | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | | | | |
|--------------------------------|-------------------------------------|---------------------------------------|---------------------------------|--|--|--|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 104 of 202 | | | | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 104 of 293 | | | | |
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MIMO Power Spectral Density Measurements (26 Tones)

| | Frequenc | | 002.11 | Antenna-1 | Antenna-2 | Summed MIMO | Diss still and Colin | , i a a Deneita | Max EIRP | |
|----------|----------|---------|-------------|---------------|---------------|---------------|----------------------|-----------------|----------|--------|
| | У | Channel | 802.11 | Power Density | Power Density | Power Density | Directional Gain | | Density | Margin |
| | [MHz] | | MODE | [dBm/MHz] | [dBm/MHz] | [dBm/MHz] | [dBi] | [dBm/MHz] | [dBm] | [dB] |
| | 5935 | 2 | ax (20MHz) | -6.03 | -4.85 | -2.39 | -2.93 | -5.32 | -1 | -4.32 |
| | 6175 | 45 | ax (20MHz) | -5.71 | -4.87 | -2.26 | -2.93 | -5.19 | -1 | -4.19 |
| | 6415 | 93 | ax (20MHz) | -5.81 | -5.21 | -2.49 | -2.93 | -5.42 | -1 | -4.42 |
| | 5695 | 3 | ax (40MHz) | -4.04 | -3.52 | -0.76 | -2.93 | -3.69 | -1 | -2.69 |
| | 6165 | 43 | ax (40MHz) | -3.86 | -3.82 | -0.83 | -2.93 | -3.76 | -1 | -2.76 |
| Band 5 | 6405 | 91 | ax (40MHz) | -3.66 | -4.07 | -0.85 | -2.93 | -3.78 | -1 | -2.78 |
| Bar | 5985 | 7 | ax (80MHz) | -4.34 | -3.04 | -0.63 | -2.93 | -3.56 | -1 | -2.56 |
| | 6145 | 39 | ax (80MHz) | -3.13 | -3.78 | -0.43 | -2.93 | -3.36 | -1 | -2.36 |
| | 6385 | 87 | ax (80MHz) | -3.77 | -3.64 | -0.69 | -2.93 | -3.62 | -1 | -2.62 |
| | 6025 | 15 | ax (160MHz) | -5.67 | -5.39 | -2.52 | -2.93 | -5.45 | -1 | -4.45 |
| | 6185 | 47 | ax (160MHz) | -7.18 | -6.56 | -3.85 | -2.93 | -6.78 | -1 | -5.78 |
| | 6345 | 79 | ax (160MHz) | -6.36 | -5.49 | -2.89 | -2.93 | -5.82 | -1 | -4.82 |
| | 6345 | 97 | ax (20MHz) | -6.21 | -4.93 | -2.51 | -3.78 | -6.29 | -1 | -5.29 |
| | 6475 | 105 | ax (20MHz) | -5.73 | -5.03 | -2.35 | -3.78 | -6.14 | -1 | -5.14 |
| | 6515 | 113 | ax (20MHz) | -6.04 | -4.47 | -2.17 | -3.78 | -5.95 | -1 | -4.95 |
| Band 6 | 6445 | 99 | ax (40MHz) | -3.41 | -3.19 | -0.29 | -3.78 | -4.07 | -1 | -3.07 |
| Bar | 6485 | 107 | ax (40MHz) | -4.26 | -3.04 | -0.60 | -3.78 | -4.38 | -1 | -3.38 |
| | 6525 | 115 | ax (40MHz) | -3.81 | -3.45 | -0.61 | -3.78 | -4.39 | -1 | -3.39 |
| | 6465 | 103 | ax (80MHz) | -4.48 | -4.36 | -1.41 | -3.78 | -5.19 | -1 | -4.19 |
| | 6505 | 111 | ax (160MHz) | -6.75 | -4.95 | -2.75 | -3.78 | -6.53 | -1 | -5.53 |
| | 6535 | 117 | ax (20MHz) | -5.83 | -5.33 | -2.56 | -3.68 | -6.25 | -1 | -5.25 |
| | 6695 | 149 | ax (20MHz) | -5.90 | -5.57 | -2.72 | -3.68 | -6.40 | -1 | -5.40 |
| | 6875 | 185 | ax (20MHz) | -5.70 | -5.71 | -2.69 | -3.68 | -6.38 | -1 | -5.38 |
| | 6565 | 123 | ax (40MHz) | -3.51 | -3.26 | -0.38 | -3.68 | -4.06 | -1 | -3.06 |
| 2 | 6725 | 155 | ax (40MHz) | -4.13 | -3.20 | -0.63 | -3.68 | -4.32 | -1 | -3.32 |
| Band 7 | 6845 | 179 | ax (40MHz) | -3.35 | -3.60 | -0.46 | -3.68 | -4.15 | -1 | -3.15 |
| - | 6545 | 119 | ax (80MHz) | -3.88 | -3.27 | -0.55 | -3.68 | -4.24 | -1 | -3.24 |
| | 6705 | 151 | ax (80MHz) | -4.11 | -3.38 | -0.72 | -3.68 | -4.41 | -1 | -3.41 |
| | 6865 | 183 | ax (80MHz) | -3.25 | -3.54 | -0.38 | -3.68 | -4.07 | -1 | -3.07 |
| | 6665 | 143 | ax (160MHz) | -5.39 | -3.96 | -1.61 | -3.68 | -5.29 | -1 | -4.29 |
| | 6825 | 175 | ax (160MHz) | -6.42 | -3.44 | -1.67 | -3.68 | -5.36 | -1 | -4.36 |
| | 6895 | 189 | ax (20MHz) | -5.92 | -5.23 | -2.55 | -3.78 | -6.33 | -1 | -5.33 |
| | 6995 | 209 | ax (20MHz) | -5.40 | -4.79 | -2.08 | -3.78 | -5.86 | -1 | -4.86 |
| | 7115 | 233 | ax (20MHz) | -5.36 | -5.10 | -2.22 | -3.78 | -6.00 | -1 | -5.00 |
| <u>∞</u> | 6885 | 187 | ax (40MHz) | -3.78 | -3.96 | -0.86 | -3.78 | -4.64 | -1 | -3.64 |
| Band 8 | 7005 | 211 | ax (40MHz) | -3.82 | -3.36 | -0.57 | -3.78 | -4.36 | -1 | -3.36 |
| - | 7085 | 227 | ax (40MHz) | -3.68 | -3.79 | -0.72 | -3.78 | -4.51 | -1 | -3.51 |
| | 6945 | 199 | ax (80MHz) | -2.76 | -2.77 | 0.25 | -3.78 | -3.53 | -1 | -2.53 |
| | 7025 | 215 | ax (80MHz) | -3.12 | -3.27 | -0.18 | -3.78 | -3.97 | -1 | -2.97 |
| | 6985 | 207 | ax (160MHz) | -5.69 | -5.69 | -2.68 | -3.78 | -6.46 | -1 | -5.46 |
| | Tab | 1. 7 20 | | irn Condu | ated Device | Spectral De | noity Maga | uromonts (2) | G Tanaa) | |

Table 7-29. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (26 Tones)

| FCC ID: A3LSMG998U | PCTEST Presad to be part of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|----------------------------------|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 105 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 105 of 293 |
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| | Frequenc y [MHz] | Channel | 802.11 MODE | Antenna-1 Power Density [dBm] | Antenna-2 Power Density [dBm] | Summed MIMO Power Density [dBm] | Directional Gain [dBi] | EIRP [dBm] | Max EIRP [dBm] | Margin [dB] |
|--------|------------------------|---------|----------------|-------------------------------------|-------------------------------------|---------------------------------------|---------------------------|---------------|-------------------|----------------|
| | 5935 | 2 | ax (20MHz) | -3.21 | -2.41 | 0.22 | -2.79 | -2.57 | -1 | -1.57 |
| | 6175 | 45 | ax (20MHz) | -3.45 | -2.78 | -0.09 | -2.79 | -2.88 | -1 | -1.88 |
| | 6415 | 93 | ax (20MHz) | -3.57 | -2.99 | -0.26 | -2.79 | -3.05 | -1 | -2.05 |
| ы | 5965 | 3 | ax (40MHz) | -6.40 | -5.54 | -2.94 | -2.79 | -5.73 | -1 | -4.73 |
| Band 5 | 6165 | 43 | ax (40MHz) | -6.58 | -6.03 | -3.28 | -2.79 | -6.07 | -1 | -5.07 |
| ä | 6405 | 91 | ax (40MHz) | -6.65 | -6.43 | -3.53 | -2.79 | -6.32 | -1 | -5.32 |
| | 5985 | 7 | ax (80MHz) | -9.50 | -8.45 | -5.93 | -2.79 | -8.72 | -1 | -7.72 |
| | 6145 | 39 | ax (80MHz) | -9.19 | -8.53 | -5.84 | -2.79 | -8.63 | -1 | -7.63 |
| | 6385 | 87 | ax (80MHz) | -9.10 | -8.90 | -5.99 | -2.79 | -8.78 | -1 | -7.78 |
| | 6435 | 97 | ax (20MHz) | -3.26 | -2.40 | 0.20 | -3.78 | -3.58 | -1 | -2.58 |
| | 6475 | 105 | ax (20MHz) | -3.39 | -2.42 | 0.13 | -3.78 | -3.65 | -1 | -2.65 |
| 9 | 6515 | 113 | ax (20MHz) | -3.55 | -2.46 | 0.04 | -3.78 | -3.74 | -1 | -2.74 |
| Band 6 | 6445 | 99 | ax (40MHz) | -6.54 | -5.50 | -2.98 | -3.78 | -6.76 | -1 | -5.76 |
| ä | 6485 | 107 | ax (40MHz) | -6.65 | -5.61 | -3.09 | -3.78 | -6.87 | -1 | -5.87 |
| | 6525 | 115 | ax (40MHz) | -6.59 | -5.38 | -2.93 | -3.78 | -6.71 | -1 | -5.71 |
| | 6465 | 103 | ax (80MHz) | -9.51 | -8.92 | -6.19 | -3.78 | -9.97 | -1 | -8.97 |
| | 6535 | 117 | ax (20MHz) | -3.25 | -2.69 | 0.05 | -3.68 | -3.63 | -1 | -2.63 |
| | 6695 | 149 | ax (20MHz) | -3.55 | -2.81 | -0.15 | -3.68 | -3.84 | -1 | -2.84 |
| | 6875 | 185 | ax (20MHz) | -3.68 | -2.99 | -0.31 | -3.68 | -4.00 | -1 | -3.00 |
| ~ | 6565 | 123 | ax (40MHz) | -6.70 | -5.97 | -3.31 | -3.68 | -7.00 | -1 | -6.00 |
| Band | 6725 | 155 | ax (40MHz) | -6.88 | -6.00 | -3.40 | -3.68 | -7.09 | -1 | -6.09 |
| ä | 6845 | 179 | ax (40MHz) | -6.27 | -5.59 | -2.91 | -3.68 | -6.59 | -1 | -5.59 |
| | 6545 | 119 | ax (80MHz) | -9.18 | -9.10 | -6.13 | -3.68 | -9.81 | -1 | -8.81 |
| | 6705 | 151 | ax (80MHz) | -9.26 | -8.94 | -6.09 | -3.68 | -9.77 | -1 | -8.77 |
| | 6865 | 183 | ax (80MHz) | -9.74 | -9.09 | -6.39 | -3.68 | -10.07 | -1 | -9.07 |
| | 6895 | 189 | ax (20MHz) | -3.35 | -2.76 | -0.03 | -3.78 | -3.82 | -1 | -2.82 |
| | 6995 | 209 | ax (20MHz) | -3.17 | -2.53 | 0.17 | -3.78 | -3.61 | -1 | -2.61 |
| ~ | 7115 | 233 | ax (20MHz) | -3.36 | -2.46 | 0.13 | -3.78 | -3.66 | -1 | -2.66 |
| Band 8 | 6885 | 187 | ax (40MHz) | -6.75 | -5.88 | -3.28 | -3.78 | -7.07 | -1 | -6.07 |
| Bar | 7005 | 211 | ax (40MHz) | -6.41 | -5.51 | -2.93 | -3.78 | -6.71 | -1 | -5.71 |
| | 7085 | 227 | ax (40MHz) | -6.58 | -5.78 | -3.15 | -3.78 | -6.93 | -1 | -5.93 |
| | 6945 | 199 | ax (80MHz) | -9.53 | -9.10 | -6.30 | -3.78 | -10.08 | -1 | -9.08 |
| | 7025 | 215 | ax (80MHz) | -9.25 | -9.07 | -6.15 | -3.78 | -9.93 | -1 | -8.93 |
| | Tabl | ~ 7 20 | | r n Condu | ated Devicer | Spectral De | neity Moseu | iamanta /Ei | III Tonool | |

Table 7-30. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (Full Tones)

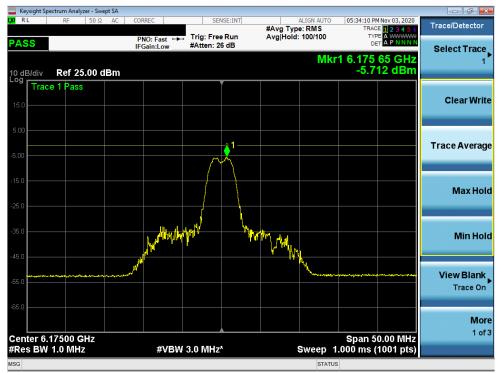
| FCC ID: A3LSMG998U | PREMA To be patter & | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|------------------------|----------------------|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 106 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 106 of 293 | |
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MIMO Antenna-1 Power Spectral Density Measurements (26 Tones)



Plot 7-147. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) UNII Band 5) - Ch. 2)



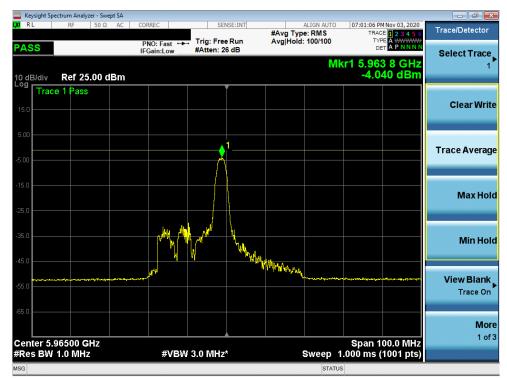
Plot 7-148. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 45)

| FCC ID: A3LSMG998U | PCTEST Presal to be patt to @ manual | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|---|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Daga 107 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 107 of 293 |
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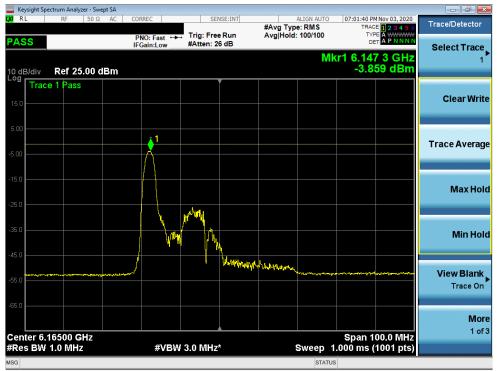
Plot 7-149. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) UNII Band 5) - Ch. 93)



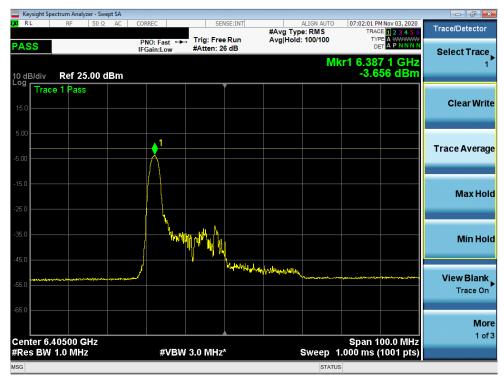
Plot 7-150. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 3)

| FCC ID: A3LSMG998U | PREMA The be patter & demonstration | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|------------------------|-------------------------------------|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Daga 108 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 108 of 293 | |
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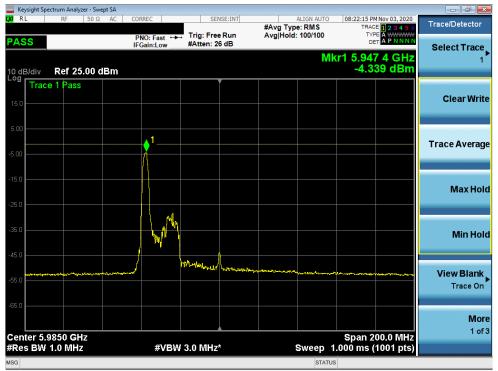
Plot 7-151. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 43)



Plot 7-152. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 91)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|------------------------|--|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Daga 100 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 109 of 293 | |
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Plot 7-153. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 7)



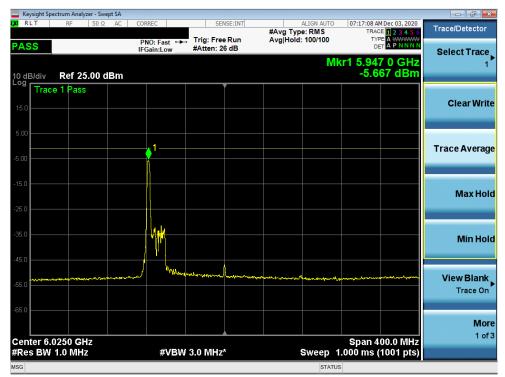
Plot 7-154. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 39)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|------------------------|-----------------------------------|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 110 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 110 of 293 | |
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| | um Analyzer - Swept SA | | | | | | | | |
|----------------|---|----------------------------|----------------------------|-----------------|------------|--------|--|-------------------|------------------------|
| LXI RL | RF 50 Ω AC | CORREC | | ISE:INT | #Avg Typ | | TRAC | Nov 03, 2020 | Trace/Detector |
| PASS | | PNO: Fast ++ IFGain:Low | , Trig: Free #Atten: 20 | | Avg Hold | | DE | | Select Trace |
| 10 dB/div | Ref 25.00 dBm | ı | | | | М | kr1 6.423 -3.70 | 3 0 GHz 66 dBm | 1 |
| Log Trace 1 | Pass | | | | | | | | Clear Write |
| -5.00 | | | | | | 1 | | | Trace Average |
| -15.0 | | | | | | | | | Max Hold |
| -25.0 | | | | | him Num | | | | Min Hold |
| -45.0 | 190 Production and an an an an an | | well-worthinsol | layafahjayahhhu | | harmon | ~?=~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | View Blank Trace On |
| -65.0 | 50 GHz | | | | | | Snap 2 | 00.0 MHz | More 1 of 3 |
| #Res BW 1.0 | | #VBW | 3.0 MHz | ¢ | | Sweep | 1.000 ms (| 1001 pts) | |
| MSG | | | | | | STATU | JS | | |

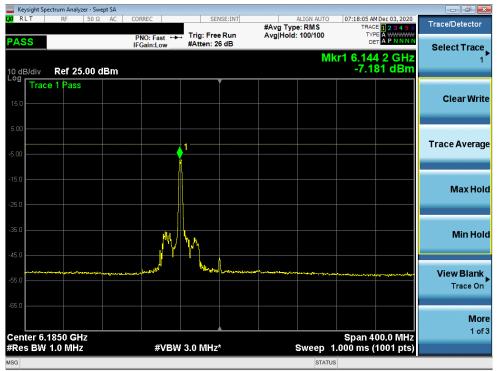
Plot 7-155. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 87)



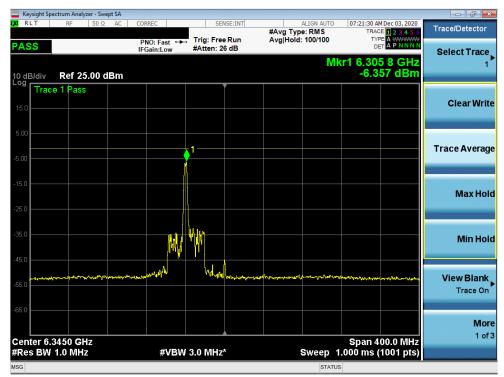
Plot 7-156. 26dB Bandwidth Plot MIMO ANT1 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 15)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|------------------------|--|---------------------------------------|---------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 111 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 111 of 293 |
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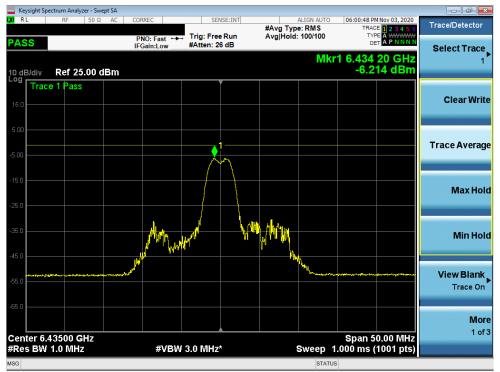
Plot 7-157. 26dB Bandwidth Plot MIMO ANT1 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 47)



Plot 7-158. I 26dB Bandwidth Plot MIMO ANT1 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 79)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|--------------------------------|--------------------|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 110 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 112 of 293 | |
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Plot 7-159. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 6) - Ch. 97)



Plot 7-160. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 6) - Ch. 105)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|--------------------------------|--------------------|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 112 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 113 of 293 | |
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Plot 7-161. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 6) - Ch. 113)



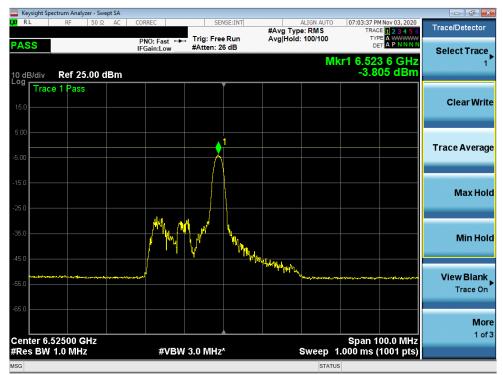
Plot 7-162. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 6) - Ch. 99)

| FCC ID: A3LSMG998U | PECTEST Presal to be patried @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|--------------------------------|-----------------------------------|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dega 111 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 114 of 293 | |
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Plot 7-163. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 6) - Ch. 107)



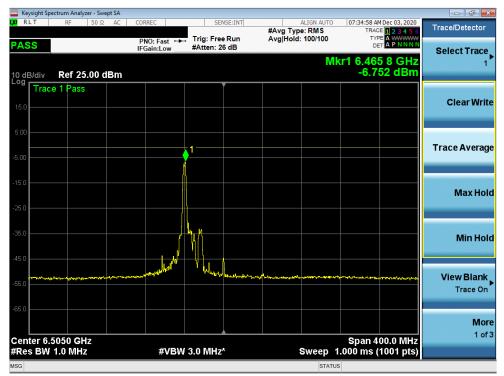
Plot 7-164. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 6) - Ch. 115)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|--------------------------------|--------------------|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dago 115 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 115 of 293 | |
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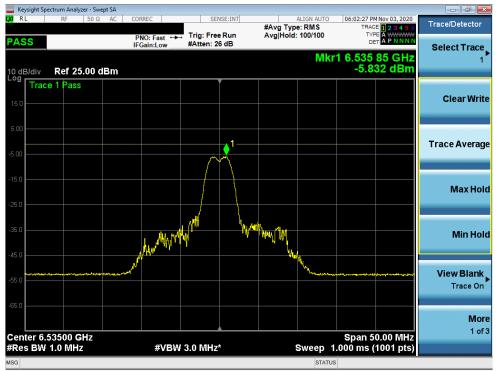
Plot 7-165. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 6) - Ch. 103)



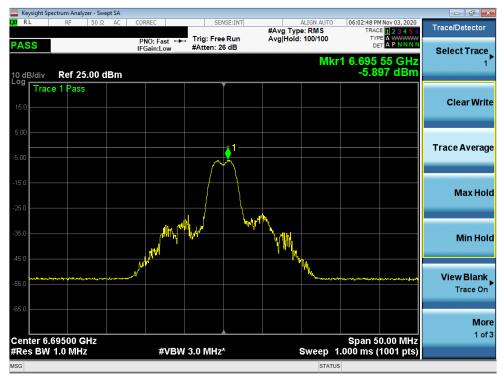
Plot 7-166. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax (26 Tones) (UNII Band 6) - Ch. 111)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dega 116 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 116 of 293 | |
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Plot 7-167. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 117)



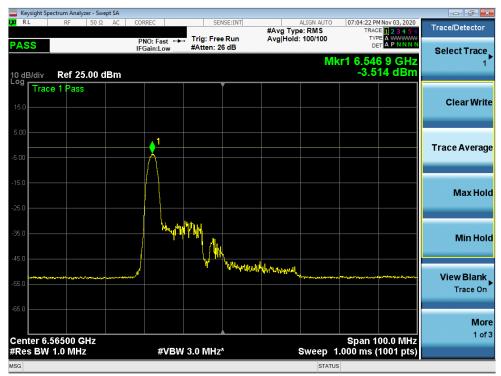
Plot 7-168. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 149)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dogo 117 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 117 of 293 | |
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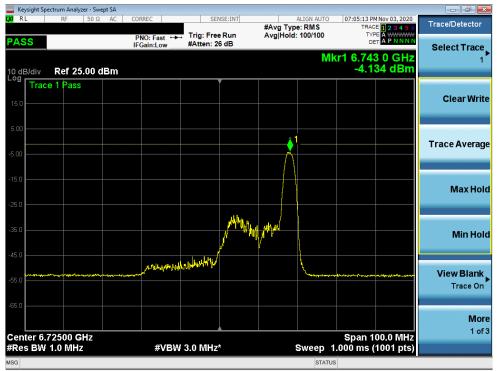
Plot 7-169. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 185)



Plot 7-170. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 123)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dago 118 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 118 of 293 | |
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Plot 7-171. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 155)



Plot 7-172. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 179)

| FCC ID: A3LSMG998U | PREMA Tip be patt of @uniment | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 110 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 119 of 293 | |
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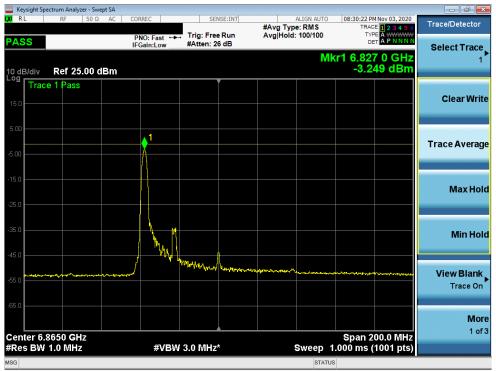
Plot 7-173. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 119)



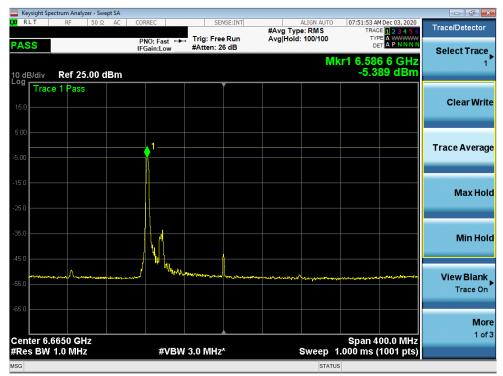
Plot 7-174. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 151)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 120 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 120 of 293 | |
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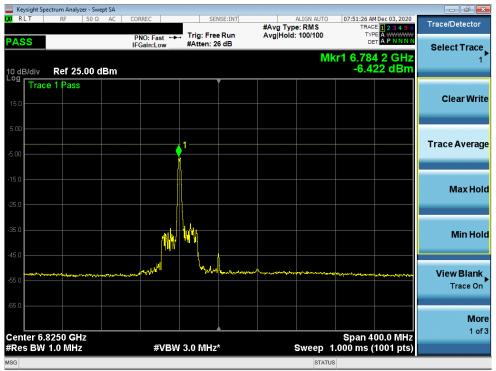
Plot 7-175. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 183)



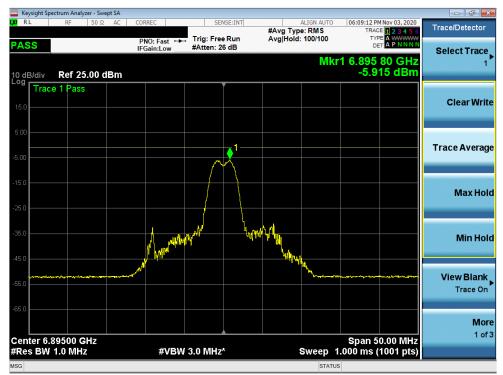
Plot 7-176. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 143)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Daga 121 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 121 of 293 | |
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Plot 7-177. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax (26 Tones) (UNII Band 7) - Ch. 175)



Plot 7-178. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 189)

| FCC ID: A3LSMG998U | PECTEST Presal to be patried @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dogo 100 of 000 | |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 122 of 293 | |
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Plot 7-179. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 209)



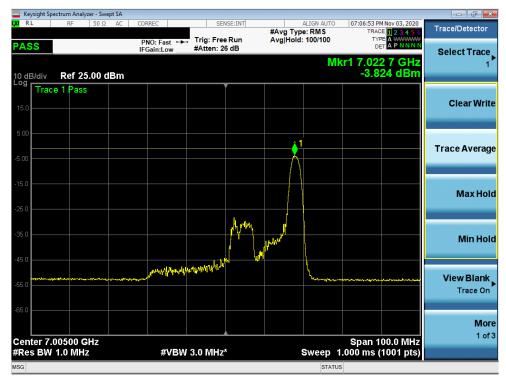
Plot 7-180. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 233)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dago 102 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 123 of 293 | |
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Plot 7-181. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 187)



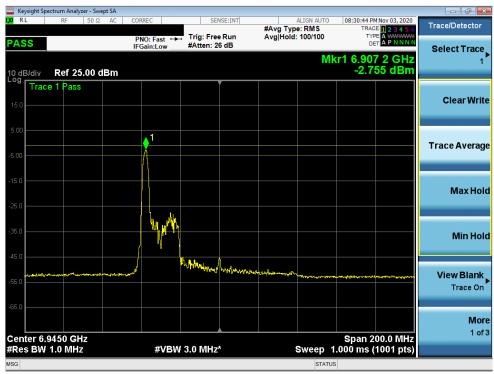
Plot 7-182. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 211)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 124 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 124 of 293 | |
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Plot 7-183. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 227)



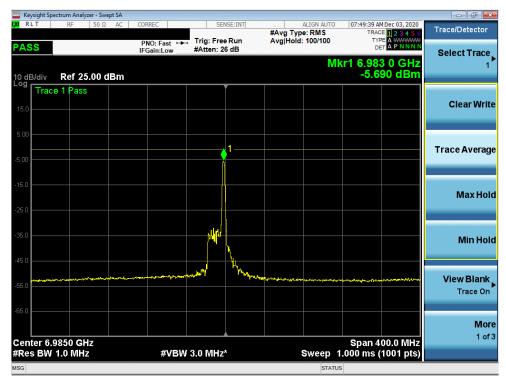
Plot 7-184. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 199)

| FCC ID: A3LSMG998U | PECTEST Presad To Law justif of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 125 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 125 of 293 | |
| 0 2020 PCTEST V 9.0 02/01/2019 | | | | |





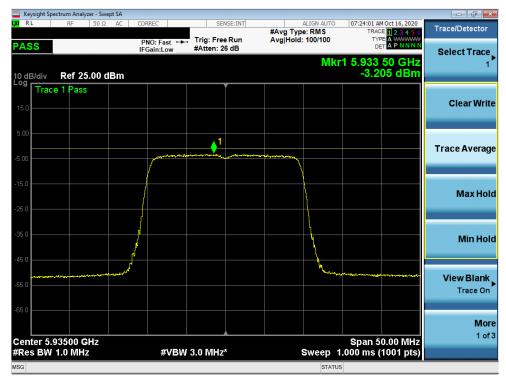
Plot 7-185. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 215)



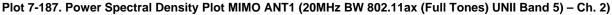
Plot 7-186. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax (26 Tones) (UNII Band 8) - Ch. 207)

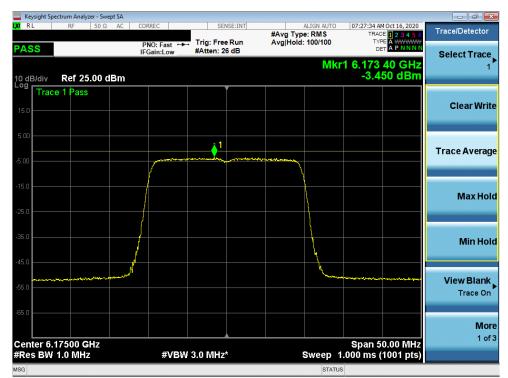
| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 126 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 126 of 293 | |
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MIMO Antenna-1 Power Spectral Density Measurements (Full Tones)

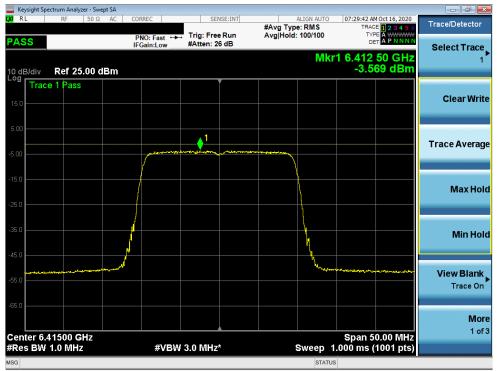




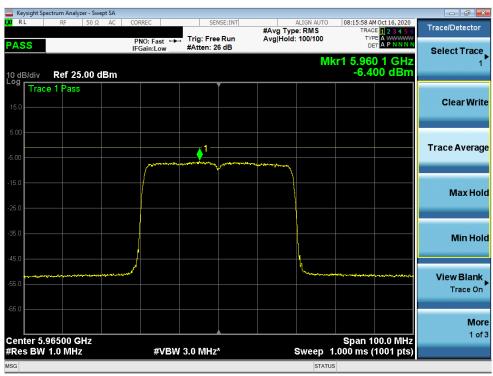
Plot 7-188. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 45)

| FCC ID: A3LSMG998U | PECTEST Presad to be patir of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Degre 107 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 127 of 293 | |
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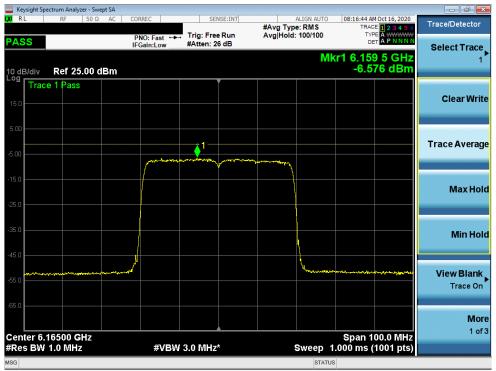
Plot 7-189. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) UNII Band 5) - Ch. 93)



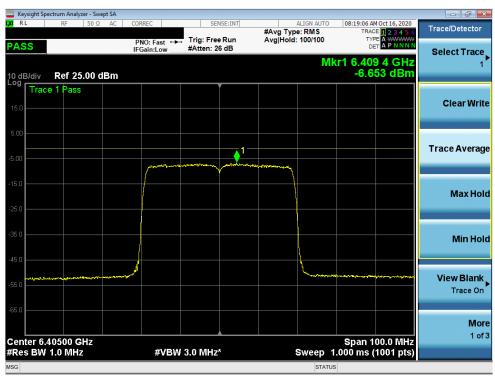
Plot 7-190. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 3)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dogo 100 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 128 of 293 | |
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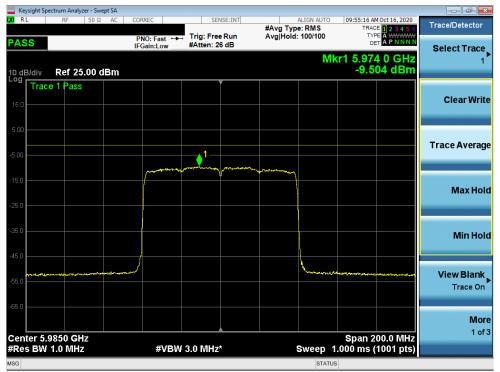
Plot 7-191. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 43)



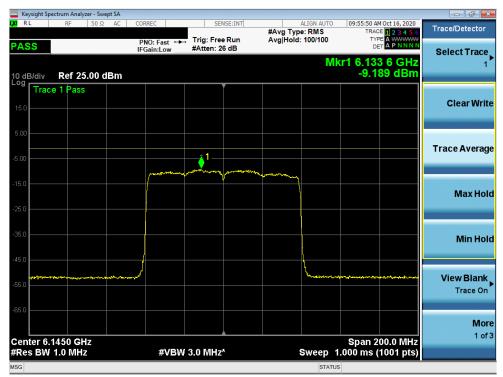
Plot 7-192. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 5) – Ch. 91)

| FCC ID: A3LSMG998U | PECTEST Presad To Law justif of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | De se 100 st 000 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 129 of 293 | |
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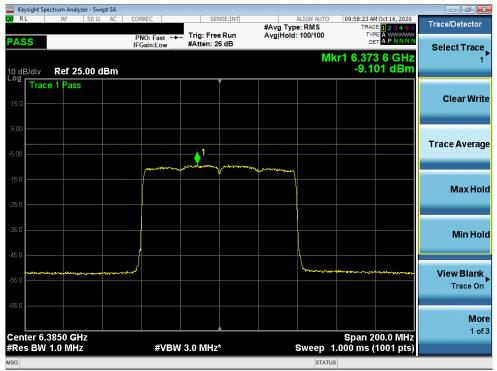
Plot 7-193. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 7)



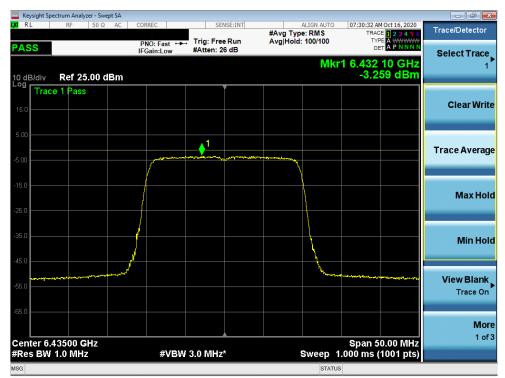
Plot 7-194. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 39)

| FCC ID: A3LSMG998U | PCTEST Freud to be patt of @element | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dogo 120 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 130 of 293 | |
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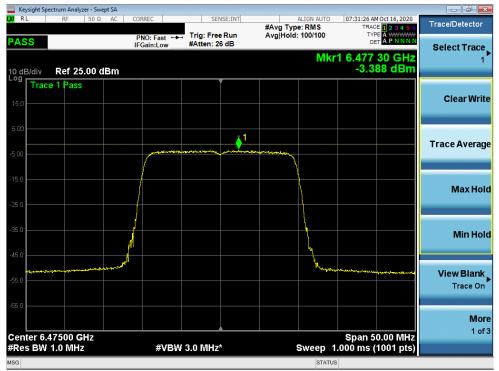
Plot 7-195. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 5) - Ch. 87)



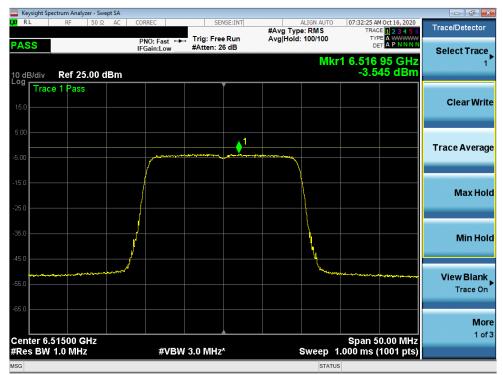
Plot 7-196. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 97)

| FCC ID: A3LSMG998U | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dago 121 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 131 of 293 | |
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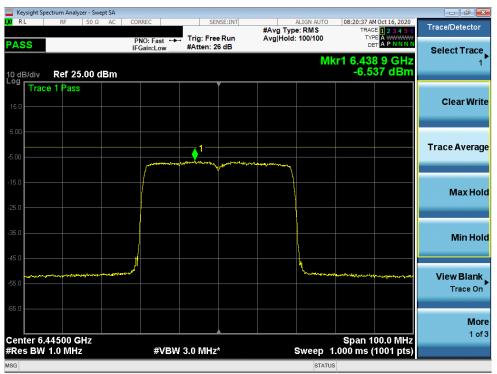
Plot 7-197. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 105)



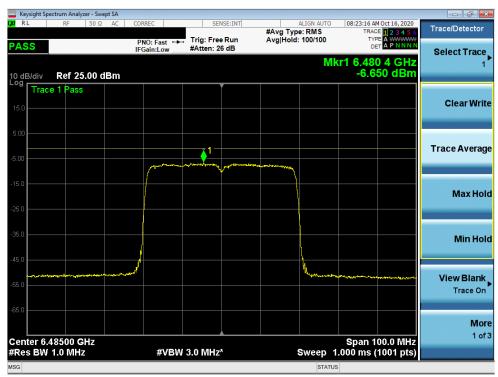
Plot 7-198. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 113)

| FCC ID: A3LSMG998U | PECTEST Presad to be patir of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Daga 122 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 132 of 293 | |
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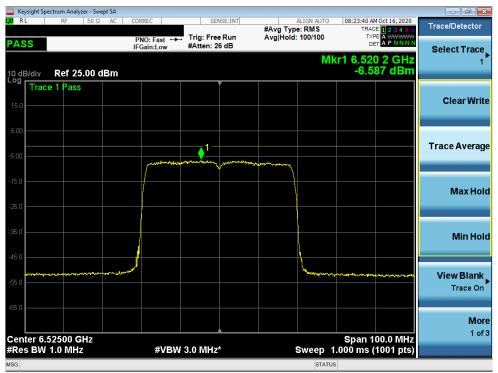
Plot 7-199. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 99)



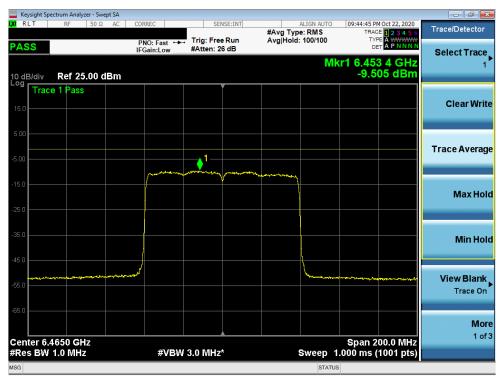
Plot 7-200. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 107)

| FCC ID: A3LSMG998U | PECTEST Presad To Law justif of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Bage 122 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 133 of 293 | |
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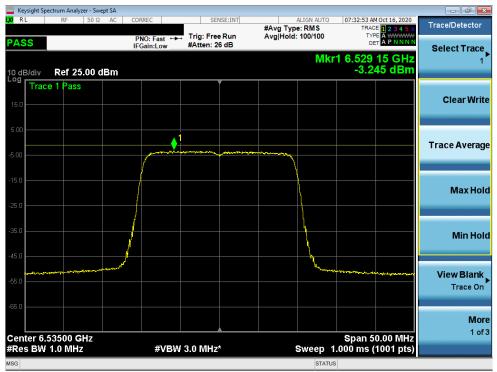
Plot 7-201. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 115)



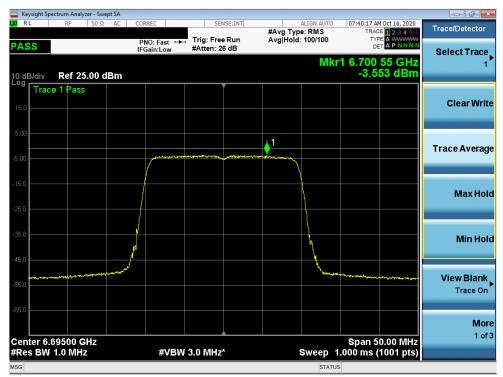
Plot 7-202. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 6) - Ch. 103)

| FCC ID: A3LSMG998U | PCTEST Freud to be patt of @element | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 134 of 293 | |
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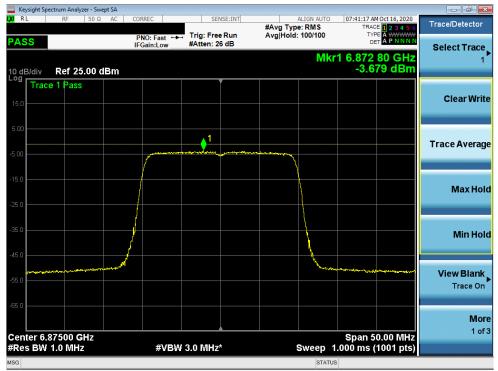
Plot 7-203. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 117)



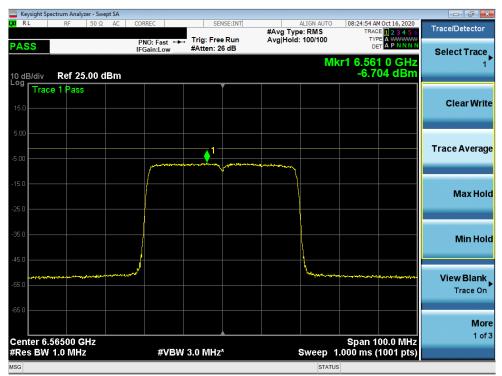
Plot 7-204. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 149)

| FCC ID: A3LSMG998U | PECTEST Presad to be patir tel @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dogo 125 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 135 of 293 | |
| 0 2020 PCTEST V 9.0 02/01/2019 | | | | |





Plot 7-205. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 185)



Plot 7-206. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 123)

| FCC ID: A3LSMG998U | PECTEST Presad to be patir tel @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 126 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 136 of 293 | |
| 0 2020 PCTEST V 9.0 02/01/2019 | | | | |



| | ectrum Analyzer - Swe | | | | | | | | | |
|-----------------------|-----------------------|----------------------------|------------------------|-------------------------|---------|----------|------------|--|-----------------------|------------------------|
| LXI RL | RF 50 Ω | AC CO | RREC | SEN | ISE:INT | #Avg Typ | ALIGN AUTO | | E 1 2 3 4 5 6 | Trace/Detector |
| PASS | | P | NO: Fast ↔ Gain:Low | Trig: Free #Atten: 2 | | Avg Hold | : 100/100 | TYF De | | Select Trace |
| 10 dB/div | Ref 25.00 d | IBm | | | | | М | kr1 6.71 -6.8 | 6 4 GHz 77 dBm | 1 |
| Log Trace | e 1 Pass | | | | | | | | | Clear Write |
| 5.00 | | | | | | | | | | Trace Average |
| -5.00 | | | | | , | | | | | |
| -25.0 | | | | | |) | | | | Max Hold |
| -35.0 | | | | | | | | | | Min Hold |
| -45.0 | | ware and the second second | | | | | Lawrence . | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | ton material and | View Blank Trace On |
| -65.0 | | | | | | | | | | More |
| Center 6.7 #Res BW | 72500 GHz 1.0 MHz | | #VBW | / 3.0 MHz | x | | Sweep | Span 1 1.000 ms (| 00.0 MHz 1001 pts) | 1 of 3 |
| MSG | | | | | | | STATU | | | |

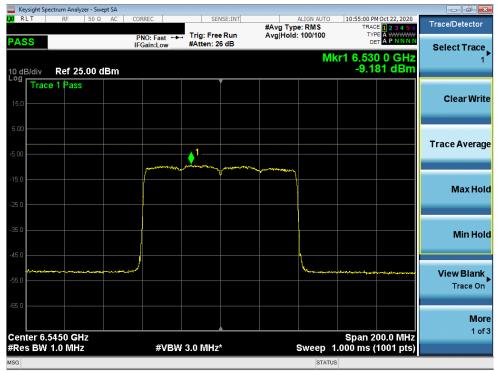
Plot 7-207. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 155)



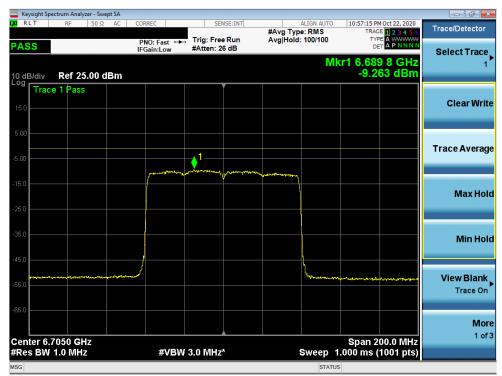
Plot 7-208. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 179)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit til @utiment | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
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| Test Report S/N: | Test Dates: | EUT Type: | | Dogo 127 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 137 of 293 |
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Plot 7-209. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 119)



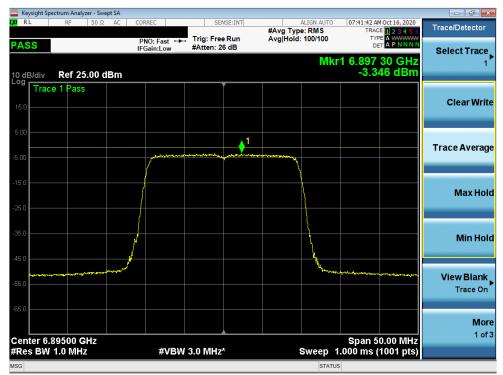
Plot 7-210. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 151)

| FCC ID: A3LSMG998U | PECTEST Presad to be patir tel @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 129 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 138 of 293 | |
| 2 2020 PCTEST V 9.0 02/01/2019 | | | | |





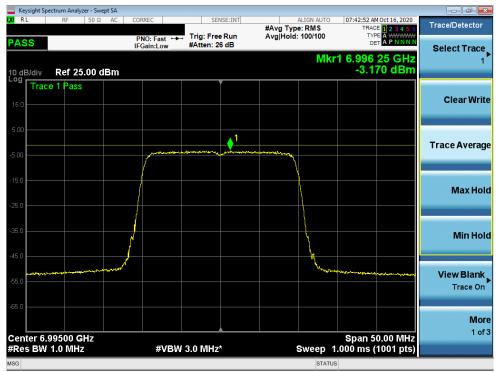
Plot 7-211. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 7) - Ch. 183)



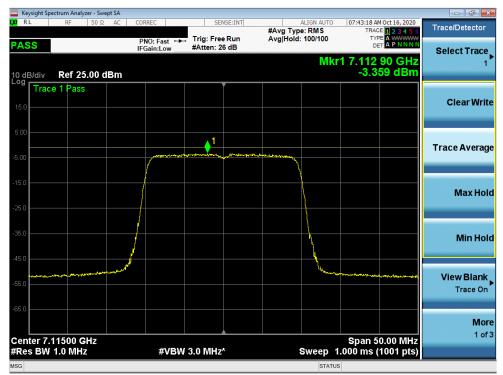
Plot 7-212. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 189)

| FCC ID: A3LSMG998U | PECTEST Presal to be patried @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dogo 120 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 139 of 293 | |
| 0 2020 PCTEST V 9.0 02/01/2019 | | | | |





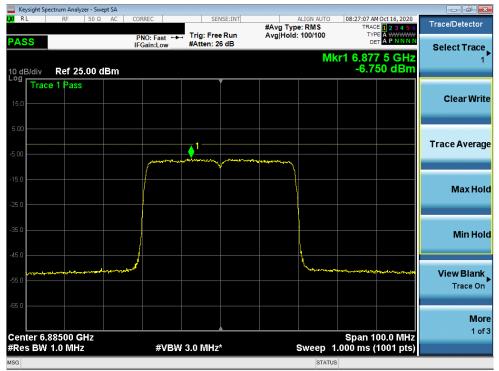
Plot 7-213. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 209)



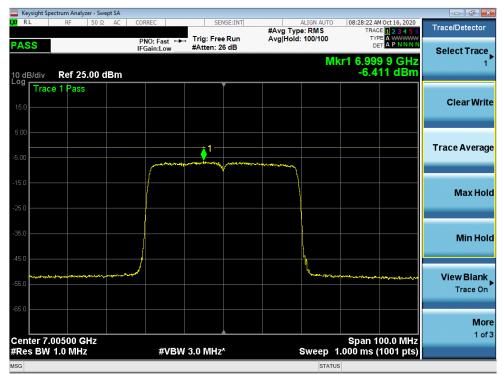
Plot 7-214. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 233)

| FCC ID: A3LSMG998U | PECTEST Presad to be patir of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 140 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 140 of 293 | |
| 2 2020 PCTEST V 9.0 02/01/2019 | | | | |





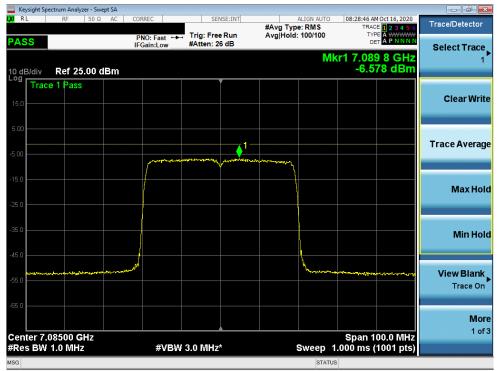
Plot 7-215. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 187)



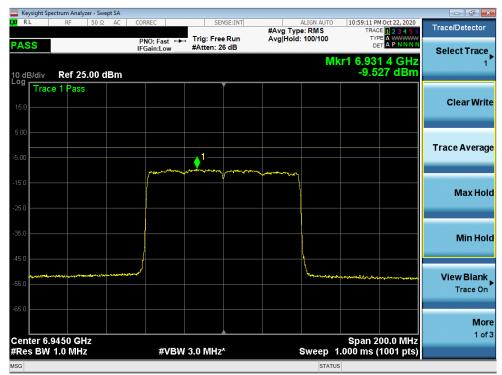
Plot 7-216. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 211)

| FCC ID: A3LSMG998U | PECTEST Presad to be patir of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 141 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 141 of 293 | |
| 0 2020 PCTEST V 9.0 02/01/2019 | | | | |





Plot 7-217. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 227)



Plot 7-218. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 199)

| FCC ID: A3LSMG998U | PECTEST Presad To Law justif of @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 142 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 142 of 293 | |
| 0 2020 PCTEST V 9.0 02/01/2019 | | | | |





Plot 7-219. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax (Full Tones) (UNII Band 8) - Ch. 215)

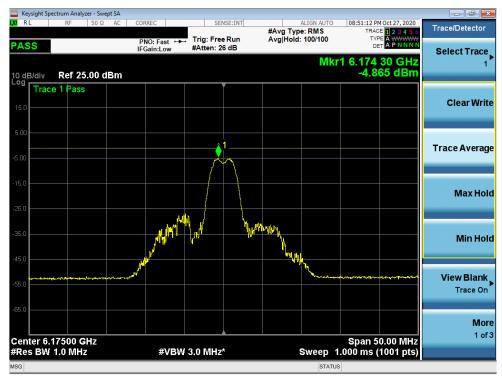
| FCC ID: A3LSMG998U | PREMA The be patter & demonstration | MEASUREMENT REPORT (CERTIFICATION) | SAMBUNE | Approved by: Quality Manager |
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| Test Report S/N: | Test Dates: | EUT Type: | | Dogo 142 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | | Page 143 of 293 |
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MIMO Antenna-2 Power Spectral Density Measurements (26 Tones)

Plot 7-220. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) UNII Band 5) - Ch. 2)



Plot 7-221. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 45)

| FCC ID: A3LSMG998U | PREMA To be patter & | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 111 of 202 |
| 1M2009230152-32-R2.A3L | 10/05 – 12/14/2020 | Portable Handset | Page 144 of 293 |
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Plot 7-222. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (26 Tones) UNII Band 5) - Ch. 93)



Plot 7-223. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 3)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dage 145 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 145 of 293 | |
| 0 2020 PCTEST V 9.0 02/01/2019 | | | | |





Plot 7-224. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 43)



Plot 7-225. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 91)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|--------------------------------|--|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 146 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 146 of 293 | |
| 0 2020 PCTEST V 9.0 02/01/2019 | | | | |



| Keysight Spectrum Analyzer - Swept SA | | | | | - ē 🔀 |
|---------------------------------------|-----------------------------|---|------------------------------|---|------------------------|
| LX RL RF 50Ω AC | CORREC | SENSE:INT | ALIGN AUTO #Avg Type: RMS | 12:02:54 AM Oct 28, 2020 TRACE 1 2 3 4 5 6 | Trace/Detector |
| PASS | PNO: Fast +++ IFGain:Low | Trig: Free Run #Atten: 26 dB | Avg Hold: 100/100 | DET A PNNN | Select Trace |
| 10 dB/div Ref 25.00 dBm | | | M | (r1 5.947 0 GHz -3.041 dBm | 1 |
| 15.0 Trace 1 Pass | | | | | Clear Write |
| 5.00 | 1 | | | | Trace Average |
| -5.00 | | | | | Max Hold |
| -25.0 | | | | | Max Hold |
| -45.0 | / "\\/\W"\ | Mihur y | | | Min Hold |
| -55.0 | | Mar | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | View Blank Trace On |
| -65.0 | | | | | More 1 of 3 |
| Center 5.9850 GHz #Res BW 1.0 MHz | #VBW | 3.0 MHz* | Sweep 1 | Span 200.0 MHz .000 ms (1001 pts) | |
| MSG | | | STATUS | | |

Plot 7-226. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 7)



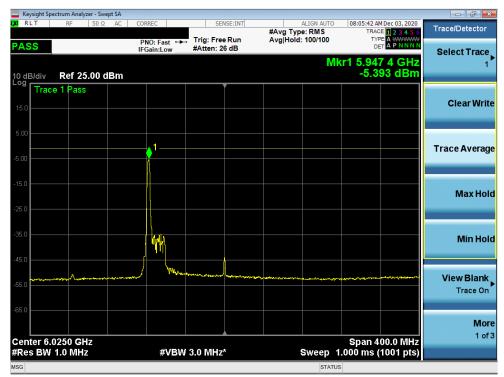
Plot 7-227. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 39)

| FCC ID: A3LSMG998U | PCTEST Presad to be patit of @ meaned | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
|------------------------|--|---------------------------------------|---------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dage 117 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 147 of 293 | |
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| | Analyzer - Swept SA | CODDEC | | or mar | | | 12:02:57 41 | 0.4.20.2020 | |
|------------------------------|---|---|--------------------------|--|----------|--------|--|--------------------------------|------------------------|
| LXI RL R | F 50 Ω AC | CORREC | | ISE:INT | #Avg Typ | | TRAC | 10ct 28, 2020 E 1 2 3 4 5 6 | Trace/Detector |
| PASS | | PNO: Fast ++ IFGain:Low | Trig: Free #Atten: 26 | | Avg Hold | | | | Select Trace |
| 10 dB/div Re | f 25.00 dBm | | | | | м | kr1 6.423 -3.64 | 3 0 GHz 44 dBm | 1 |
| Log Trace 1 F | Pass | | | | | | | | Clear Write |
| 5.00 | | | | | (| 1 | | | Trace Average |
| -5.00 | | | | | | | | | Max Hold |
| -25.0 | | | | | u Mille | | | | Max Hold |
| -35.0 | | | | | ľ. | | | | Min Hold |
| -55.0 | กระทั่งสำนักสารการการการสูบเสรียงใหญ่และกระเพ | Harrow Barrow | convioloov.W | hymred and a second | | hanner | were and the second | ****** | View Blank Trace On |
| -65.0 | | | | | | | | | More 1 of 3 |
| Center 6.3850 #Res BW 1.0 | | #VBW | 3.0 MHz* | | | Sweep | Span 2 1.000 ms (| 00.0 MHz 1001 pts) | |
| MSG | | | | | | STATU | IS | | |

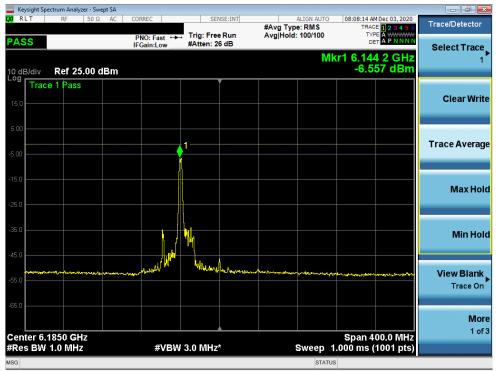
Plot 7-228. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 87)



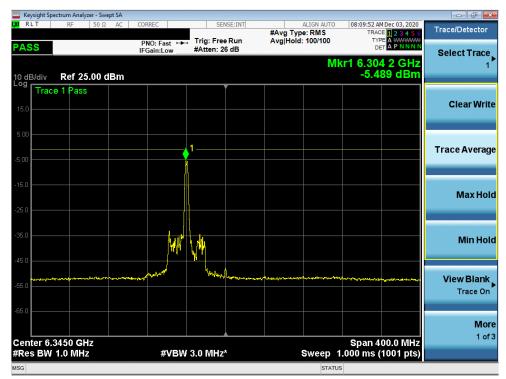
Plot 7-229. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 15)

| FCC ID: A3LSMG998U | PREMA Tip be patt of @ minuted | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dogo 149 of 202 | |
| 1M2009230152-32-R2.A3L | 10/05 - 12/14/2020 | Portable Handset | Page 148 of 293 | |
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Plot 7-230. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 47)



Plot 7-231. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax (26 Tones) (UNII Band 5) - Ch. 79)

| FCC ID: A3LSMG998U | PECTEST Presal to be patried @ | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager | |
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| Test Report S/N: | Test Dates: | EUT Type: | Dega 140 of 202 | |
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