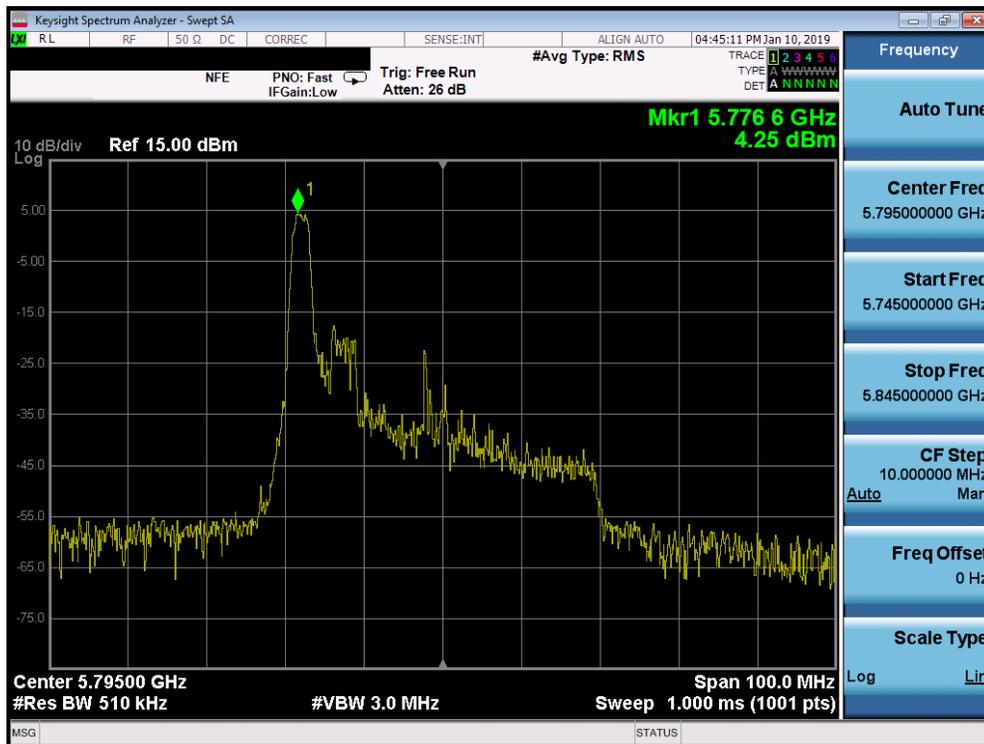
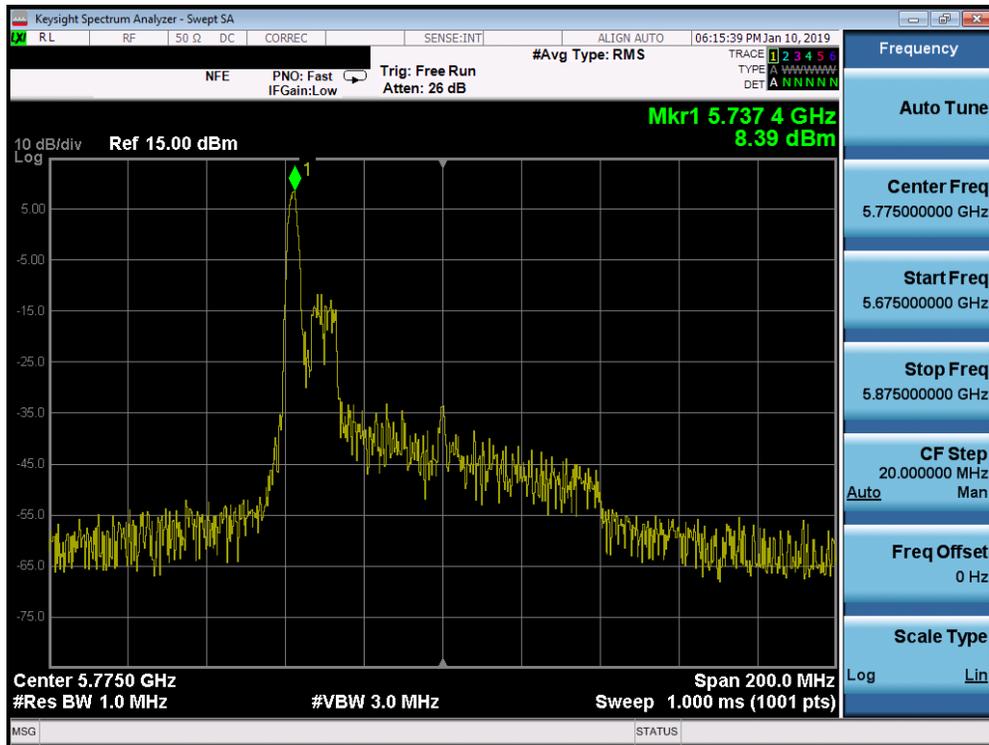


Plot 7-262. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)



Plot 7-263. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 196 of 516                 |



Plot 7-264. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 197 of 516                 |

### SISO Antenna-2 Power Spectral Density Measurements (52 Tones)

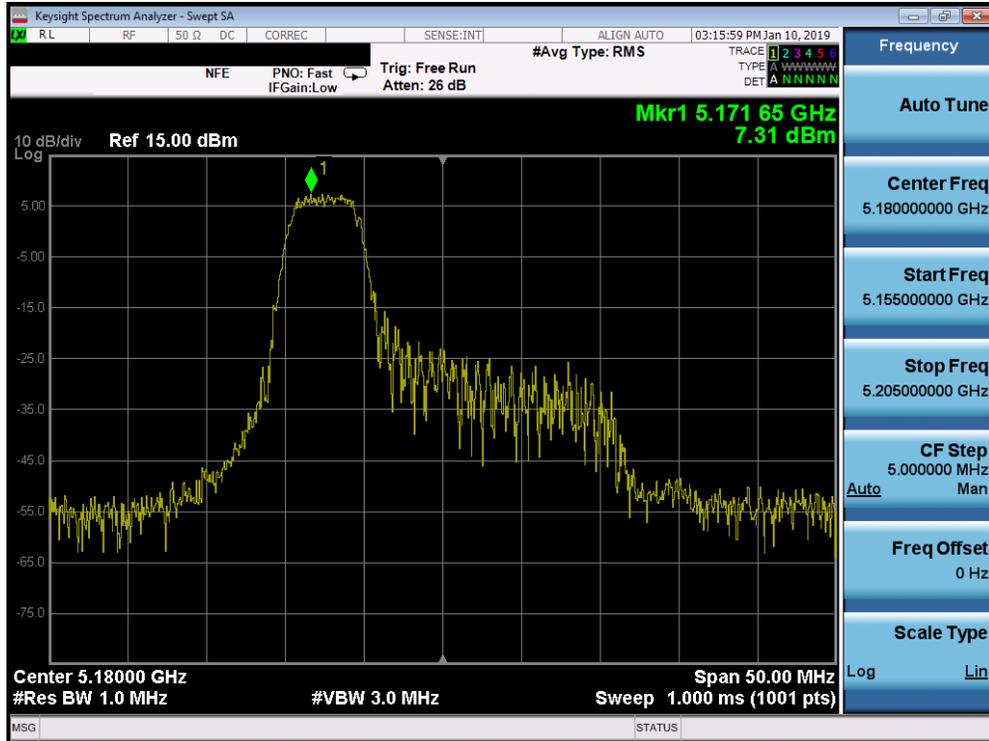
|         | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|---------|-----------------|-------------|-------------|-------|------------------|------------------------------|-----------------------------|-------------|
| Band 1  | 5180            | 36          | ax (20MHz)  | 52T   | MCS0             | 7.31                         | 11.0                        | -3.69       |
|         | 5200            | 40          | ax (20MHz)  | 52T   | MCS0             | 7.83                         | 11.0                        | -3.17       |
|         | 5240            | 48          | ax (20MHz)  | 52T   | MCS0             | 8.08                         | 11.0                        | -2.92       |
|         | 5190            | 38          | ax (40MHz)  | 52T   | MCS0             | 7.73                         | 11.0                        | -3.27       |
|         | 5230            | 46          | ax (40MHz)  | 52T   | MCS0             | 8.01                         | 11.0                        | -2.99       |
|         | 5210            | 42          | ax (80MHz)  | 52T   | MCS0             | 6.86                         | 11.0                        | -4.14       |
| Band 2A | 5260            | 52          | ax (20MHz)  | 52T   | MCS0             | 8.24                         | 11.0                        | -2.76       |
|         | 5280            | 56          | ax (20MHz)  | 52T   | MCS0             | 8.71                         | 11.0                        | -2.29       |
|         | 5320            | 64          | ax (20MHz)  | 52T   | MCS0             | 8.04                         | 11.0                        | -2.96       |
|         | 5270            | 54          | ax (40MHz)  | 52T   | MCS0             | 8.01                         | 11.0                        | -2.99       |
|         | 5310            | 62          | ax (40MHz)  | 52T   | MCS0             | 7.81                         | 11.0                        | -3.19       |
|         | 5290            | 58          | ax (80MHz)  | 52T   | MCS0             | 6.61                         | 11.0                        | -4.39       |
| Band 2C | 5500            | 100         | ax (20MHz)  | 52T   | MCS0             | 8.23                         | 11.0                        | -2.77       |
|         | 5600            | 120         | ax (20MHz)  | 52T   | MCS0             | 8.16                         | 11.0                        | -2.84       |
|         | 5720            | 144         | ax (20MHz)  | 52T   | MCS0             | 7.95                         | 11.0                        | -3.05       |
|         | 5510            | 102         | ax (40MHz)  | 52T   | MCS0             | 7.99                         | 11.0                        | -3.01       |
|         | 5590            | 118         | ax (40MHz)  | 52T   | MCS0             | 7.62                         | 11.0                        | -3.38       |
|         | 5710            | 142         | ax (40MHz)  | 52T   | MCS0             | 7.53                         | 11.0                        | -3.47       |
|         | 5530            | 106         | ax (80MHz)  | 52T   | MCS0             | 6.47                         | 11.0                        | -4.53       |
|         | 5610            | 122         | ax (80MHz)  | 52T   | MCS0             | 6.31                         | 11.0                        | -4.69       |
|         | 5690            | 138         | ax (80MHz)  | 52T   | MCS0             | 3.69                         | 11.0                        | -7.31       |

Table 7-84. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT2 (52 Tones)

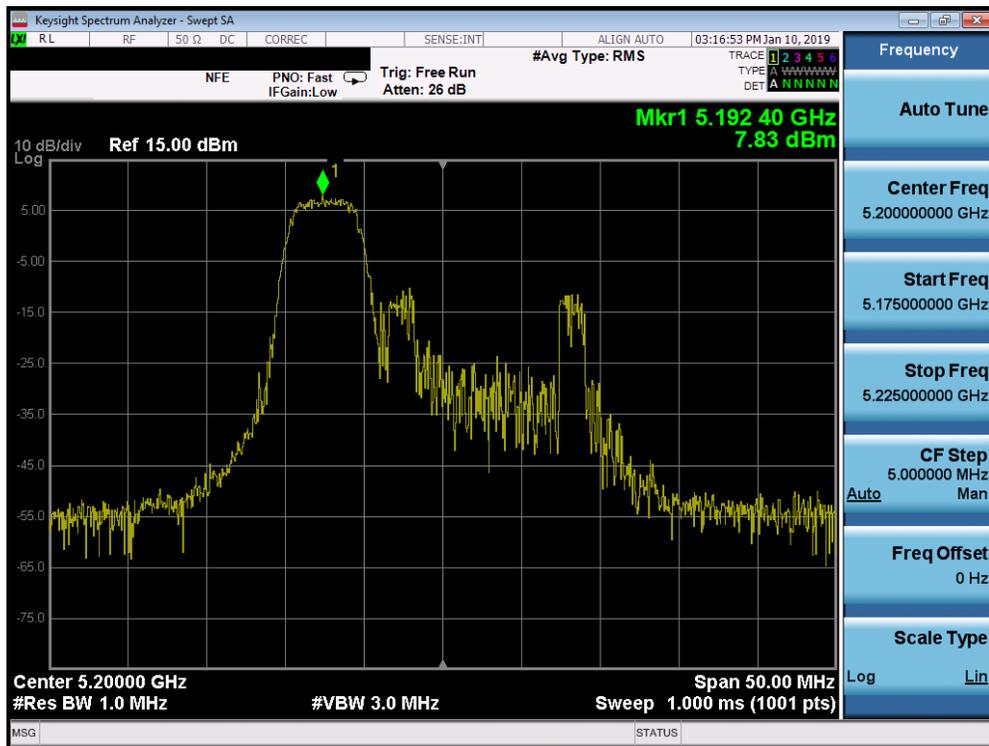
|        | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Antenna Gain [dBi] | e.i.r.p. Power Density [dBm/MHz] | ISED Max e.i.r.p. Power Density | Margin [dB] |
|--------|-----------------|-------------|-------------|-------|------------------|------------------------------|--------------------|----------------------------------|---------------------------------|-------------|
| Band 1 | 5180            | 36          | ax (20MHz)  | 52T   | MCS0             | 7.31                         | -8.43              | -1.12                            | 10.0                            | -11.12      |
|        | 5200            | 40          | ax (20MHz)  | 52T   | MCS0             | 7.83                         | -8.34              | -0.51                            | 10.0                            | -10.51      |
|        | 5240            | 48          | ax (20MHz)  | 52T   | MCS0             | 8.08                         | -7.99              | 0.09                             | 10.0                            | -9.91       |
|        | 5190            | 38          | ax (40MHz)  | 52T   | MCS0             | 7.73                         | -8.43              | -0.70                            | 10.0                            | -10.70      |
|        | 5230            | 46          | ax (40MHz)  | 52T   | MCS0             | 8.01                         | -8.34              | -0.33                            | 10.0                            | -10.33      |
|        | 5210            | 42          | ax (80MHz)  | 52T   | MCS0             | 6.86                         | -7.99              | -1.13                            | 10.0                            | -11.13      |

Table 7-85. Bands 1 e.i.r.p Conducted Power Spectral Density Measurements (ISED 52 Tones)

|   |   |                                       |  |   |                                 |
|---|---|---------------------------------------|--|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |  | Page 198 of 516   |                                 |

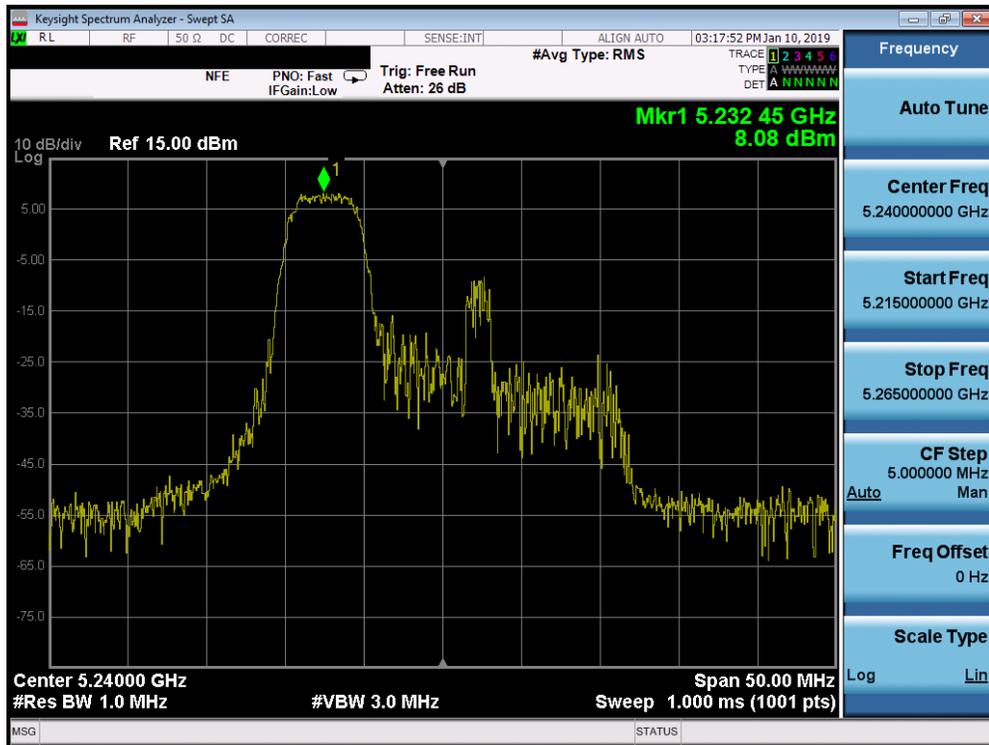


Plot 7-265. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 36)

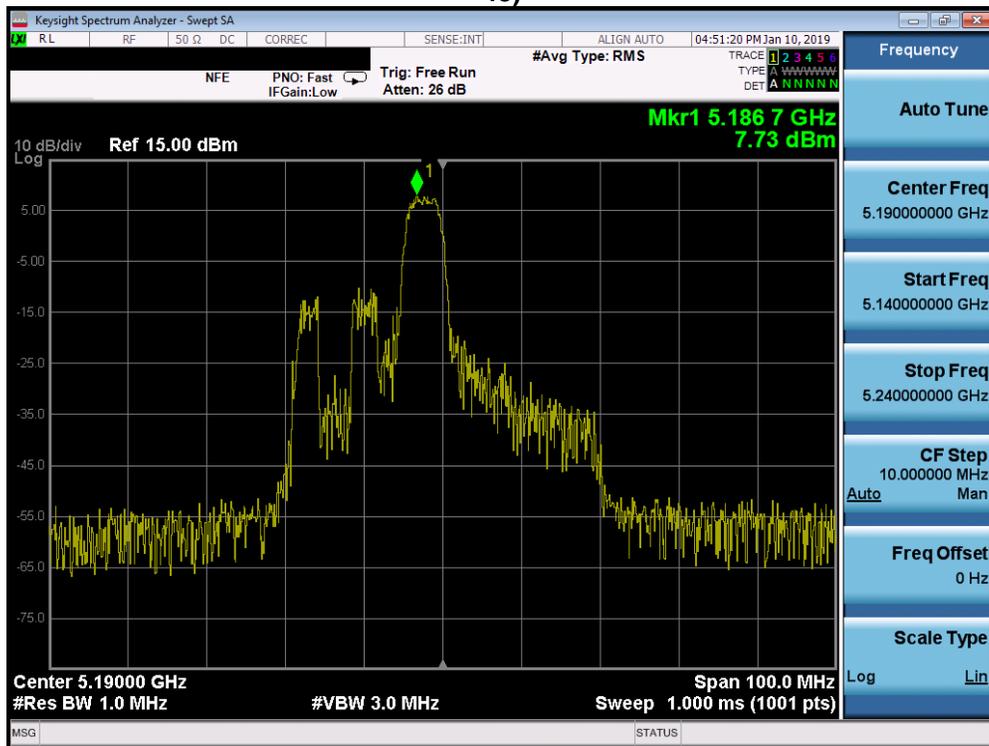


Plot 7-266. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 40)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 199 of 516                 |

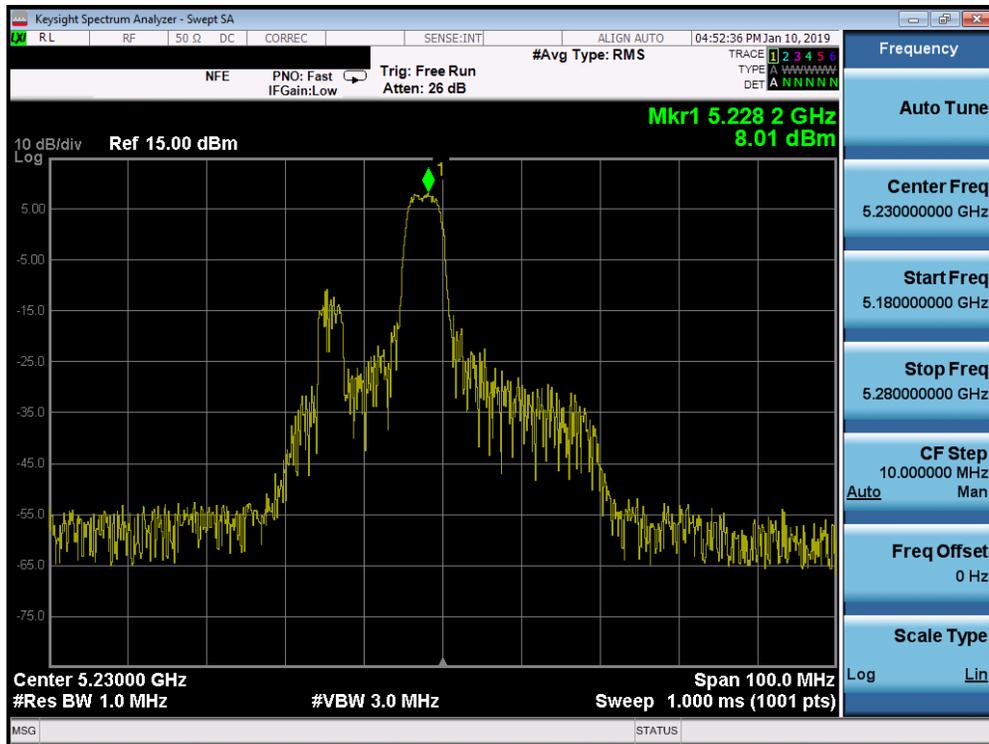


Plot 7-267. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 48)

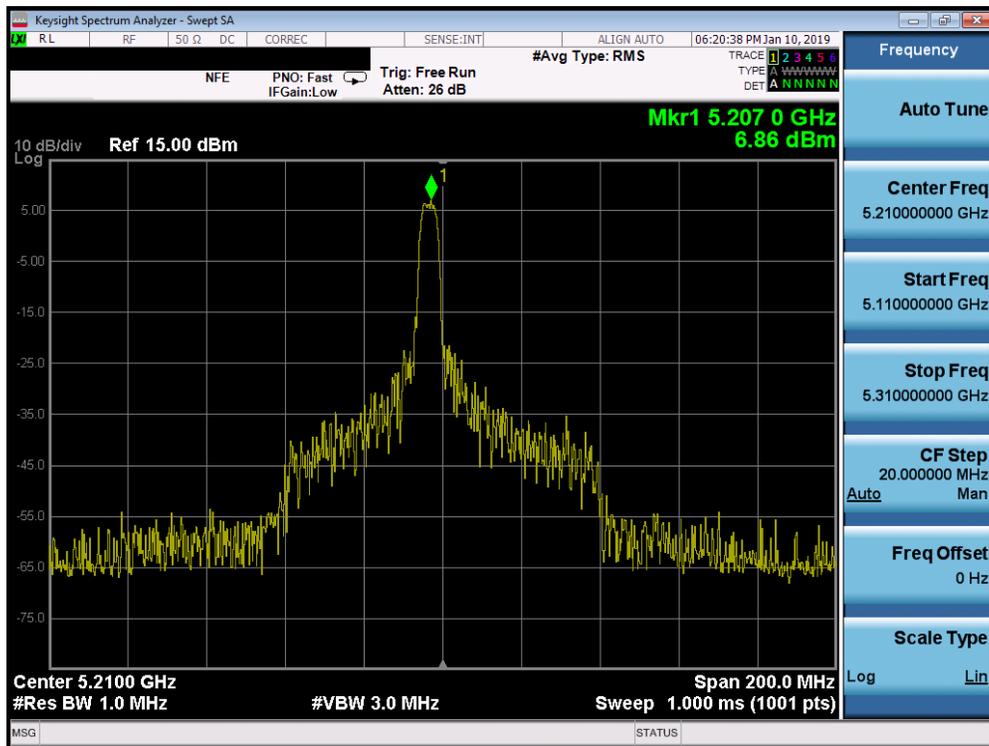


Plot 7-268. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 38)

|   |  |                                       |         |                                 |
|---|--|---------------------------------------|---------|---------------------------------|
| FCC ID: A3LSMG975U                      | PCTEST<br>ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT<br>(CERTIFICATION) | SAMSUNG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019    | EUT Type:<br>Portable Handset         |         | Page 200 of 516                 |

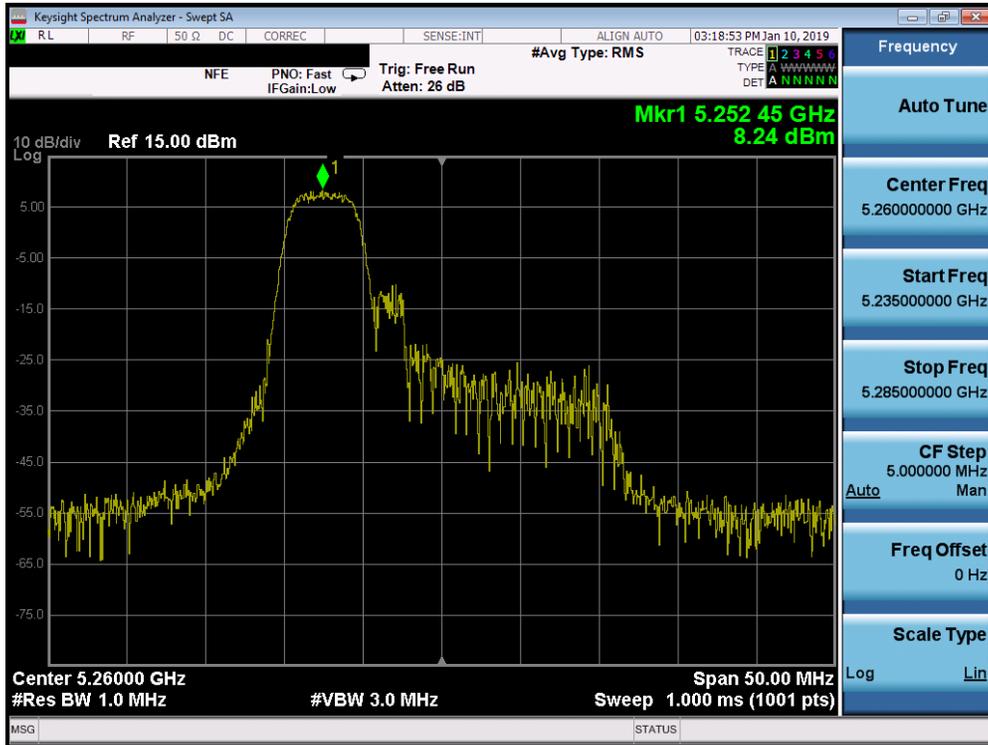


Plot 7-269. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 46)

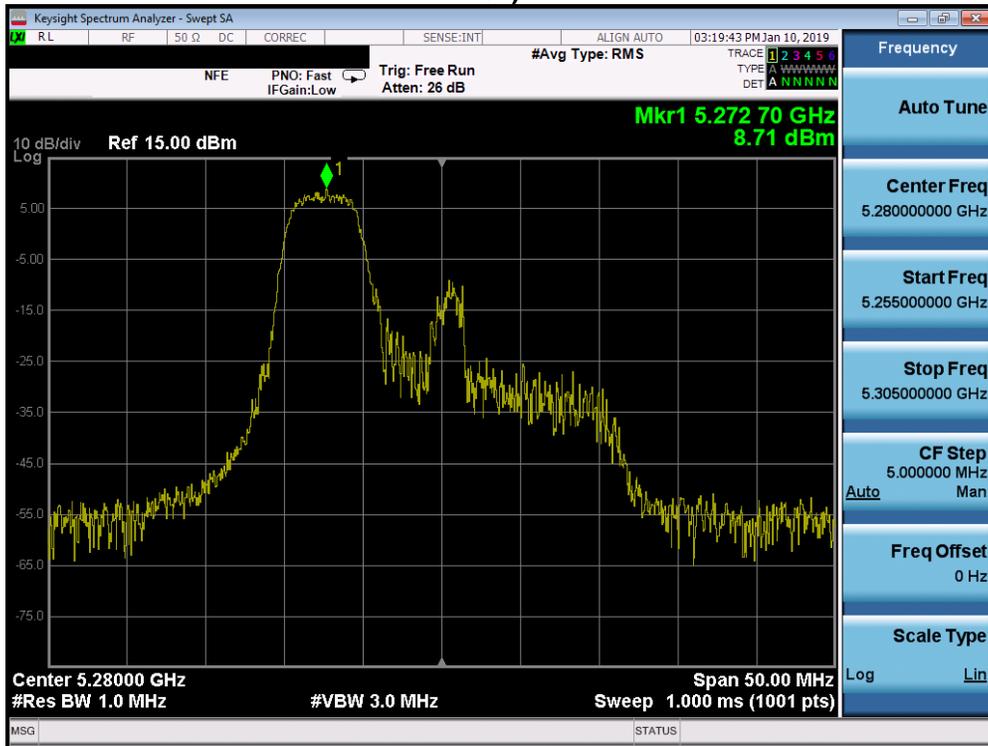


Plot 7-270. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 42)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 201 of 516                 |

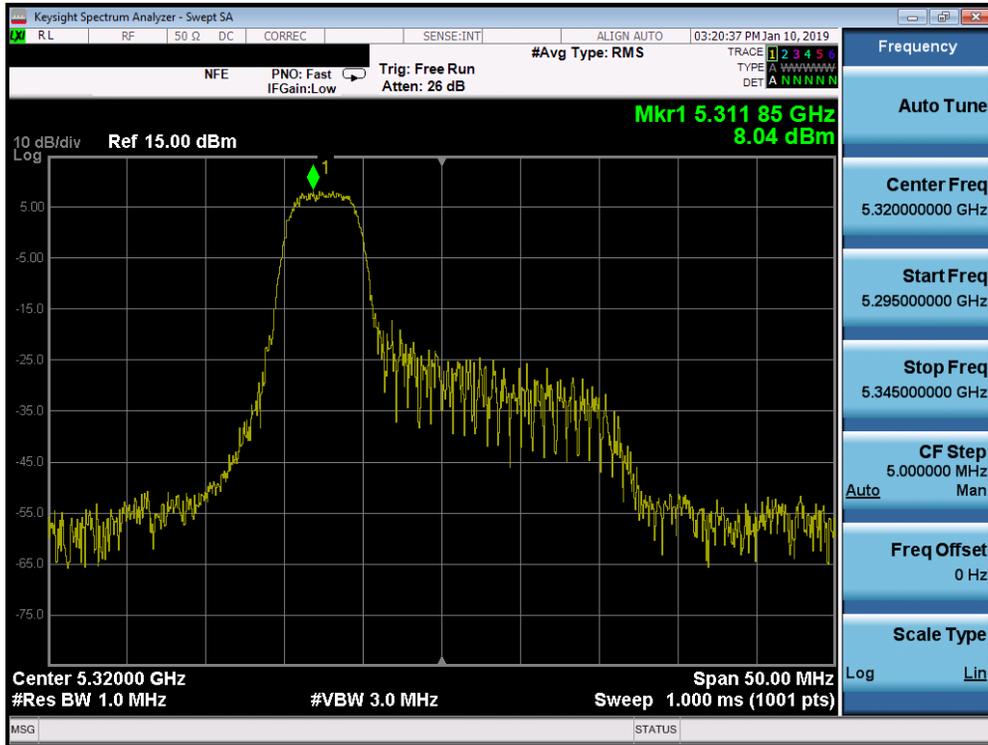


Plot 7-271. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 52)

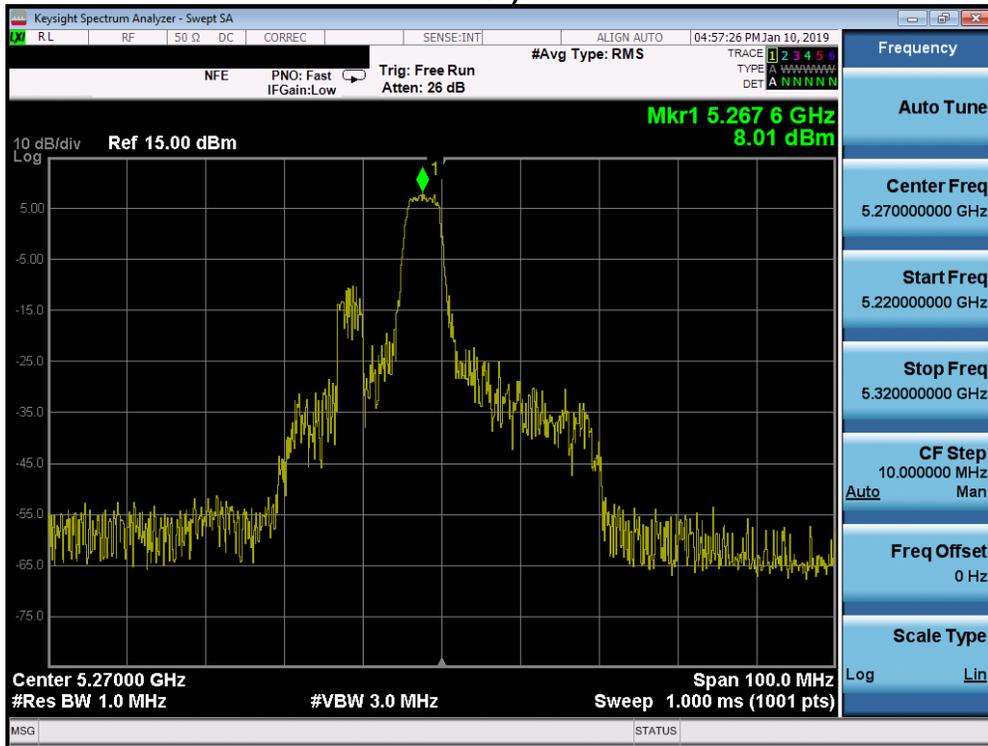


Plot 7-272. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 56)

|   |  |                                       |         |                                 |
|---|--|---------------------------------------|---------|---------------------------------|
| FCC ID: A3LSMG975U                      | PCTEST<br>ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT<br>(CERTIFICATION) | SAMSUNG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019    | EUT Type:<br>Portable Handset         |         | Page 202 of 516                 |

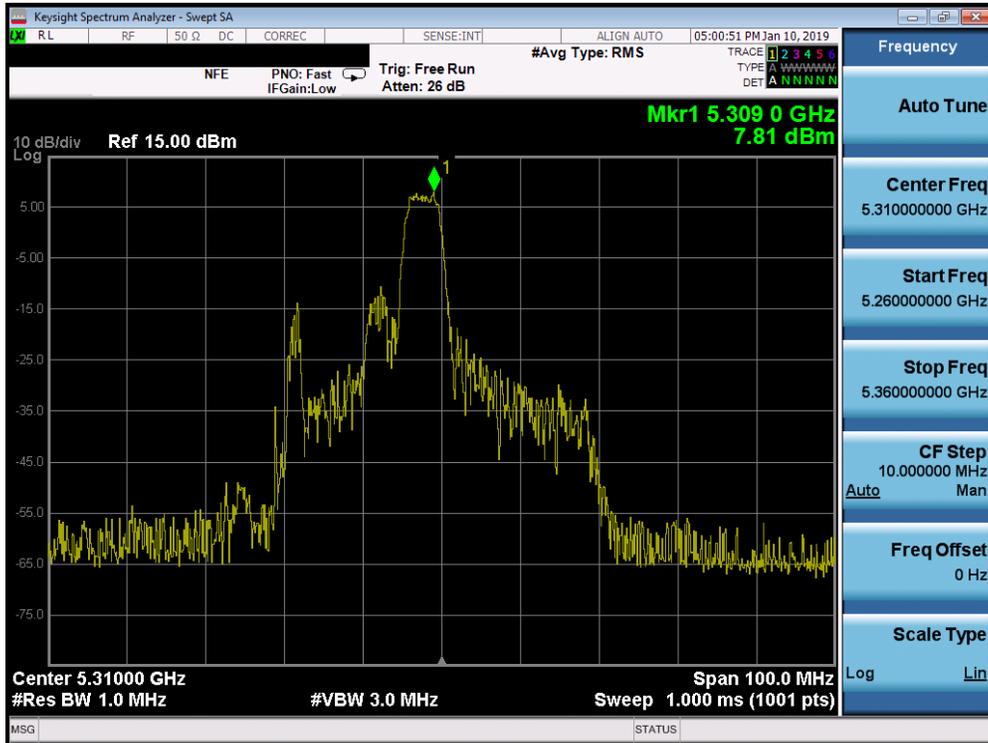


Plot 7-273. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 64)

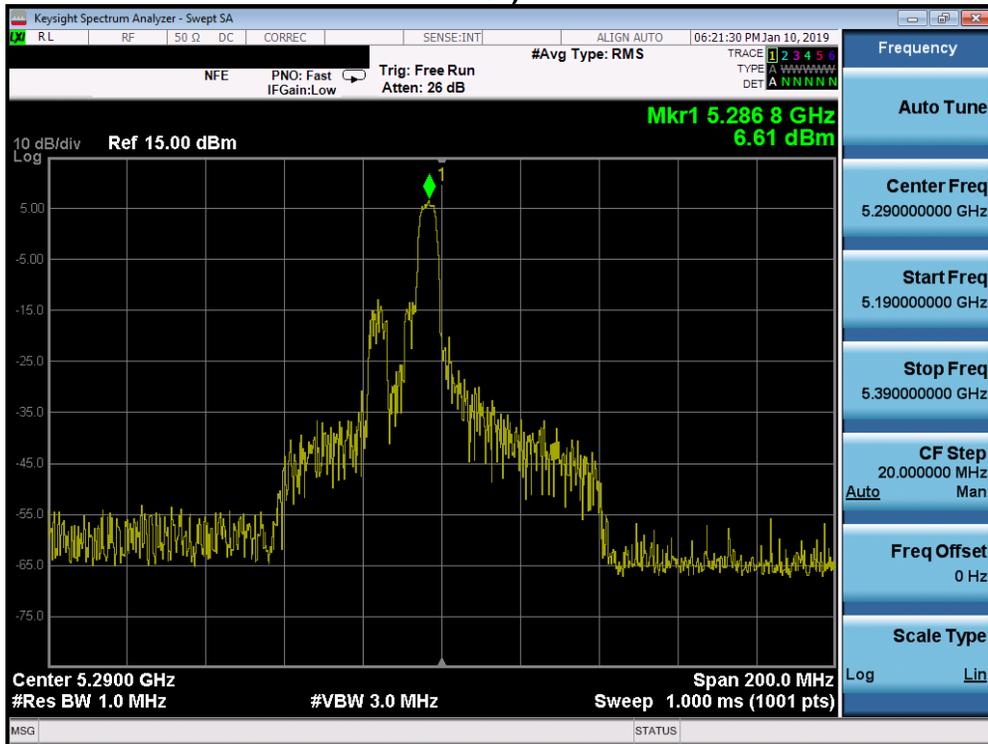


Plot 7-274. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 54)

|   |  |                                       |         |                                 |
|---|--|---------------------------------------|---------|---------------------------------|
| FCC ID: A3LSMG975U                      | PCTEST<br>ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT<br>(CERTIFICATION) | SAMSUNG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019    | EUT Type:<br>Portable Handset         |         | Page 203 of 516                 |

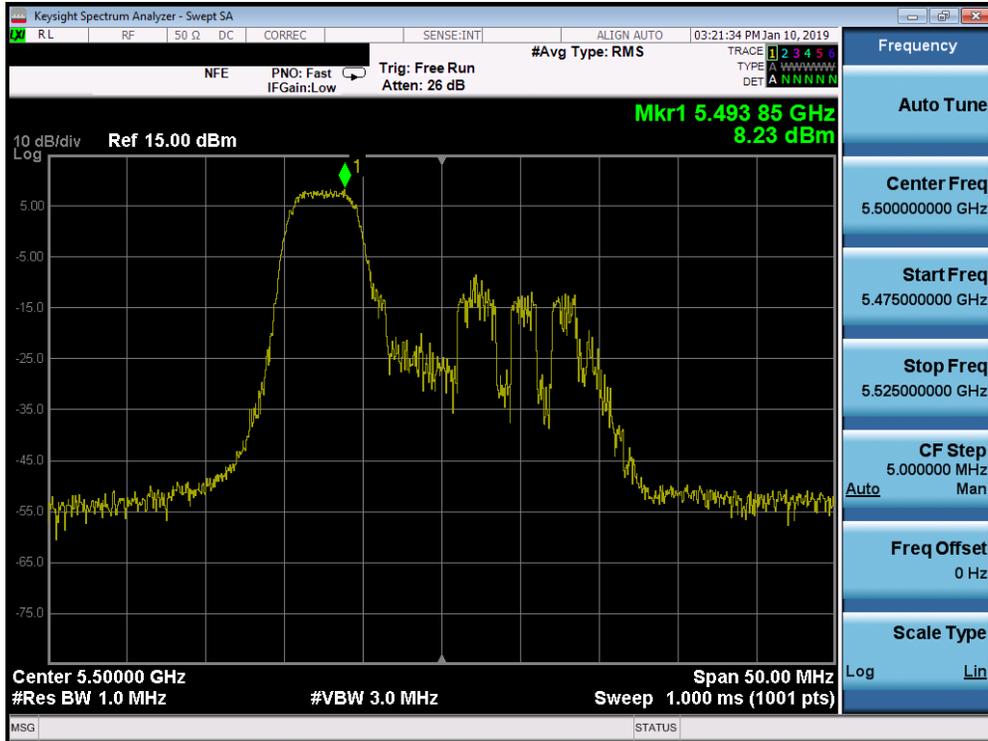


Plot 7-275. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 62)

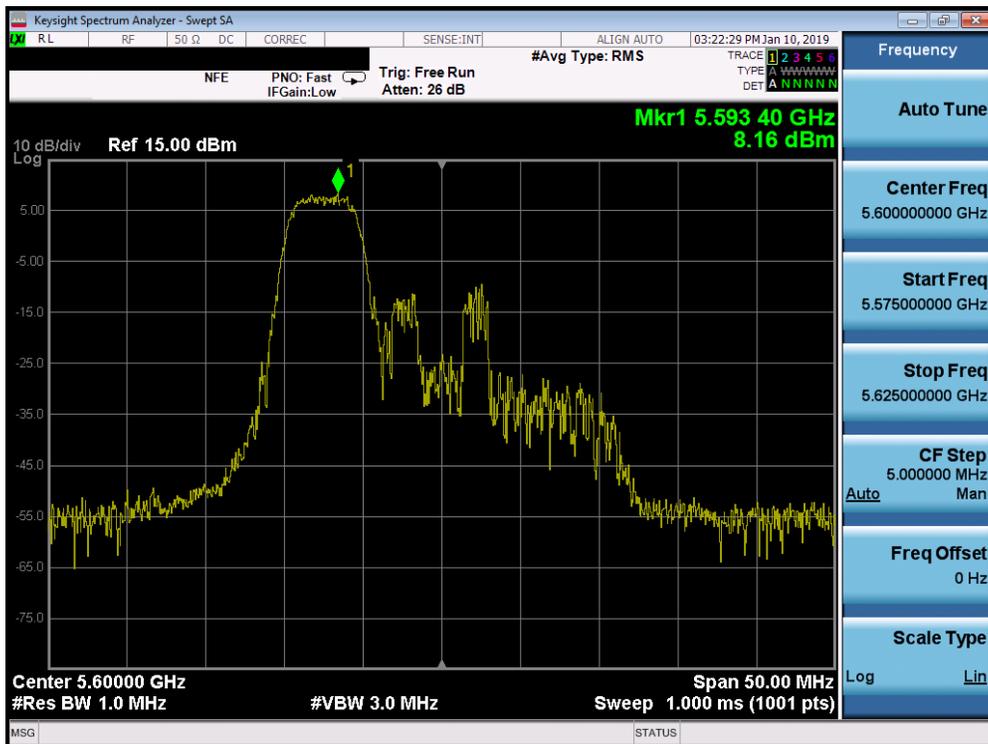


Plot 7-276. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 58)

|   |  |                                       |         |                                 |
|---|--|---------------------------------------|---------|---------------------------------|
| FCC ID: A3LSMG975U                      | PCTEST<br>ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT<br>(CERTIFICATION) | SAMSUNG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019    | EUT Type:<br>Portable Handset         |         | Page 204 of 516                 |

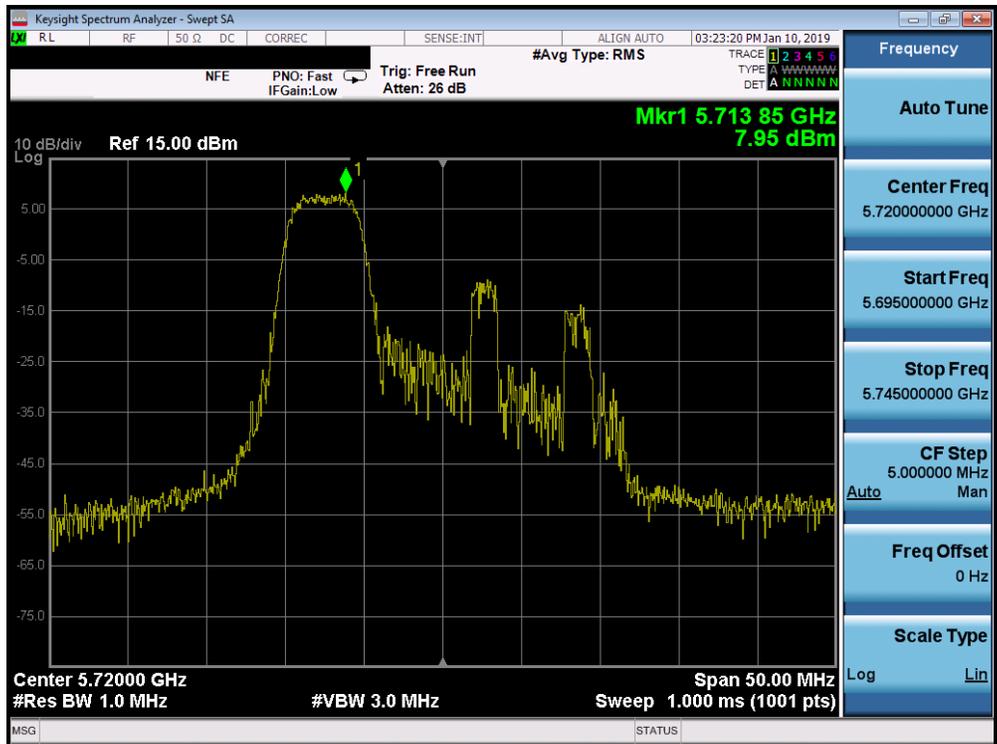


Plot 7-277. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 100)

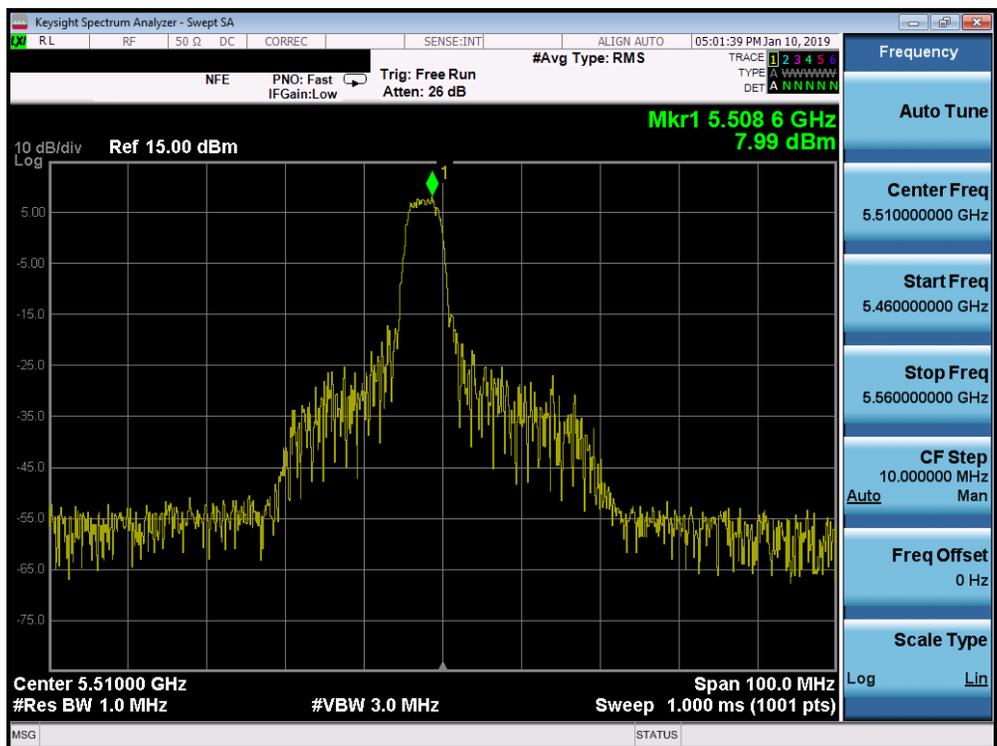


Plot 7-278. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 120)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 205 of 516                 |

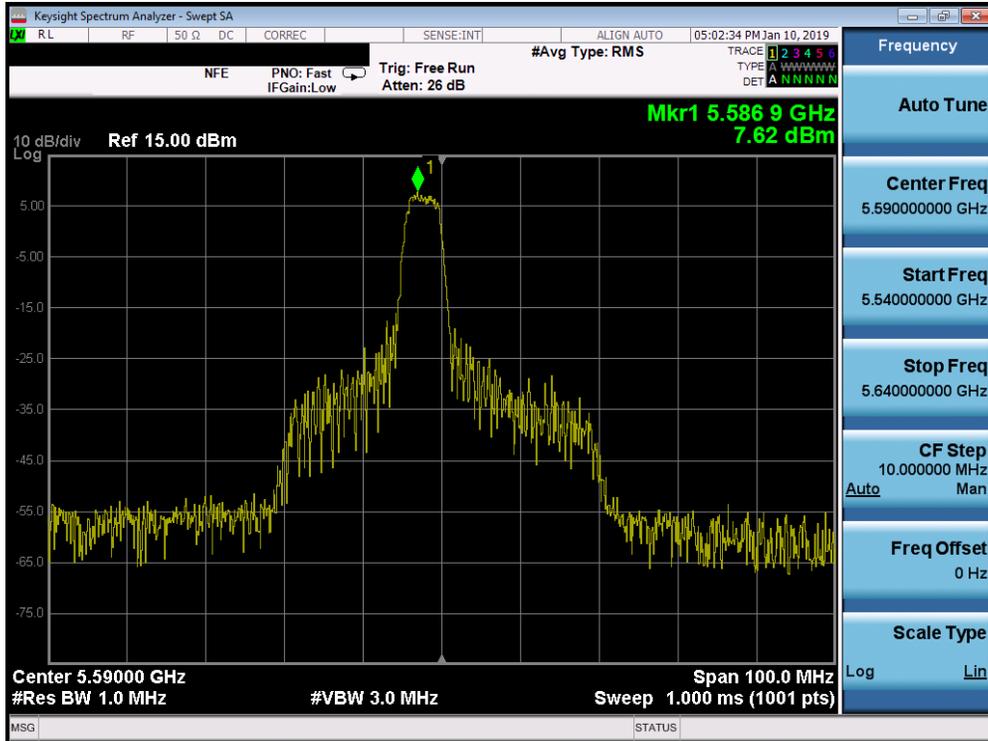


Plot 7-279. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 144)

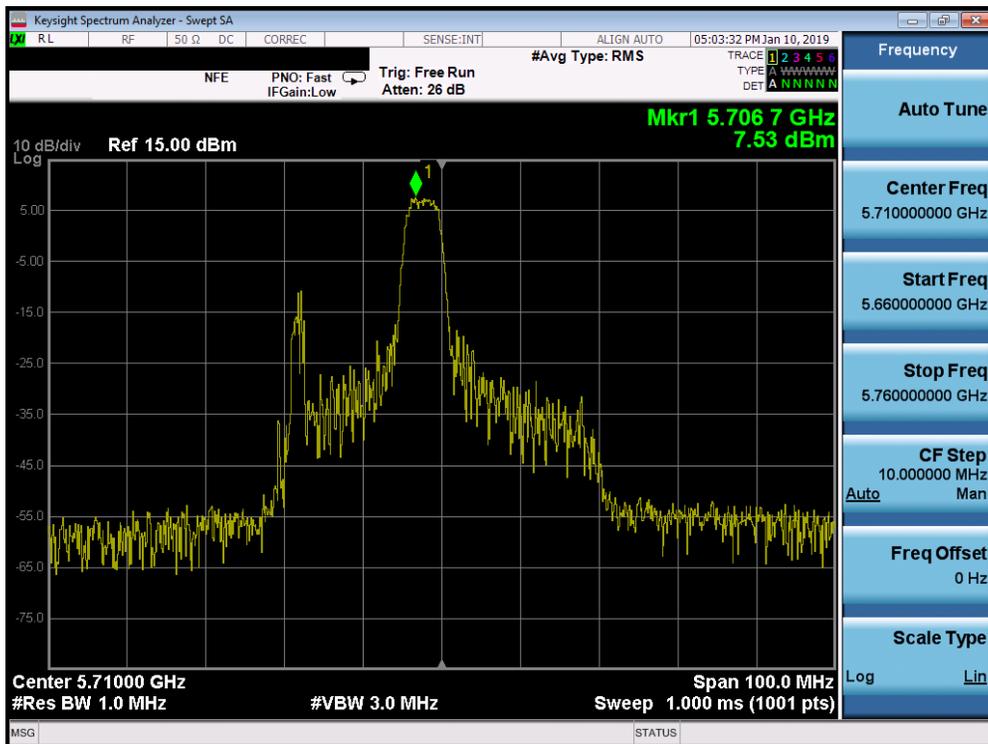


Plot 7-280. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 102)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 206 of 516                 |



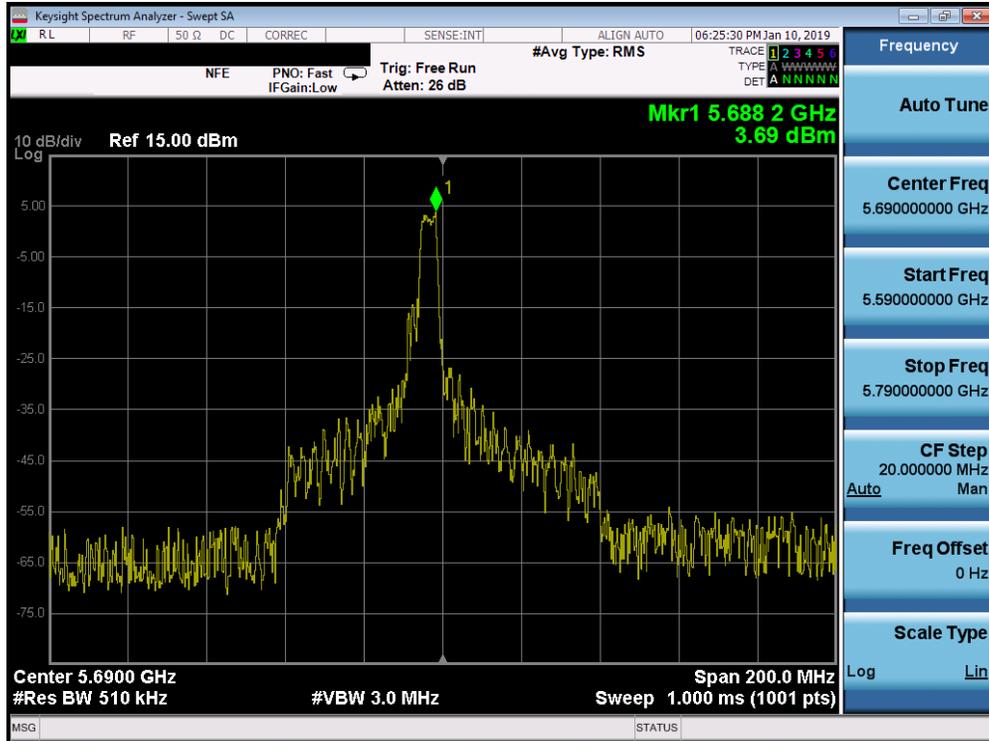
Plot 7-281. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 118)



Plot 7-282. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 142)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 207 of 516                 |



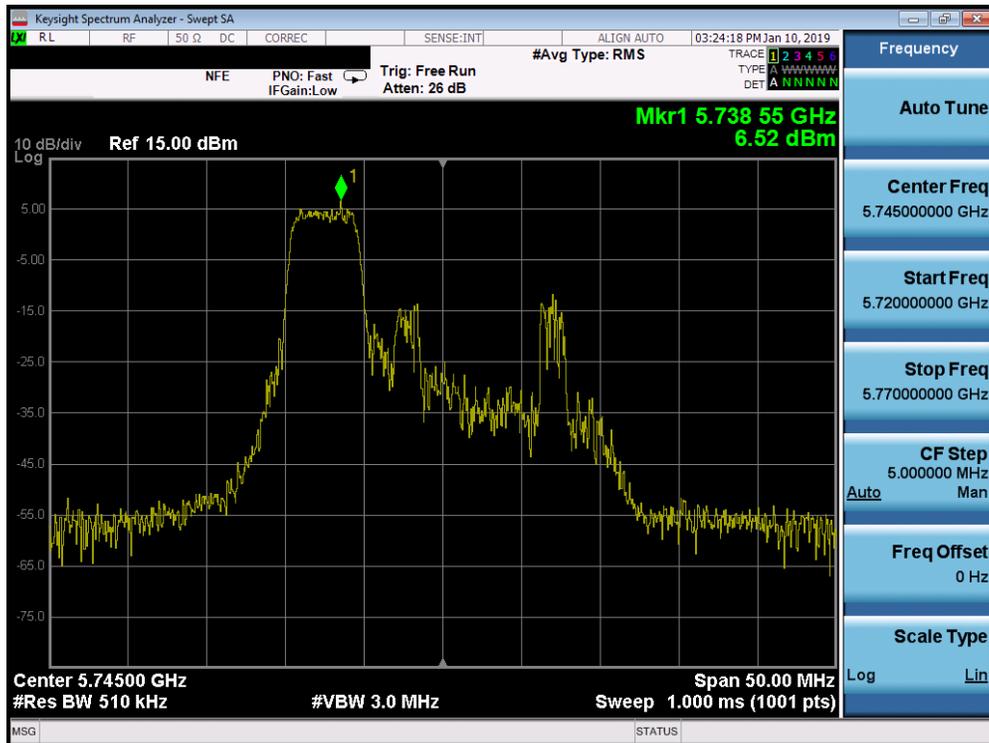


Plot 7-285. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 138)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 209 of 516                 |

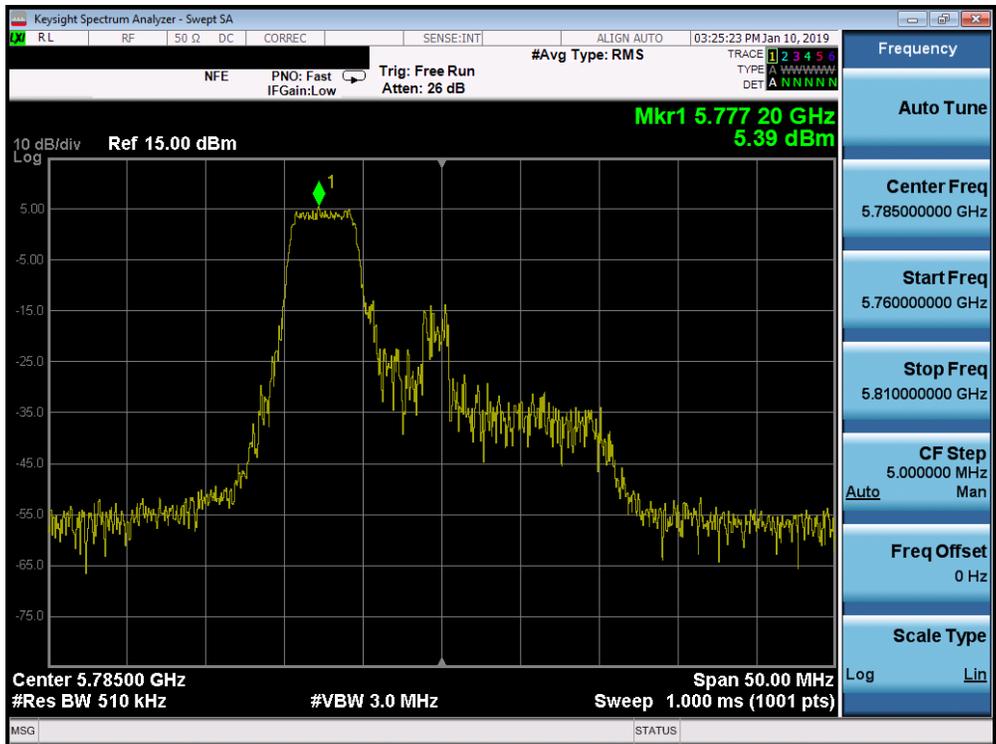
|               | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Permissible Power Density [dBm/500kHz] | Margin [dB] |
|---------------|-----------------|-------------|-------------|-------|------------------|------------------------------|--|-------------|
| <b>Band 3</b> | 5745            | 149         | ax (20MHz)  | 52T   | MCS0             | 6.52                         | 30.0                                       | -23.48      |
|               | 5785            | 157         | ax (20MHz)  | 52T   | MCS0             | 5.39                         | 30.0                                       | -24.61      |
|               | 5825            | 165         | ax (20MHz)  | 52T   | MCS0             | 4.21                         | 30.0                                       | -25.79      |
|               | 5755            | 151         | ax (40MHz)  | 52T   | MCS0             | 4.76                         | 30.0                                       | -25.24      |
|               | 5795            | 159         | ax (40MHz)  | 52T   | MCS0             | 0.52                         | 30.0                                       | -29.48      |
|               | 5775            | 155         | ax (80MHz)  | 52T   | MCS0             | 6.35                         | 30.0                                       | -23.65      |

**Table 7-86. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (52 Tones)**

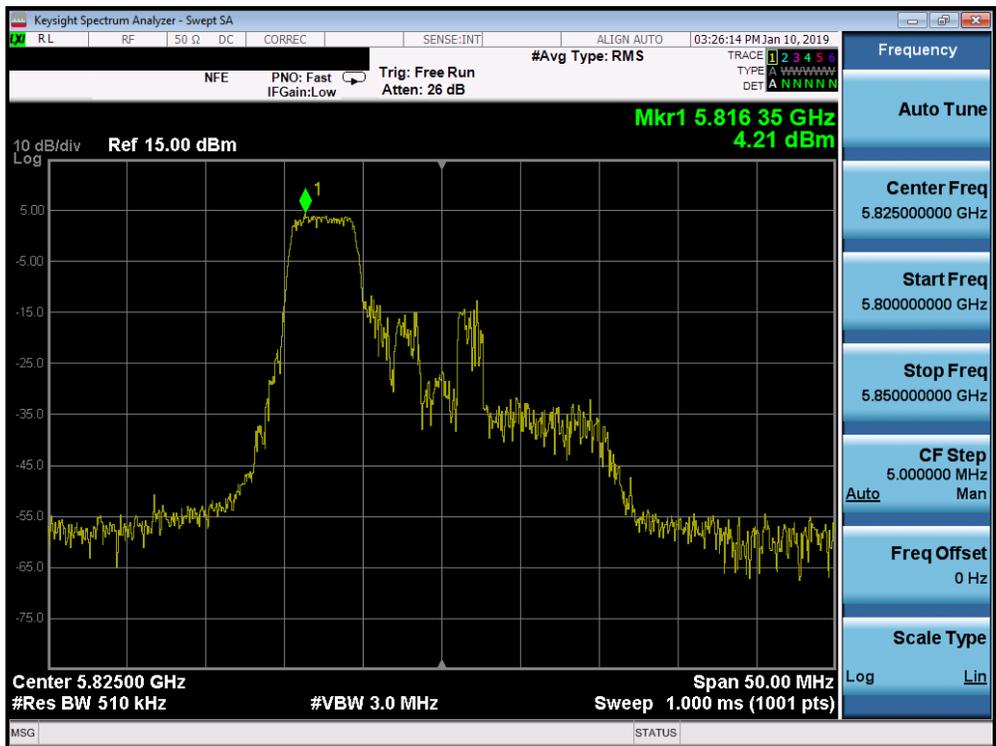


**Plot 7-286. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 149)**

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 210 of 516                 |



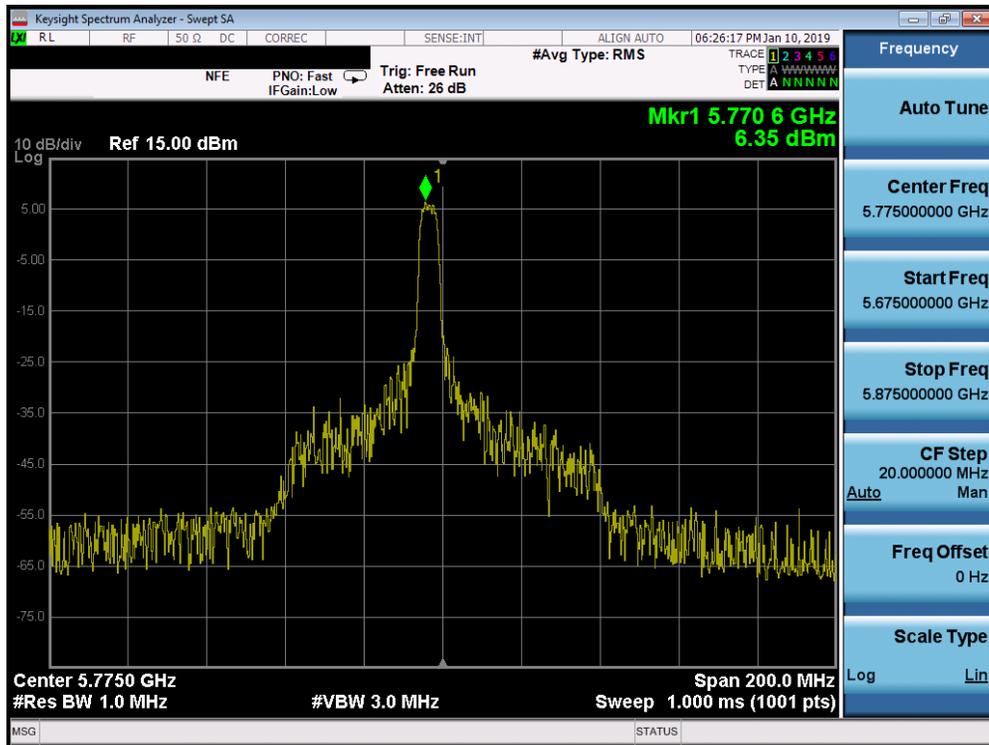
Plot 7-287. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 157)



Plot 7-288. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 165)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 211 of 516                 |





Plot 7-291. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 155)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 213 of 516                 |

### SISO Antenna-2 Power Spectral Density Measurements (106 Tones)

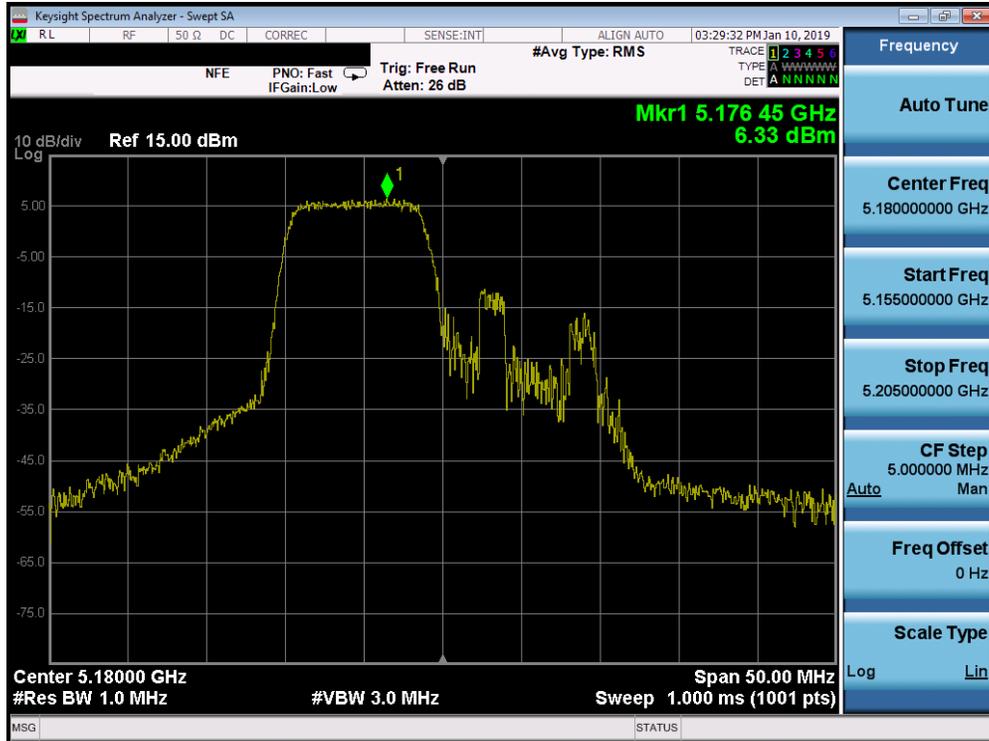
|         | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|---------|-----------------|-------------|-------------|-------|------------------|------------------------------|-----------------------------|-------------|
| Band 1  | 5180            | 36          | ax (20MHz)  | 106T  | MCS0             | 6.33                         | 11.0                        | -4.67       |
|         | 5200            | 40          | ax (20MHz)  | 106T  | MCS0             | 6.97                         | 11.0                        | -4.03       |
|         | 5240            | 48          | ax (20MHz)  | 106T  | MCS0             | 7.14                         | 11.0                        | -3.86       |
|         | 5190            | 38          | ax (40MHz)  | 106T  | MCS0             | 4.00                         | 11.0                        | -7.00       |
|         | 5230            | 46          | ax (40MHz)  | 106T  | MCS0             | 5.82                         | 11.0                        | -5.18       |
|         | 5210            | 42          | ax (80MHz)  | 106T  | MCS0             | 4.67                         | 11.0                        | -6.33       |
| Band 2A | 5260            | 52          | ax (20MHz)  | 106T  | MCS0             | 7.35                         | 11.0                        | -3.65       |
|         | 5280            | 56          | ax (20MHz)  | 106T  | MCS0             | 7.35                         | 11.0                        | -3.65       |
|         | 5320            | 64          | ax (20MHz)  | 106T  | MCS0             | 7.37                         | 11.0                        | -3.63       |
|         | 5270            | 54          | ax (40MHz)  | 106T  | MCS0             | 5.49                         | 11.0                        | -5.51       |
|         | 5310            | 62          | ax (40MHz)  | 106T  | MCS0             | 5.06                         | 11.0                        | -5.94       |
|         | 5290            | 58          | ax (80MHz)  | 106T  | MCS0             | 4.37                         | 11.0                        | -6.63       |
| Band 2C | 5500            | 100         | ax (20MHz)  | 106T  | MCS0             | 7.50                         | 11.0                        | -3.50       |
|         | 5600            | 120         | ax (20MHz)  | 106T  | MCS0             | 6.99                         | 11.0                        | -4.01       |
|         | 5720            | 144         | ax (20MHz)  | 106T  | MCS0             | 7.21                         | 11.0                        | -3.79       |
|         | 5510            | 102         | ax (40MHz)  | 106T  | MCS0             | 5.50                         | 11.0                        | -5.50       |
|         | 5550            | 118         | ax (40MHz)  | 106T  | MCS0             | 5.33                         | 11.0                        | -5.67       |
|         | 5710            | 142         | ax (40MHz)  | 106T  | MCS0             | 5.10                         | 11.0                        | -5.90       |
|         | 5530            | 106         | ax (80MHz)  | 106T  | MCS0             | 4.92                         | 11.0                        | -6.08       |
|         | 5610            | 122         | ax (80MHz)  | 106T  | MCS0             | 4.50                         | 11.0                        | -6.50       |
|         | 5690            | 138         | ax (80MHz)  | 106T  | MCS0             | 1.20                         | 11.0                        | -9.80       |

Table 7-87. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT2 (106 Tones)

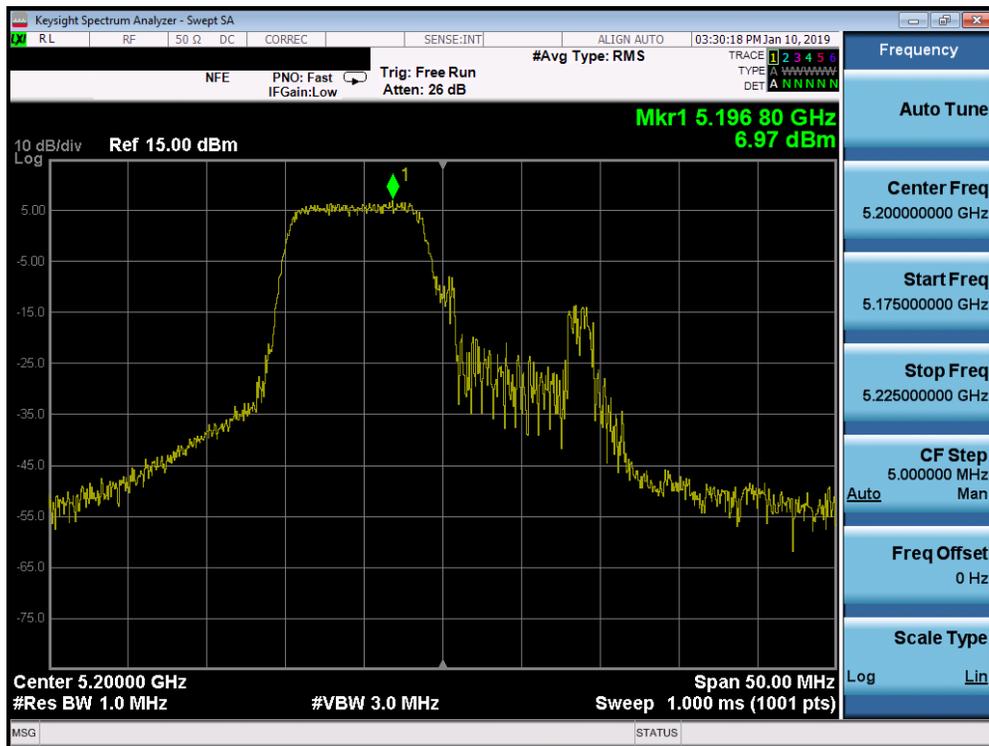
|        | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Antenna Gain [dBi] | e.i.r.p. Power Density [dBm/MHz] | ISED Max e.i.r.p. Power Density | Margin [dB] |
|--------|-----------------|-------------|-------------|-------|------------------|------------------------------|--------------------|----------------------------------|---------------------------------|-------------|
| Band 1 | 5180            | 36          | ax (20MHz)  | 106T  | MCS0             | 6.33                         | -8.43              | -2.10                            | 10.0                            | -12.10      |
|        | 5200            | 40          | ax (20MHz)  | 106T  | MCS0             | 6.97                         | -8.34              | -1.37                            | 10.0                            | -11.37      |
|        | 5240            | 48          | ax (20MHz)  | 106T  | MCS0             | 7.14                         | -7.99              | -0.85                            | 10.0                            | -10.85      |
|        | 5190            | 38          | ax (40MHz)  | 106T  | MCS0             | 4.00                         | -8.43              | -4.43                            | 10.0                            | -14.43      |
|        | 5230            | 46          | ax (40MHz)  | 106T  | MCS0             | 5.82                         | -8.34              | -2.52                            | 10.0                            | -12.52      |
|        | 5210            | 42          | ax (80MHz)  | 106T  | MCS0             | 4.67                         | -7.99              | -3.32                            | 10.0                            | -13.32      |

Table 7-88. Bands 1 e.r.i.p Conducted Power Spectral Density Measurements (ISED 106 Tones)

|   |   |                                    |  |   |                                 |
|---|---|------------------------------------|--|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT (CERTIFICATION) |  |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset      |  | Page 214 of 516   |                                 |

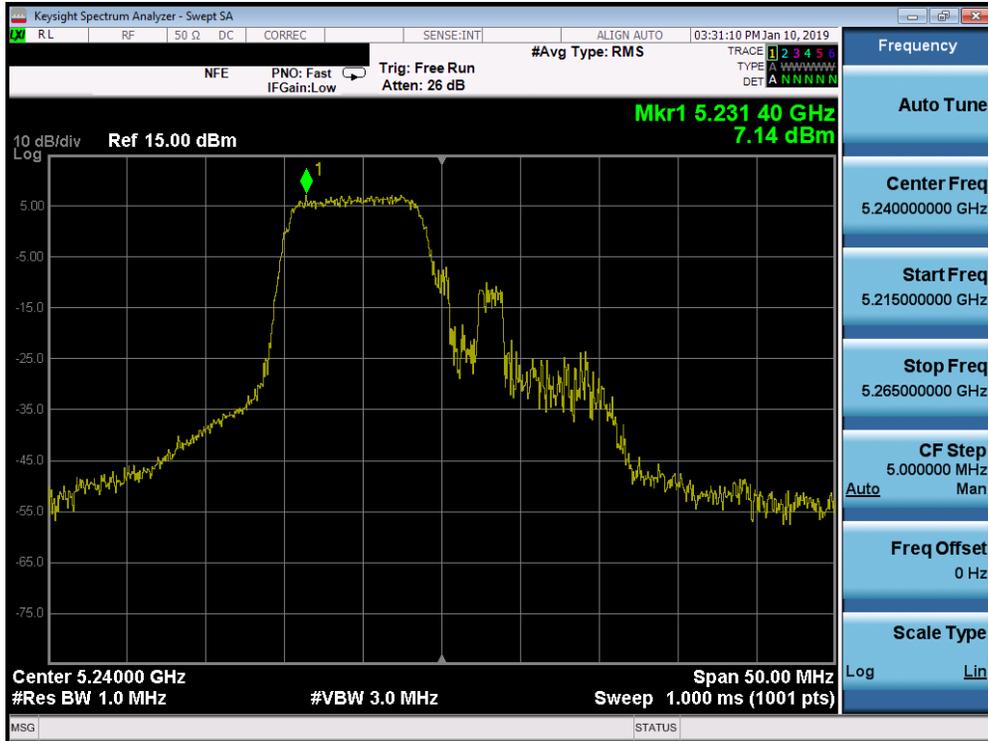


Plot 7-292. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 36)



Plot 7-293. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 40)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 215 of 516                 |



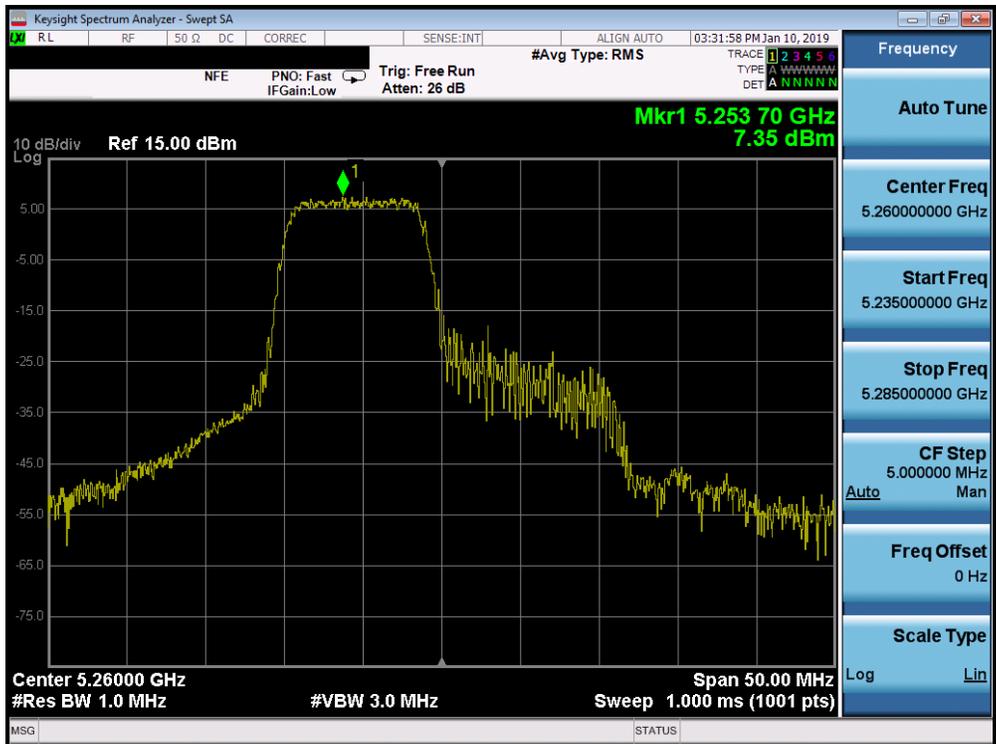
Plot 7-294. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 48)



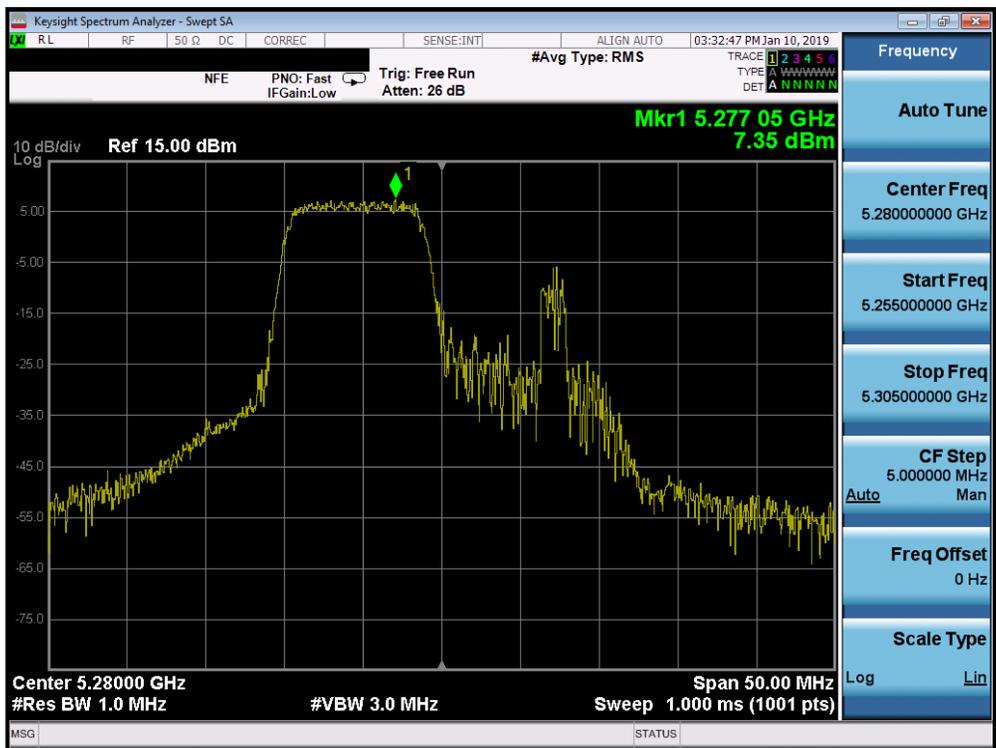
Plot 7-295. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 38)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 216 of 516                 |



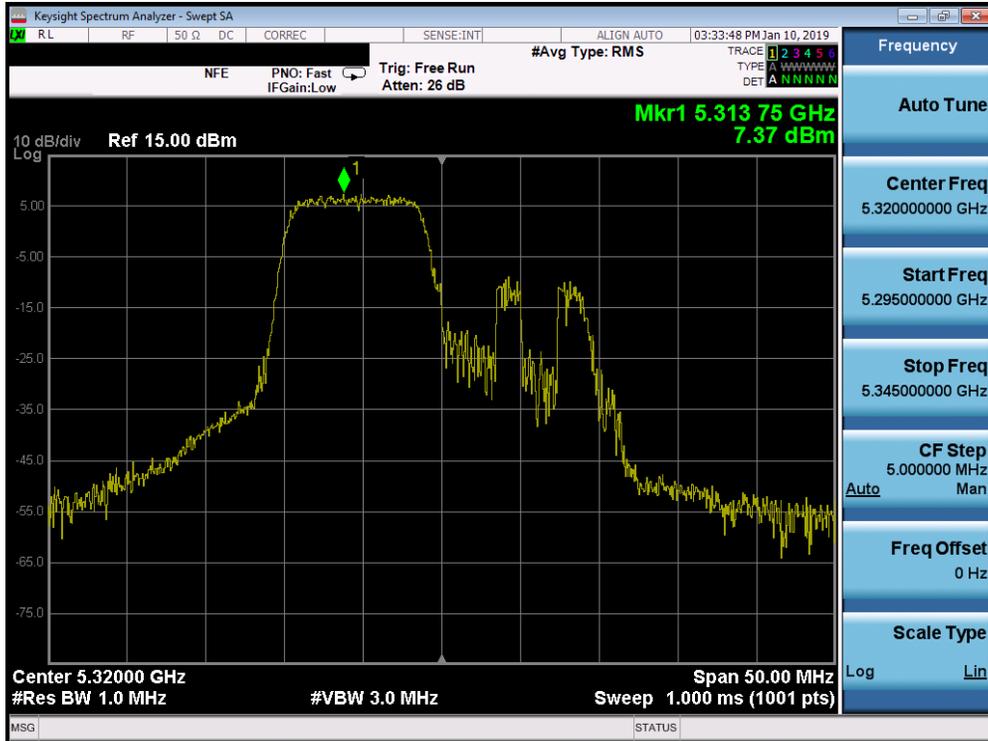


Plot 7-298. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 52)

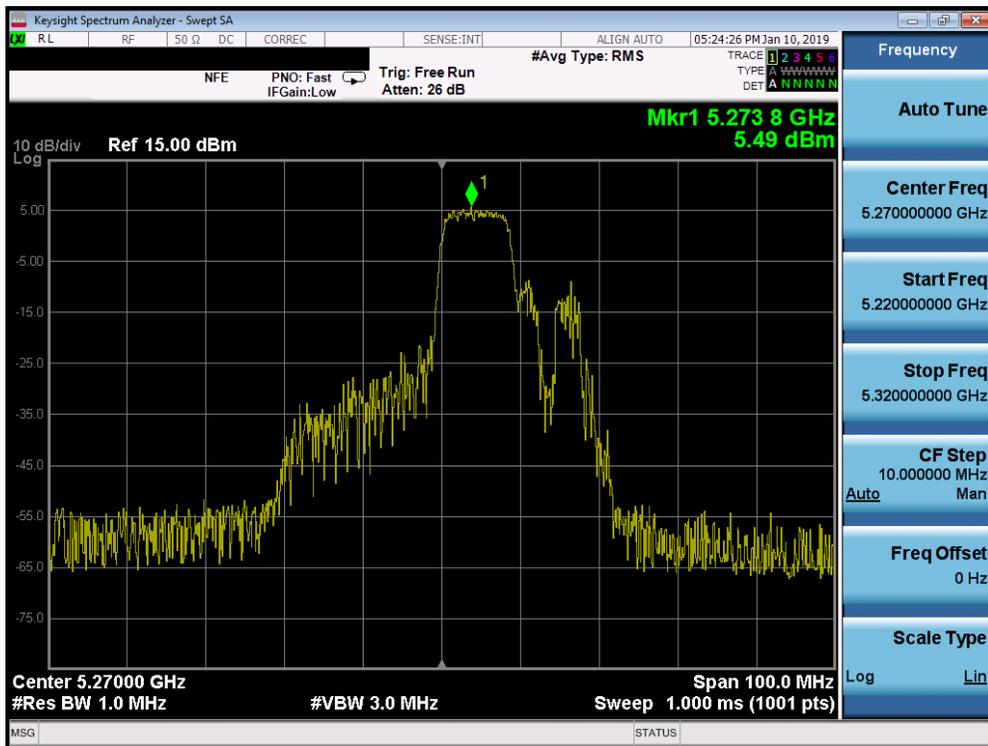


Plot 7-299. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 56)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 218 of 516                 |

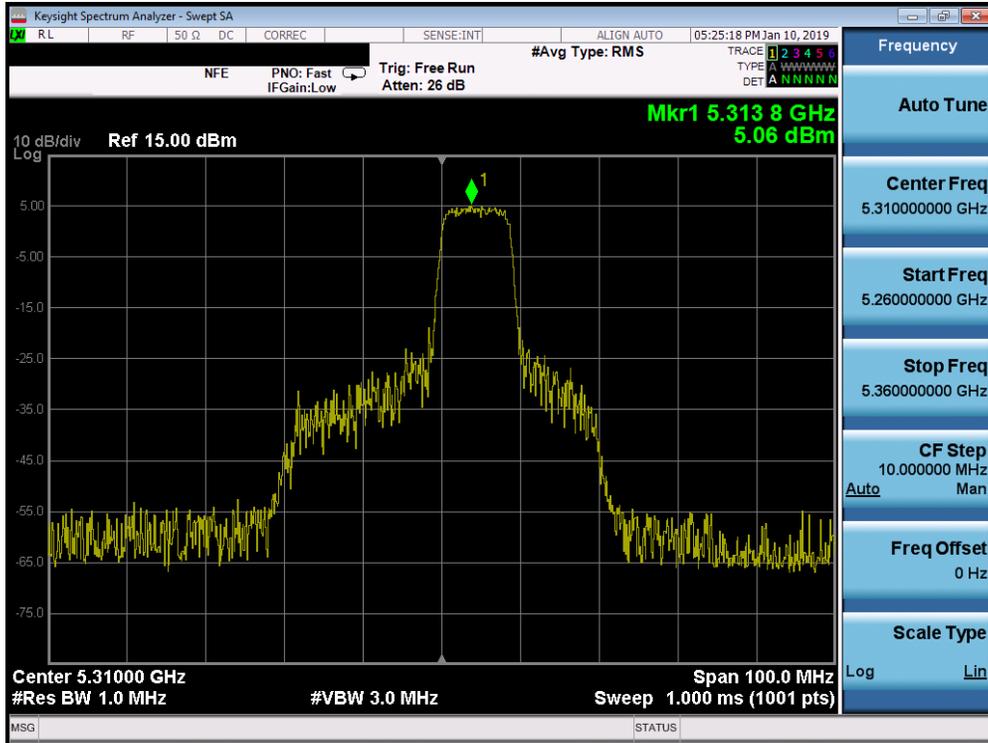


Plot 7-300. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 64)

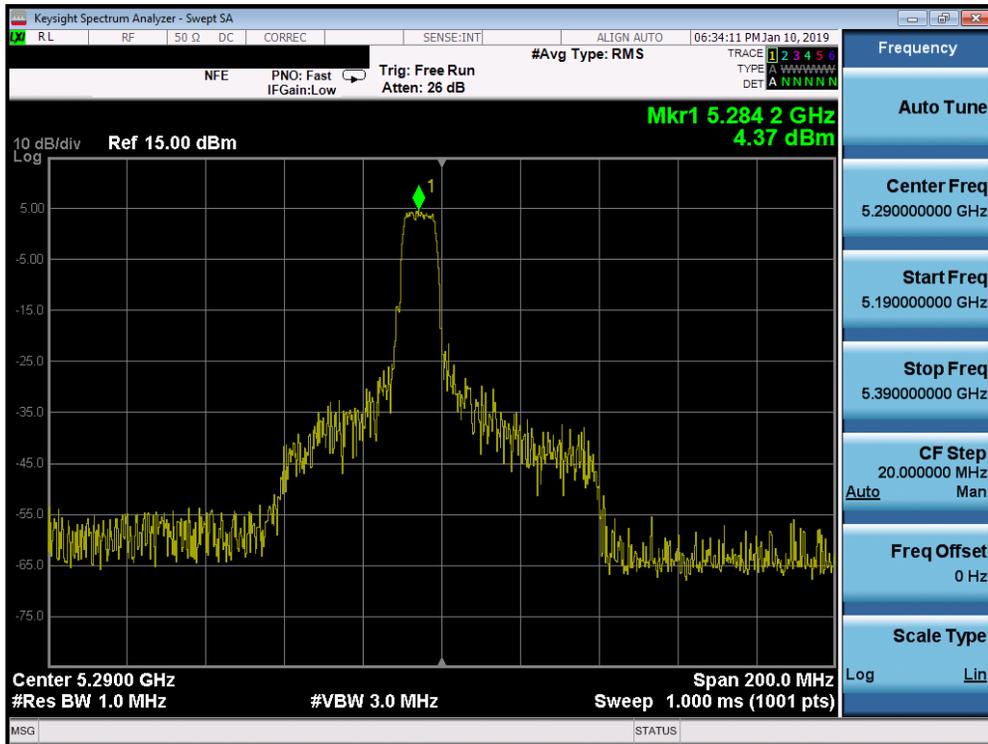


Plot 7-301. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 54)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 219 of 516                 |



Plot 7-302. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 62)

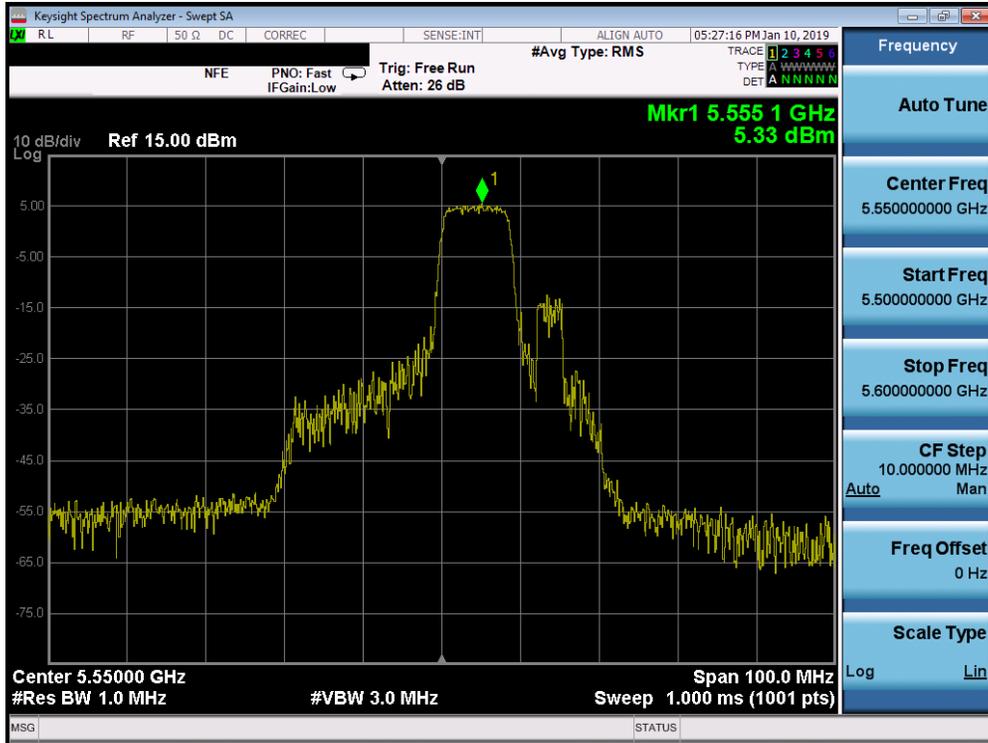


Plot 7-303. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 58)

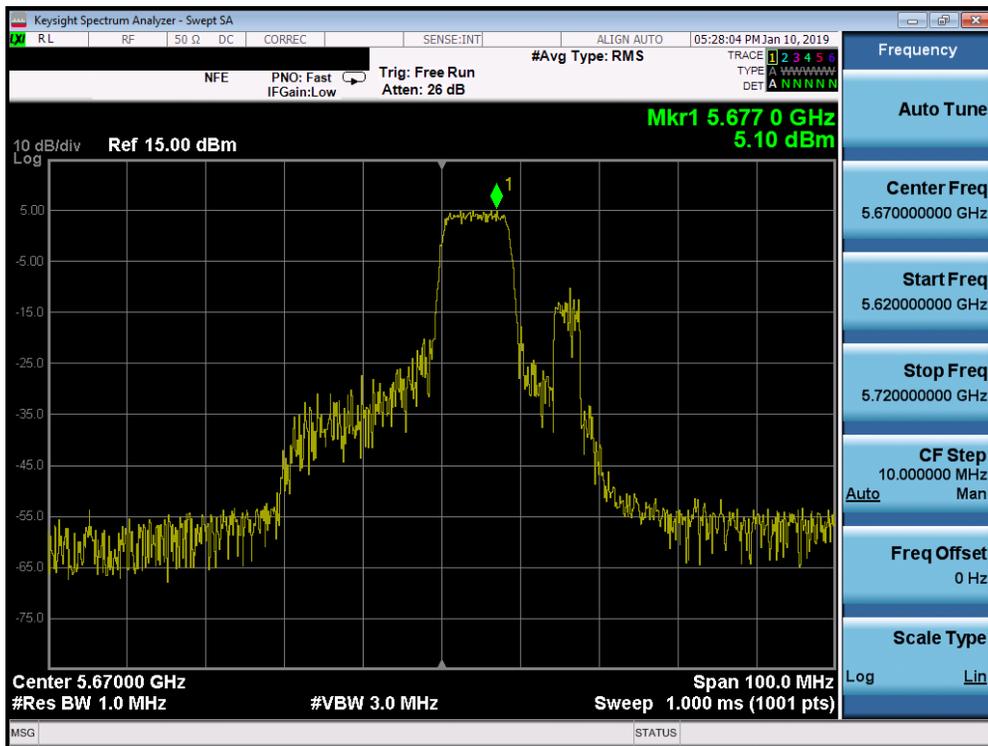
|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 220 of 516                 |





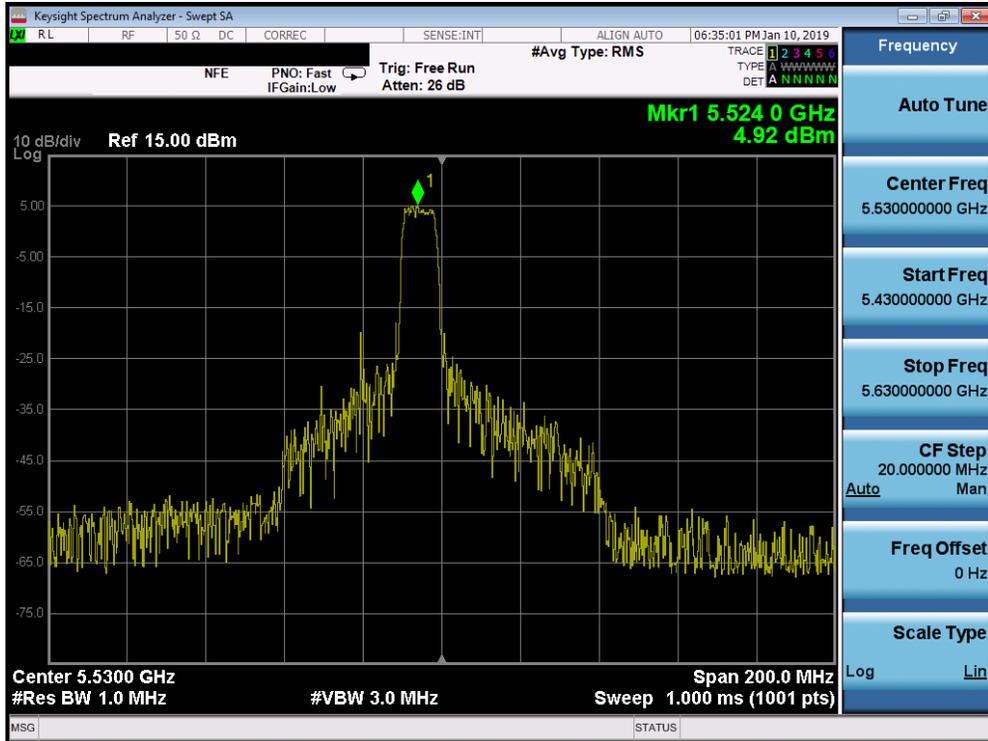


Plot 7-308. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 118)

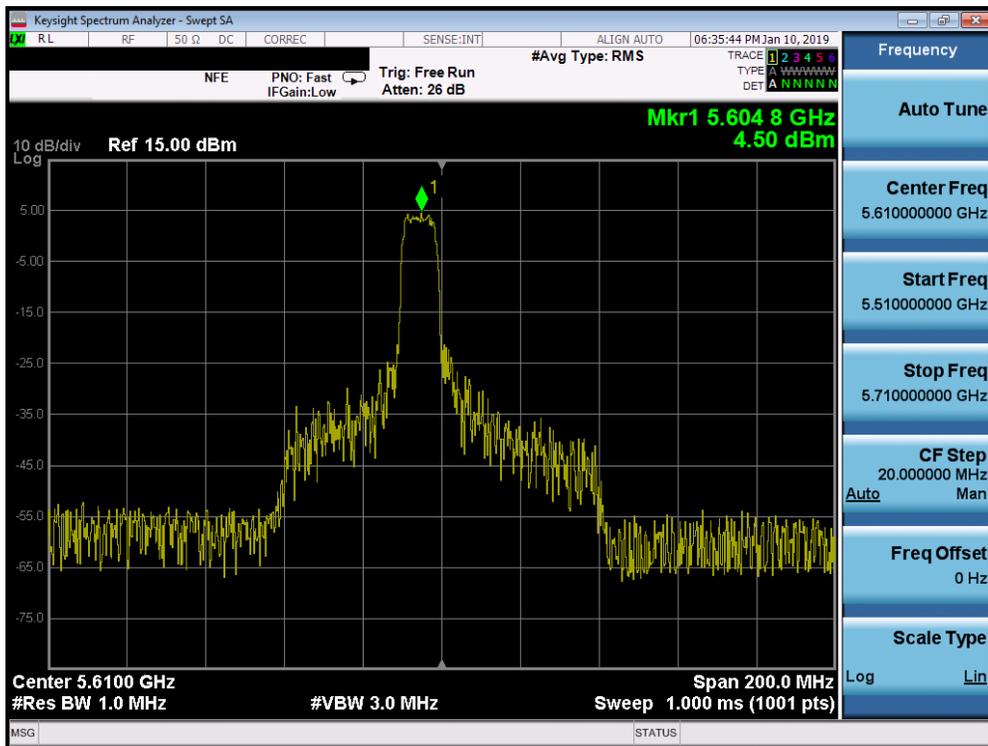


Plot 7-309. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 142)

|   |  |                                       |         |                                 |
|---|--|---------------------------------------|---------|---------------------------------|
| FCC ID: A3LSMG975U                      | PCTEST<br>ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT<br>(CERTIFICATION) | SAMSUNG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019    | EUT Type:<br>Portable Handset         |         | Page 223 of 516                 |

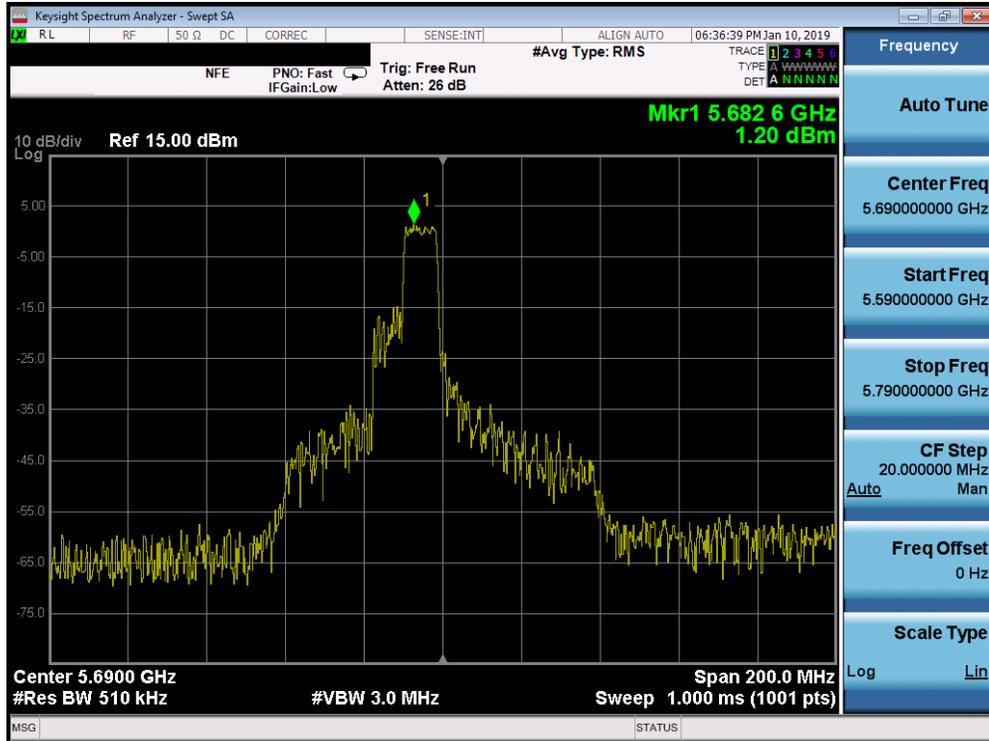


Plot 7-310. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 106)



Plot 7-311. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 122)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 224 of 516                 |

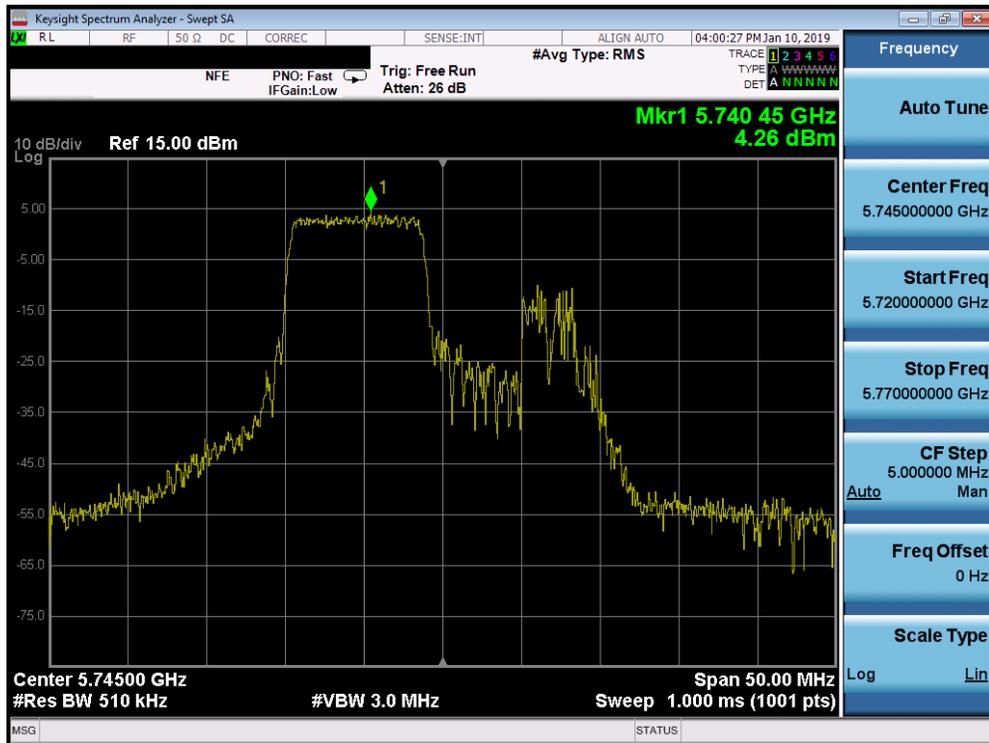


Plot 7-312. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 138)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 225 of 516                 |

|               | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Permissible Power Density [dBm/500kHz] | Margin [dB] |
|---------------|-----------------|-------------|-------------|-------|------------------|------------------------------|--|-------------|
| <b>Band 3</b> | 5745            | 149         | ax (20MHz)  | 106T  | MCS0             | 4.26                         | 30.0                                       | -25.74      |
|               | 5785            | 157         | ax (20MHz)  | 106T  | MCS0             | 3.82                         | 30.0                                       | -26.18      |
|               | 5825            | 165         | ax (20MHz)  | 106T  | MCS0             | 3.52                         | 30.0                                       | -26.48      |
|               | 5755            | 151         | ax (40MHz)  | 106T  | MCS0             | 2.78                         | 30.0                                       | -27.22      |
|               | 5795            | 159         | ax (40MHz)  | 106T  | MCS0             | 1.75                         | 30.0                                       | -28.25      |
|               | 5775            | 155         | ax (80MHz)  | 106T  | MCS0             | 4.45                         | 30.0                                       | -25.55      |

**Table 7-89. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (106 Tones)**

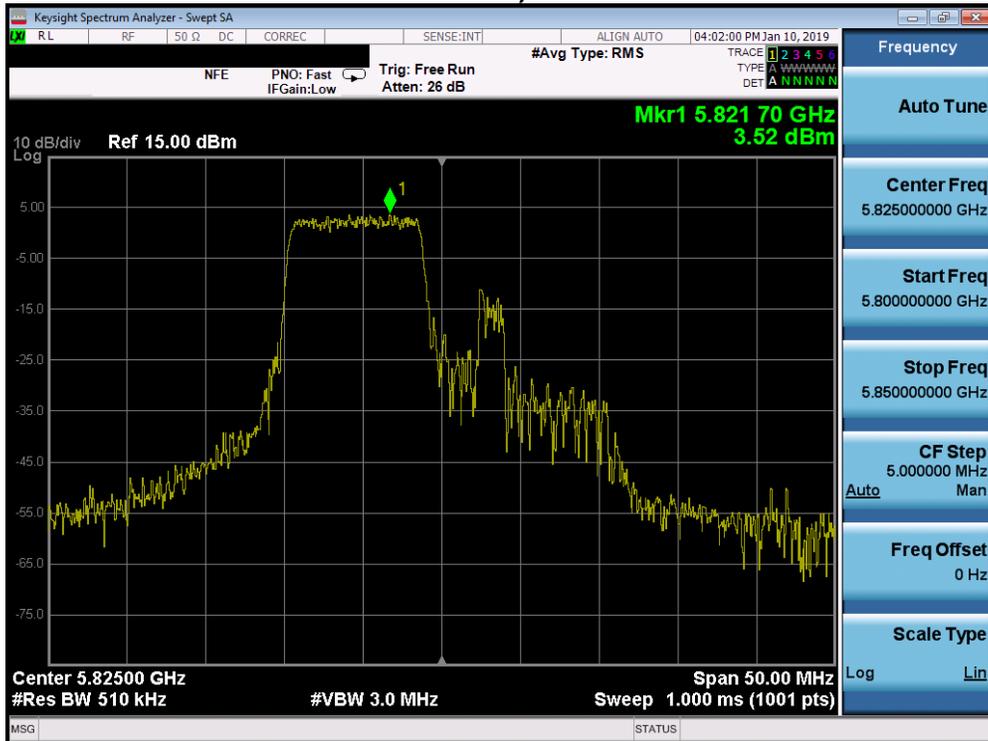


**Plot 7-313. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 149)**

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 226 of 516                 |

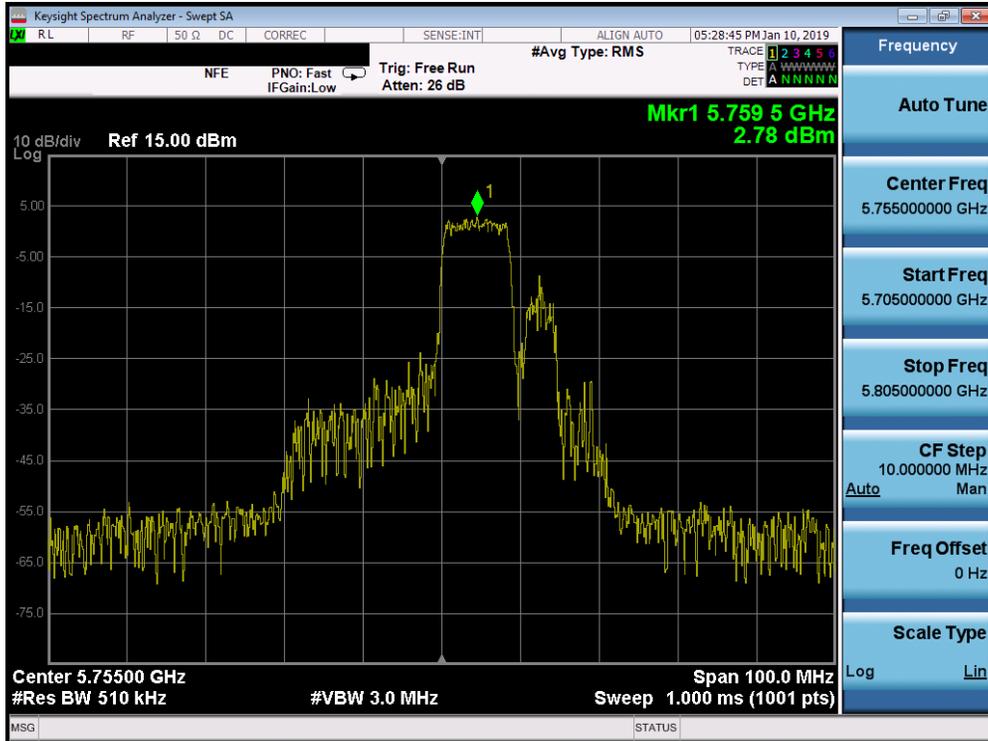


Plot 7-314. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 157)

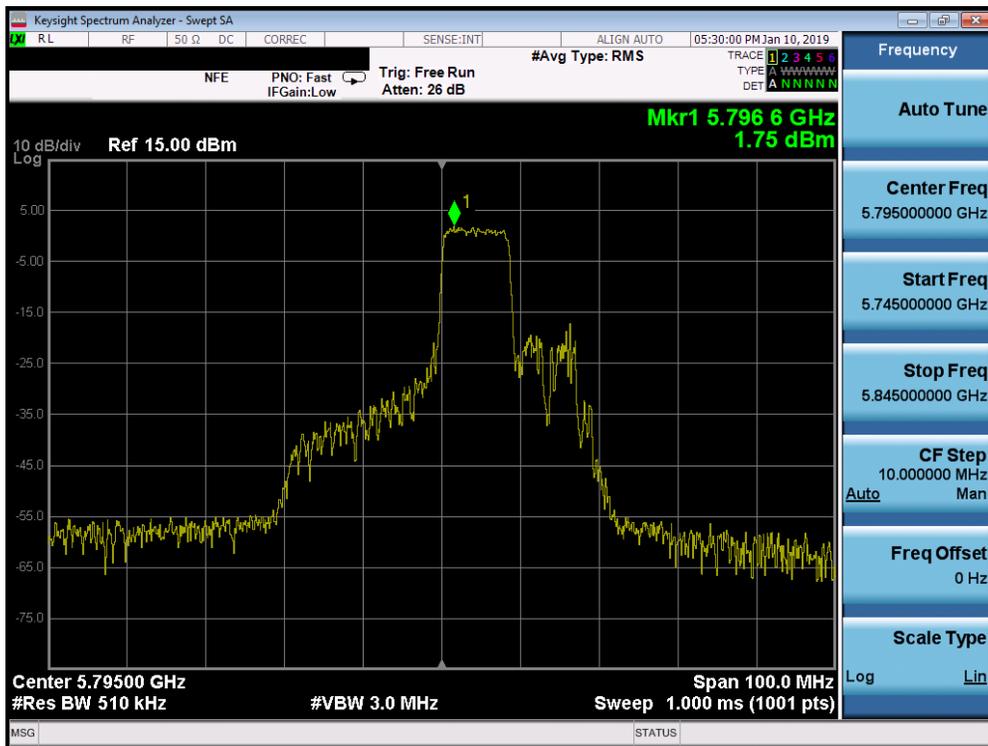


Plot 7-315. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 165)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 227 of 516                 |

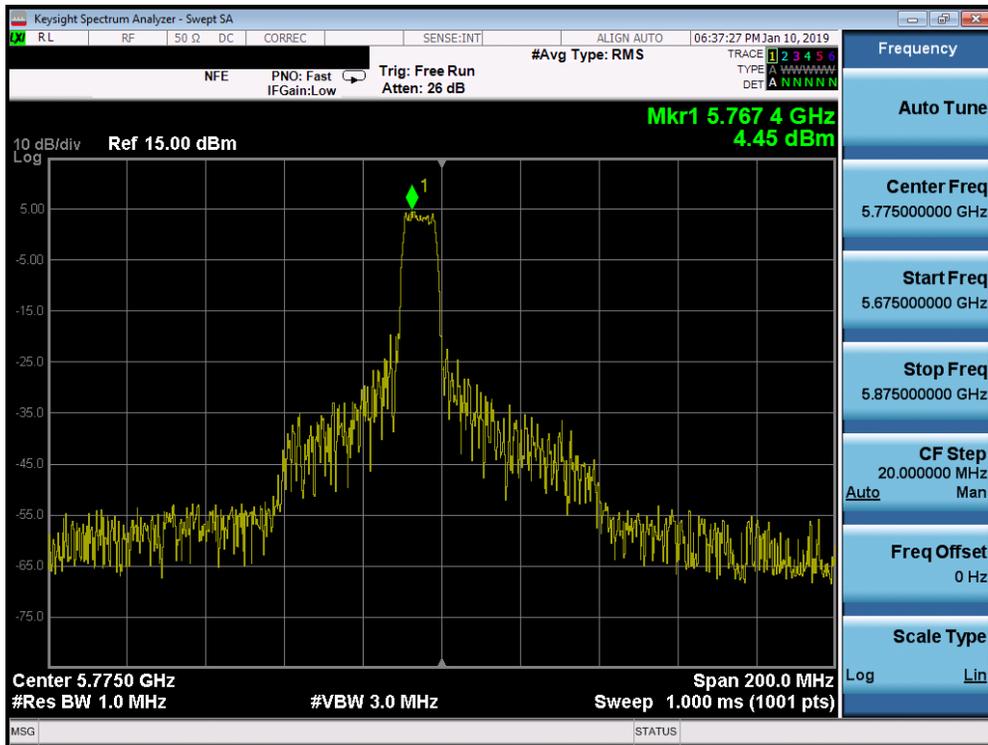


Plot 7-316. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 151)



Plot 7-317. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 159)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 228 of 516                 |



Plot 7-318. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 155)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 229 of 516                 |

### SISO Antenna-2 Power Spectral Density Measurements (242 Tones)

|         | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|---------|-----------------|-------------|-------------|-------|------------------|------------------------------|-----------------------------|-------------|
| Band 1  | 5180            | 36          | ax (20MHz)  | 242T  | MCS0             | 4.43                         | 11.0                        | -6.57       |
|         | 5200            | 40          | ax (20MHz)  | 242T  | MCS0             | 4.31                         | 11.0                        | -6.69       |
|         | 5240            | 48          | ax (20MHz)  | 242T  | MCS0             | 4.95                         | 11.0                        | -6.05       |
|         | 5190            | 38          | ax (40MHz)  | 242T  | MCS0             | 3.07                         | 11.0                        | -7.93       |
|         | 5230            | 46          | ax (40MHz)  | 242T  | MCS0             | 3.93                         | 11.0                        | -7.07       |
|         | 5210            | 42          | ax (80MHz)  | 242T  | MCS0             | 1.88                         | 11.0                        | -9.12       |
| Band 2A | 5260            | 52          | ax (20MHz)  | 242T  | MCS0             | 4.89                         | 11.0                        | -6.11       |
|         | 5280            | 56          | ax (20MHz)  | 242T  | MCS0             | 5.12                         | 11.0                        | -5.88       |
|         | 5320            | 64          | ax (20MHz)  | 242T  | MCS0             | 5.21                         | 11.0                        | -5.79       |
|         | 5270            | 54          | ax (40MHz)  | 242T  | MCS0             | 3.30                         | 11.0                        | -7.70       |
|         | 5310            | 62          | ax (40MHz)  | 242T  | MCS0             | 3.62                         | 11.0                        | -7.38       |
|         | 5290            | 58          | ax (80MHz)  | 242T  | MCS0             | 1.93                         | 11.0                        | -9.07       |
| Band 2C | 5500            | 100         | ax (20MHz)  | 242T  | MCS0             | 4.82                         | 11.0                        | -6.18       |
|         | 5600            | 120         | ax (20MHz)  | 242T  | MCS0             | 4.27                         | 11.0                        | -6.73       |
|         | 5720            | 144         | ax (20MHz)  | 242T  | MCS0             | 4.52                         | 11.0                        | -6.48       |
|         | 5510            | 102         | ax (40MHz)  | 242T  | MCS0             | 3.33                         | 11.0                        | -7.67       |
|         | 5590            | 118         | ax (40MHz)  | 242T  | MCS0             | 3.05                         | 11.0                        | -7.95       |
|         | 5710            | 142         | ax (40MHz)  | 242T  | MCS0             | 2.74                         | 11.0                        | -8.26       |
|         | 5530            | 106         | ax (80MHz)  | 242T  | MCS0             | 2.40                         | 11.0                        | -8.60       |
|         | 5610            | 122         | ax (80MHz)  | 242T  | MCS0             | 2.22                         | 11.0                        | -8.78       |
|         | 5690            | 138         | ax (80MHz)  | 242T  | MCS0             | -0.05                        | 11.0                        | -11.05      |

Table 7-90. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT2 (242 Tones)

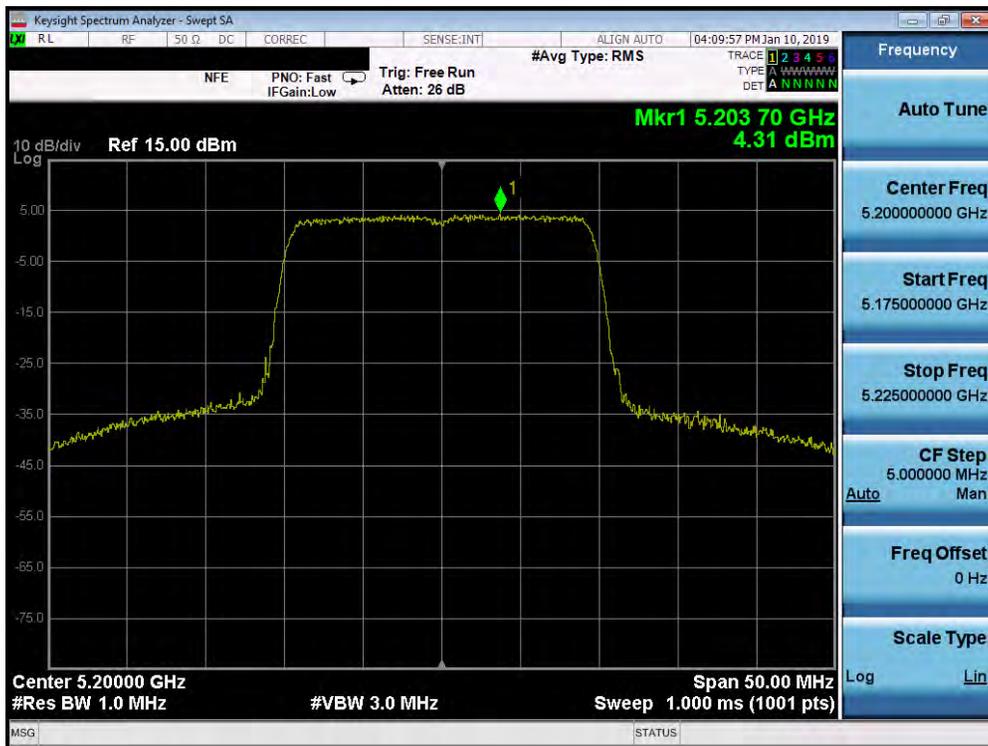
|        | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Antenna Gain [dBi] | e.i.r.p. Power Density [dBm/MHz] | ISED Max e.i.r.p. Power Density | Margin [dB] |
|--------|-----------------|-------------|-------------|-------|------------------|------------------------------|--------------------|----------------------------------|---------------------------------|-------------|
| Band 1 | 5180            | 36          | ax (20MHz)  | 242T  | MCS0             | 4.43                         | -8.43              | -4.00                            | 10.0                            | -14.00      |
|        | 5200            | 40          | ax (20MHz)  | 242T  | MCS0             | 4.31                         | -8.34              | -4.03                            | 10.0                            | -14.03      |
|        | 5240            | 48          | ax (20MHz)  | 242T  | MCS0             | 4.95                         | -7.99              | -3.04                            | 10.0                            | -13.04      |
|        | 5190            | 38          | ax (40MHz)  | 242T  | MCS0             | 3.07                         | -8.43              | -5.36                            | 10.0                            | -15.36      |
|        | 5230            | 46          | ax (40MHz)  | 242T  | MCS0             | 3.93                         | -8.34              | -4.41                            | 10.0                            | -14.41      |
|        | 5210            | 42          | ax (80MHz)  | 242T  | MCS0             | 1.88                         | -7.99              | -6.11                            | 10.0                            | -16.11      |

Table 7-91. Bands 1 e.i.r.p Conducted Power Spectral Density Measurements (ISED 242 Tones)

|   |   |                                       |  |   |                                 |
|---|---|---------------------------------------|--|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |  | Page 230 of 516   |                                 |

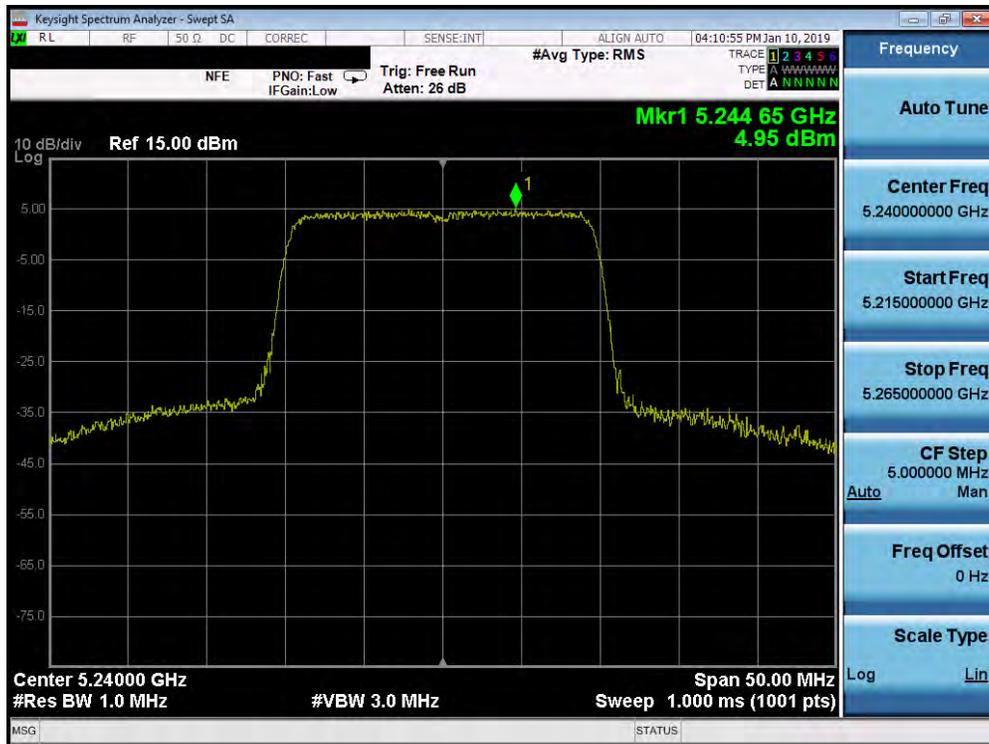


Plot 7-319. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 36)

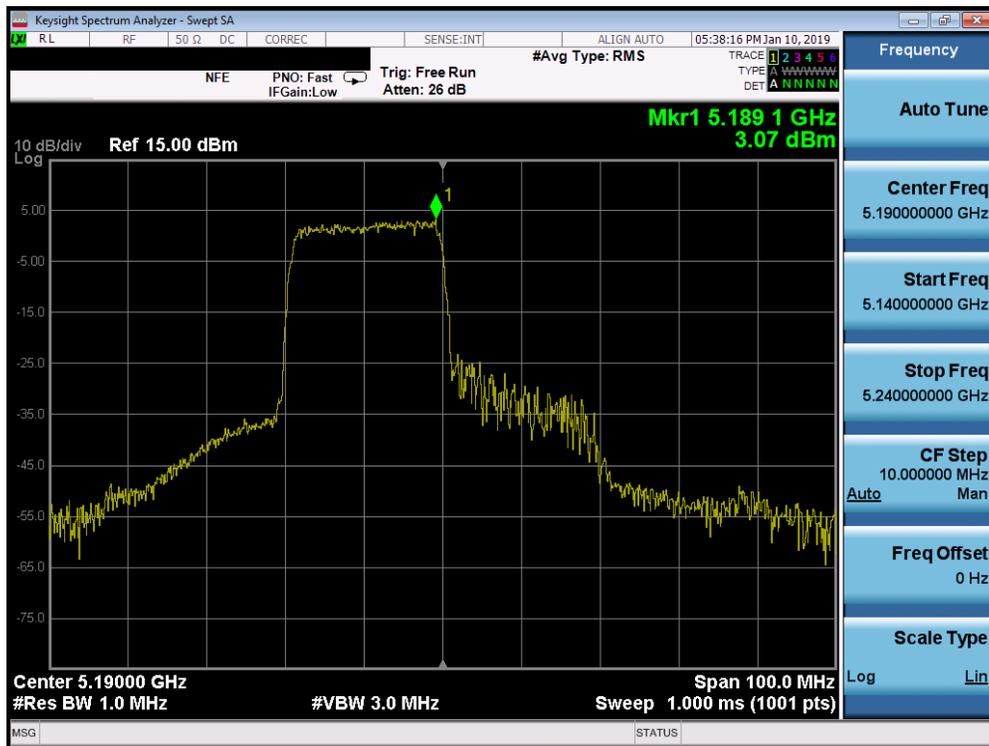


Plot 7-320. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 40)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 231 of 516                 |

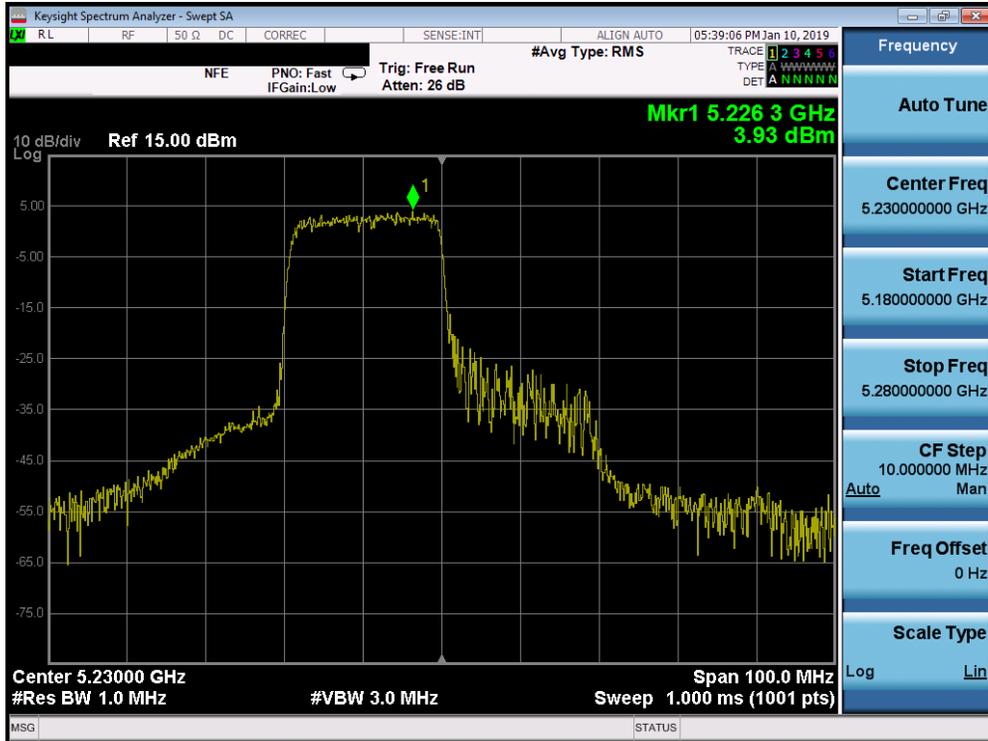


Plot 7-321. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 48)

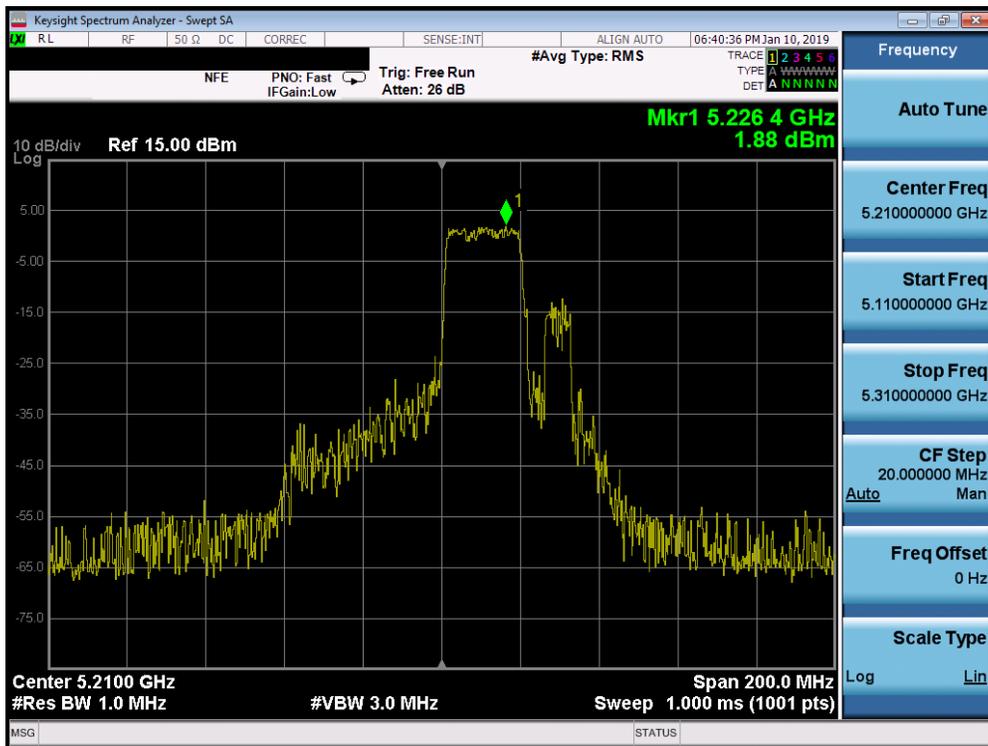


Plot 7-322. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 38)

|   |                                     |                                    |  |                                 |
|---|-------------------------------------|------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset      |  | Page 232 of 516                 |

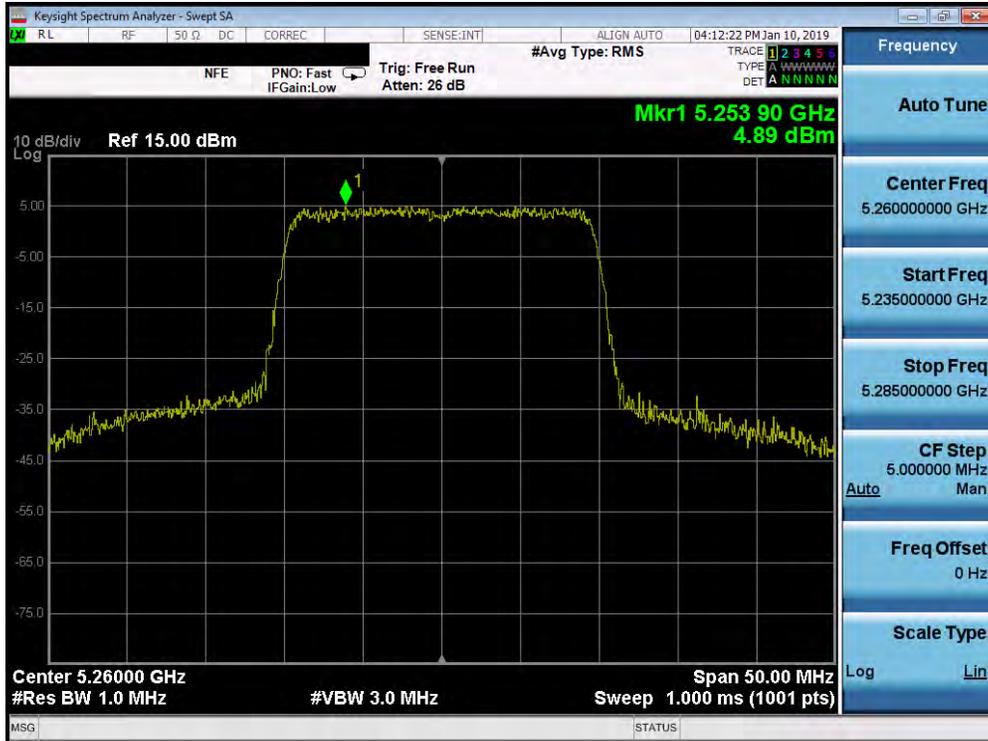


Plot 7-323. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 46)

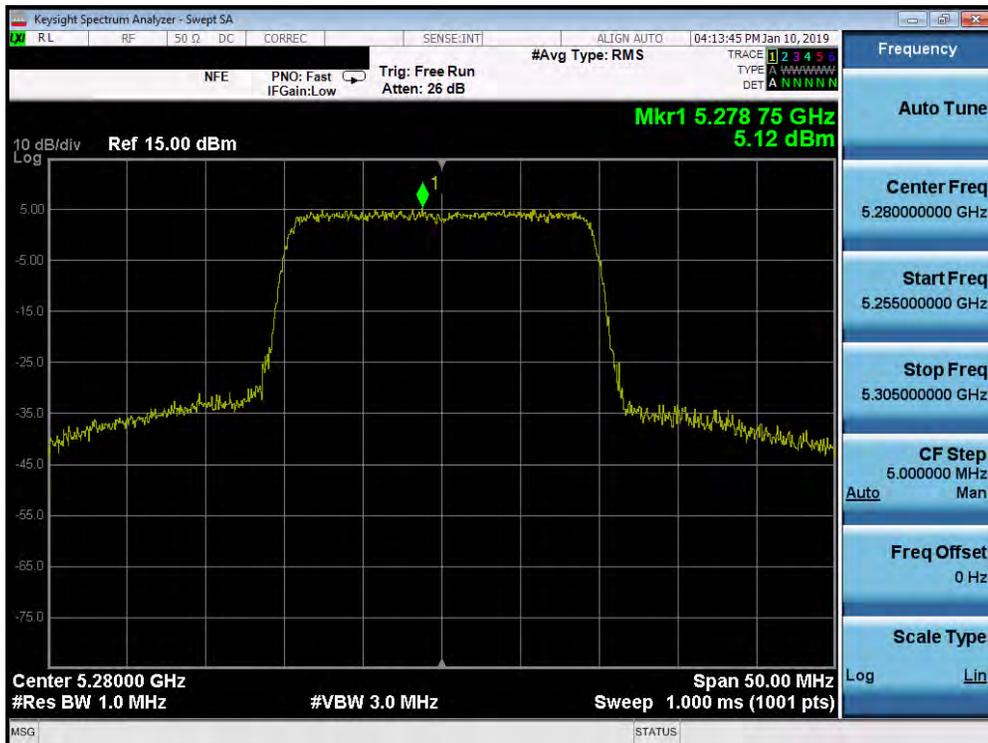


Plot 7-324. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 42)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 233 of 516                 |

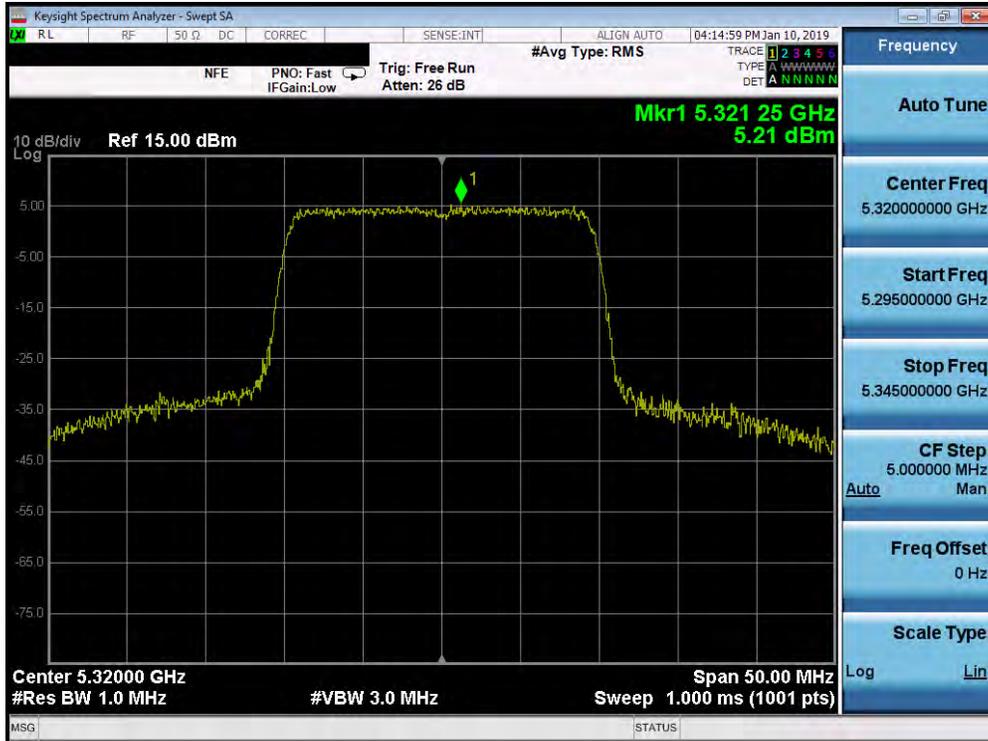


Plot 7-325. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 52)

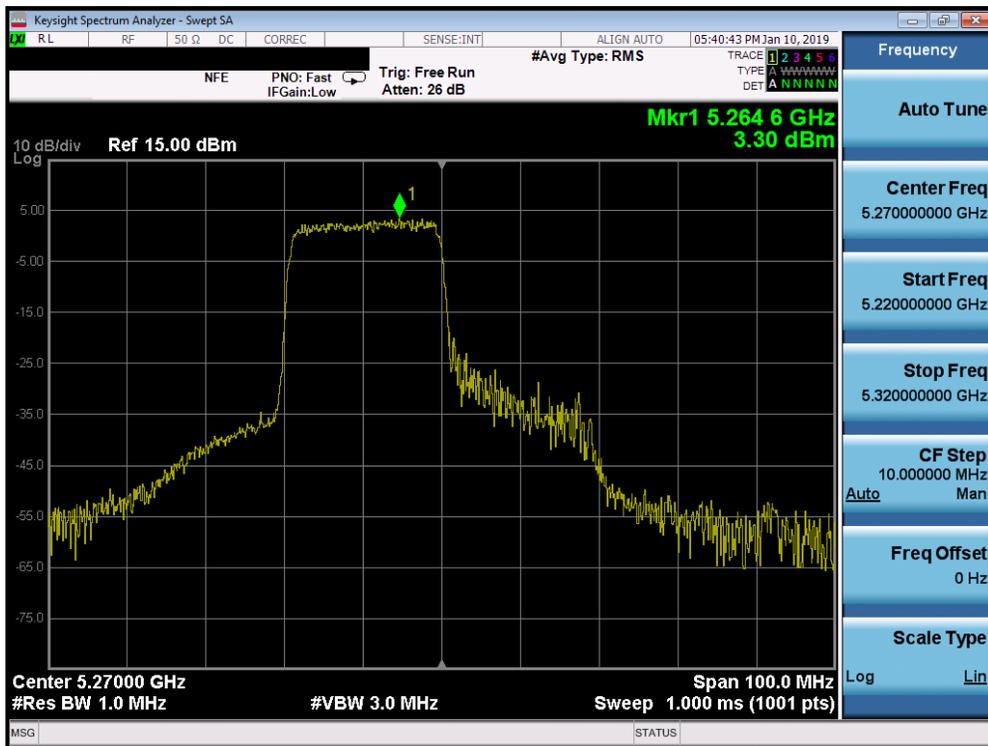


Plot 7-326. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 56)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 234 of 516                 |

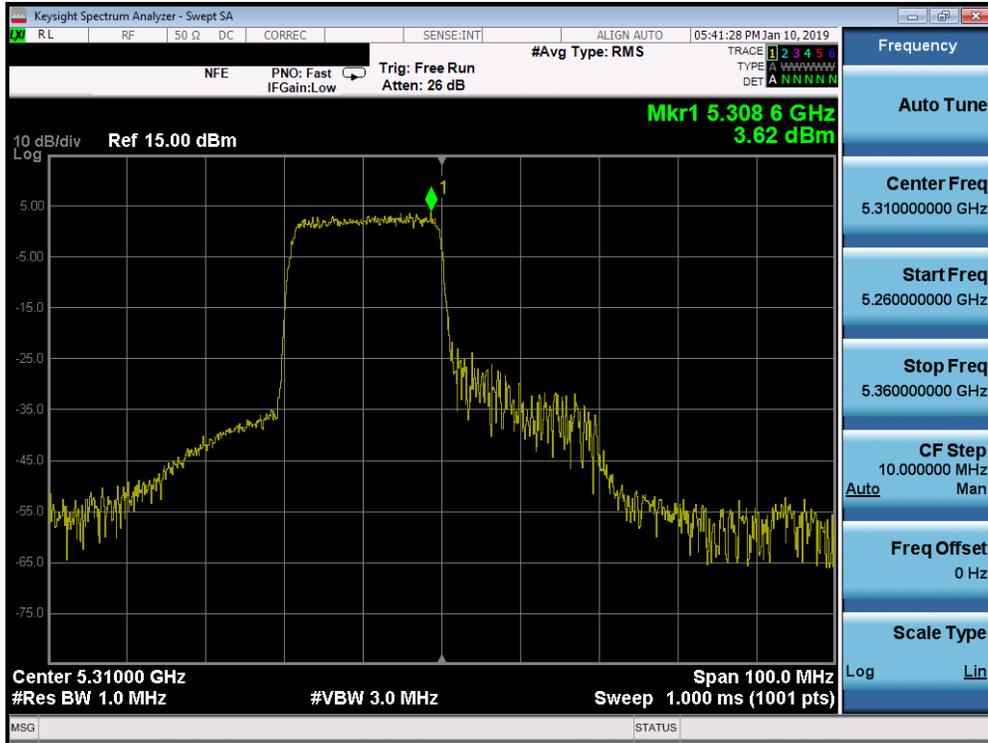


Plot 7-327. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 64)

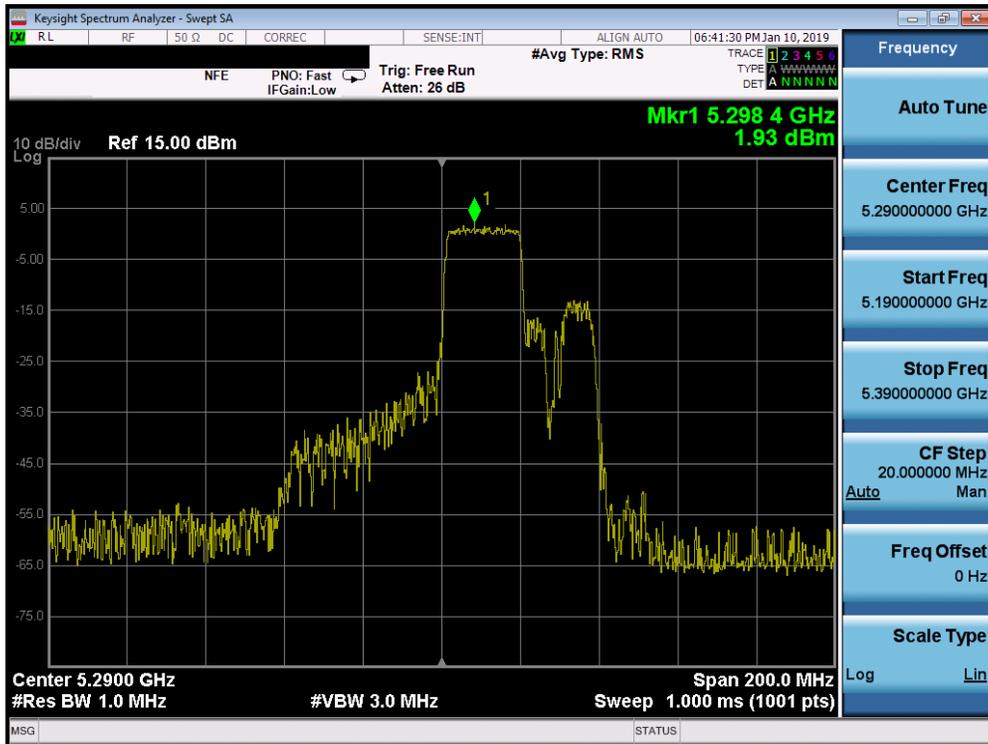


Plot 7-328. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 54)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 235 of 516                 |



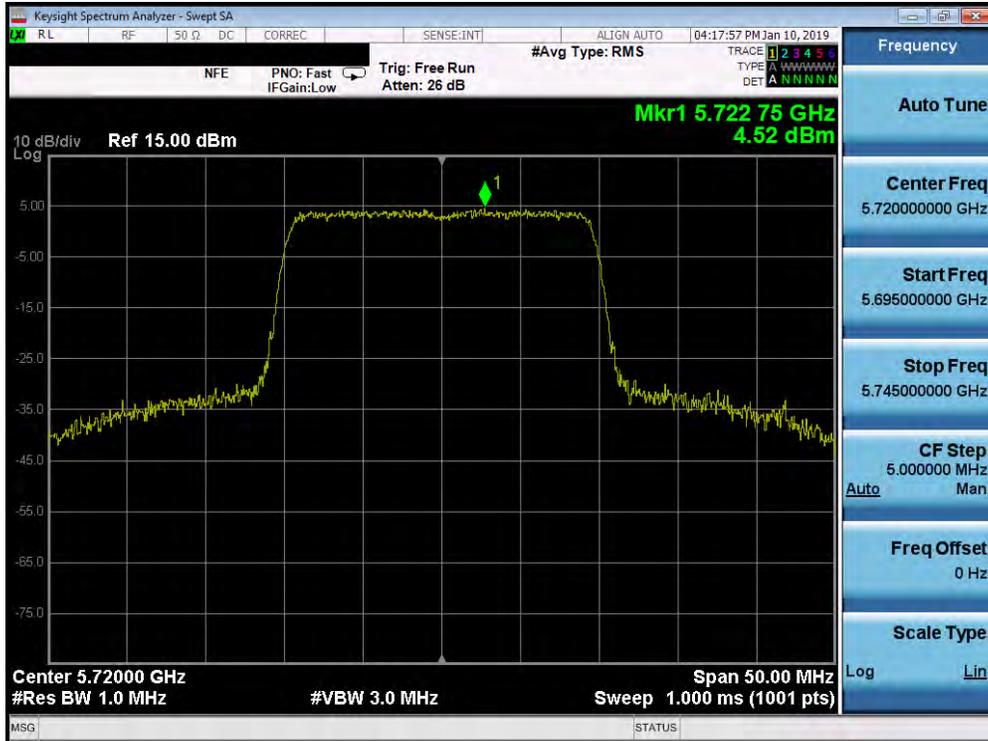
Plot 7-329. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 62)



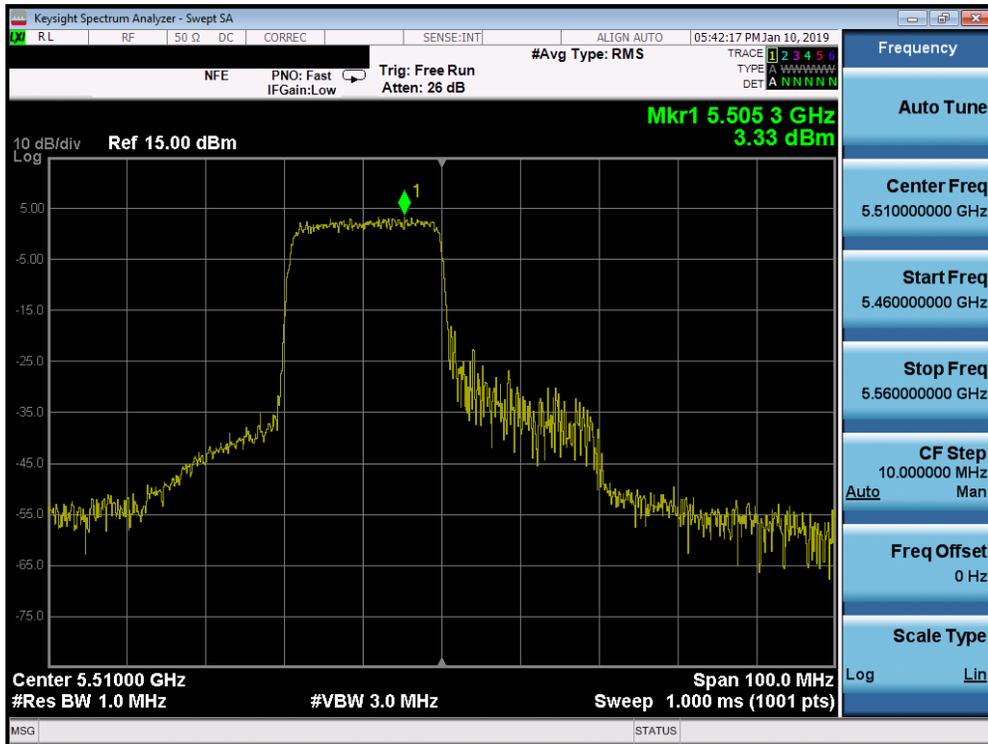
Plot 7-330. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 58)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 236 of 516                 |



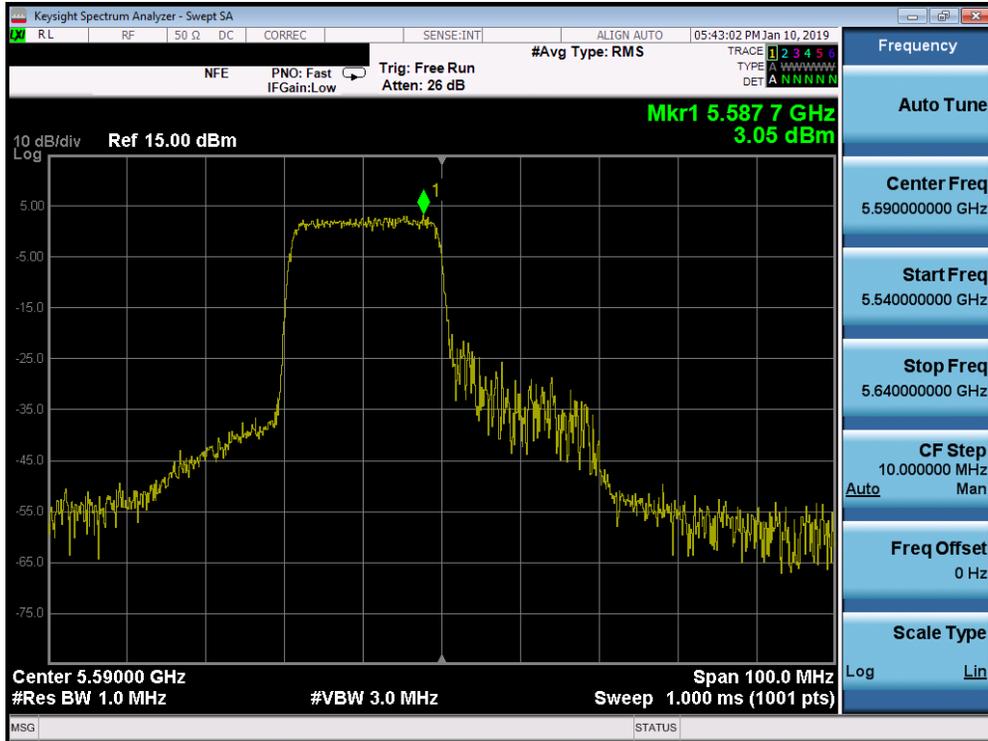


Plot 7-333. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 144)

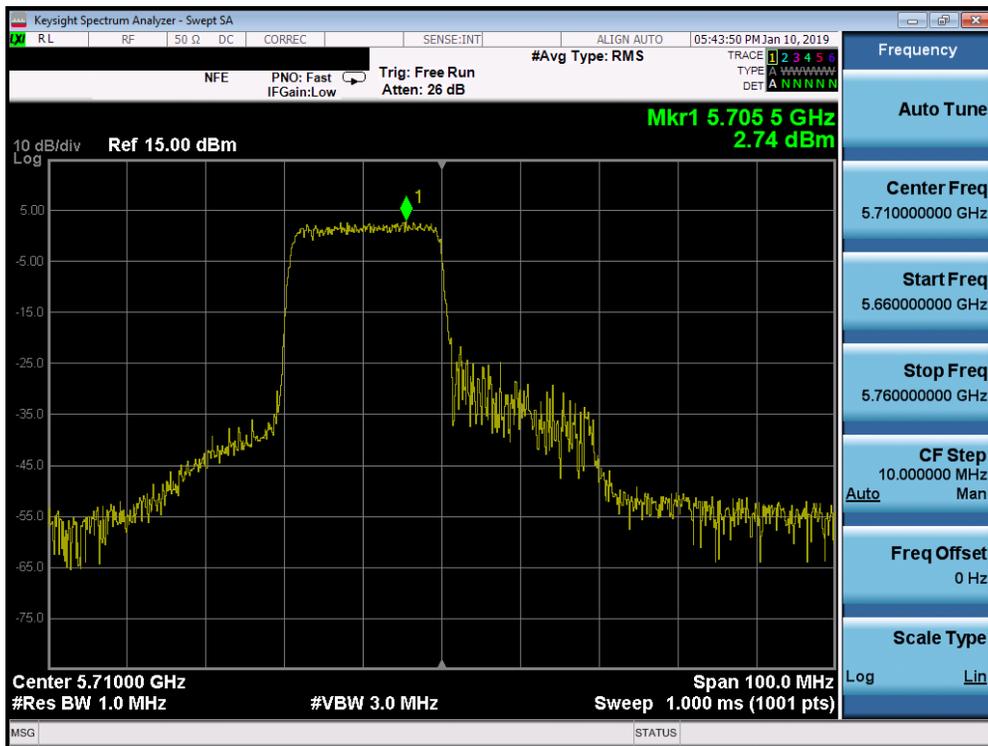


Plot 7-334. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 102)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 238 of 516                 |

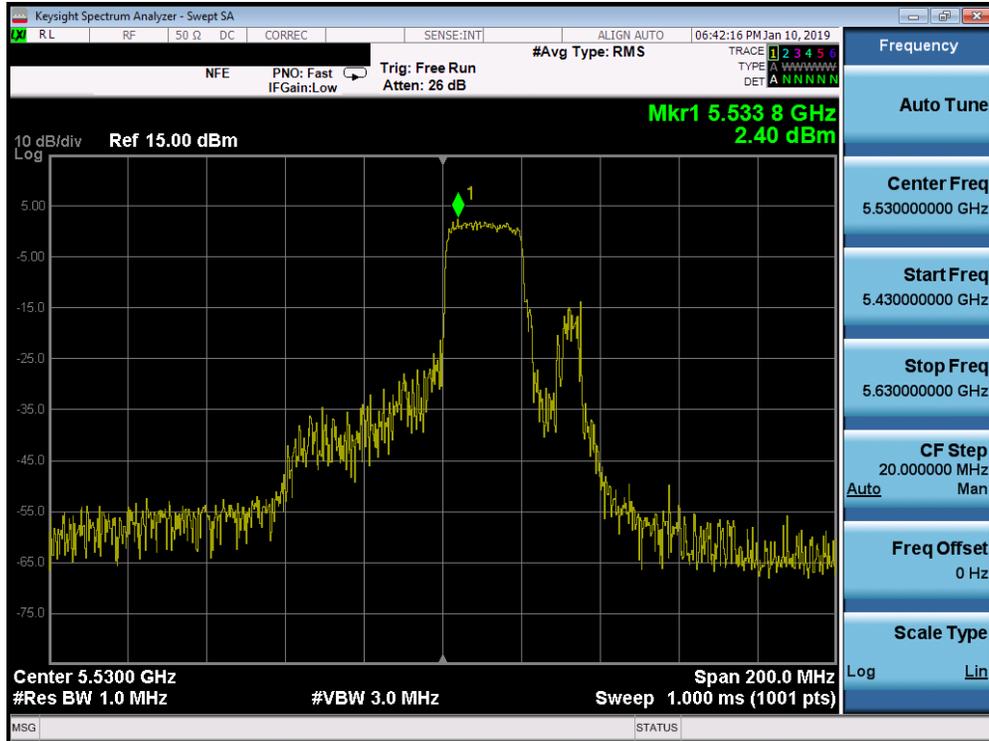


Plot 7-335. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 118)

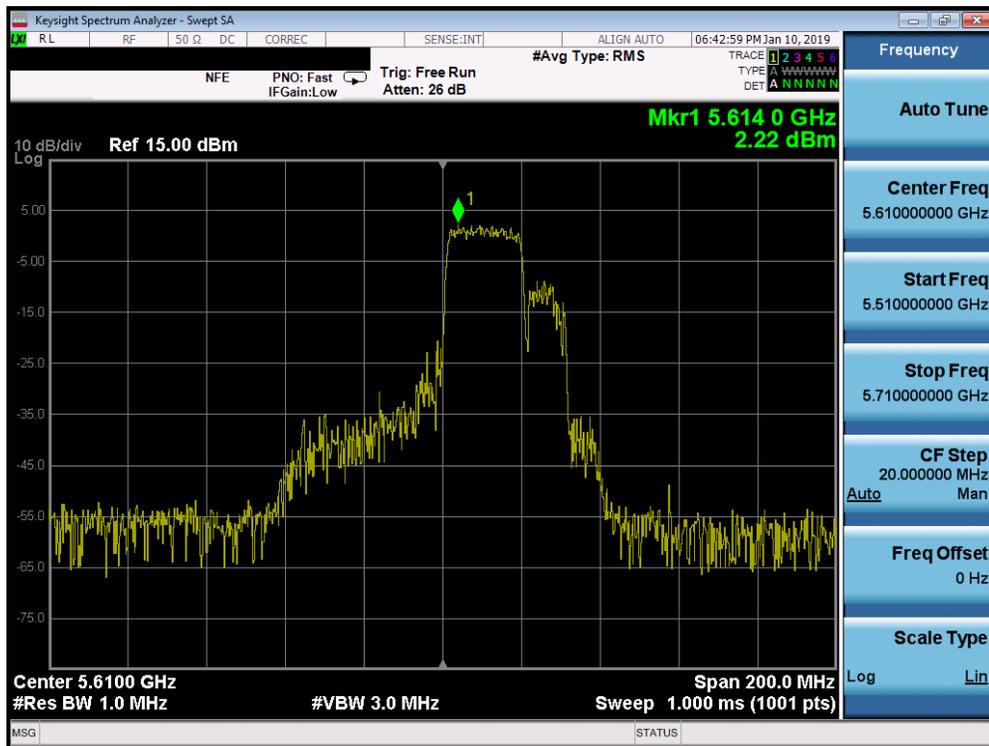


Plot 7-336. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 142)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 239 of 516                 |

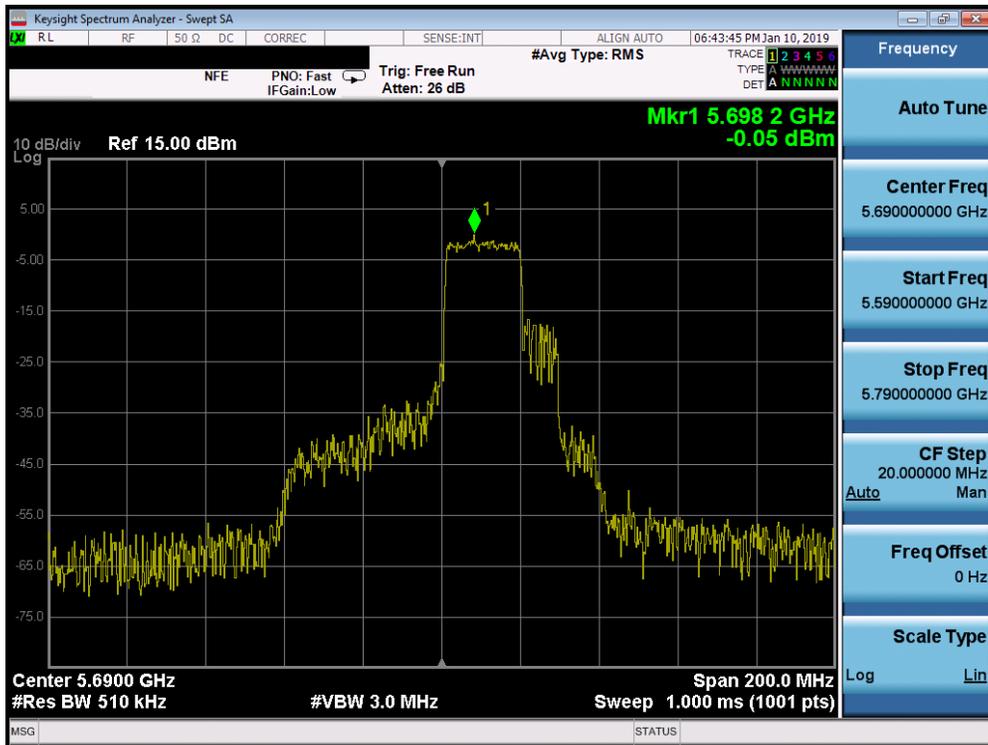


Plot 7-337. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 106)



Plot 7-338. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 122)

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 240 of 516                 |

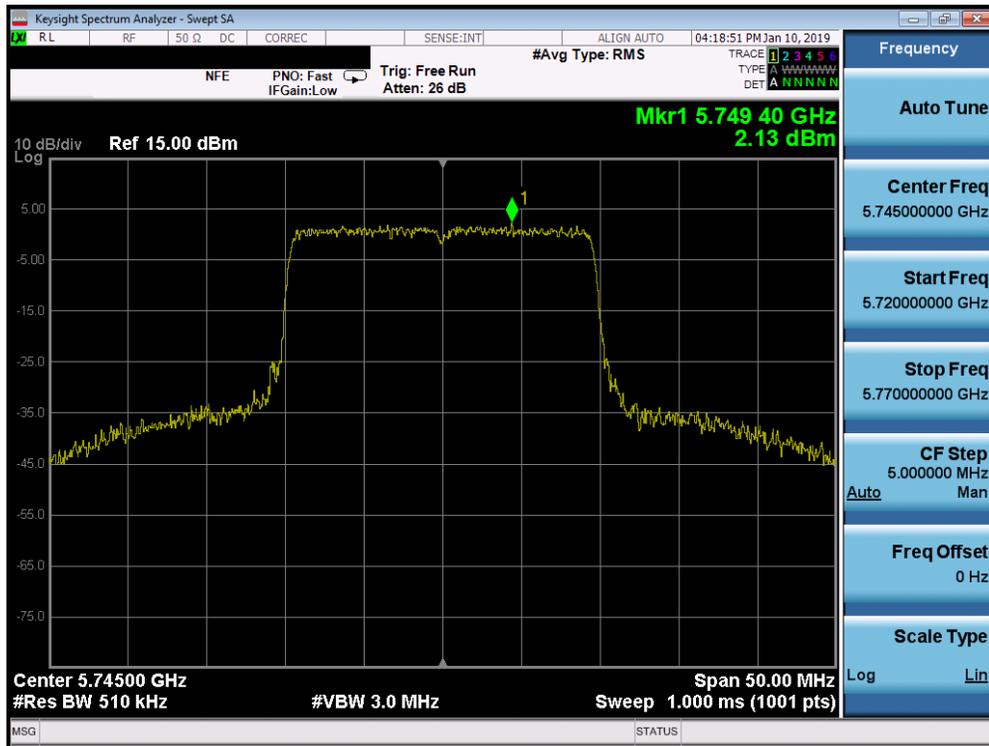


**Plot 7-339. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 138)**

|  |   |   |   |  |
|--|---|---|---|--|
| FCC ID: A3LSMG975U                             |  | <b>MEASUREMENT REPORT<br/>(CERTIFICATION)</b> |  | <b>Approved by:</b><br>Quality Manager |
| <b>Test Report S/N:</b><br>1M1810250197-06.A3L | <b>Test Dates:</b><br>10/31/2018-1/09/2019  | <b>EUT Type:</b><br>Portable Handset          |   | Page 241 of 516                        |

|               | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Permissible Power Density [dBm/500kHz] | Margin [dB] |
|---------------|-----------------|-------------|-------------|-------|------------------|------------------------------|--|-------------|
| <b>Band 3</b> | 5745            | 149         | ax (20MHz)  | 242T  | MCS0             | 2.13                         | 30.0                                       | -27.87      |
|               | 5785            | 157         | ax (20MHz)  | 242T  | MCS0             | 2.01                         | 30.0                                       | -27.99      |
|               | 5825            | 165         | ax (20MHz)  | 242T  | MCS0             | 1.50                         | 30.0                                       | -28.50      |
|               | 5755            | 151         | ax (40MHz)  | 242T  | MCS0             | -0.34                        | 30.0                                       | -30.34      |
|               | 5795            | 159         | ax (40MHz)  | 242T  | MCS0             | -11.51                       | 30.0                                       | -41.51      |
|               | 5775            | 155         | ax (80MHz)  | 242T  | MCS0             | 1.29                         | 30.0                                       | -28.71      |

**Table 7-92. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (242 Tones)**

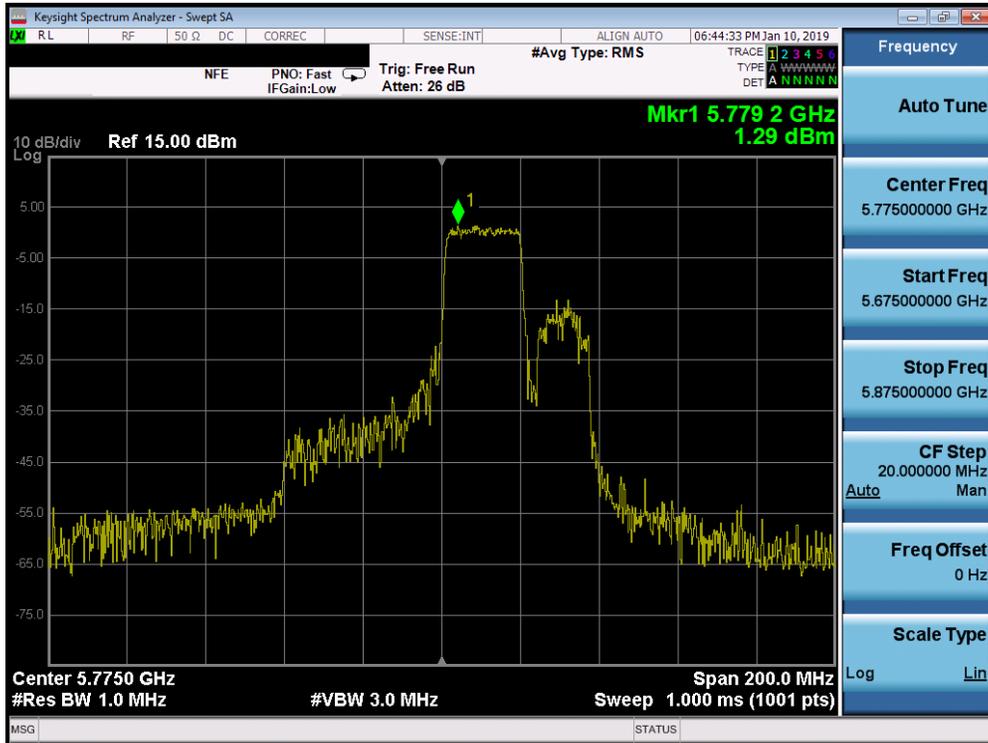


**Plot 7-340. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 149)**

|   |                                     |                                       |  |                                 |
|---|-------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG975U                      |                                     | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019 | EUT Type:<br>Portable Handset         |  | Page 242 of 516                 |







Plot 7-345. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 155)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 245 of 516                 |

### SISO Antenna-2 Power Spectral Density Measurements (484 Tones)

|         | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|---------|-----------------|-------------|-------------|-------|------------------|------------------------------|-----------------------------|-------------|
| Band 1  | 5190            | 38          | ax (40MHz)  | 484T  | MCS0             | -11.02                       | 11.0                        | -22.02      |
|         | 5230            | 46          | ax (40MHz)  | 484T  | MCS0             | -10.91                       | 11.0                        | -21.91      |
|         | 5210            | 42          | ax (80MHz)  | 484T  | MCS0             | 0.26                         | 11.0                        | -10.74      |
| Band 2A | 5270            | 54          | ax (40MHz)  | 484T  | MCS0             | -11.10                       | 11.0                        | -22.10      |
|         | 5310            | 62          | ax (40MHz)  | 484T  | MCS0             | -11.39                       | 11.0                        | -22.39      |
|         | 5290            | 58          | ax (80MHz)  | 484T  | MCS0             | -1.13                        | 11.0                        | -12.13      |
| Band 2C | 5510            | 102         | ax (40MHz)  | 484T  | MCS0             | -11.00                       | 11.0                        | -22.00      |
|         | 5590            | 118         | ax (40MHz)  | 484T  | MCS0             | -11.59                       | 11.0                        | -22.59      |
|         | 5710            | 142         | ax (40MHz)  | 484T  | MCS0             | -11.51                       | 11.0                        | -22.51      |
|         | 5530            | 106         | ax (80MHz)  | 484T  | MCS0             | -0.41                        | 11.0                        | -11.41      |
|         | 5610            | 122         | ax (80MHz)  | 484T  | MCS0             | 0.46                         | 11.0                        | -10.54      |
|         | 5690            | 138         | ax (80MHz)  | 484T  | MCS0             | -3.75                        | 11.0                        | -14.75      |

Table 7-93. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT2 (484 Tones)

|        | Frequency [MHz] | Channel No. | 802.11 Mode | Data Rate [Mbps] | Measured Power Density [dBm] | Antenna Gain [dBi] | e.i.r.p. Power Density [dBm/MHz] | ISED Max e.i.r.p. Power Density | Margin [dB] |
|--------|-----------------|-------------|-------------|------------------|------------------------------|--------------------|----------------------------------|---------------------------------|-------------|
| Band 1 | 5190            | 38          | n (40MHz)   | 13.5/15 (MCS0)   | -11.02                       | -8.43              | -19.45                           | 10.0                            | -29.45      |
|        | 5230            | 46          | n (40MHz)   | 13.5/15 (MCS0)   | -10.91                       | -8.34              | -19.25                           | 10.0                            | -29.25      |
|        | 5210            | 42          | ac (80MHz)  | 29.3/32.5 (MCS0) | 0.26                         | -7.99              | -7.73                            | 10.0                            | -17.73      |

Table 7-94. Bands 1 e.r.i.p Conducted Power Spectral Density Measurements (ISED 484 Tones)

|   |   |                                       |   |                                 |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG975U                      |  | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M1810250197-06.A3L | Test Dates:<br>10/31/2018-1/09/2019   | EUT Type:<br>Portable Handset         |   | Page 246 of 516                 |



