

Appendix D

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Wi-Fi Adapter

Trade Mark: N/A

Test Model: AP0100

Environmental Conditions

| | |
|--------------------|-------------|
| Temperature: | 23.8 °C |
| Relative Humidity: | 54.1% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Wang.Chuang |
| Supervised by: | Tom.Liu |

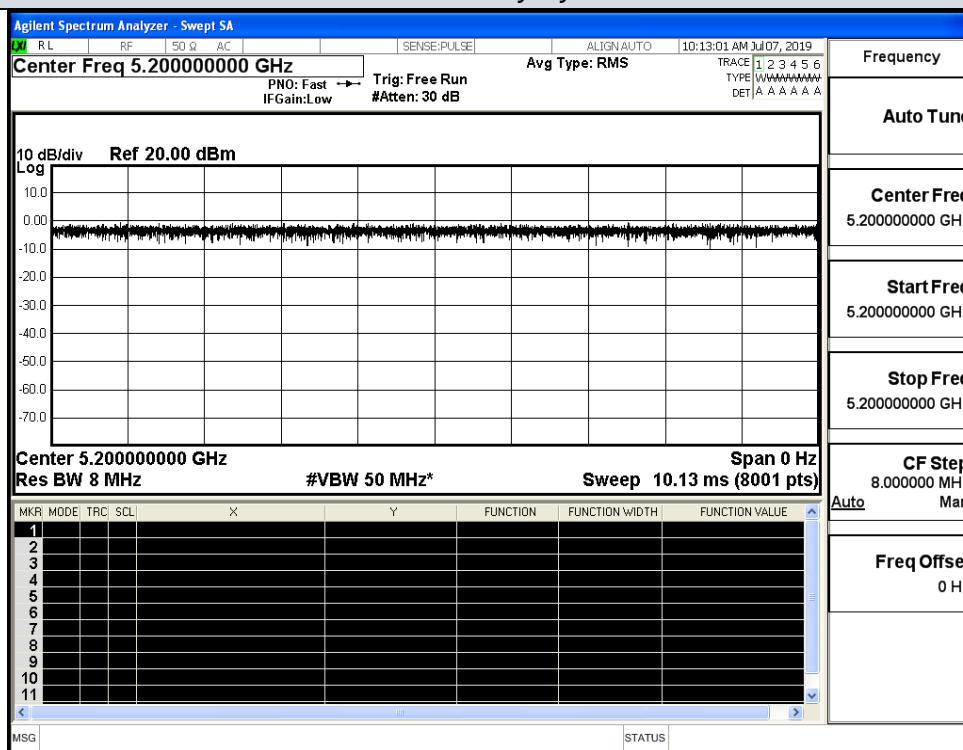
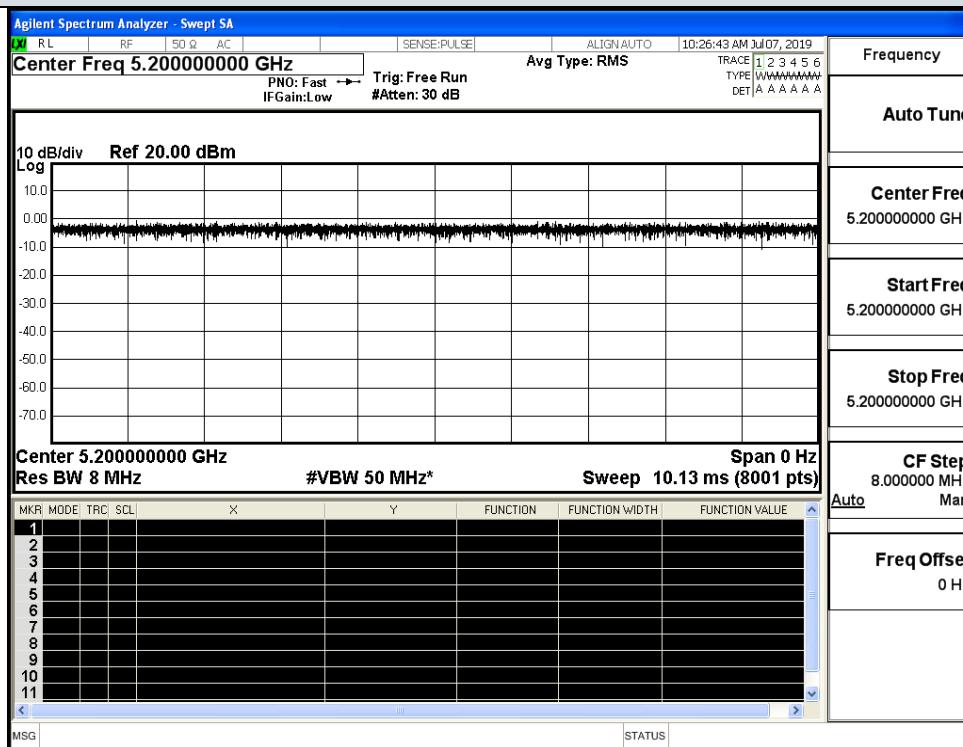
D.1 Duty Cycle

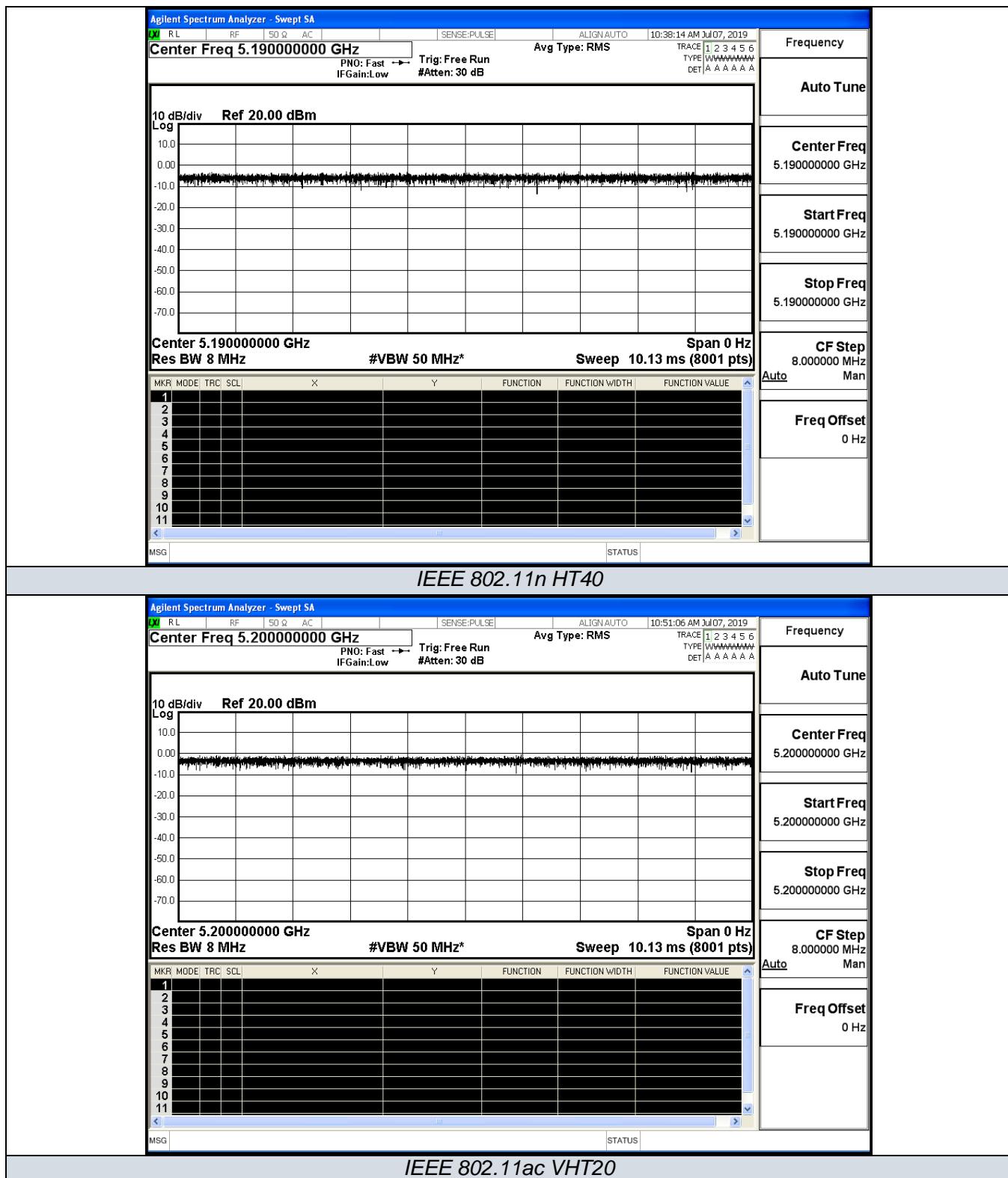
Antenna 0

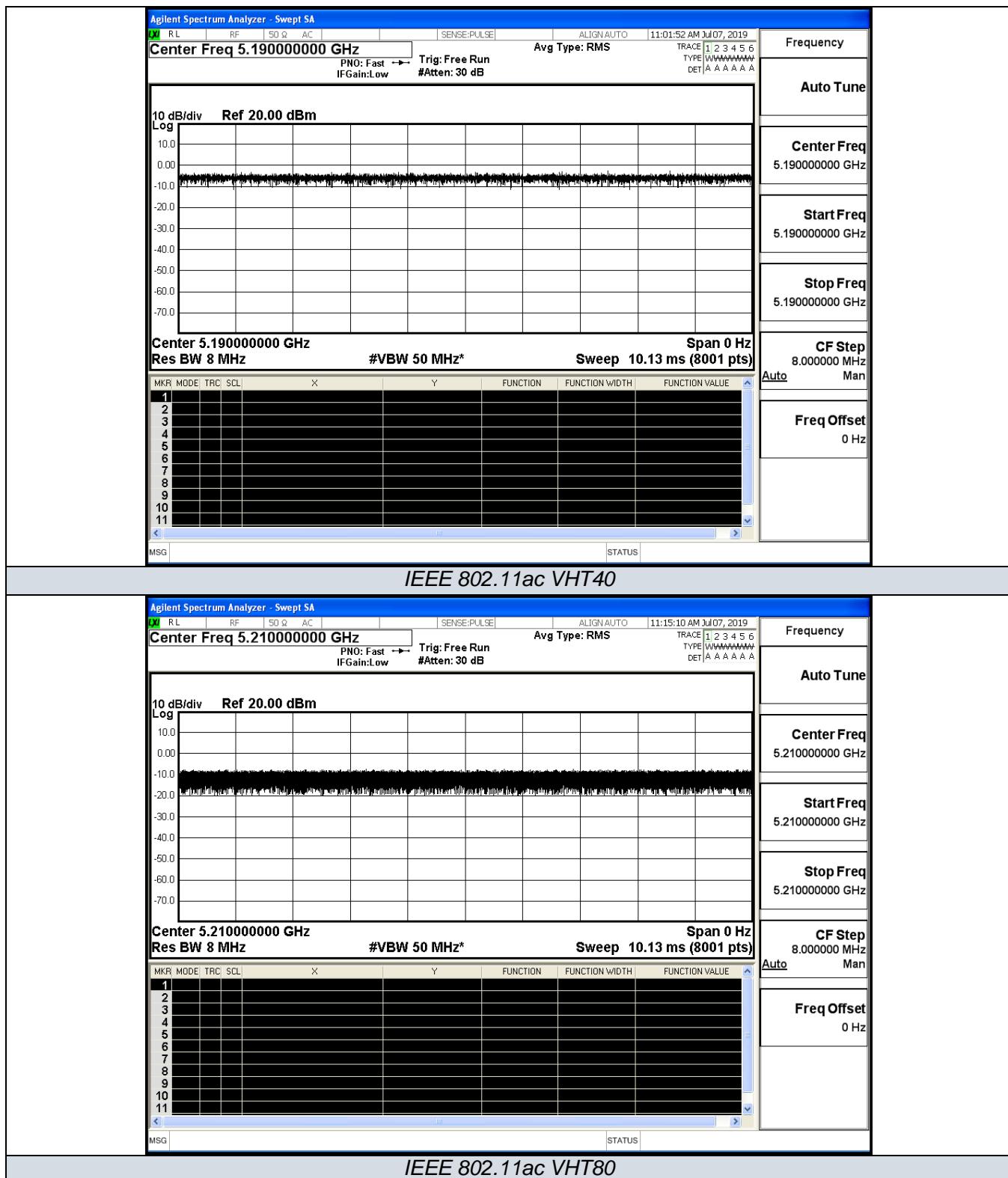
| Test Mode | Test Frequency (MHz) | Duty Cycle (%) | 10log(1/x) Factor (dB) | 1/B Minimum VBW (KHz) |
|-------------|----------------------|----------------|------------------------|-----------------------|
| 11A | 5200 | 100 | 0.00 | 0.01 |
| 11N20 SISO | 5200 | 100 | 0.00 | 0.01 |
| 11N40 SISO | 5190 | 100 | 0.00 | 0.01 |
| 11AC20 SISO | 5200 | 100 | 0.00 | 0.01 |
| 11AC40 SISO | 5190 | 100 | 0.00 | 0.01 |
| 11AC80 SISO | 5210 | 100 | 0.00 | 0.01 |

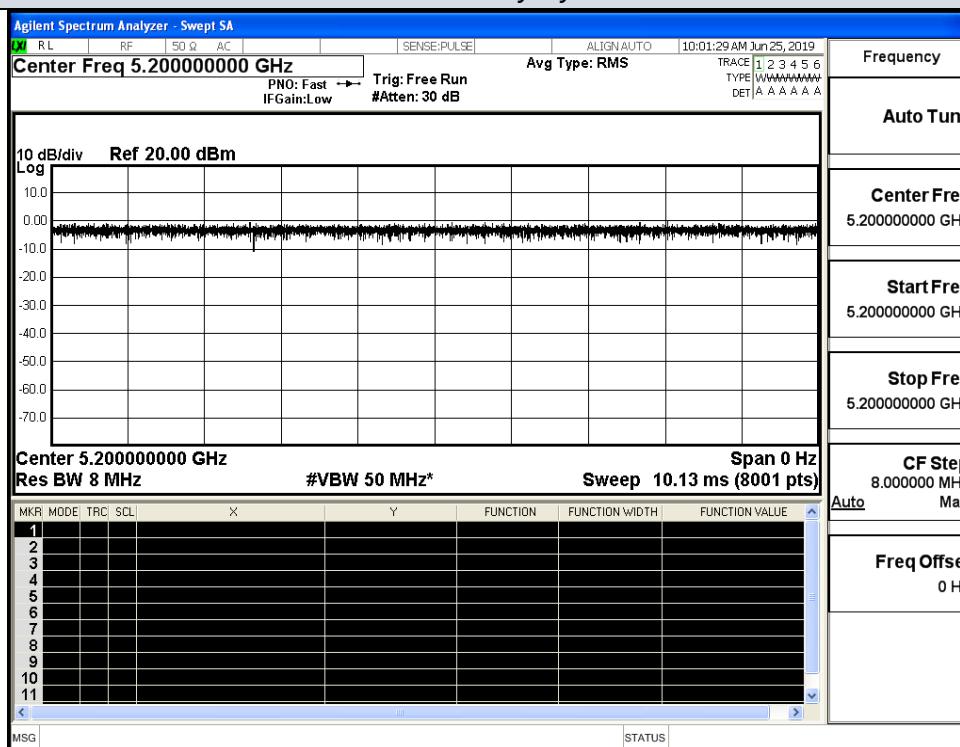
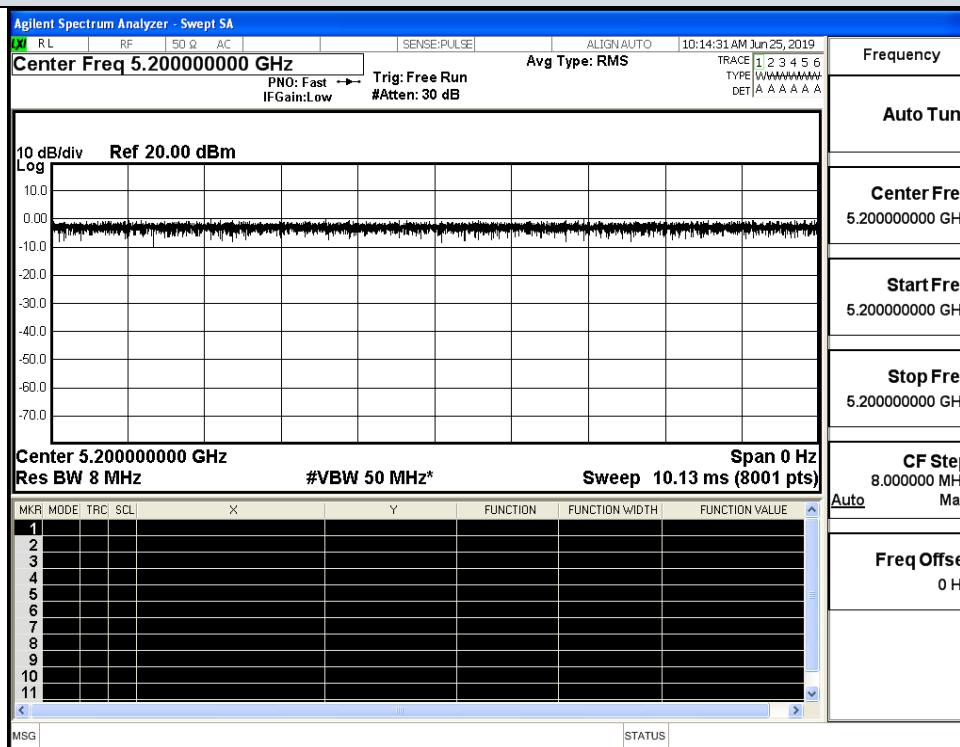
Antenna 1

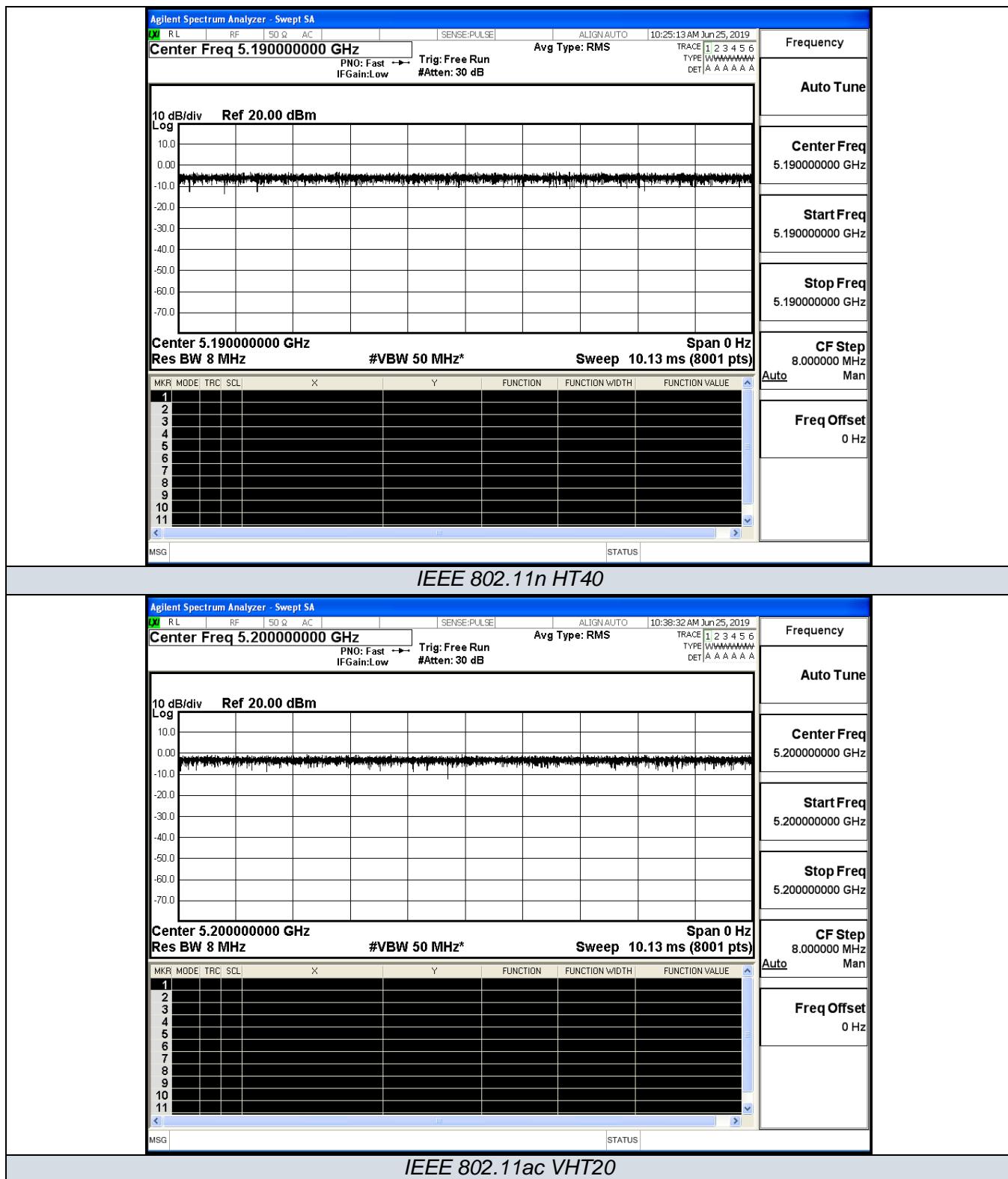
| Test Mode | Test Frequency (MHz) | Duty Cycle (%) | 10log(1/x) Factor (dB) | 1/B Minimum VBW (KHz) |
|-------------|----------------------|----------------|------------------------|-----------------------|
| 11A | 5200 | 100 | 0.00 | 0.01 |
| 11N20 SISO | 5200 | 100 | 0.00 | 0.01 |
| 11N40 SISO | 5190 | 100 | 0.00 | 0.01 |
| 11AC20 SISO | 5200 | 100 | 0.00 | 0.01 |
| 11AC40 SISO | 5190 | 100 | 0.00 | 0.01 |
| 11AC80 SISO | 5210 | 100 | 0.00 | 0.01 |

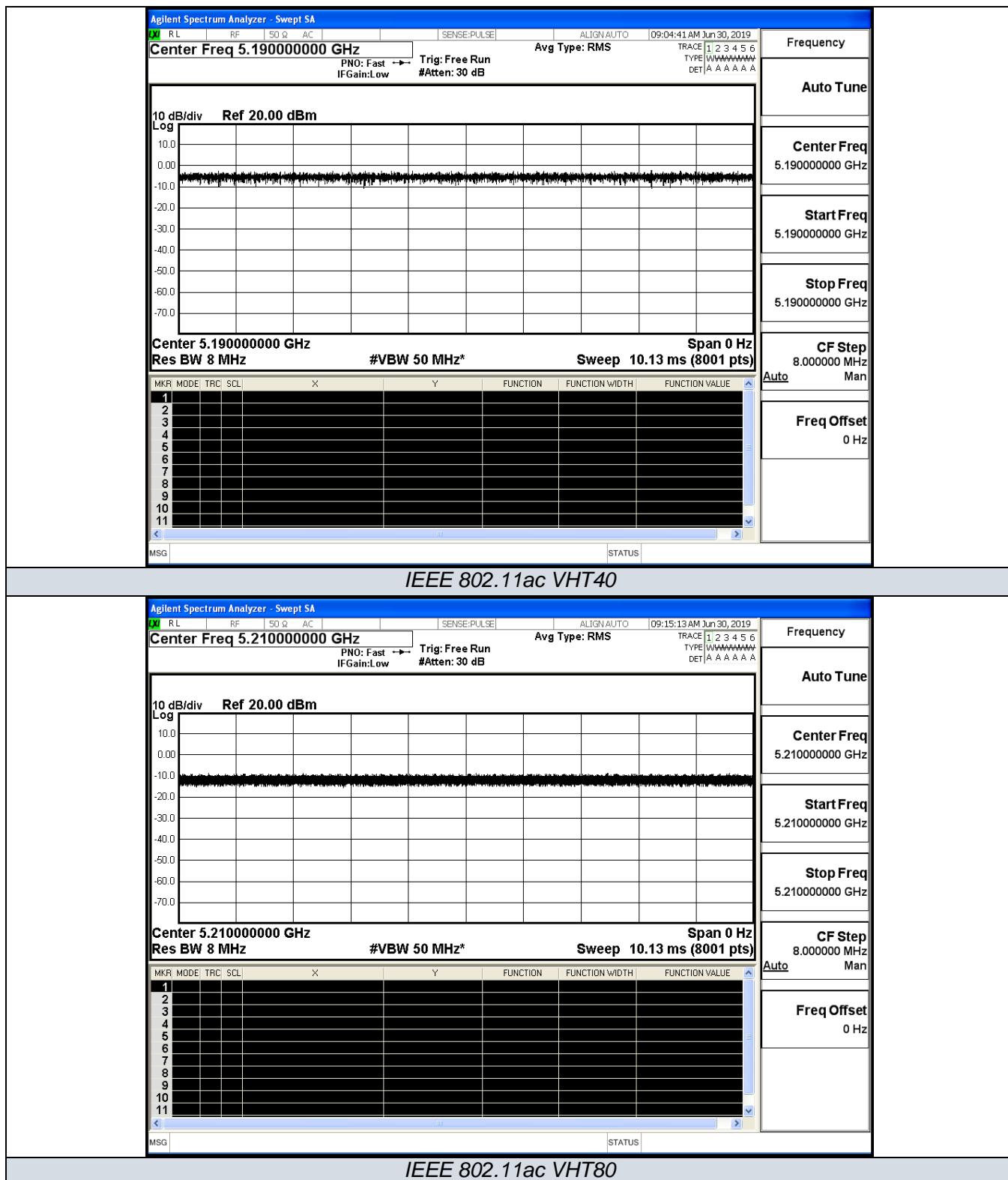
On Time and Duty Cycle Ant 0*IEEE 802.11a**IEEE 802.11n HT20*





On Time and Duty Cycle Ant 1*IEEE 802.11a**IEEE 802.11n HT20*





D.2 Maximum Conduct Output Power

Only for FCC Review

Antenna 0

| Test Mode | Channel | Frequency (MHz) | AVG Conducted Power (dBm) | Duty Cycle Factor (dB) | Report Conducted Power (dBm) | Limit (dBm) |
|-------------|---------|-----------------|---------------------------|------------------------|------------------------------|-------------|
| 11A | 36 | 5180 | 15.42 | 0 | 15.42 | 24.00 |
| | 40 | 5200 | 16.29 | 0 | 16.29 | |
| | 48 | 5240 | 15.56 | 0 | 15.56 | |
| 11N20 SISO | 36 | 5180 | 15.96 | 0 | 15.96 | 24.00 |
| | 40 | 5200 | 16.13 | 0 | 16.13 | |
| | 48 | 5240 | 15.70 | 0 | 15.70 | |
| 11N40 SISO | 38 | 5190 | 14.91 | 0 | 14.91 | 24.00 |
| | 46 | 5230 | 14.91 | 0 | 14.91 | |
| 11AC20 SISO | 36 | 5180 | 16.20 | 0 | 16.20 | 24.00 |
| | 40 | 5200 | 16.37 | 0 | 16.37 | |
| | 48 | 5240 | 15.71 | 0 | 15.71 | |
| 11AC40 SISO | 38 | 5190 | 14.84 | 0 | 14.84 | 24.00 |
| | 46 | 5230 | 14.28 | 0 | 14.28 | |
| 11AC80 SISO | 42 | 5210 | 14.43 | 0 | 14.43 | 24.00 |

Antenna 1

| Test Mode | Channel | Frequency (MHz) | AVG Conducted Power (dBm) | Duty Cycle Factor (dB) | Report Conducted Power (dBm) | Limit (dBm) |
|-------------|---------|-----------------|---------------------------|------------------------|------------------------------|-------------|
| 11A | 36 | 5180 | 15.43 | 0 | 15.43 | 24.00 |
| | 40 | 5200 | 15.56 | 0 | 15.56 | |
| | 48 | 5240 | 16.03 | 0 | 16.03 | |
| 11N20 SISO | 36 | 5180 | 15.33 | 0 | 15.33 | 24.00 |
| | 40 | 5200 | 16.10 | 0 | 16.10 | |
| | 48 | 5240 | 15.74 | 0 | 15.74 | |
| 11N40 SISO | 38 | 5190 | 14.18 | 0 | 14.18 | 24.00 |
| | 46 | 5230 | 15.68 | 0 | 15.68 | |
| 11AC20 SISO | 36 | 5180 | 15.69 | 0 | 15.69 | 24.00 |
| | 40 | 5200 | 15.48 | 0 | 15.48 | |
| | 48 | 5240 | 15.51 | 0 | 15.51 | |
| 11AC40 SISO | 38 | 5190 | 14.14 | 0 | 14.14 | 24.00 |
| | 46 | 5230 | 14.44 | 0 | 14.44 | |
| 11AC80 SISO | 42 | 5210 | 14.45 | 0 | 14.45 | 24.00 |

ANT0+ANT1:

| Test Mode | Channel | Frequency (MHz) | Duty Cycle Factor (dB) | Report Conducted Power (dBm) | | | Limit (dBm) |
|-------------|---------|-----------------|------------------------|------------------------------|-------|-------|-------------|
| | | | | Ant0 | Ant1 | Sum | |
| 11N20 MIMO | 36 | 5180 | 0 | 15.96 | 15.33 | 18.67 | 24.00 |
| | 40 | 5200 | 0 | 16.13 | 16.10 | 19.13 | |
| | 48 | 5240 | 0 | 15.70 | 15.74 | 18.73 | |
| 11N40 MIMO | 38 | 5190 | 0 | 14.91 | 14.18 | 17.57 | 24.00 |
| | 46 | 5230 | 0 | 14.91 | 15.68 | 18.32 | |
| 11AC20 MIMO | 36 | 5180 | 0 | 16.20 | 15.69 | 18.96 | 24.00 |
| | 40 | 5200 | 0 | 16.37 | 15.48 | 18.96 | |
| | 48 | 5240 | 0 | 15.71 | 15.51 | 18.62 | |
| 11AC40 MIMO | 38 | 5190 | 0 | 14.84 | 14.14 | 17.51 | 24.00 |
| | 46 | 5230 | 0 | 14.28 | 14.44 | 17.37 | |
| 11AC80 MIMO | 42 | 5210 | 0 | 14.43 | 14.45 | 17.45 | 24.00 |

Only for ISED Review**Antenna 0**

| Test Mode | Channel | Frequency (MHz) | AVG Conducted Power (dBm) | Antenna Gain (dBi) | Duty Cycle Factor (dB) | Report EIRP (dBm) | Limit (dBm) |
|-------------|---------|-----------------|---------------------------|--------------------|------------------------|-------------------|-------------|
| 11A | 36 | 5180 | 15.42 | 2.04 | 0 | 17.46 | 23.00 |
| | 40 | 5200 | 16.29 | 2.04 | 0 | 18.33 | |
| | 48 | 5240 | 15.56 | 2.04 | 0 | 17.60 | |
| 11N20 SISO | 36 | 5180 | 15.96 | 2.04 | 0 | 18.00 | 23.00 |
| | 40 | 5200 | 16.13 | 2.04 | 0 | 18.17 | |
| | 48 | 5240 | 15.70 | 2.04 | 0 | 17.74 | |
| 11N40 SISO | 38 | 5190 | 14.91 | 2.04 | 0 | 16.95 | 23.00 |
| | 46 | 5230 | 14.91 | 2.04 | 0 | 16.95 | |
| 11AC20 SISO | 36 | 5180 | 16.20 | 2.04 | 0 | 18.24 | 23.00 |
| | 40 | 5200 | 16.37 | 2.04 | 0 | 18.41 | |
| | 48 | 5240 | 15.71 | 2.04 | 0 | 17.75 | |
| 11AC40 SISO | 38 | 5190 | 14.84 | 2.04 | 0 | 16.88 | 23.00 |
| | 46 | 5230 | 14.28 | 2.04 | 0 | 16.32 | |
| 11AC80 SISO | 42 | 5210 | 14.43 | 2.04 | 0 | 16.47 | 23.00 |

Antenna 1

| Test Mode | Channel | Frequency (MHz) | AVG Conducted Power (dBm) | Antenna Gain (dBi) | Duty Cycle Factor (dB) | Report EIRP (dBm) | Limit (dBm) |
|-------------|---------|-----------------|---------------------------|--------------------|------------------------|-------------------|-------------|
| 11A | 36 | 5180 | 15.43 | 2.04 | 0 | 17.47 | 23.00 |
| | 40 | 5200 | 15.56 | 2.04 | 0 | 17.60 | |
| | 48 | 5240 | 16.03 | 2.04 | 0 | 18.07 | |
| 11N20 SISO | 36 | 5180 | 15.33 | 2.04 | 0 | 17.37 | 23.00 |
| | 40 | 5200 | 16.10 | 2.04 | 0 | 18.14 | |
| | 48 | 5240 | 15.74 | 2.04 | 0 | 17.78 | |
| 11N40 SISO | 38 | 5190 | 14.18 | 2.04 | 0 | 16.22 | 23.00 |
| | 46 | 5230 | 15.68 | 2.04 | 0 | 17.72 | |
| 11AC20 SISO | 36 | 5180 | 15.69 | 2.04 | 0 | 17.73 | 23.00 |
| | 40 | 5200 | 15.48 | 2.04 | 0 | 17.52 | |
| | 48 | 5240 | 15.51 | 2.04 | 0 | 17.55 | |
| 11AC40 SISO | 38 | 5190 | 14.14 | 2.04 | 0 | 16.18 | 23.00 |
| | 46 | 5230 | 14.44 | 2.04 | 0 | 16.48 | |
| 11AC80 SISO | 42 | 5210 | 14.45 | 2.04 | 0 | 16.49 | 23.00 |

ANT0+ANT1:

| Test Mode | Channel | Frequency (MHz) | Duty Cycle Factor (dB) | Report EIRP (dBm) | | | Limit (dBm) |
|-------------|---------|-----------------|------------------------|-------------------|-------|-------|-------------|
| | | | | Ant0 | Ant1 | Sum | |
| 11N20 MIMO | 36 | 5180 | 0 | 18.00 | 17.37 | 20.71 | 23.00 |
| | 40 | 5200 | 0 | 18.17 | 18.14 | 21.17 | |
| | 48 | 5240 | 0 | 17.74 | 17.78 | 20.77 | |
| 11N40 MIMO | 38 | 5190 | 0 | 16.95 | 16.22 | 19.61 | 23.00 |
| | 46 | 5230 | 0 | 16.95 | 17.72 | 20.36 | |
| 11AC20 MIMO | 36 | 5180 | 0 | 18.24 | 17.73 | 21.00 | 23.00 |
| | 40 | 5200 | 0 | 18.41 | 17.52 | 21.00 | |
| | 48 | 5240 | 0 | 17.75 | 17.55 | 20.66 | |
| 11AC40 MIMO | 38 | 5190 | 0 | 16.88 | 16.18 | 19.55 | 23.00 |
| | 46 | 5230 | 0 | 16.32 | 16.48 | 19.41 | |
| 11AC80 MIMO | 42 | 5210 | 0 | 16.47 | 16.49 | 19.49 | 23.00 |

D.3 Power Spectral Density

Only for FCC Review

Antenna 0

| Test Mode | Channel | Frequency (MHz) | Power Density (dBm/MHz) | Duty Cycle Factor (dB) | Report Power Density (dBm/MHz) | Limit (dBm/MHz) |
|-------------|---------|-----------------|-------------------------|------------------------|--------------------------------|-----------------|
| 11A | 36 | 5180 | 2.843 | 0 | 2.843 | 11.00 |
| | 40 | 5200 | 2.619 | 0 | 2.619 | |
| | 48 | 5240 | 0.503 | 0 | 0.503 | |
| 11N20 SISO | 36 | 5180 | 3.036 | 0 | 3.036 | 11.00 |
| | 40 | 5200 | 2.558 | 0 | 2.558 | |
| | 48 | 5240 | 0.671 | 0 | 0.671 | |
| 11N40 SISO | 38 | 5190 | 0.189 | 0 | 0.189 | 11.00 |
| | 46 | 5230 | -0.794 | 0 | -0.794 | |
| 11AC20 SISO | 36 | 5180 | 3.423 | 0 | 3.423 | 11.00 |
| | 40 | 5200 | 2.043 | 0 | 2.043 | |
| | 48 | 5240 | 0.708 | 0 | 0.708 | |
| 11AC40 SISO | 38 | 5190 | 0.173 | 0 | 0.173 | 11.00 |
| | 46 | 5230 | -1.194 | 0 | -1.194 | |
| 11AC80 SISO | 42 | 5210 | -2.918 | 0 | -2.918 | 11.00 |

Antenna 1

| Test Mode | Channel | Frequency (MHz) | Power Density (dBm/MHz) | Duty Cycle Factor (dB) | Report Power Density (dBm/MHz) | Limit (dBm/MHz) |
|-------------|---------|-----------------|-------------------------|------------------------|--------------------------------|-----------------|
| 11A | 36 | 5180 | 2.839 | 0 | 2.839 | 11.00 |
| | 40 | 5200 | 2.832 | 0 | 2.832 | |
| | 48 | 5240 | 1.532 | 0 | 1.532 | |
| 11N20 SISO | 36 | 5180 | 3.301 | 0 | 3.301 | 11.00 |
| | 40 | 5200 | 3.045 | 0 | 3.045 | |
| | 48 | 5240 | 1.061 | 0 | 1.061 | |
| 11N40 SISO | 38 | 5190 | 0.101 | 0 | 0.101 | 11.00 |
| | 46 | 5230 | -0.675 | 0 | -0.675 | |
| 11AC20 SISO | 36 | 5180 | 3.551 | 0 | 3.551 | 11.00 |
| | 40 | 5200 | 2.956 | 0 | 2.956 | |
| | 48 | 5240 | 1.722 | 0 | 1.722 | |
| 11AC40 SISO | 38 | 5190 | 0.989 | 0 | 0.989 | 11.00 |
| | 46 | 5230 | -1.366 | 0 | -1.366 | |
| 11AC80 SISO | 42 | 5210 | -4.287 | 0 | -4.287 | 11.00 |

ANT0+ANT1:

| Test Mode | Channel | Frequency (MHz) | Duty Cycle Factor (dB) | Report Power Density (dBm/MHz) | | | Limit (dBm) |
|-------------|---------|-----------------|------------------------|--------------------------------|--------|--------|-------------|
| | | | | Ant0 | Ant1 | Sum | |
| 11N20 MIMO | 36 | 5180 | 0 | 3.036 | 3.301 | 6.181 | 11.00 |
| | 40 | 5200 | 0 | 2.558 | 3.045 | 5.819 | |
| | 48 | 5240 | 0 | 0.671 | 1.061 | 3.881 | |
| 11N40 MIMO | 38 | 5190 | 0 | 0.189 | 0.101 | 3.156 | 11.00 |
| | 46 | 5230 | 0 | -0.794 | -0.675 | 2.276 | |
| 11AC20 MIMO | 36 | 5180 | 0 | 3.423 | 3.551 | 6.498 | 11.00 |
| | 40 | 5200 | 0 | 2.043 | 2.956 | 5.534 | |
| | 48 | 5240 | 0 | 0.708 | 1.722 | 4.255 | |
| 11AC40 MIMO | 38 | 5190 | 0 | 0.173 | 0.989 | 3.610 | 11.00 |
| | 46 | 5230 | 0 | -1.194 | -1.366 | 1.731 | |
| 11AC80 MIMO | 42 | 5210 | 0 | -2.918 | -4.287 | -0.538 | 11.00 |

Only for ISED Review**Antenna 0**

| Test Mode | Channel | Frequency (MHz) | Power Density Conducted (dBm/MHz) | Antenna Gain (dBi) | Duty Cycle Factor (dB) | Report Power Density EIRP (dBm/MHz) | Limit (dBm/MHz) |
|-------------|---------|-----------------|-----------------------------------|--------------------|------------------------|-------------------------------------|-----------------|
| 11A | 36 | 5180 | 2.843 | 2.04 | 0 | 4.883 | 10.00 |
| | 40 | 5200 | 2.619 | 2.04 | 0 | 4.659 | |
| | 48 | 5240 | 0.503 | 2.04 | 0 | 2.543 | |
| 11N20 SISO | 36 | 5180 | 3.036 | 2.04 | 0 | 5.076 | 10.00 |
| | 40 | 5200 | 2.558 | 2.04 | 0 | 4.598 | |
| | 48 | 5240 | 0.671 | 2.04 | 0 | 2.711 | |
| 11N40 SISO | 38 | 5190 | 0.189 | 2.04 | 0 | 2.229 | 10.00 |
| | 46 | 5230 | -0.794 | 2.04 | 0 | 1.246 | |
| 11AC20 SISO | 36 | 5180 | 3.423 | 2.04 | 0 | 5.463 | 10.00 |
| | 40 | 5200 | 2.043 | 2.04 | 0 | 4.083 | |
| | 48 | 5240 | 0.708 | 2.04 | 0 | 2.748 | |
| 11AC40 SISO | 38 | 5190 | 0.173 | 2.04 | 0 | 2.213 | 10.00 |
| | 46 | 5230 | -1.194 | 2.04 | 0 | 0.846 | |
| 11AC80 SISO | 42 | 5210 | -2.918 | 2.04 | 0 | -0.878 | 10.00 |

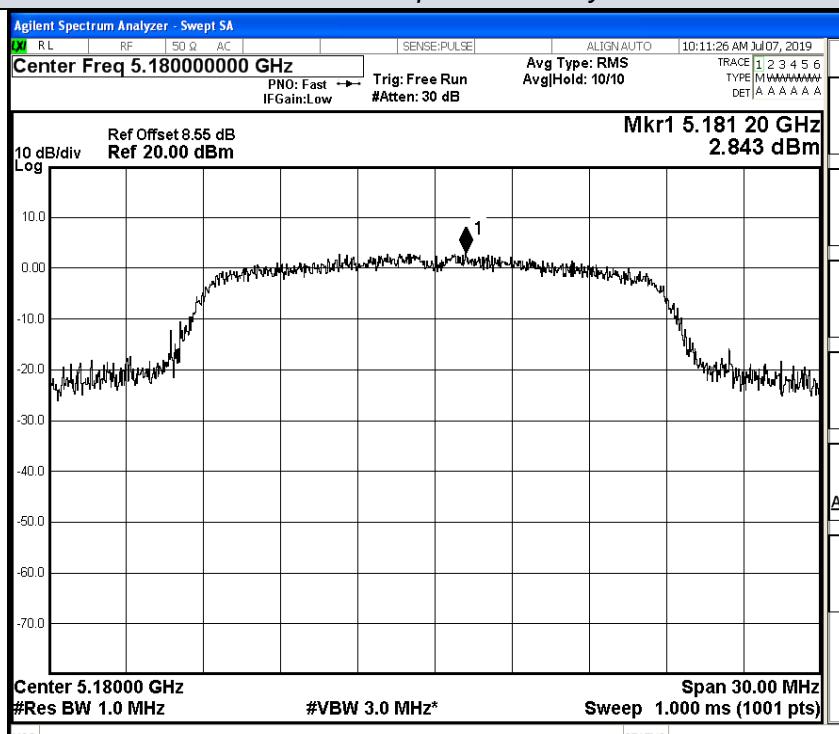
Antenna 1

| Test Mode | Channel | Frequency (MHz) | Power Density Conducted (dBm/MHz) | Antenna Gain (dBi) | Duty Cycle Factor (dB) | Report Power Density EIRP (dBm/MHz) | Limit (dBm/MHz) |
|-------------|---------|-----------------|-----------------------------------|--------------------|------------------------|-------------------------------------|-----------------|
| 11A | 36 | 5180 | 2.839 | 2.04 | 0 | 4.879 | 10.00 |
| | 40 | 5200 | 2.832 | 2.04 | 0 | 4.872 | |
| | 48 | 5240 | 1.532 | 2.04 | 0 | 3.572 | |
| 11N20 SISO | 36 | 5180 | 3.301 | 2.04 | 0 | 5.341 | 10.00 |
| | 40 | 5200 | 3.045 | 2.04 | 0 | 5.085 | |
| | 48 | 5240 | 1.061 | 2.04 | 0 | 3.101 | |
| 11N40 SISO | 38 | 5190 | 0.101 | 2.04 | 0 | 2.141 | 10.00 |
| | 46 | 5230 | -0.675 | 2.04 | 0 | 1.365 | |
| 11AC20 SISO | 36 | 5180 | 3.551 | 2.04 | 0 | 5.591 | 10.00 |
| | 40 | 5200 | 2.956 | 2.04 | 0 | 4.996 | |
| | 48 | 5240 | 1.722 | 2.04 | 0 | 3.762 | |
| 11AC40 SISO | 38 | 5190 | 0.989 | 2.04 | 0 | 3.029 | 10.00 |
| | 46 | 5230 | -1.366 | 2.04 | 0 | 0.674 | |
| 11AC80 SISO | 42 | 5210 | -4.287 | 2.04 | 0 | -2.247 | 10.00 |

ANT0+ANT1:

| Test Mode | Channel | Frequency (MHz) | Duty Cycle Factor (dB) | Report Power Density EIRP (dBm/MHz) | | | Limit (dBm/MHz) |
|-------------|---------|-----------------|------------------------|-------------------------------------|--------|-------|-----------------|
| | | | | Ant0 | Ant1 | Sum | |
| 11N20 MIMO | 36 | 5180 | 0 | 5.076 | 5.341 | 8.221 | 10.00 |
| | 40 | 5200 | 0 | 4.598 | 5.085 | 7.859 | |
| | 48 | 5240 | 0 | 2.711 | 3.101 | 5.921 | |
| 11N40 MIMO | 38 | 5190 | 0 | 2.229 | 2.141 | 5.196 | 10.00 |
| | 46 | 5230 | 0 | 1.246 | 1.365 | 4.316 | |
| 11AC20 MIMO | 36 | 5180 | 0 | 5.463 | 5.591 | 8.538 | 10.00 |
| | 40 | 5200 | 0 | 4.083 | 4.996 | 7.574 | |
| | 48 | 5240 | 0 | 2.748 | 3.762 | 6.295 | |
| 11AC40 MIMO | 38 | 5190 | 0 | 2.213 | 3.029 | 5.650 | 10.00 |
| | 46 | 5230 | 0 | 0.846 | 0.674 | 3.771 | |
| 11AC80 MIMO | 42 | 5210 | 0 | -0.878 | -2.247 | 1.502 | 10.00 |

Power Spectral Density Ant 0

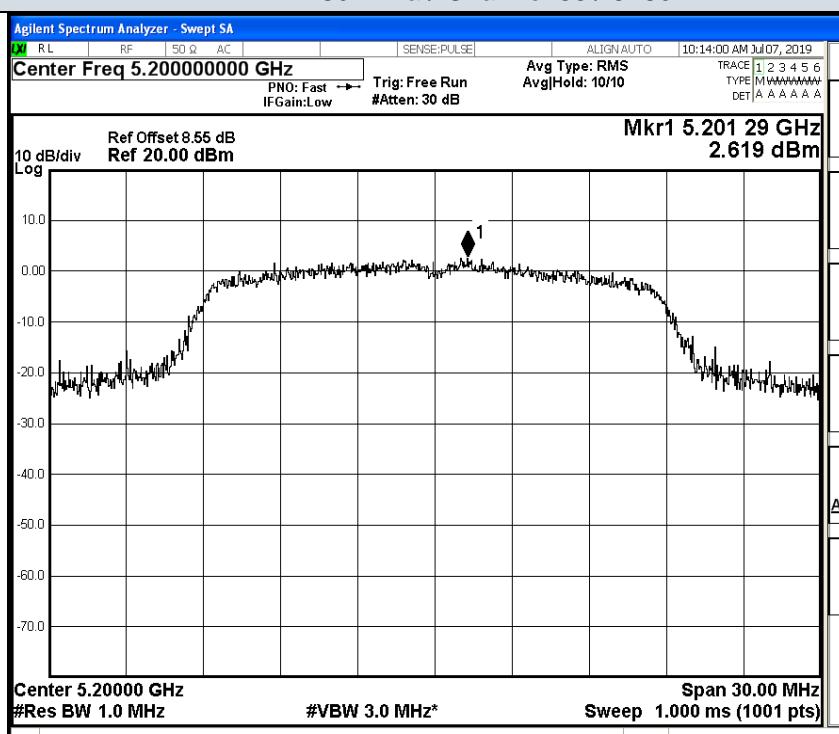


Frequency

Auto Tune

Center Freq
5.180000000 GHzStart Freq
5.185000000 GHzStop Freq
5.195000000 GHzCF Step
3.000000 MHz
AutoFreq Offset
0 Hz

IEEE 802.11a / Channel 36 / 5180 MHz

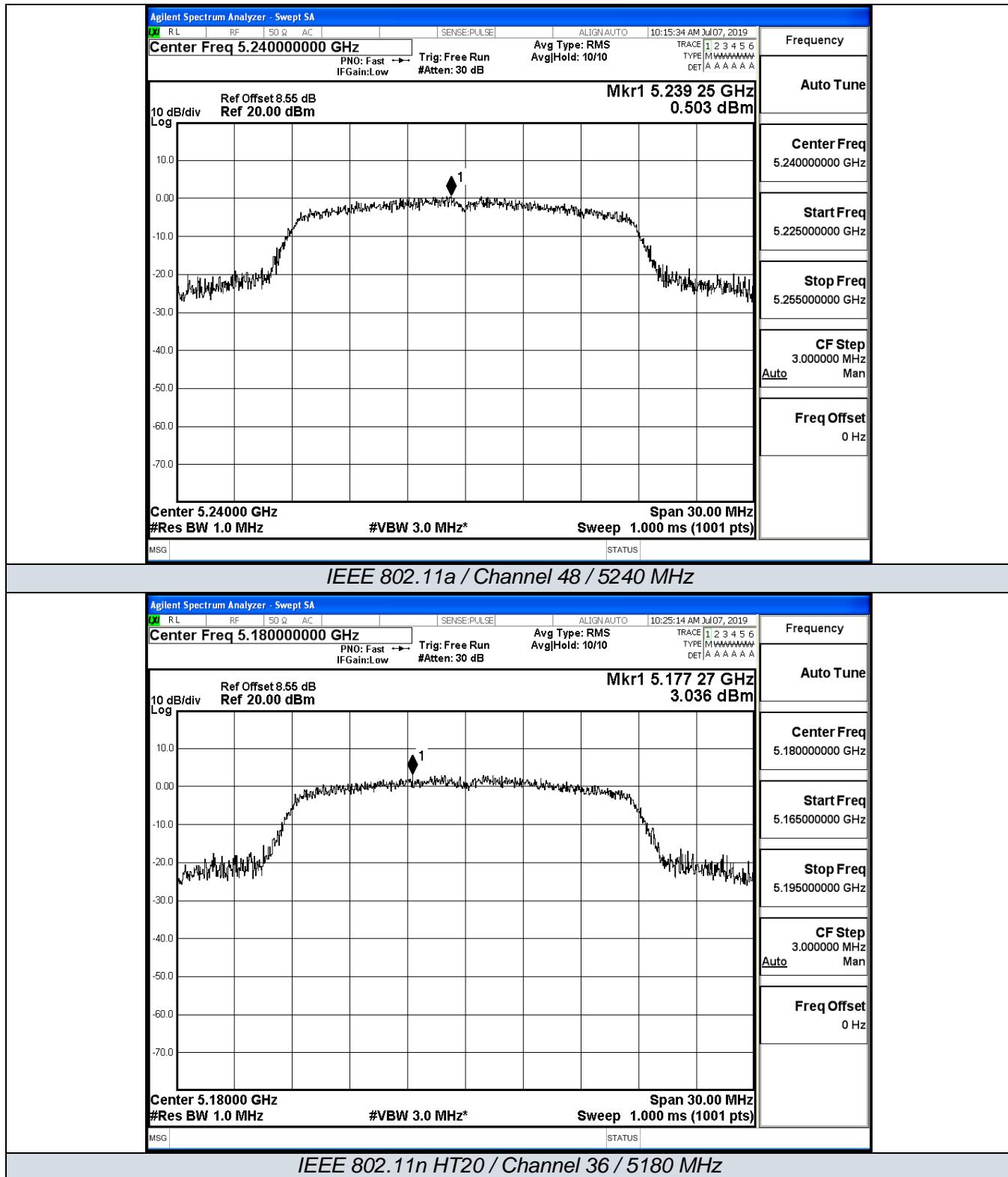


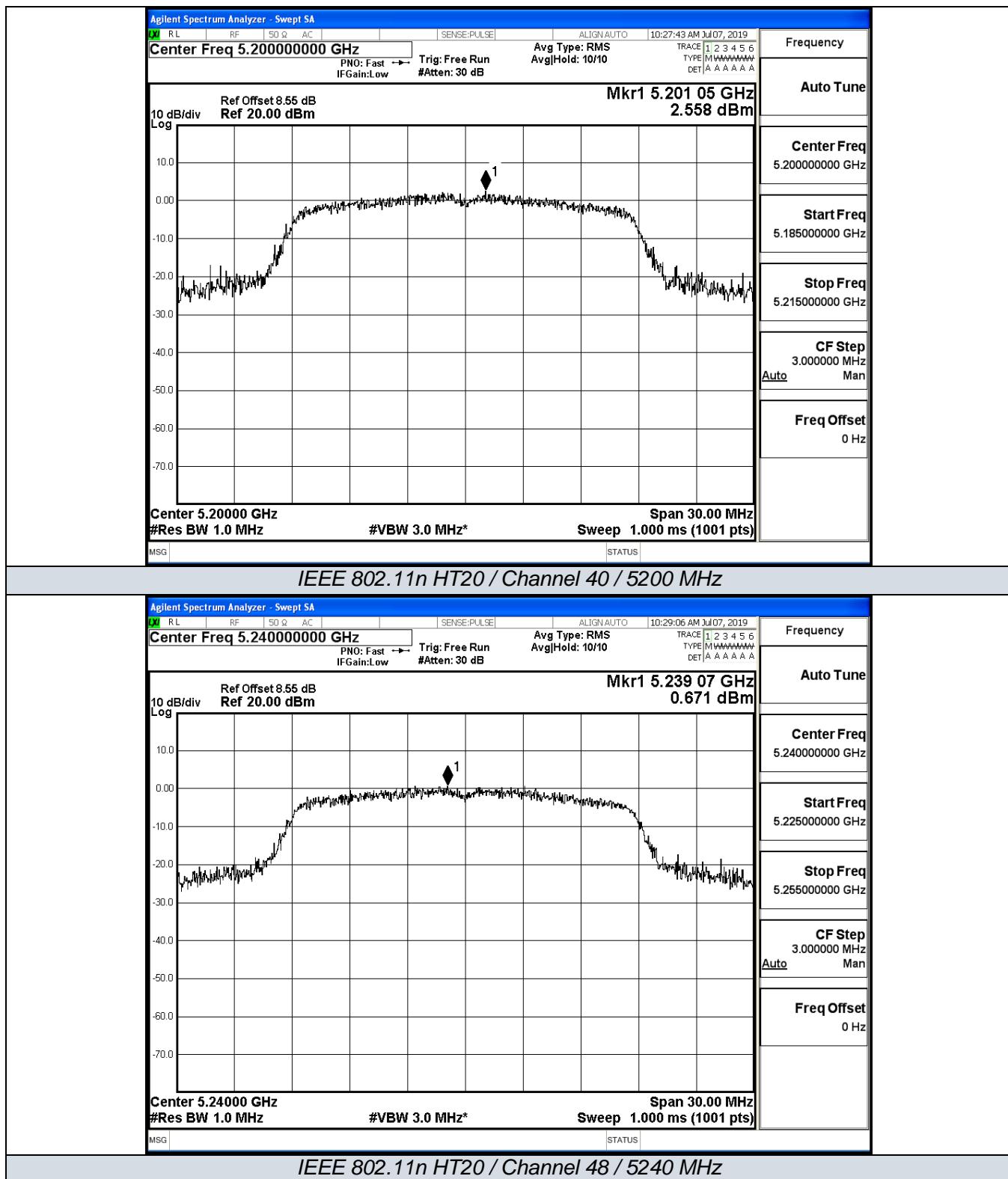
Frequency

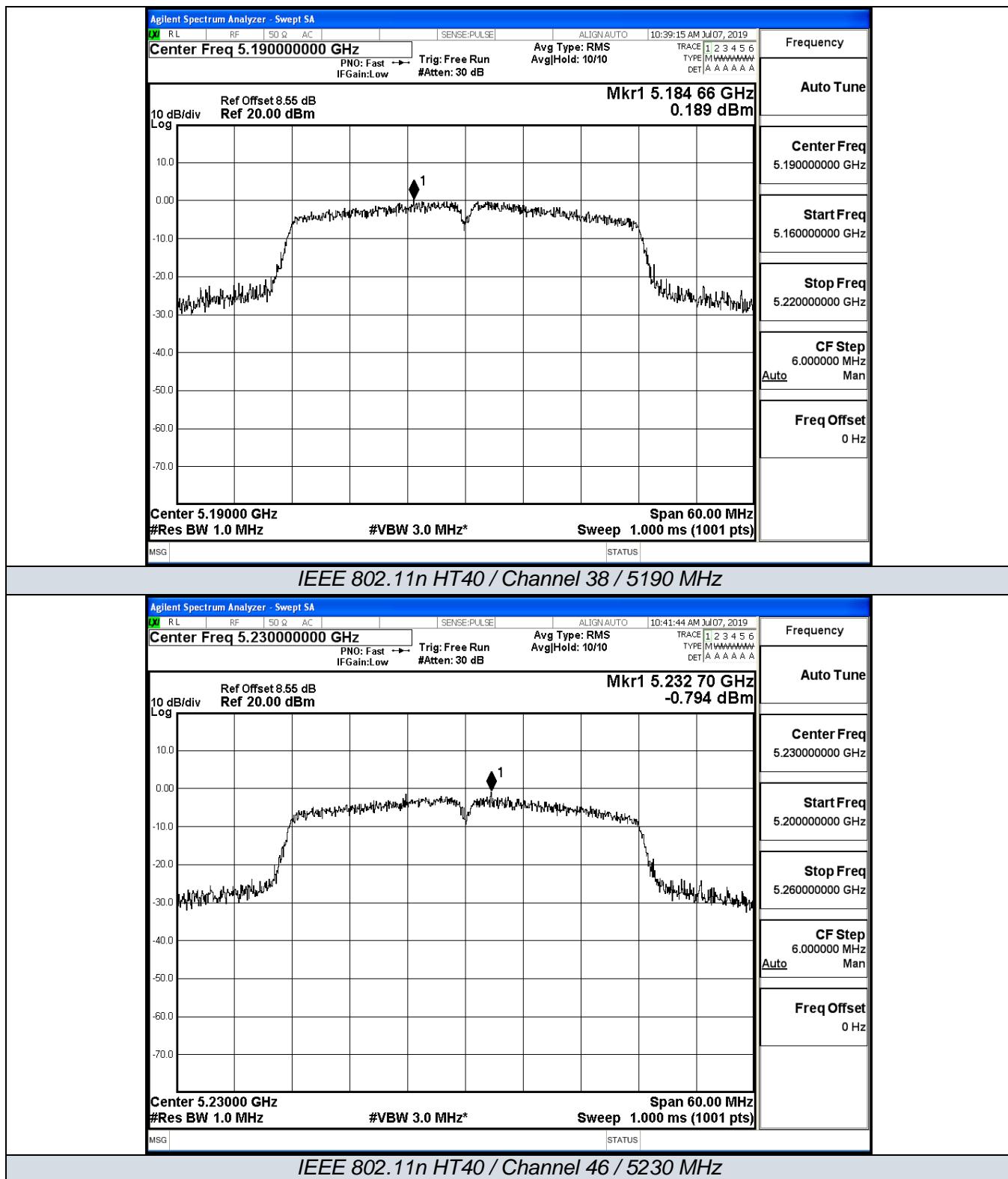
Auto Tune

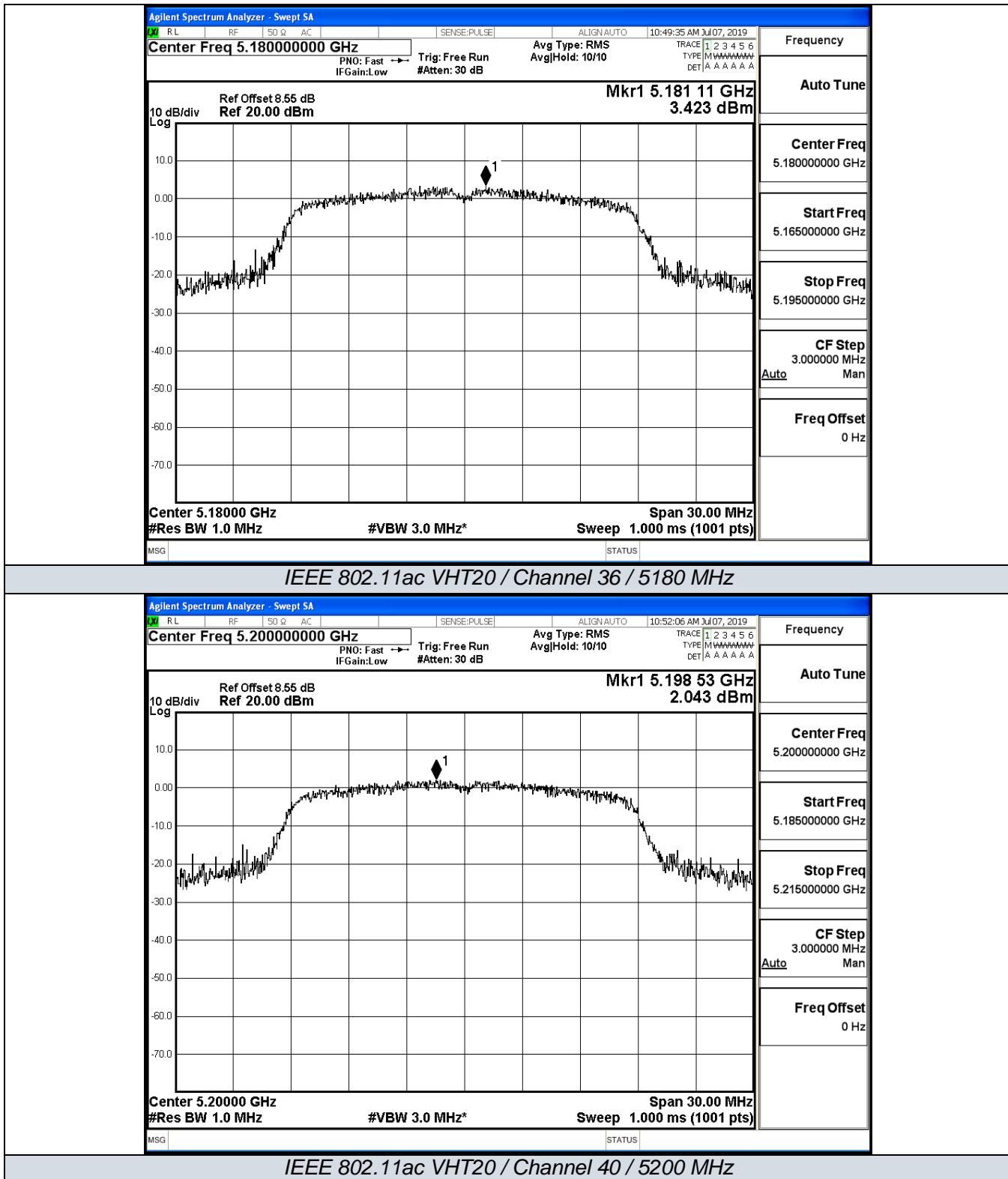
Center Freq
5.200000000 GHzStart Freq
5.185000000 GHzStop Freq
5.215000000 GHzCF Step
3.000000 MHz
AutoFreq Offset
0 Hz

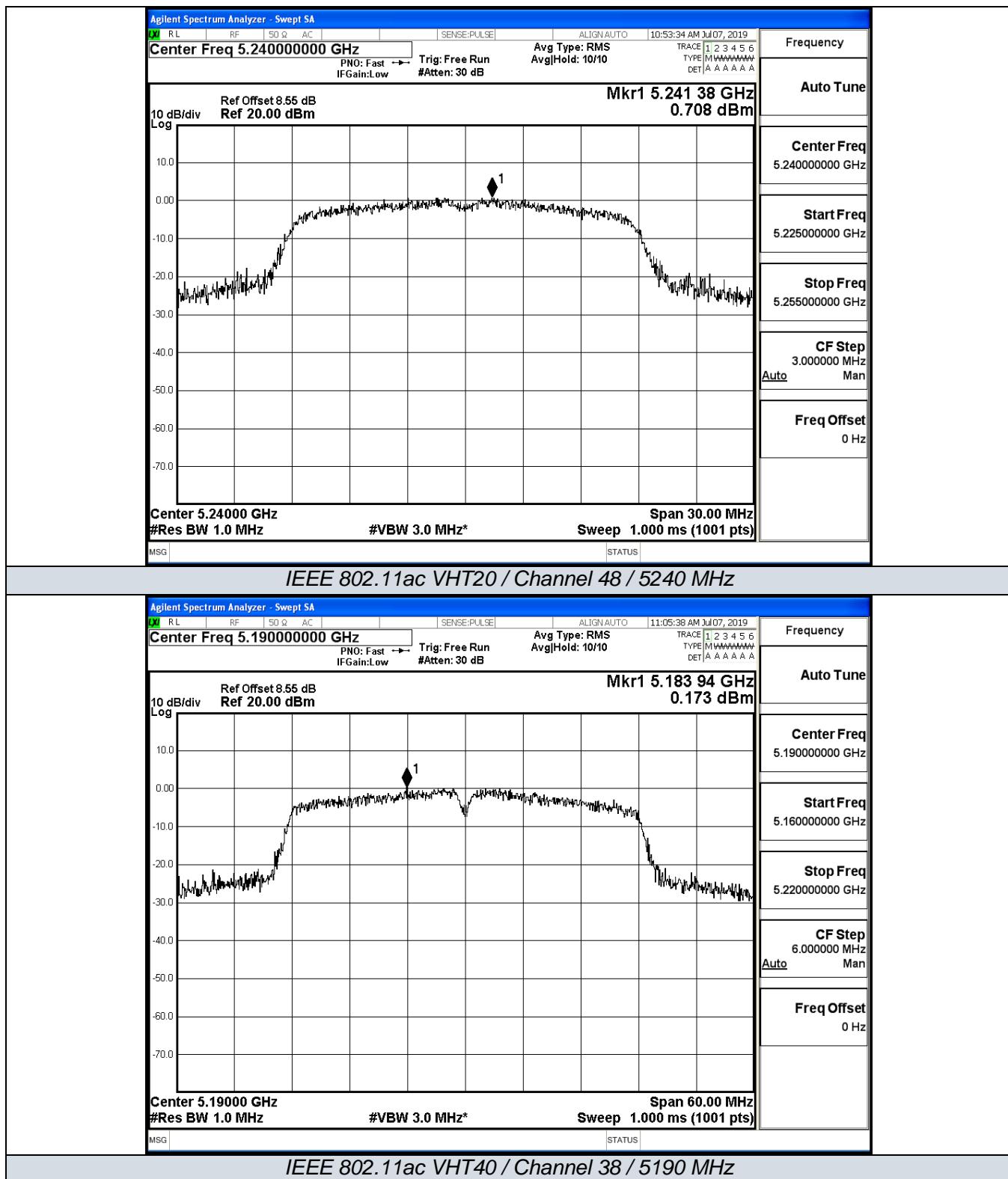
IEEE 802.11a / Channel 40 / 5200 MHz

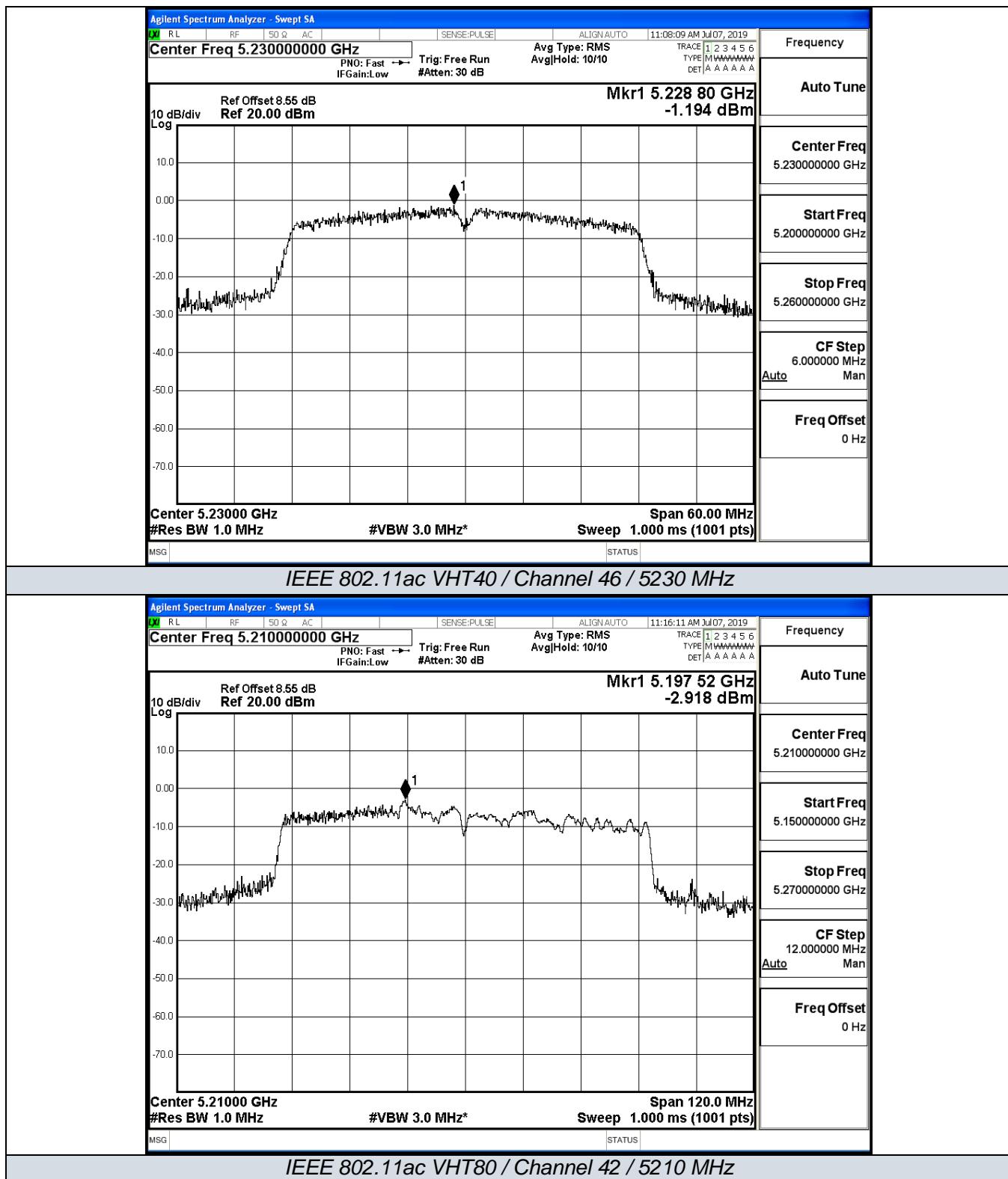




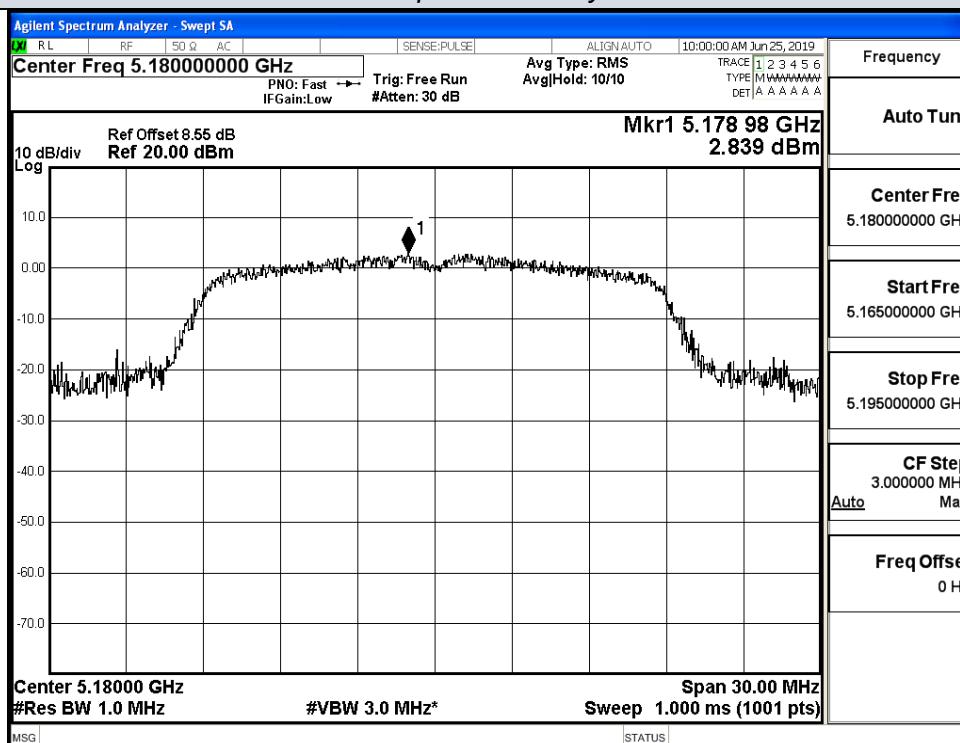








Power Spectral Density Ant 1

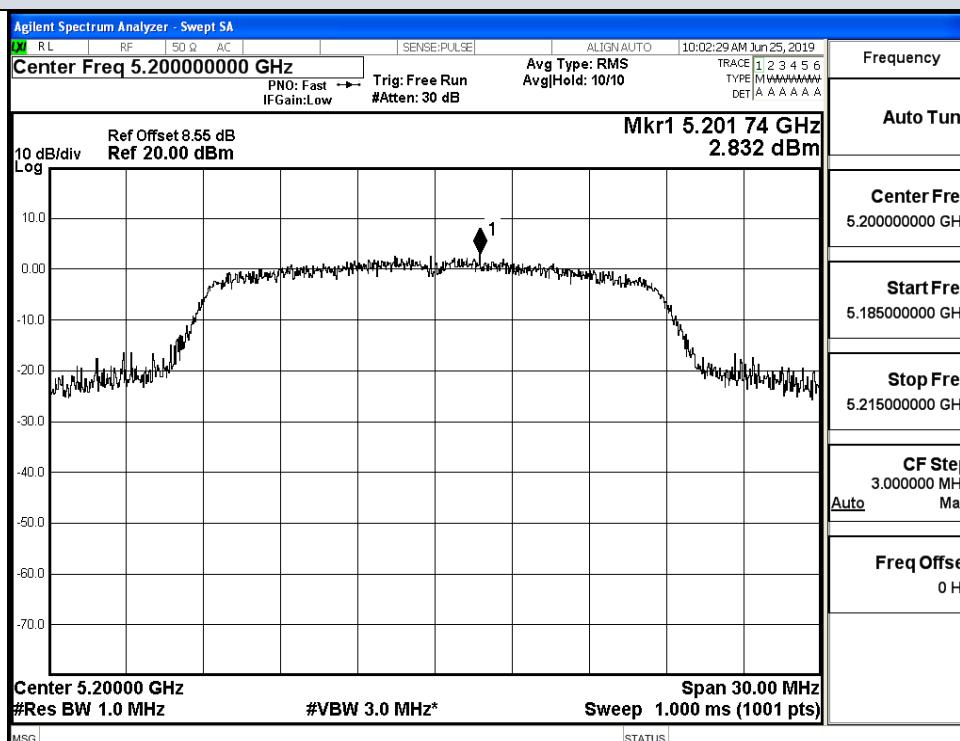


Frequency

Auto Tune

Center Freq
5.180000000 GHzStart Freq
5.185000000 GHzStop Freq
5.195000000 GHzCF Step
3.00000 MHz
AutoFreq Offset
0 Hz

IEEE 802.11a / Channel 36 / 5180 MHz

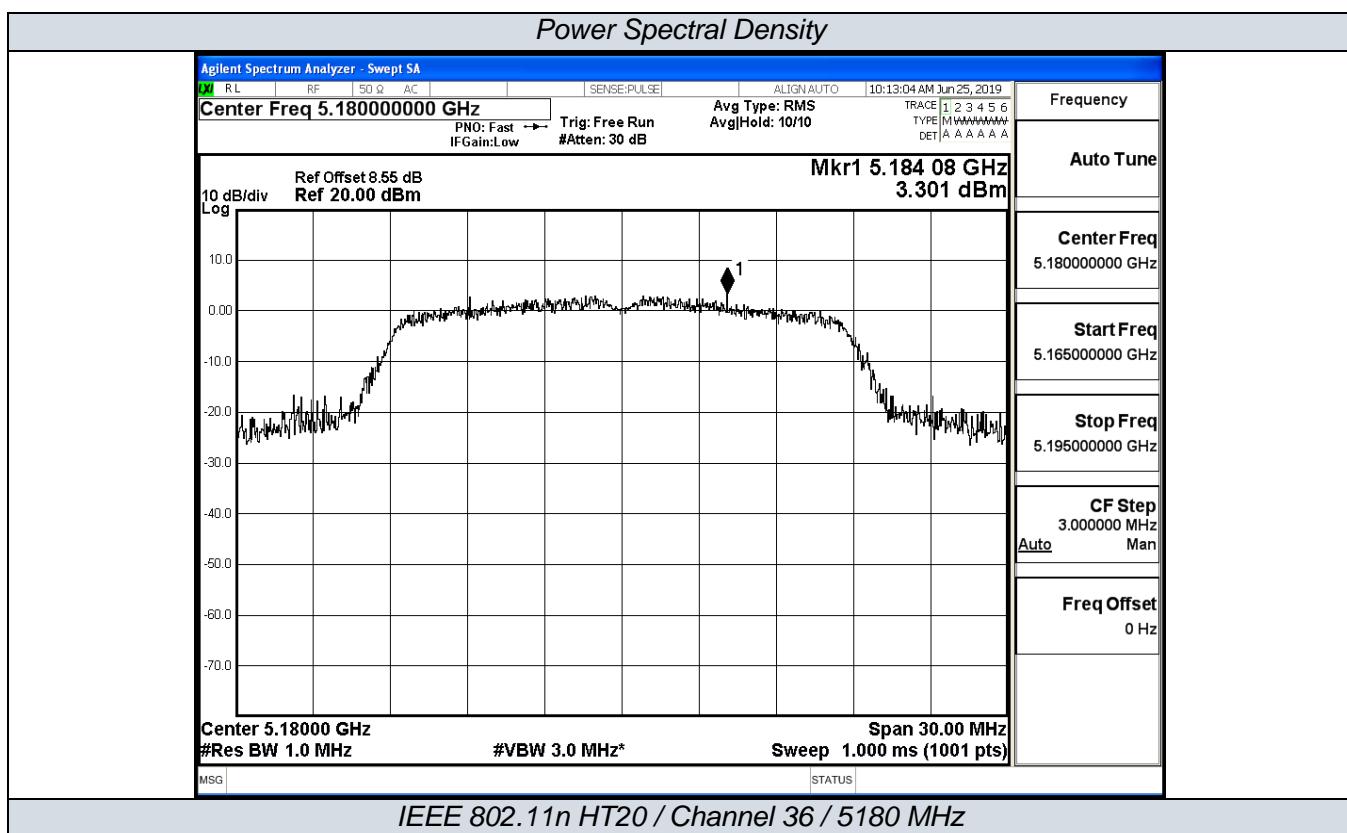
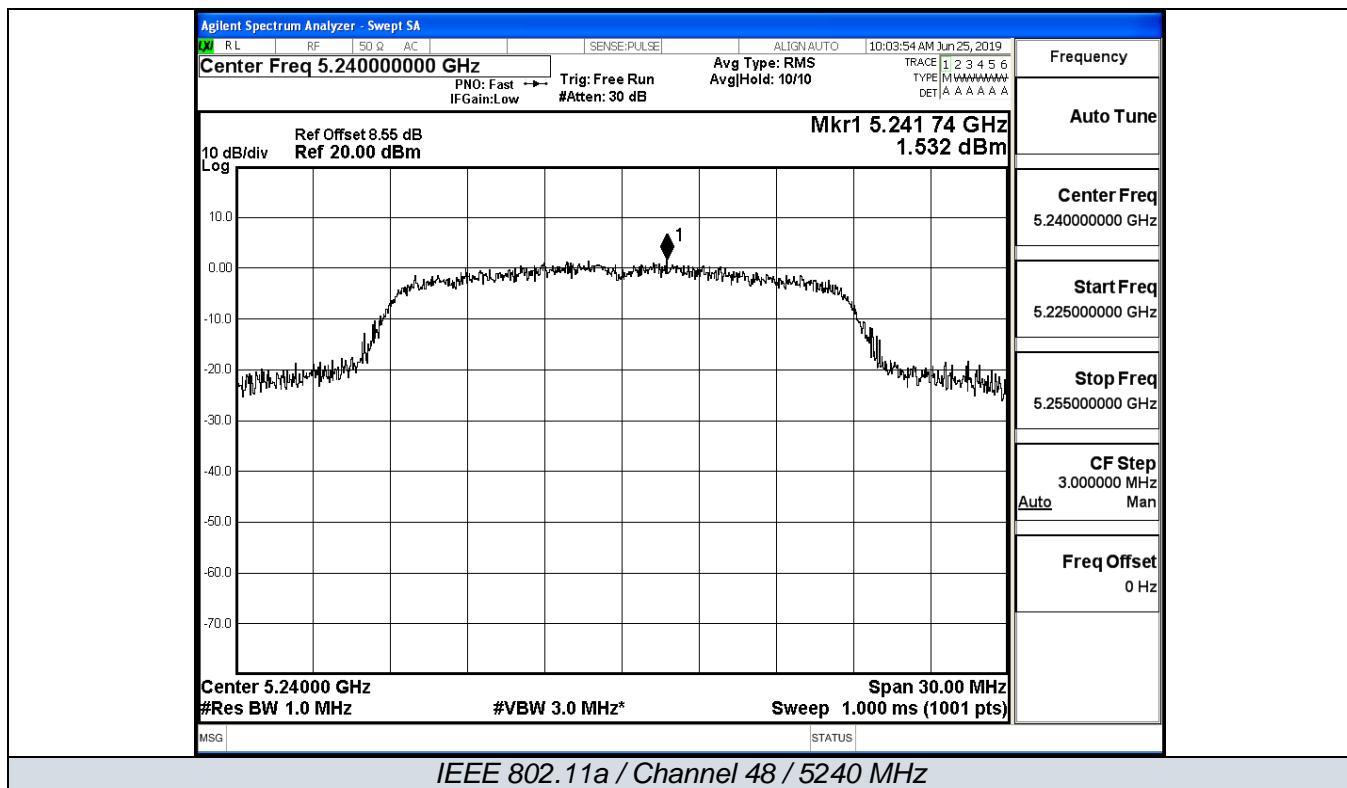


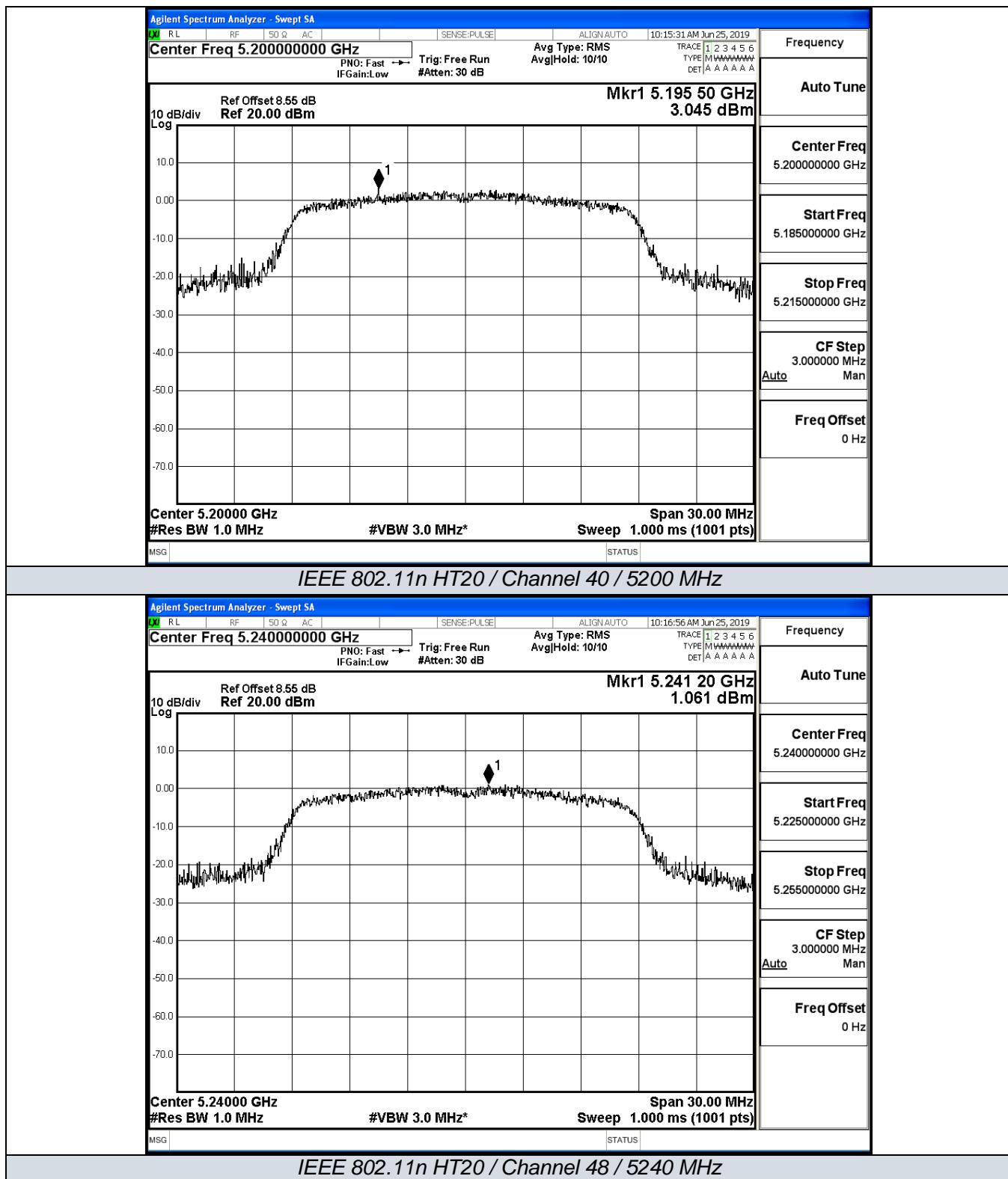
Frequency

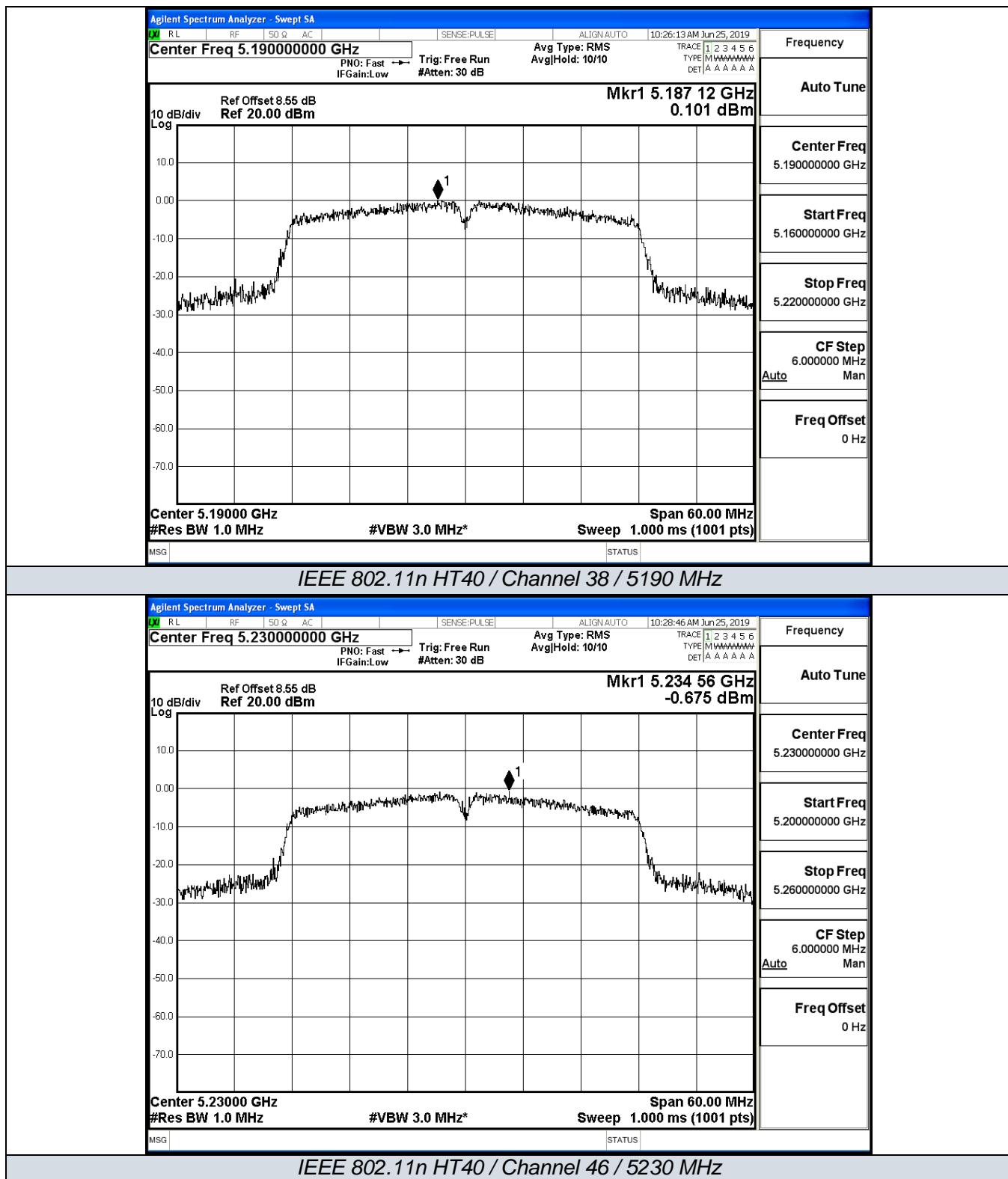
Auto Tune

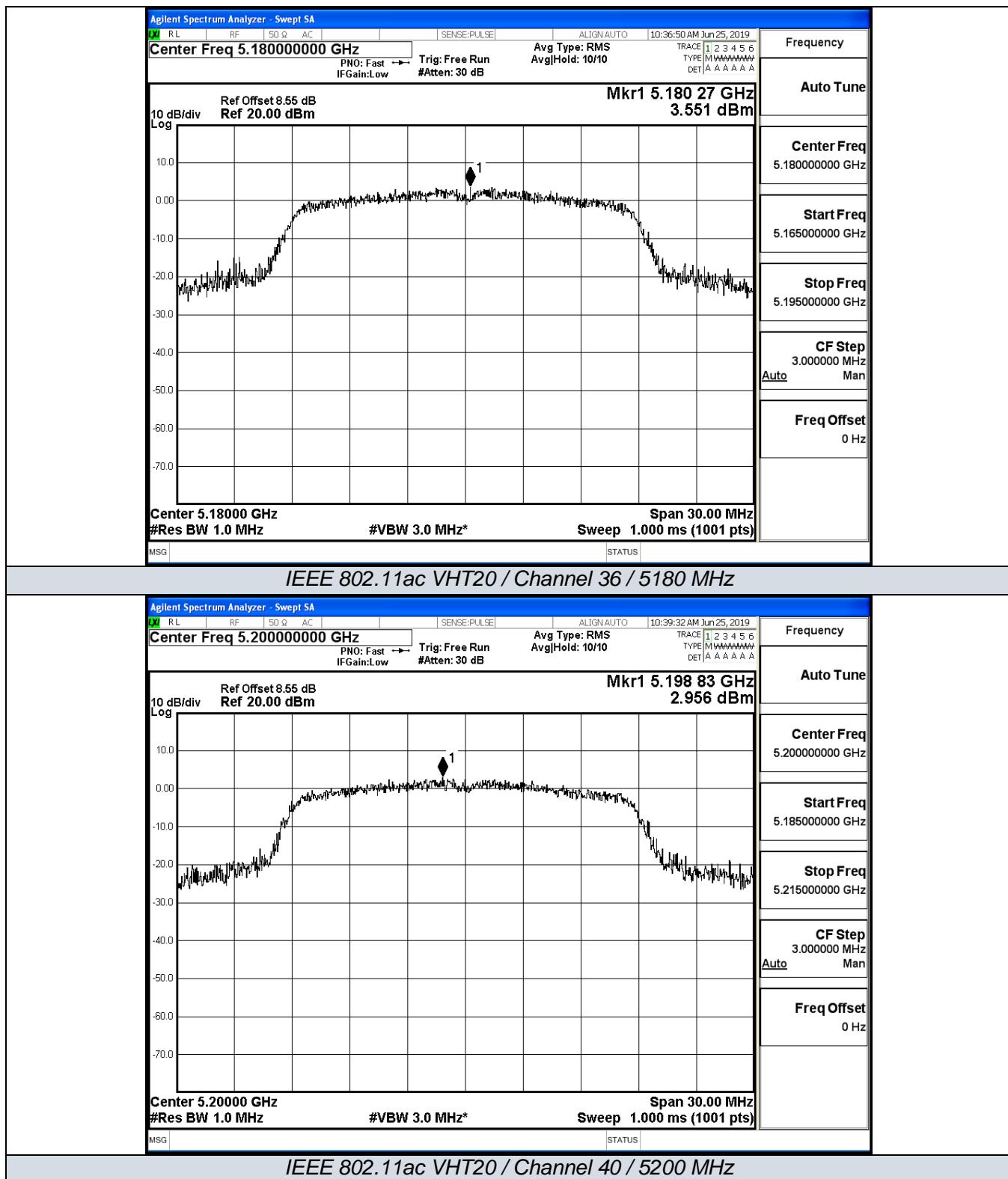
Center Freq
5.200000000 GHzStart Freq
5.185000000 GHzStop Freq
5.215000000 GHzCF Step
3.00000 MHz
AutoFreq Offset
0 Hz

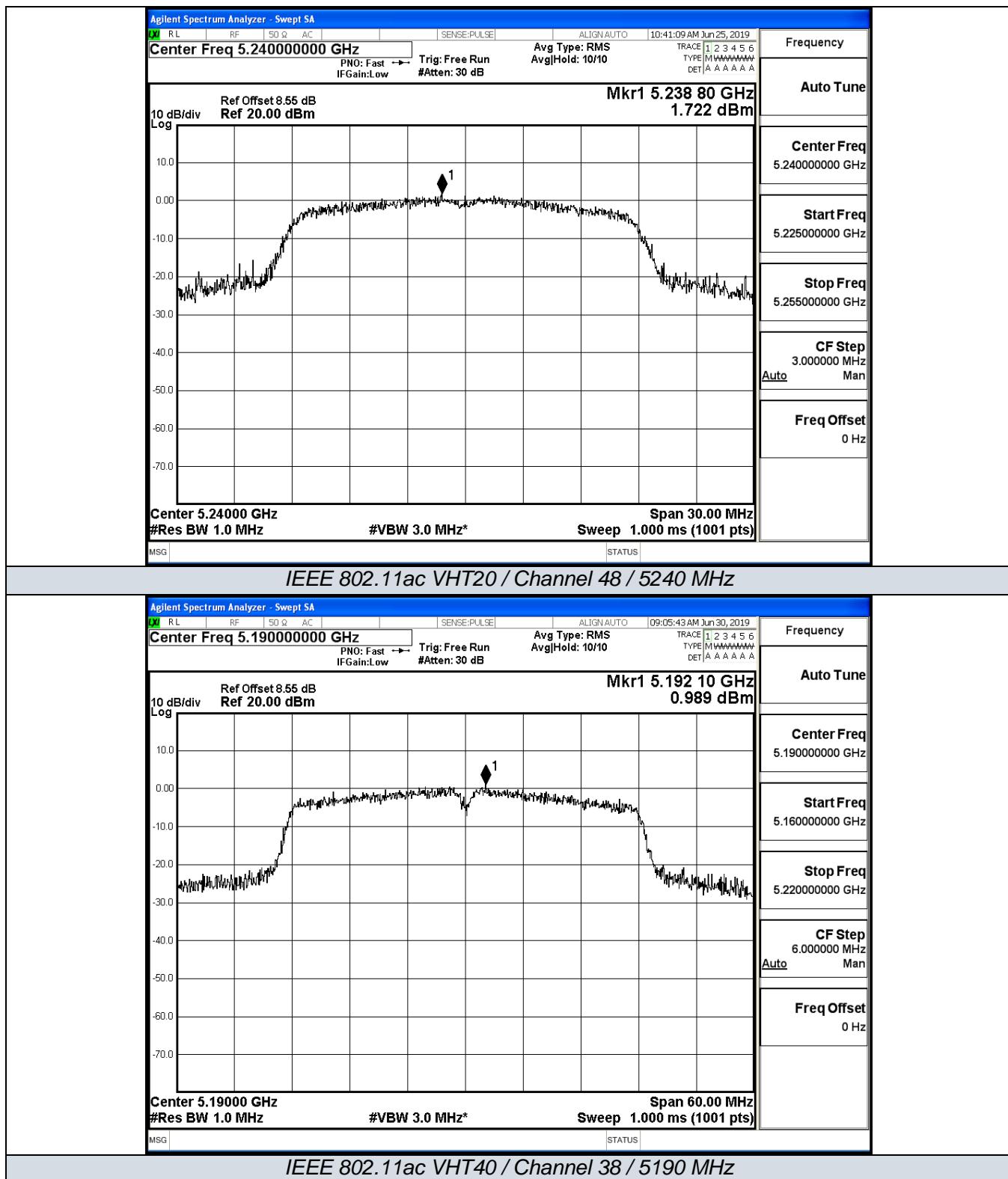
IEEE 802.11a / Channel 40 / 5200 MHz

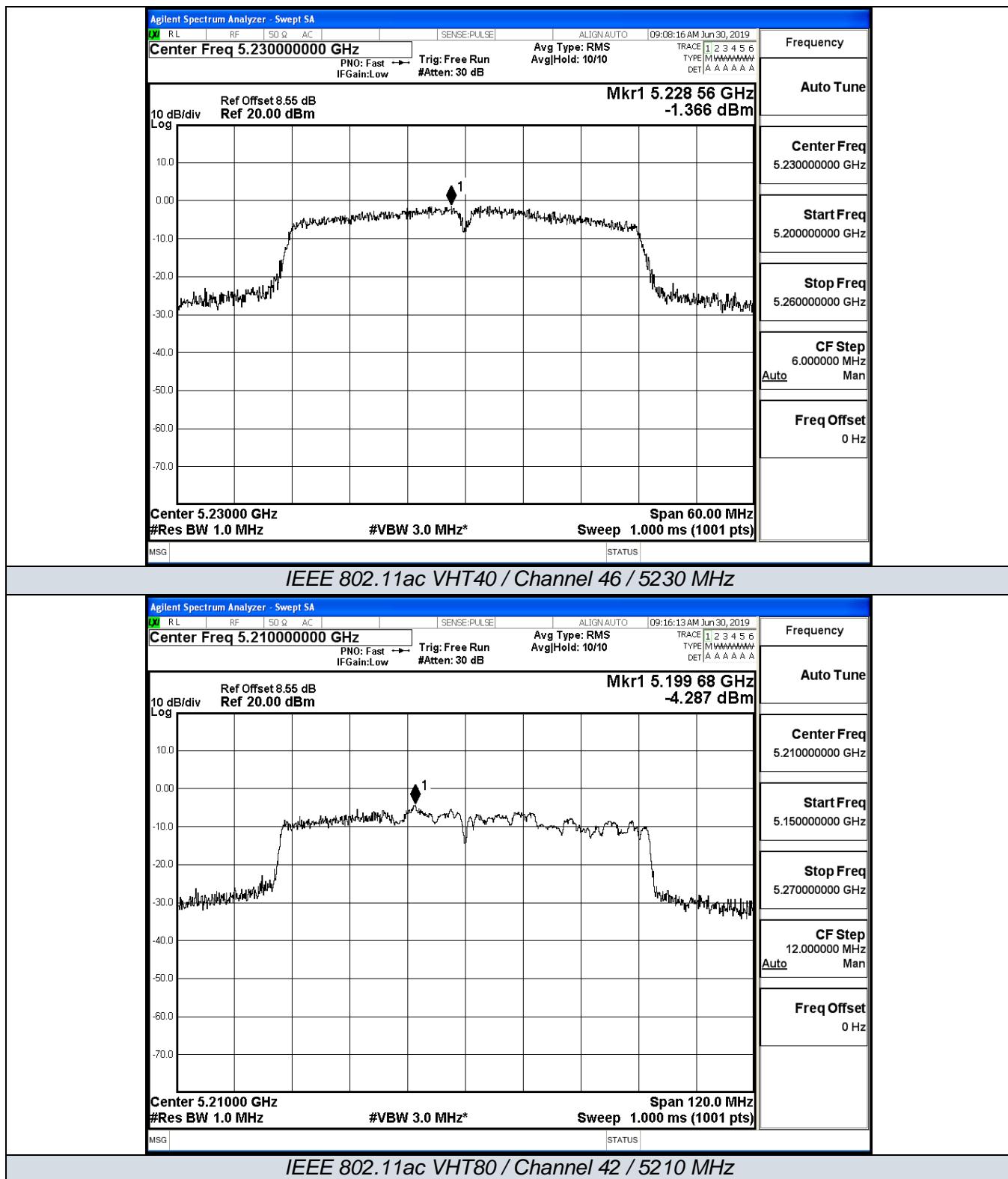












D.4 Emission Bandwidth

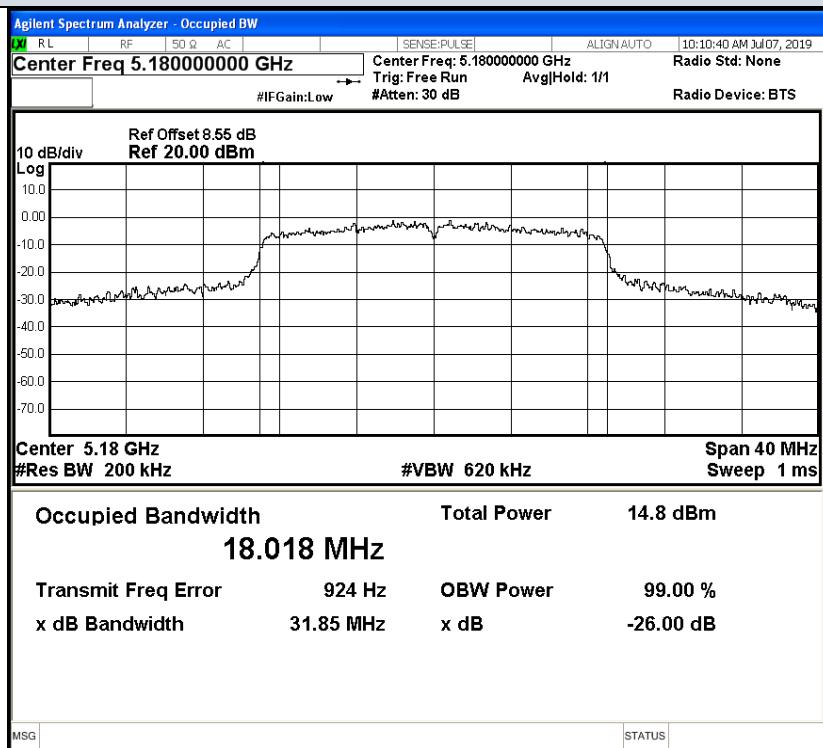
Antenna 0

| Test Mode | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | Limit (MHz) |
|-------------|---------|-----------------|----------------------|---------------------|-------------|
| 11A | 36 | 5180 | 31.820 | 18.018 | No Limit |
| | 40 | 5200 | 34.470 | 18.352 | |
| | 48 | 5240 | 33.980 | 18.830 | |
| 11N20 SISO | 36 | 5180 | 29.290 | 17.948 | No Limit |
| | 40 | 5200 | 30.370 | 17.972 | |
| | 48 | 5240 | 35.170 | 18.456 | |
| 11N40 SISO | 38 | 5190 | 64.770 | 36.497 | No Limit |
| | 46 | 5230 | 64.250 | 36.513 | |
| 11AC20 SISO | 36 | 5180 | 30.680 | 18.034 | No Limit |
| | 40 | 5200 | 32.440 | 17.961 | |
| | 48 | 5240 | 31.830 | 18.121 | |
| 11AC40 SISO | 38 | 5190 | 62.140 | 36.461 | No Limit |
| | 46 | 5230 | 68.100 | 36.646 | |
| 11AC80 SISO | 42 | 5210 | 143.800 | 77.187 | No Limit |

Antenna 1

| Test Mode | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | Limit (MHz) |
|-------------|---------|-----------------|----------------------|---------------------|-------------|
| 11A | 36 | 5180 | 32.920 | 18.081 | No Limit |
| | 40 | 5200 | 34.750 | 18.370 | |
| | 48 | 5240 | 38.230 | 19.378 | |
| 11N20 SISO | 36 | 5180 | 33.160 | 17.984 | No Limit |
| | 40 | 5200 | 32.540 | 18.034 | |
| | 48 | 5240 | 33.720 | 18.289 | |
| 11N40 SISO | 38 | 5190 | 65.050 | 36.440 | No Limit |
| | 46 | 5230 | 67.010 | 36.842 | |
| 11AC20 SISO | 36 | 5180 | 31.880 | 17.939 | No Limit |
| | 40 | 5200 | 33.900 | 17.986 | |
| | 48 | 5240 | 34.190 | 18.238 | |
| 11AC40 SISO | 38 | 5190 | 68.250 | 36.481 | No Limit |
| | 46 | 5230 | 66.670 | 36.720 | |
| 11AC80 SISO | 42 | 5210 | 158.800 | 78.665 | No Limit |

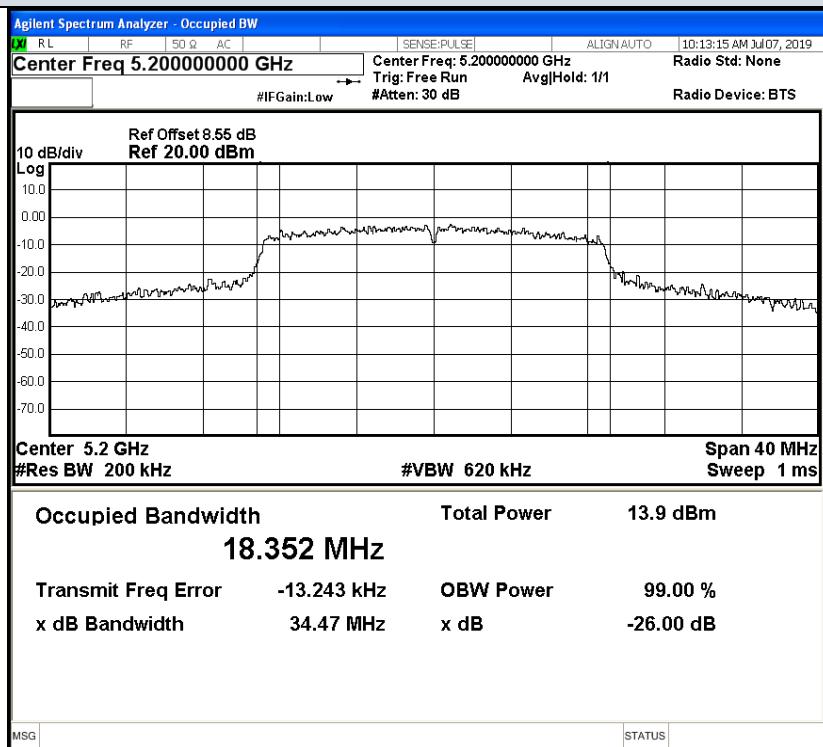
99% and 26dB Bandwidth Ant 0



Frequency

Center Freq
5.180000000 GHzCF Step
4.000000 MHz
Auto ManFreq Offset
0 Hz

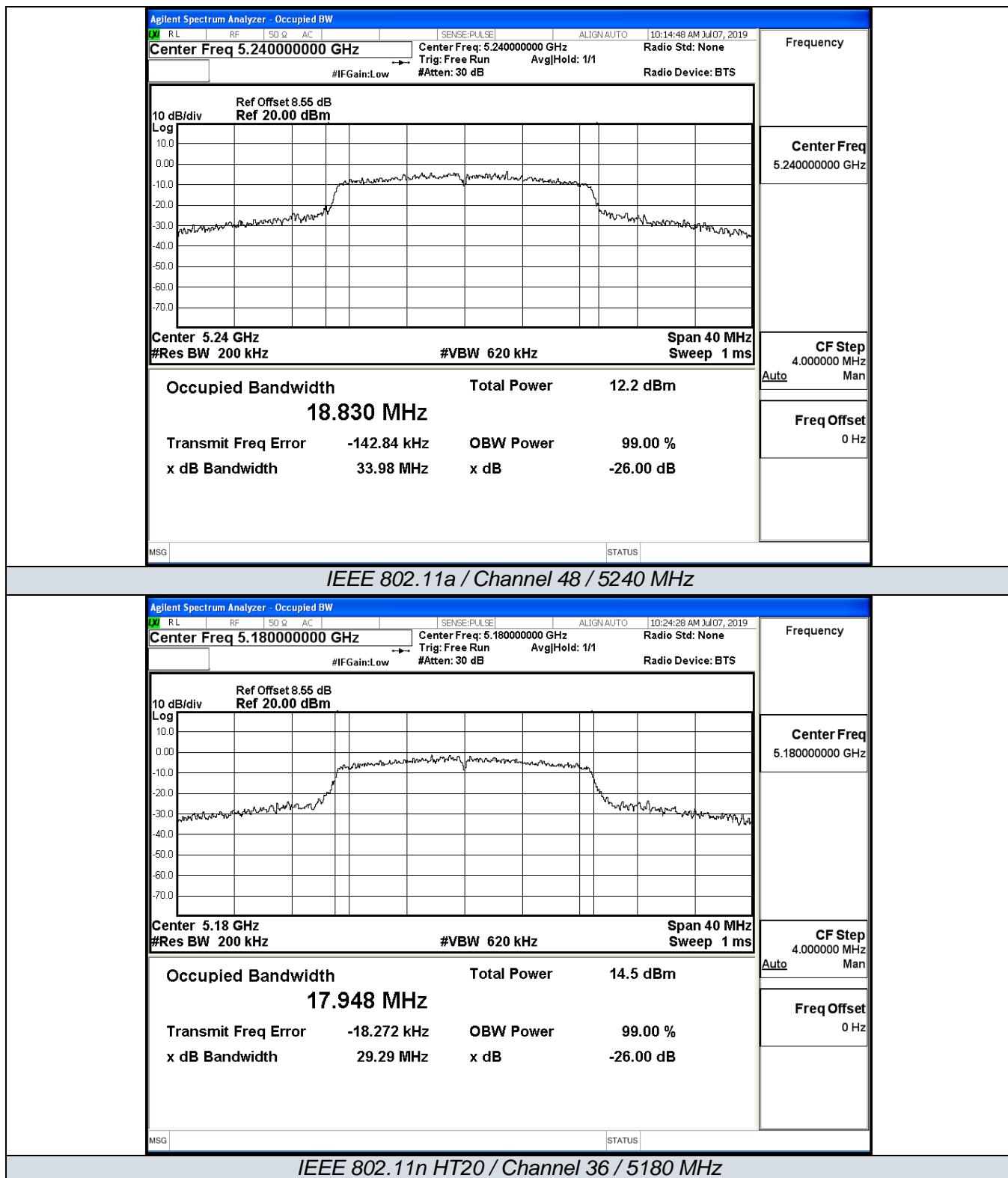
IEEE 802.11a / Channel 36 / 5180 MHz

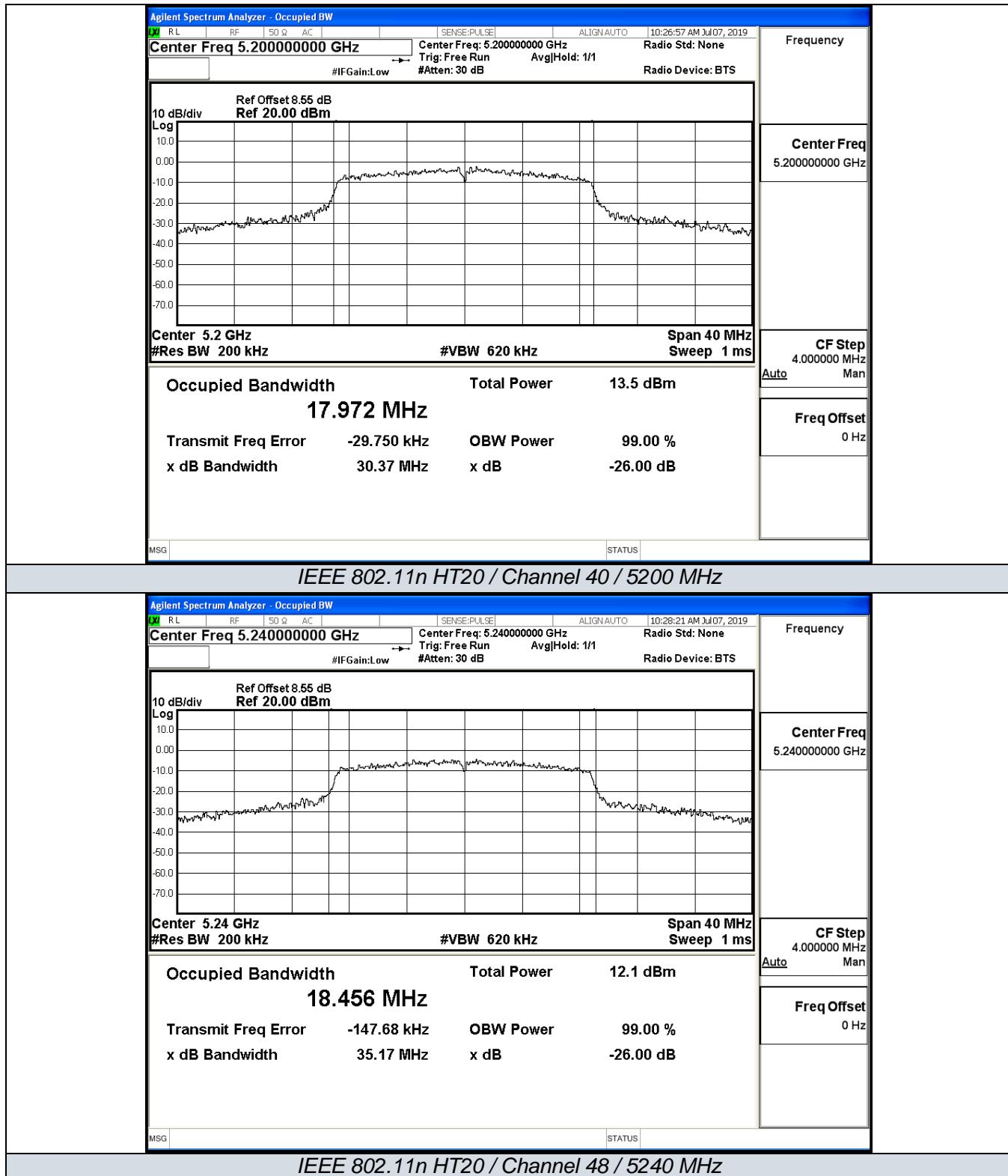


Frequency

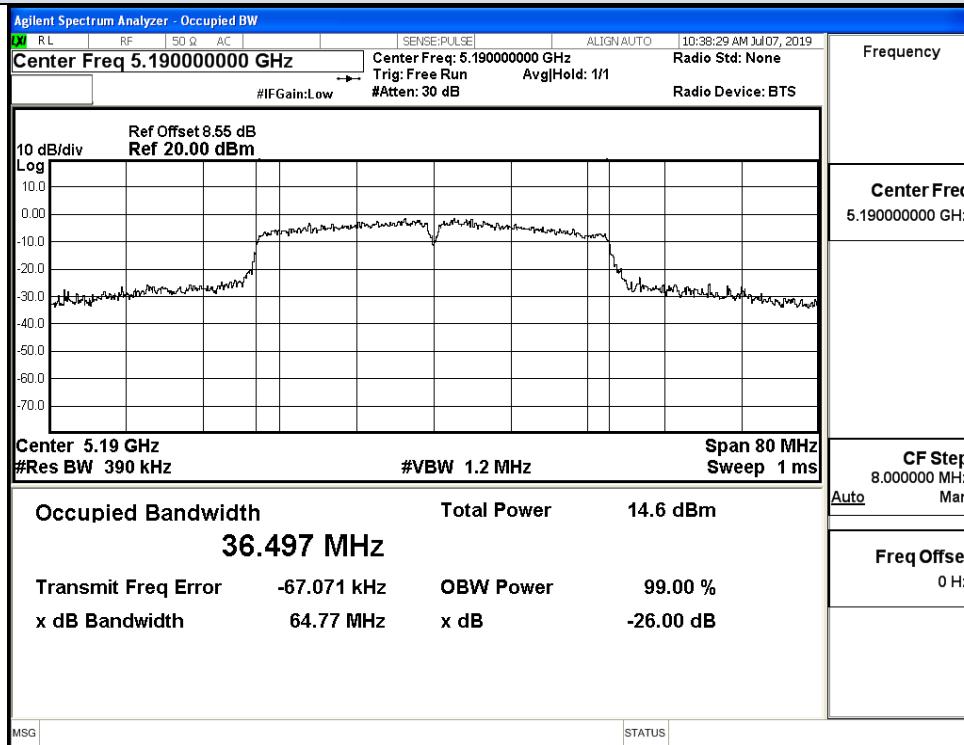
Center Freq
5.200000000 GHzCF Step
4.000000 MHz
Auto ManFreq Offset
0 Hz

IEEE 802.11a / Channel 40 / 5200 MHz





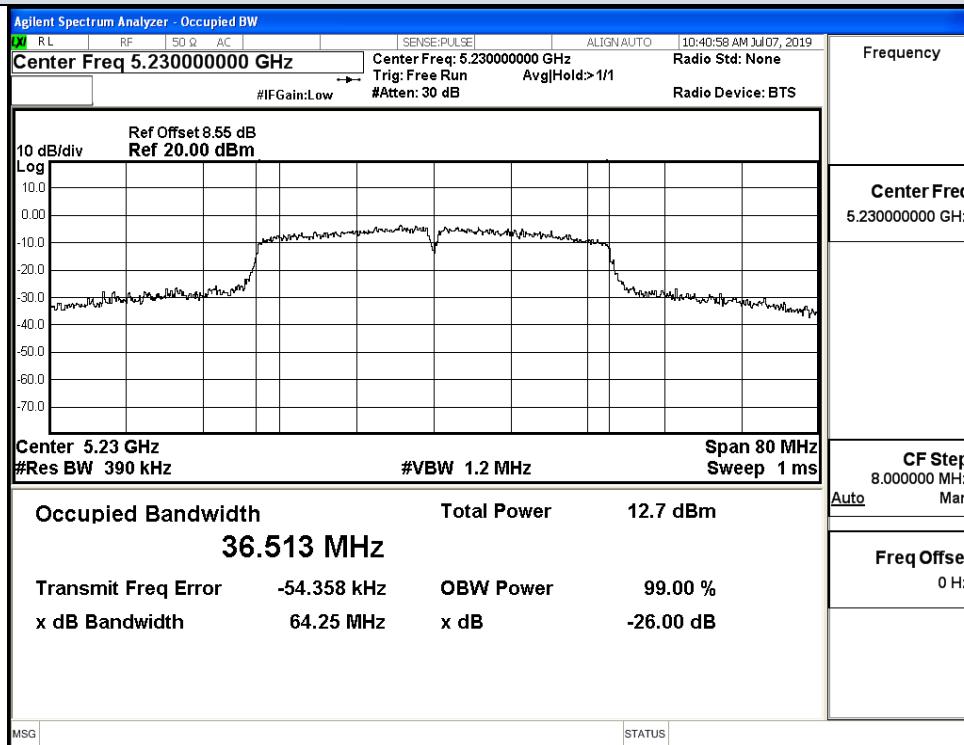
99% and 26dB Bandwidth Ant 0



Frequency

Center Freq
5.190000000 GHzCF Step
8.000000 MHz
Auto ManFreq Offset
0 Hz

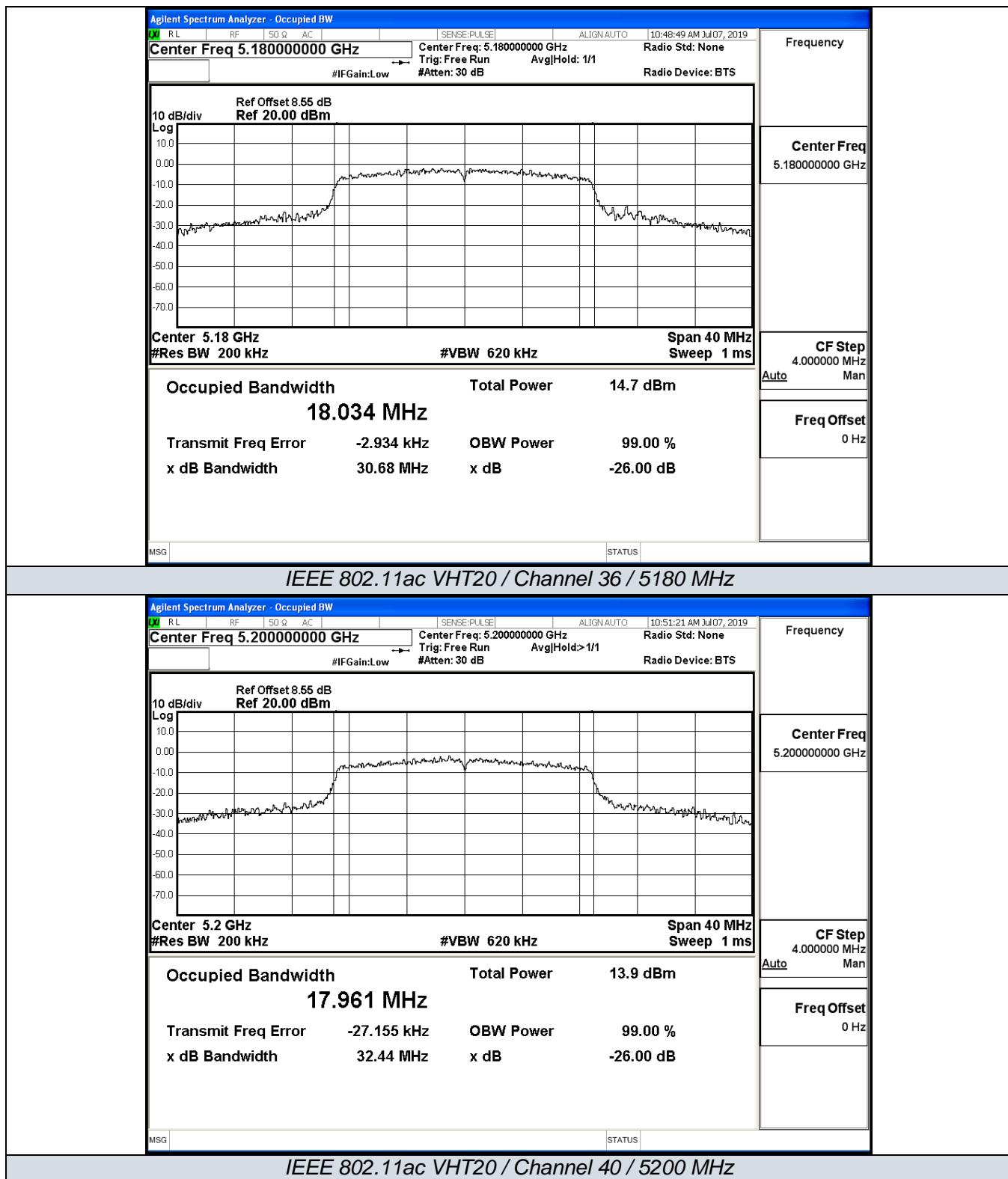
IEEE 802.11n HT40 / Channel 38 / 5190 MHz

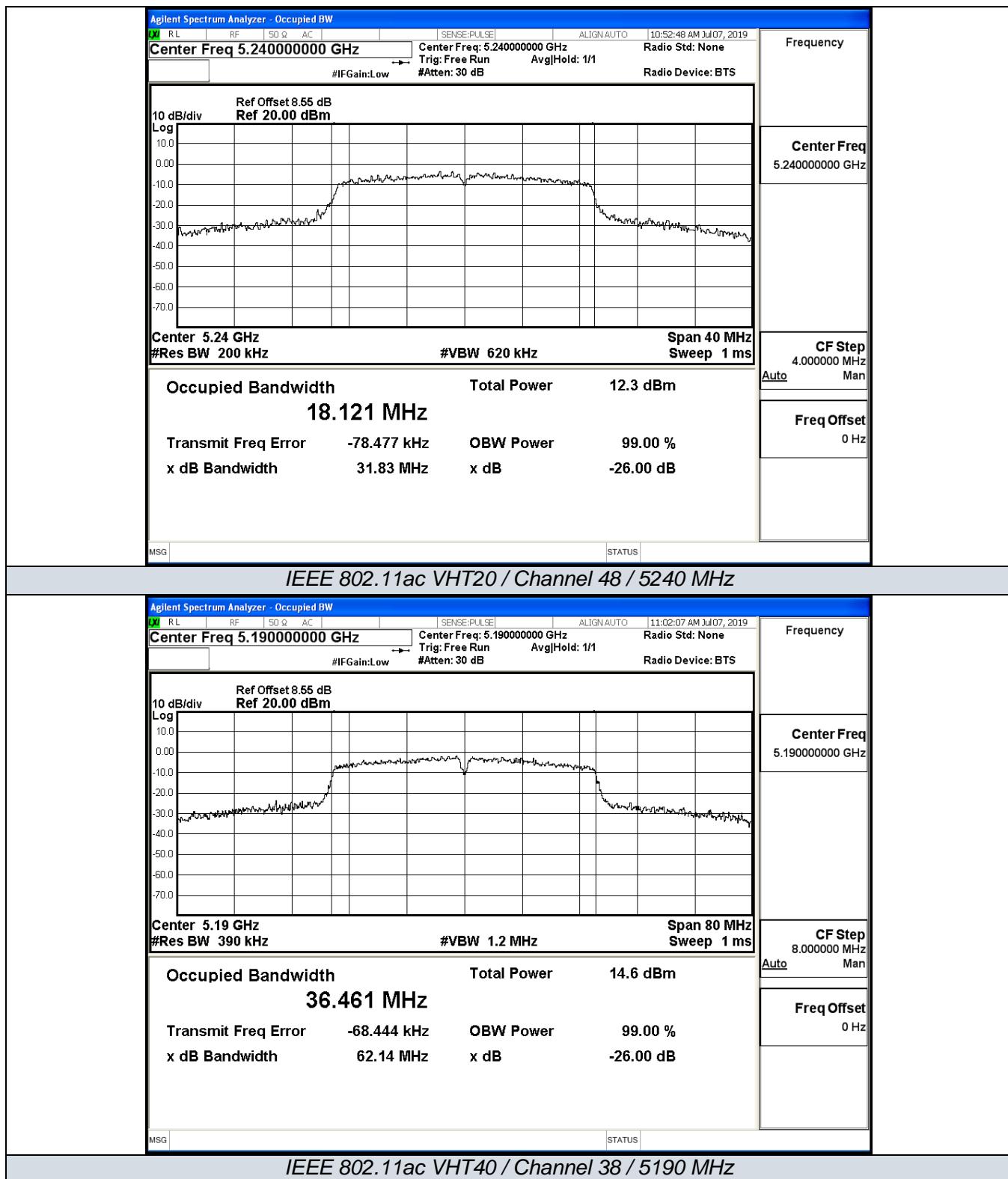


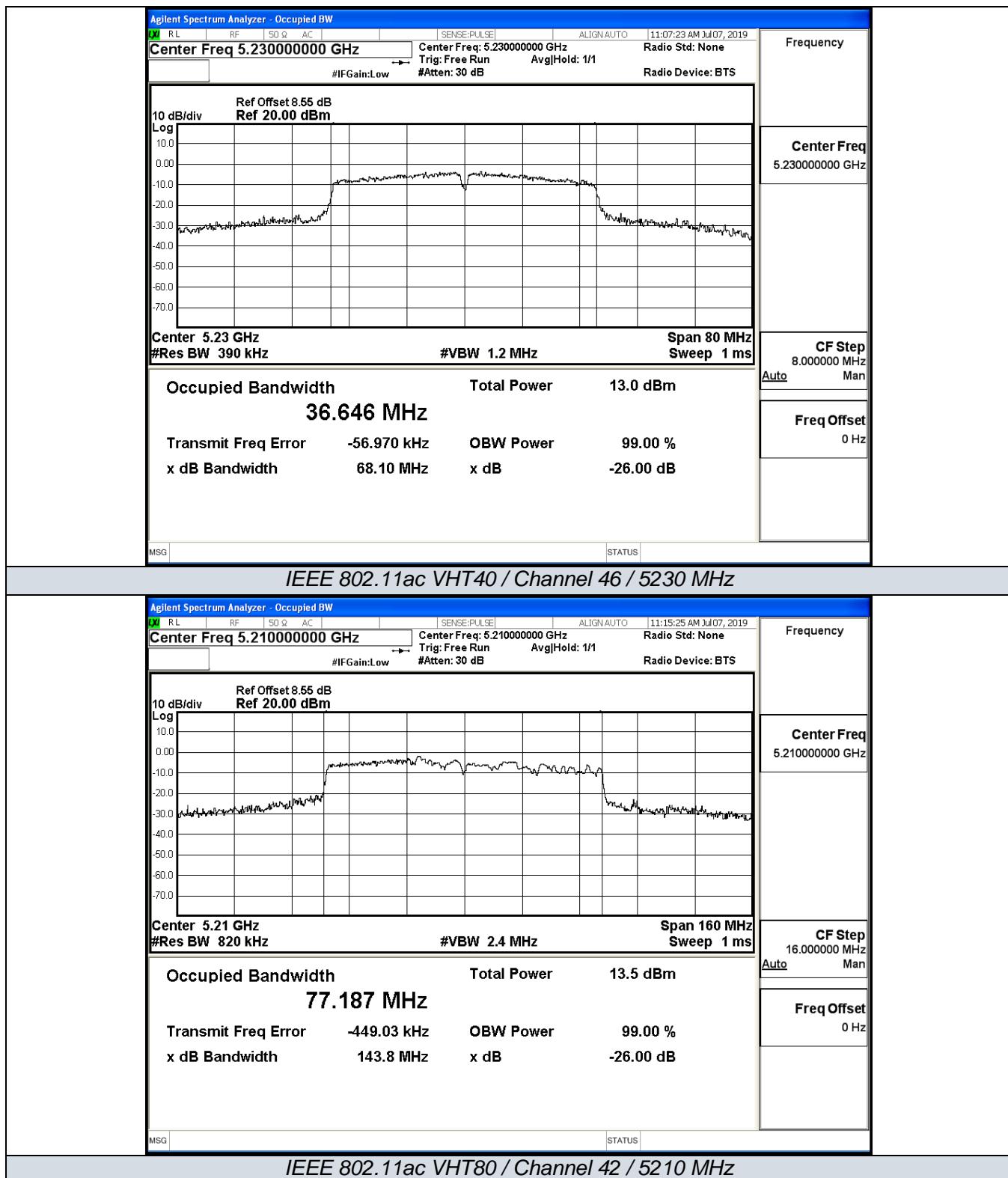
Frequency

Center Freq
5.230000000 GHzCF Step
8.000000 MHz
Auto ManFreq Offset
0 Hz

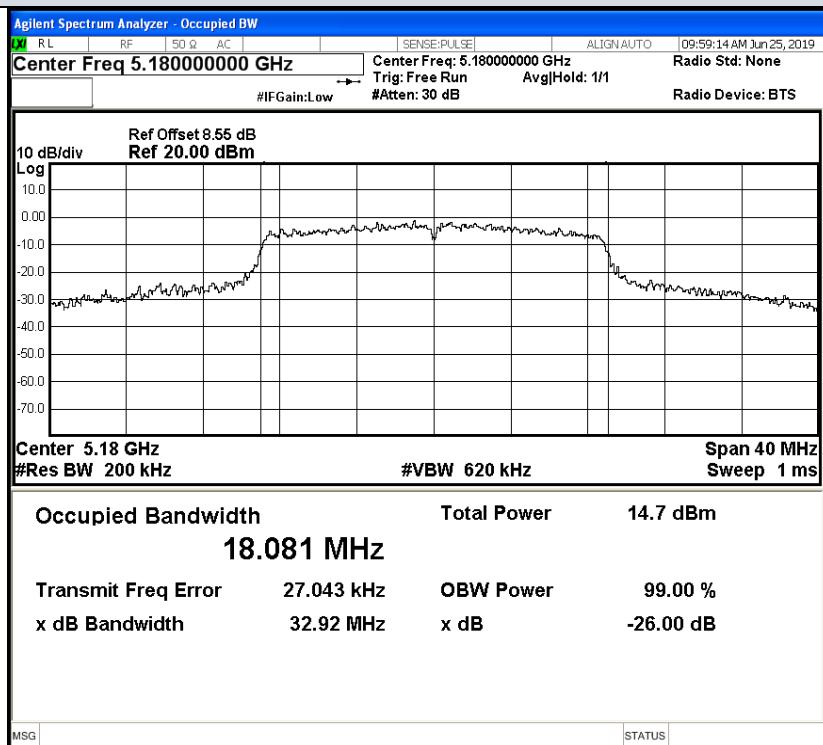
IEEE 802.11n HT40 / Channel 46 / 5230 MHz







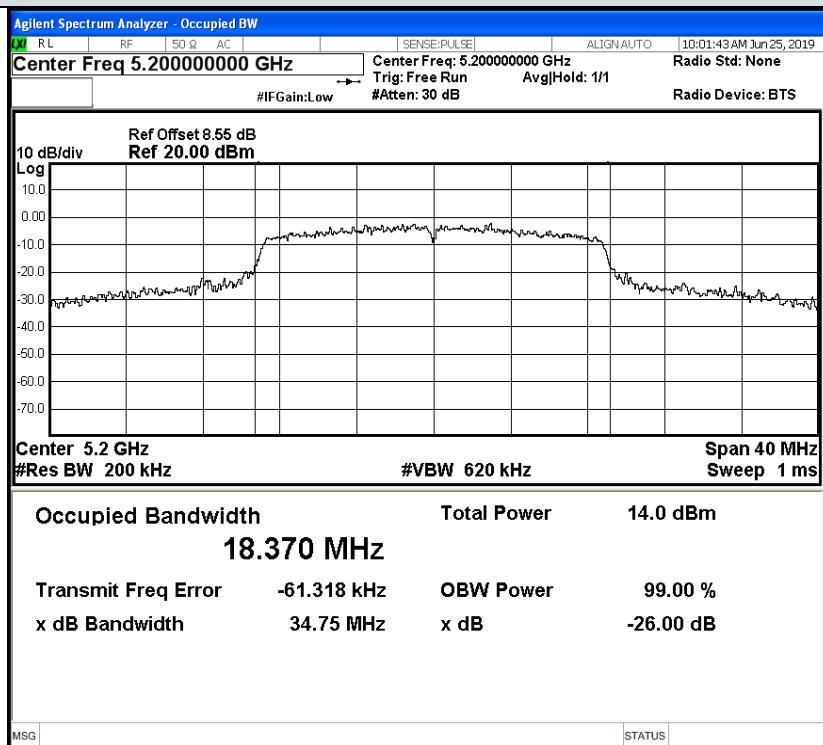
99% and 26dB Bandwidth Ant 1



Frequency

Center Freq
5.180000000 GHzCF Step
4.000000 MHz
Auto ManFreq Offset
0 Hz

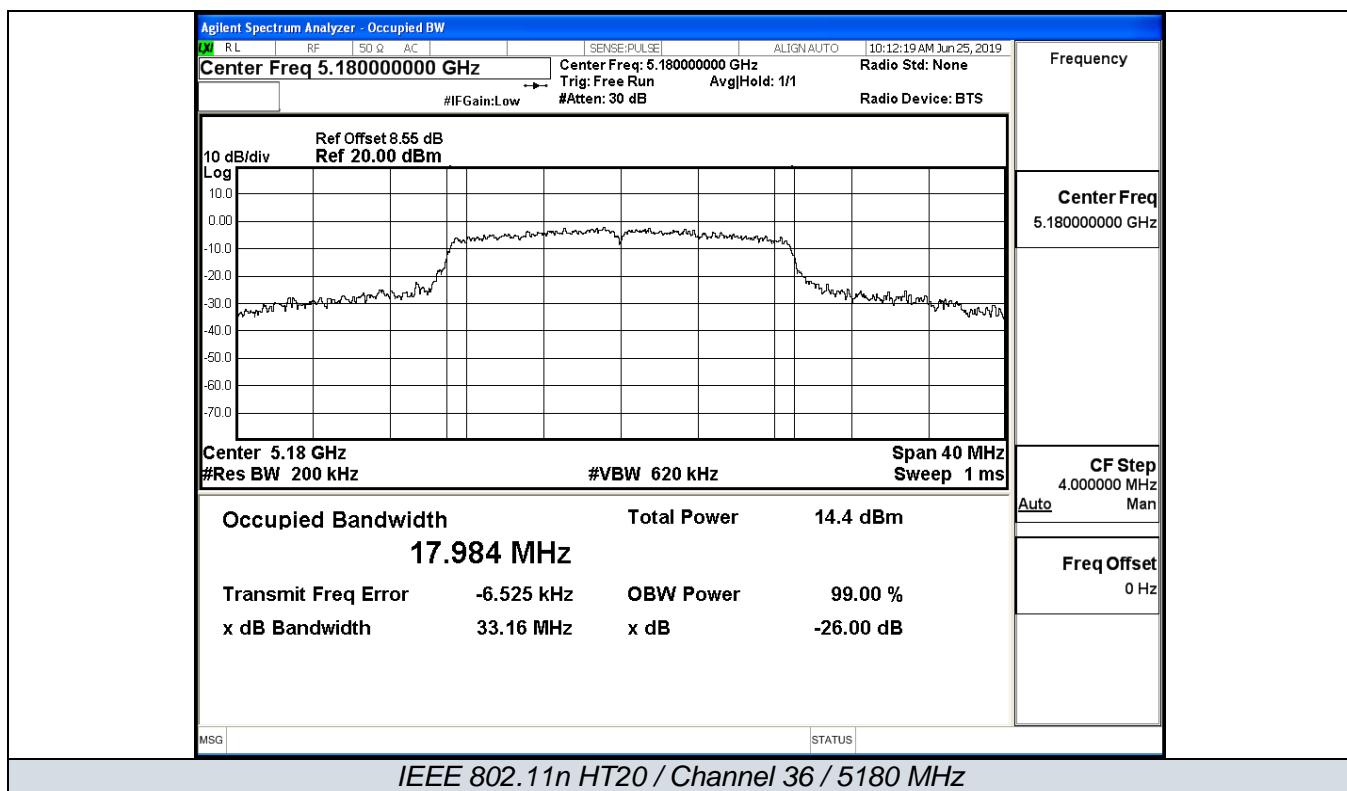
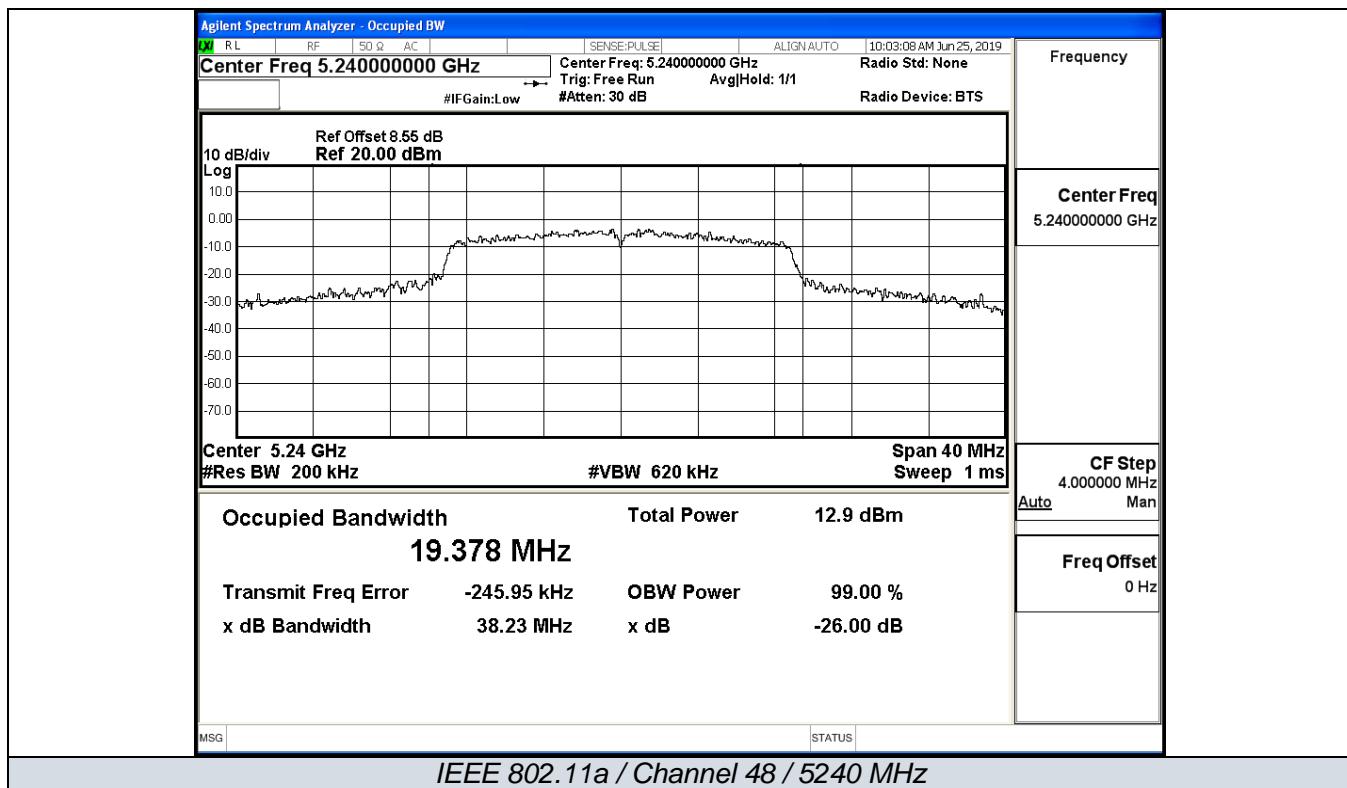
IEEE 802.11a / Channel 36 / 5180 MHz

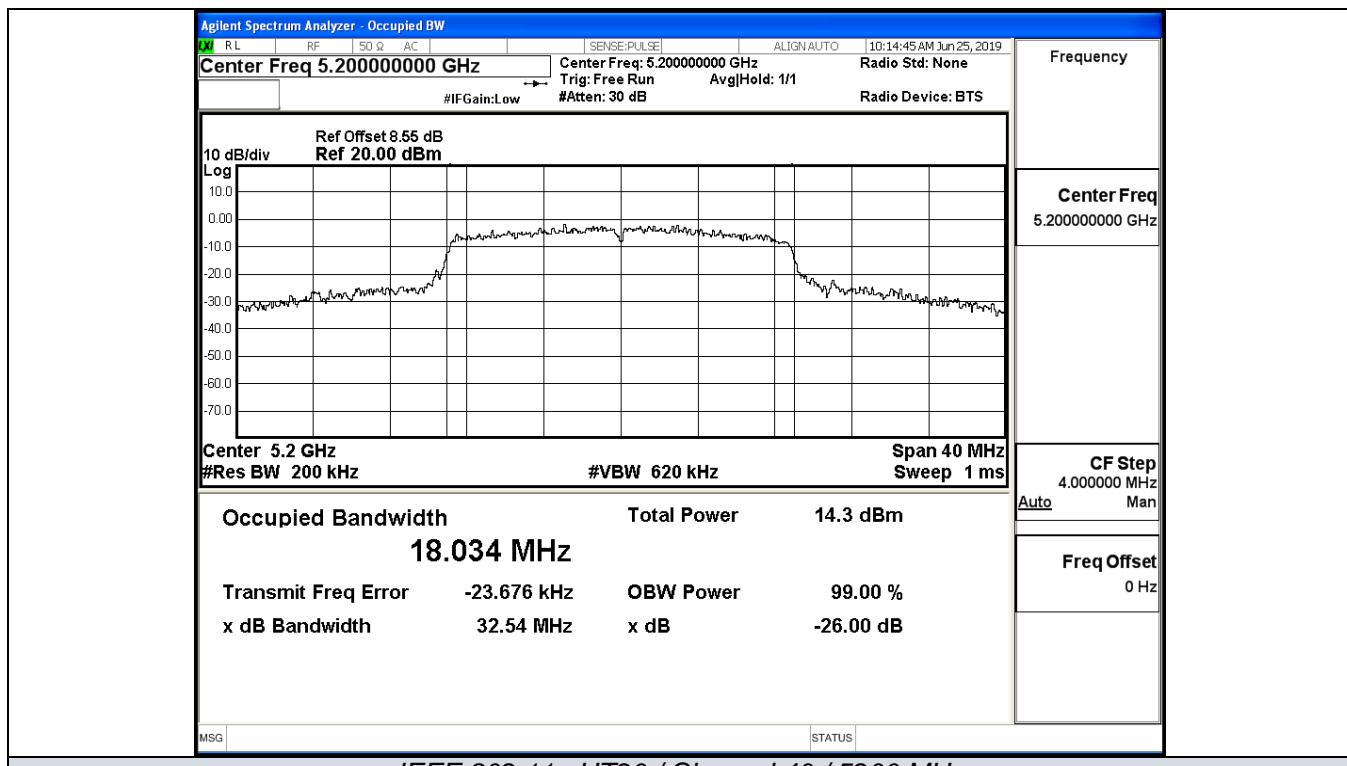
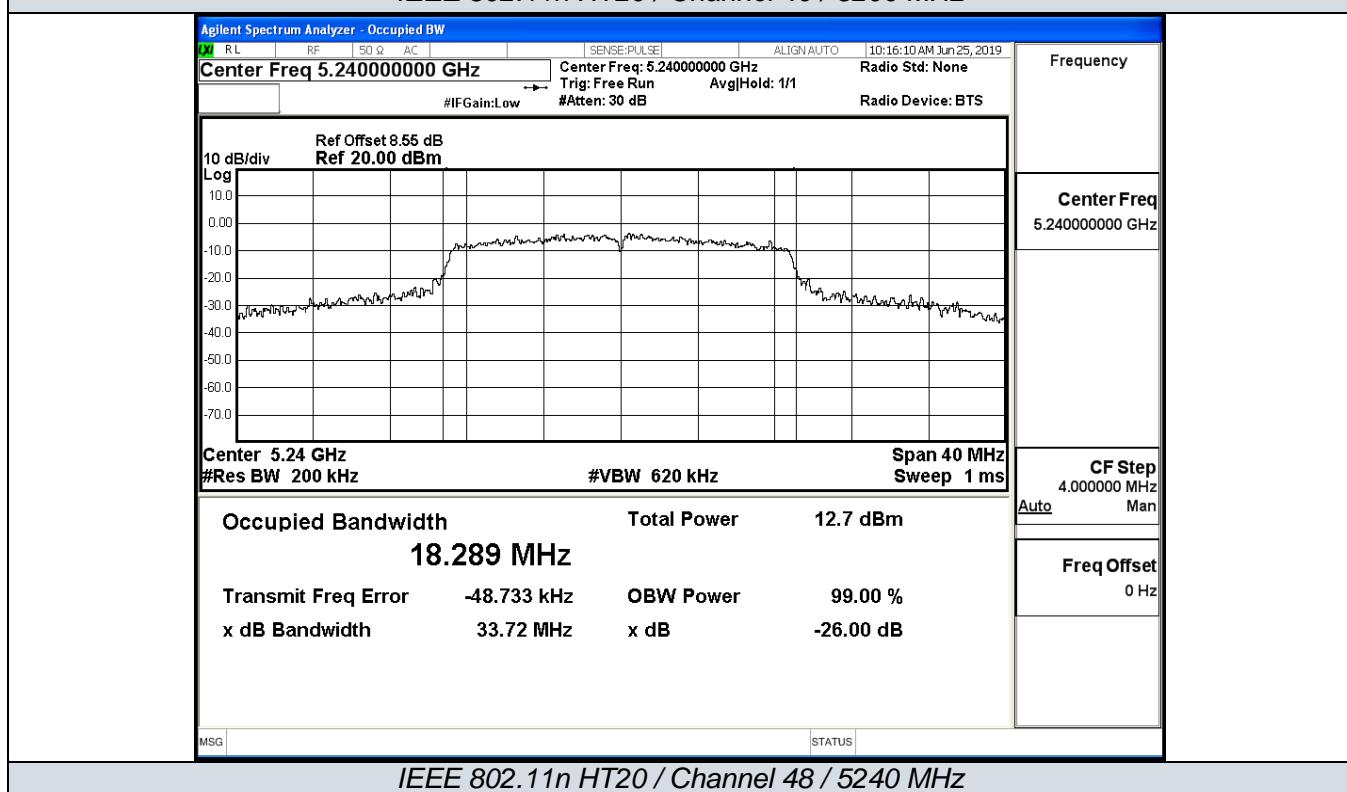


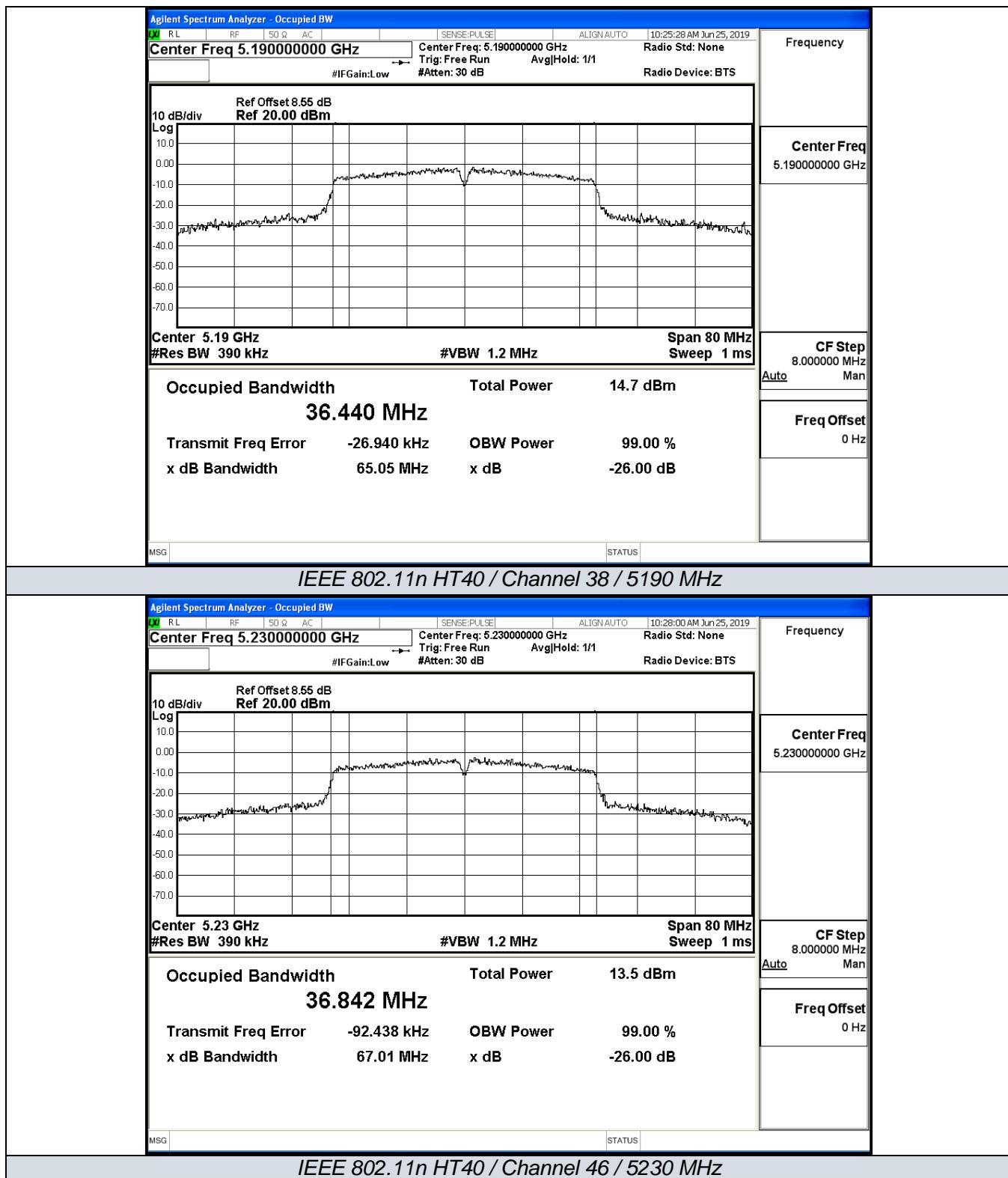
Frequency

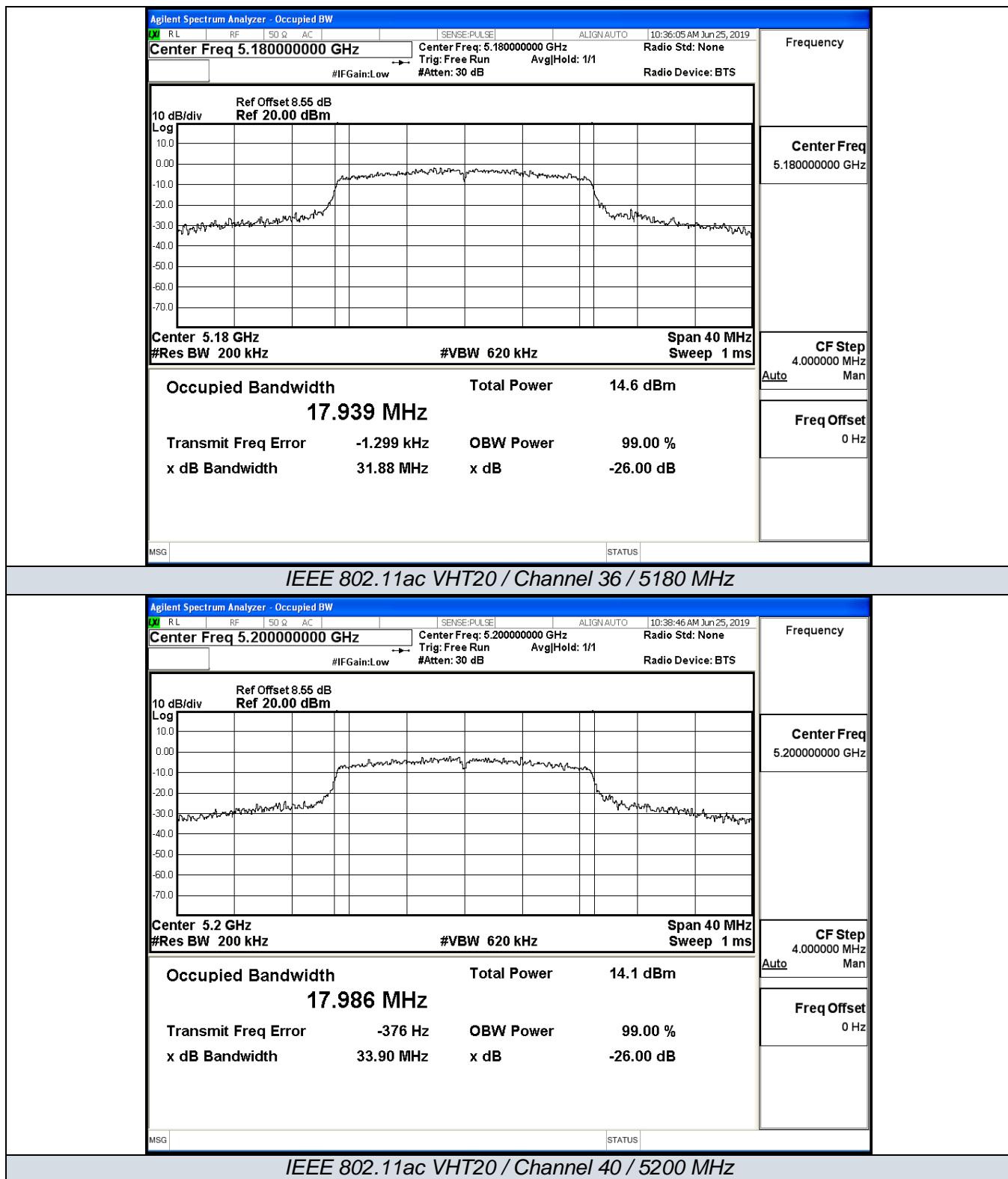
Center Freq
5.200000000 GHzCF Step
4.000000 MHz
Auto ManFreq Offset
0 Hz

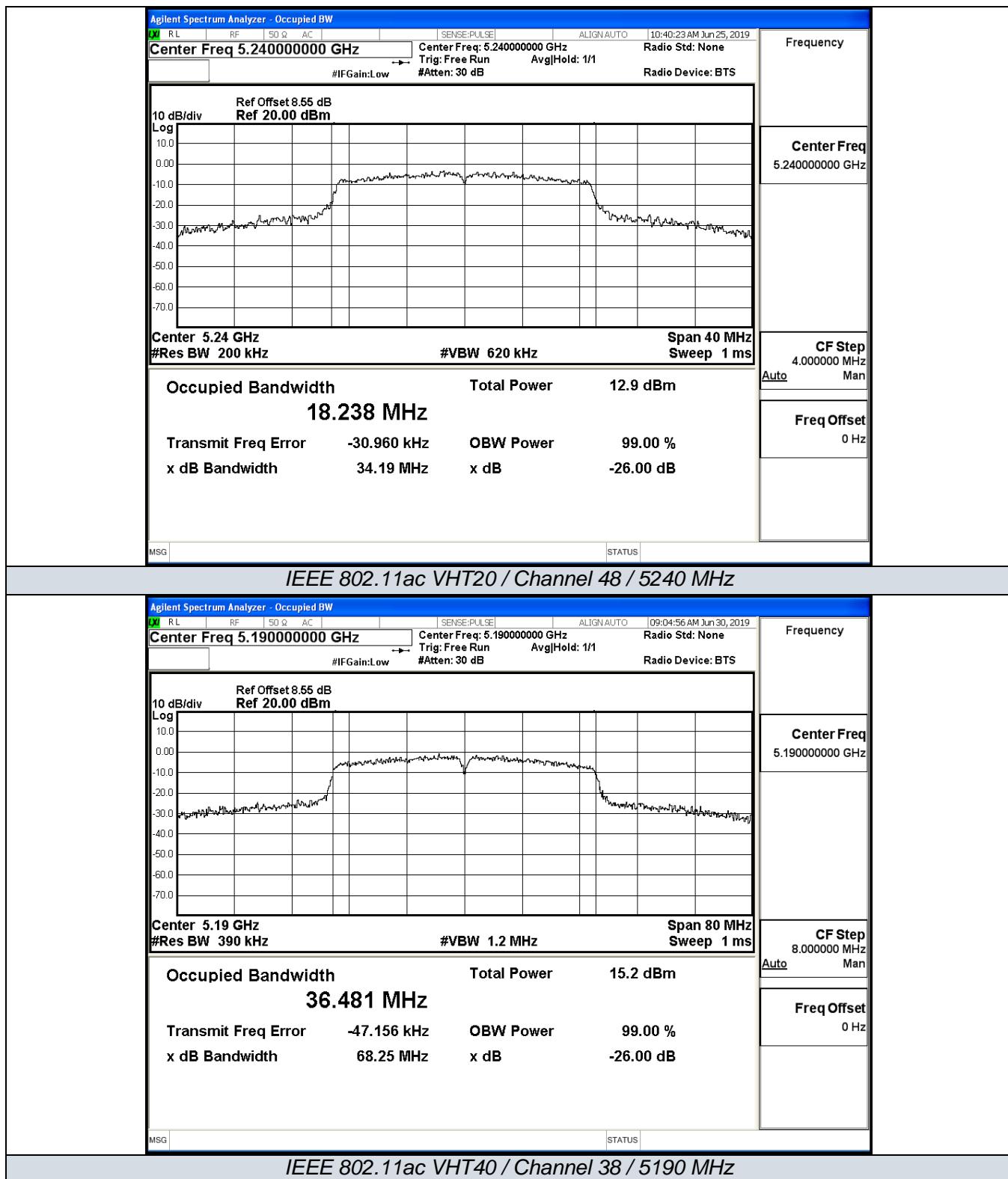
IEEE 802.11a / Channel 40 / 5200 MHz

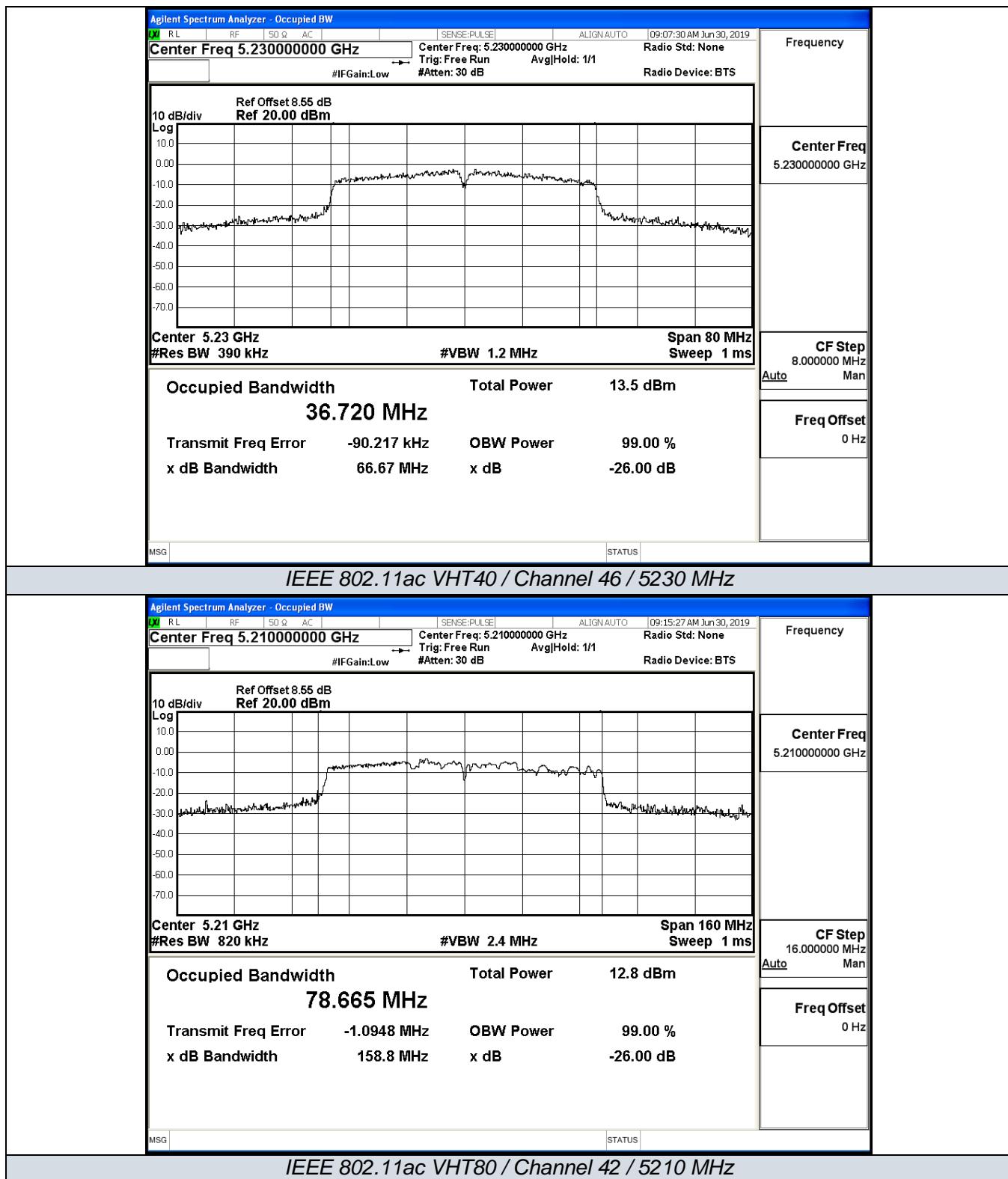


**IEEE 802.11n HT20 / Channel 40 / 5200 MHz****IEEE 802.11n HT20 / Channel 48 / 5240 MHz**









D.5 Undesirable Emissions Measurement

Antenna 0

| Test Mode | Channel | Frequency (MHz) | Conducted Power (dBm) | Antenna Gain (dBi) | Ground Reflection Factor (dB) | Covert Radiated E Level At 3m (dBuV/m) | Detector | Limit (dBuV/m) |
|-------------|---------|-----------------|-----------------------|--------------------|-------------------------------|--|----------|----------------|
| 11A | 36 | 4500.0 | -61.145 | 2.04 | 0 | 36.123 | Peak | 68.20 |
| | | 4500.0 | -71.508 | 2.04 | 0 | 25.760 | Average | 54.00 |
| | | 5150.0 | -37.636 | 2.04 | 0 | 59.632 | Peak | 68.20 |
| | | 5150.0 | -59.707 | 2.04 | 0 | 37.561 | Average | 54.00 |
| | 48 | 5350.0 | -51.109 | 2.04 | 0 | 46.159 | Peak | 68.20 |
| | | 5350.0 | -60.684 | 2.04 | 0 | 36.584 | Average | 54.00 |
| | | 5460.0 | -50.807 | 2.04 | 0 | 46.461 | Peak | 68.20 |
| | | 5460.0 | -61.133 | 2.04 | 0 | 36.135 | Average | 54.00 |
| 11N20 SISO | 36 | 4500.0 | -62.330 | 2.04 | 0 | 34.938 | Peak | 68.20 |
| | | 4500.0 | -71.559 | 2.04 | 0 | 25.709 | Average | 54.00 |
| | | 5150.0 | -41.593 | 2.04 | 0 | 55.675 | Peak | 68.20 |
| | | 5150.0 | -59.746 | 2.04 | 0 | 37.522 | Average | 54.00 |
| | 48 | 5350.0 | -49.276 | 2.04 | 0 | 47.992 | Peak | 68.20 |
| | | 5350.0 | -60.270 | 2.04 | 0 | 36.998 | Average | 54.00 |
| | | 5460.0 | -50.602 | 2.04 | 0 | 46.666 | Peak | 68.20 |
| | | 5460.0 | -60.817 | 2.04 | 0 | 36.451 | Average | 54.00 |
| 11N40 SISO | 38 | 4500.0 | -60.908 | 2.04 | 0 | 36.360 | Peak | 68.20 |
| | | 4500.0 | -71.572 | 2.04 | 0 | 25.696 | Average | 54.00 |
| | | 5150.0 | -39.174 | 2.04 | 0 | 58.094 | Peak | 68.20 |
| | | 5150.0 | -49.714 | 2.04 | 0 | 47.554 | Average | 54.00 |
| | 46 | 5350.0 | -49.523 | 2.04 | 0 | 47.745 | Peak | 68.20 |
| | | 5350.0 | -59.837 | 2.04 | 0 | 37.431 | Average | 54.00 |
| | | 5460.0 | -50.265 | 2.04 | 0 | 47.003 | Peak | 68.20 |
| | | 5460.0 | -60.502 | 2.04 | 0 | 36.766 | Average | 54.00 |
| 11AC20 SISO | 36 | 4500.0 | -61.519 | 2.04 | 0 | 35.749 | Peak | 68.20 |
| | | 4500.0 | -71.538 | 2.04 | 0 | 25.730 | Average | 54.00 |
| | | 5150.0 | -43.872 | 2.04 | 0 | 53.396 | Peak | 68.20 |
| | | 5150.0 | -59.724 | 2.04 | 0 | 37.544 | Average | 54.00 |
| | 48 | 5350.0 | -50.366 | 2.04 | 0 | 46.902 | Peak | 68.20 |
| | | 5350.0 | -60.316 | 2.04 | 0 | 36.952 | Average | 54.00 |
| | | 5460.0 | -49.747 | 2.04 | 0 | 47.521 | Peak | 68.20 |
| | | 5460.0 | -60.758 | 2.04 | 0 | 36.510 | Average | 54.00 |
| 11AC40 SISO | 38 | 4500.0 | -62.501 | 2.04 | 0 | 34.767 | Peak | 68.20 |
| | | 4500.0 | -60.442 | 2.04 | 0 | 36.826 | Average | 54.00 |
| | | 5150.0 | -39.598 | 2.04 | 0 | 57.670 | Peak | 68.20 |
| | | 5150.0 | -49.470 | 2.04 | 0 | 47.798 | Average | 54.00 |
| | 46 | 5350.0 | -49.128 | 2.04 | 0 | 48.140 | Peak | 68.20 |
| | | 5350.0 | -59.753 | 2.04 | 0 | 37.515 | Average | 54.00 |
| | | 5460.0 | -49.986 | 2.04 | 0 | 47.282 | Peak | 68.20 |
| | | 5460.0 | -60.473 | 2.04 | 0 | 36.795 | Average | 54.00 |
| 11AC80 SISO | 42 | 4500.0 | -61.338 | 2.04 | 0 | 35.930 | Peak | 68.20 |
| | | 4500.0 | -71.575 | 2.04 | 0 | 25.693 | Average | 54.00 |
| | | 5150.0 | -39.476 | 2.04 | 0 | 57.792 | Peak | 68.20 |

| | | | | | | | | |
|--|--|--------|---------|------|---|--------|---------|-------|
| | | 5150.0 | -57.389 | 2.04 | 0 | 39.879 | Average | 54.00 |
| | | 5350.0 | -39.465 | 2.04 | 0 | 57.803 | Peak | 68.20 |
| | | 5350.0 | -52.905 | 2.04 | 0 | 44.363 | Average | 54.00 |
| | | 5460.0 | -49.950 | 2.04 | 0 | 47.318 | Peak | 68.20 |
| | | 5460.0 | -59.835 | 2.04 | 0 | 37.433 | Average | 54.00 |

Antenna 1

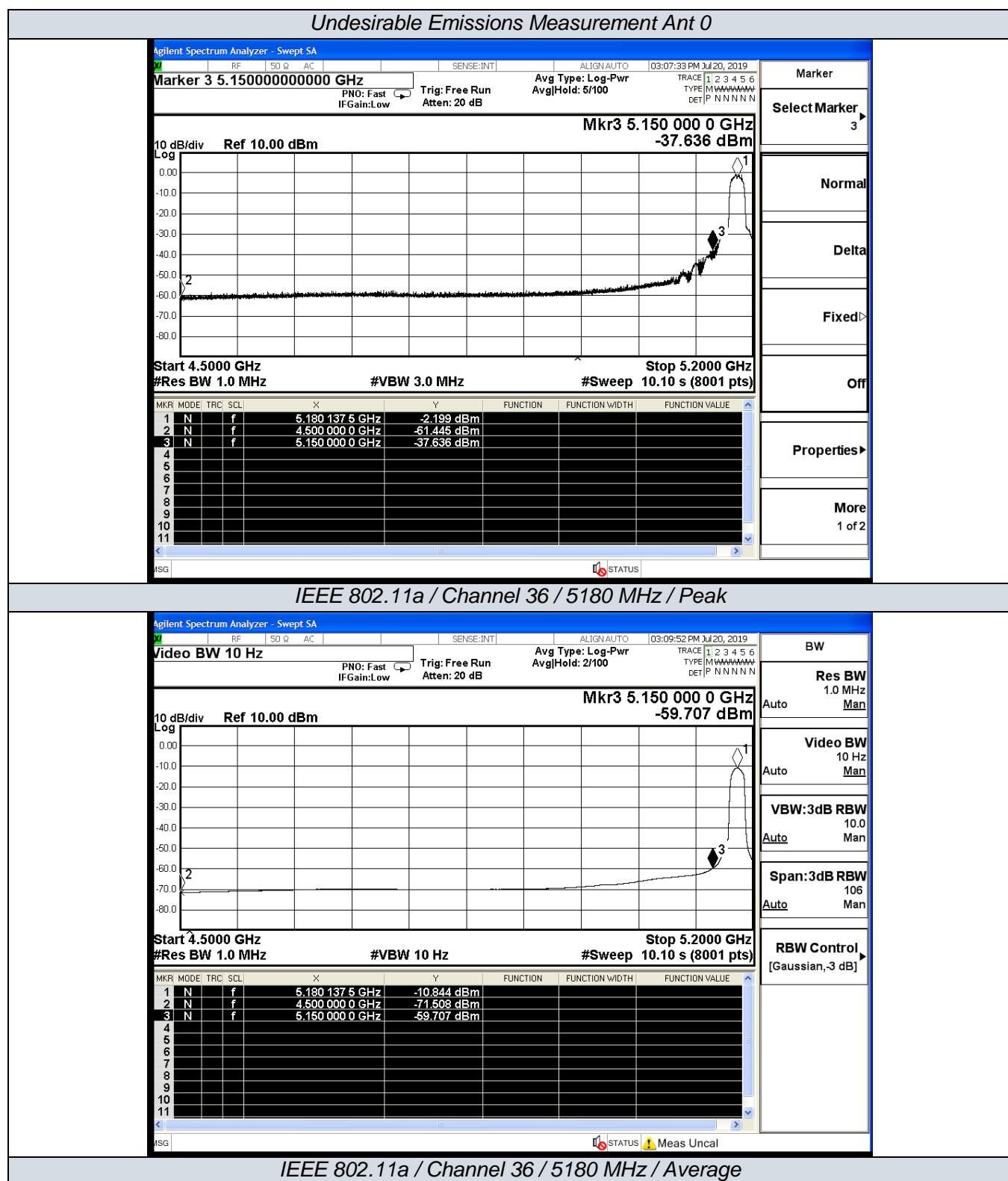
| Test Mode | Channel | Frequency (MHz) | Conducted Power (dBm) | Antenna Gain (dBi) | Ground Reflection Factor (dB) | Covert Radiated E Level At 3m (dBuV/m) | Detector | Limit (dBuV/m) |
|-------------|---------|-----------------|-----------------------|--------------------|-------------------------------|--|----------|----------------|
| 11A | 36 | 4500.0 | -61.377 | 2.04 | 0 | 35.891 | Peak | 68.20 |
| | | 4500.0 | -71.536 | 2.04 | 0 | 25.732 | Average | 54.00 |
| | | 5150.0 | -37.505 | 2.04 | 0 | 59.763 | Peak | 68.20 |
| | | 5150.0 | -59.723 | 2.04 | 0 | 37.545 | Average | 54.00 |
| | 48 | 5350.0 | -50.084 | 2.04 | 0 | 47.184 | Peak | 68.20 |
| | | 5350.0 | -60.364 | 2.04 | 0 | 36.904 | Average | 54.00 |
| | | 5460.0 | -50.492 | 2.04 | 0 | 46.776 | Peak | 68.20 |
| | | 5460.0 | -60.962 | 2.04 | 0 | 36.306 | Average | 54.00 |
| 11N20 SISO | 36 | 4500.0 | -61.192 | 2.04 | 0 | 36.076 | Peak | 68.20 |
| | | 4500.0 | -71.521 | 2.04 | 0 | 25.747 | Average | 54.00 |
| | | 5150.0 | -39.079 | 2.04 | 0 | 58.189 | Peak | 68.20 |
| | | 5150.0 | -59.745 | 2.04 | 0 | 37.523 | Average | 54.00 |
| | 48 | 5350.0 | -50.204 | 2.04 | 0 | 47.064 | Peak | 68.20 |
| | | 5350.0 | -60.371 | 2.04 | 0 | 36.897 | Average | 54.00 |
| | | 5460.0 | -49.729 | 2.04 | 0 | 47.539 | Peak | 68.20 |
| | | 5460.0 | -60.921 | 2.04 | 0 | 36.347 | Average | 54.00 |
| 11N40 SISO | 38 | 4500.0 | -62.501 | 2.04 | 0 | 34.767 | Peak | 68.20 |
| | | 4500.0 | -71.589 | 2.04 | 0 | 25.679 | Average | 54.00 |
| | | 5150.0 | -39.155 | 2.04 | 0 | 58.113 | Peak | 68.20 |
| | | 5150.0 | -49.730 | 2.04 | 0 | 47.538 | Average | 54.00 |
| | 46 | 5350.0 | -49.322 | 2.04 | 0 | 47.946 | Peak | 68.20 |
| | | 5350.0 | -59.625 | 2.04 | 0 | 37.643 | Average | 54.00 |
| | | 5460.0 | -51.372 | 2.04 | 0 | 45.896 | Peak | 68.20 |
| | | 5460.0 | -60.606 | 2.04 | 0 | 36.662 | Average | 54.00 |
| 11AC20 SISO | 36 | 4500.0 | -62.446 | 2.04 | 0 | 34.822 | Peak | 68.20 |
| | | 4500.0 | -71.521 | 2.04 | 0 | 25.747 | Average | 54.00 |
| | | 5150.0 | -39.452 | 2.04 | 0 | 57.816 | Peak | 68.20 |
| | | 5150.0 | -59.697 | 2.04 | 0 | 37.571 | Average | 54.00 |
| | 48 | 5350.0 | -50.416 | 2.04 | 0 | 46.852 | Peak | 68.20 |
| | | 5350.0 | -60.330 | 2.04 | 0 | 36.938 | Average | 54.00 |
| | | 5460.0 | -50.531 | 2.04 | 0 | 46.737 | Peak | 68.20 |
| | | 5460.0 | -60.910 | 2.04 | 0 | 36.358 | Average | 54.00 |
| 11AC40 SISO | 38 | 4500.0 | -61.471 | 2.04 | 0 | 35.797 | Peak | 68.20 |
| | | 4500.0 | -71.637 | 2.04 | 0 | 25.631 | Average | 54.00 |
| | | 5150.0 | -39.323 | 2.04 | 0 | 57.945 | Peak | 68.20 |
| | | 5150.0 | -49.769 | 2.04 | 0 | 47.499 | Average | 54.00 |
| | 46 | 5350.0 | -49.099 | 2.04 | 0 | 48.169 | Peak | 68.20 |
| | | 5350.0 | -59.905 | 2.04 | 0 | 37.363 | Average | 54.00 |
| | | 5460.0 | -51.038 | 2.04 | 0 | 46.230 | Peak | 68.20 |

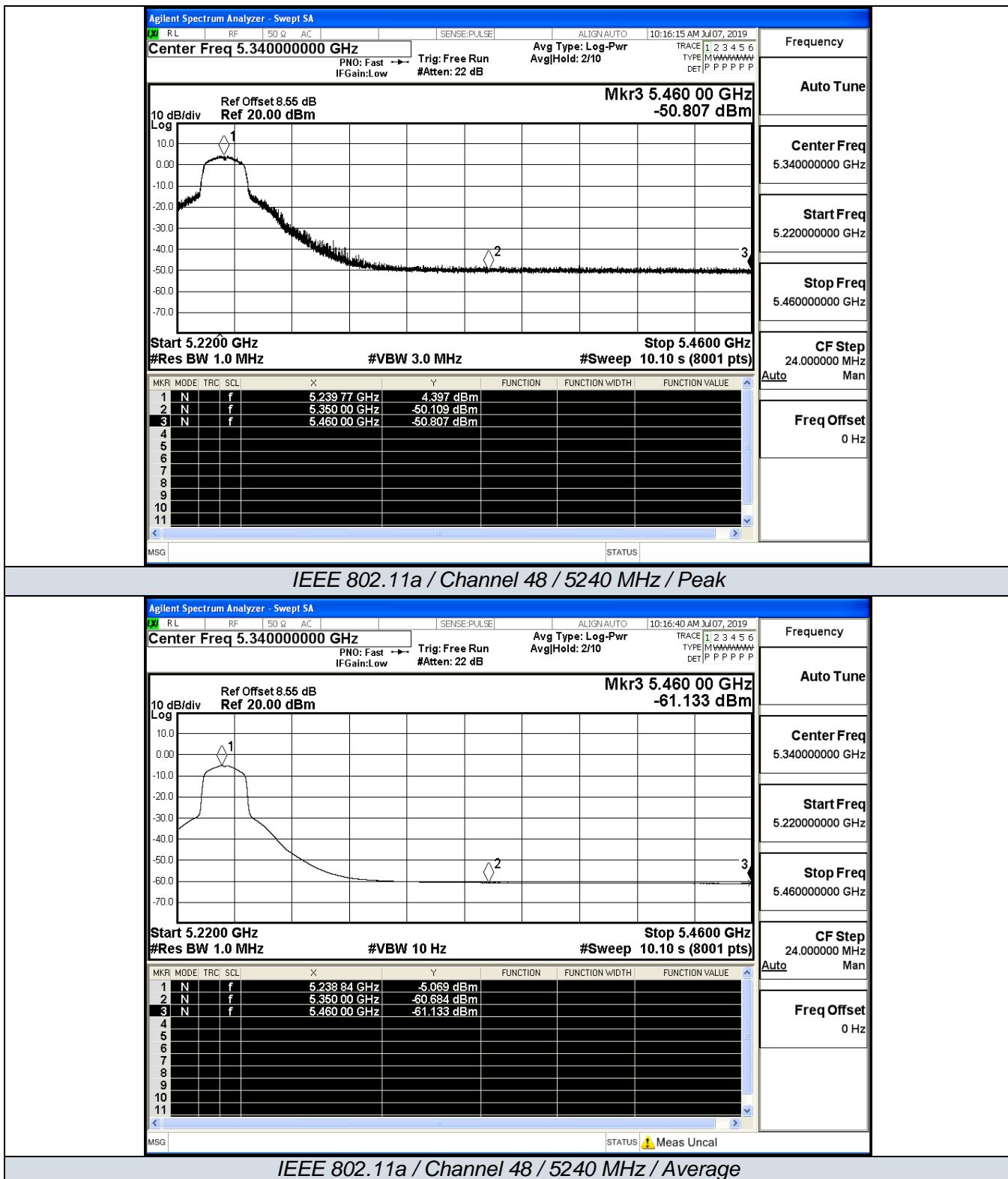
| | | | | | | | | |
|----------------|----|--------|---------|------|---|--------|---------|-------|
| | | 5460.0 | -60.923 | 2.04 | 0 | 36.345 | Average | 54.00 |
| 11AC80 SISO | 42 | 4500.0 | -61.929 | 2.04 | 0 | 35.339 | Peak | 68.20 |
| | | 4500.0 | -71.581 | 2.04 | 0 | 25.687 | Average | 54.00 |
| | | 5150.0 | -38.222 | 2.04 | 0 | 59.046 | Peak | 68.20 |
| | | 5150.0 | -57.394 | 2.04 | 0 | 39.874 | Average | 54.00 |
| | | 5350.0 | -40.398 | 2.04 | 0 | 56.870 | Peak | 68.20 |
| | | 5350.0 | -53.900 | 2.04 | 0 | 43.368 | Average | 54.00 |
| | | 5460.0 | -50.456 | 2.04 | 0 | 46.812 | Peak | 68.20 |
| | | 5460.0 | -60.253 | 2.04 | 0 | 37.015 | Average | 54.00 |

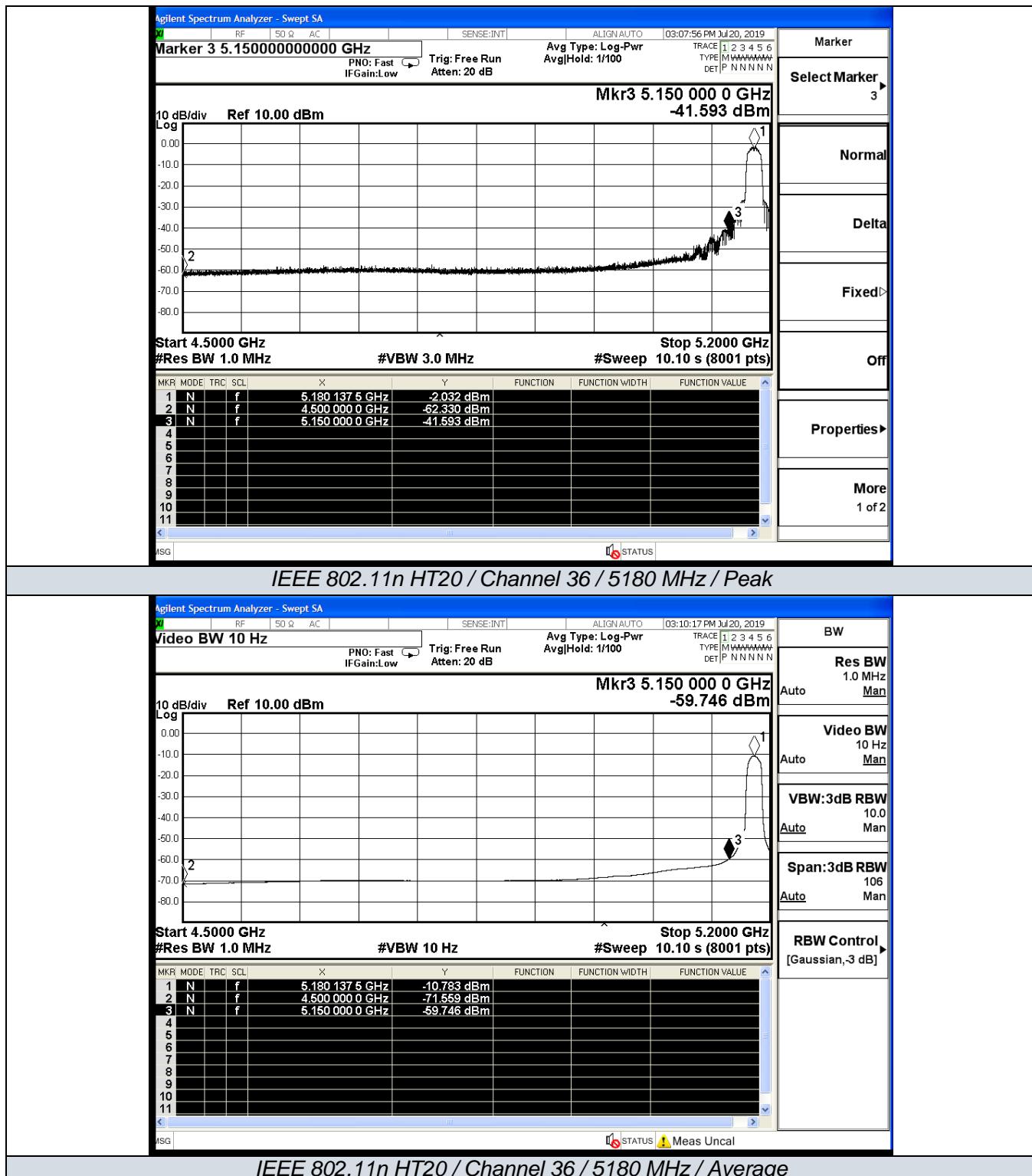
ANT0+ANT1:

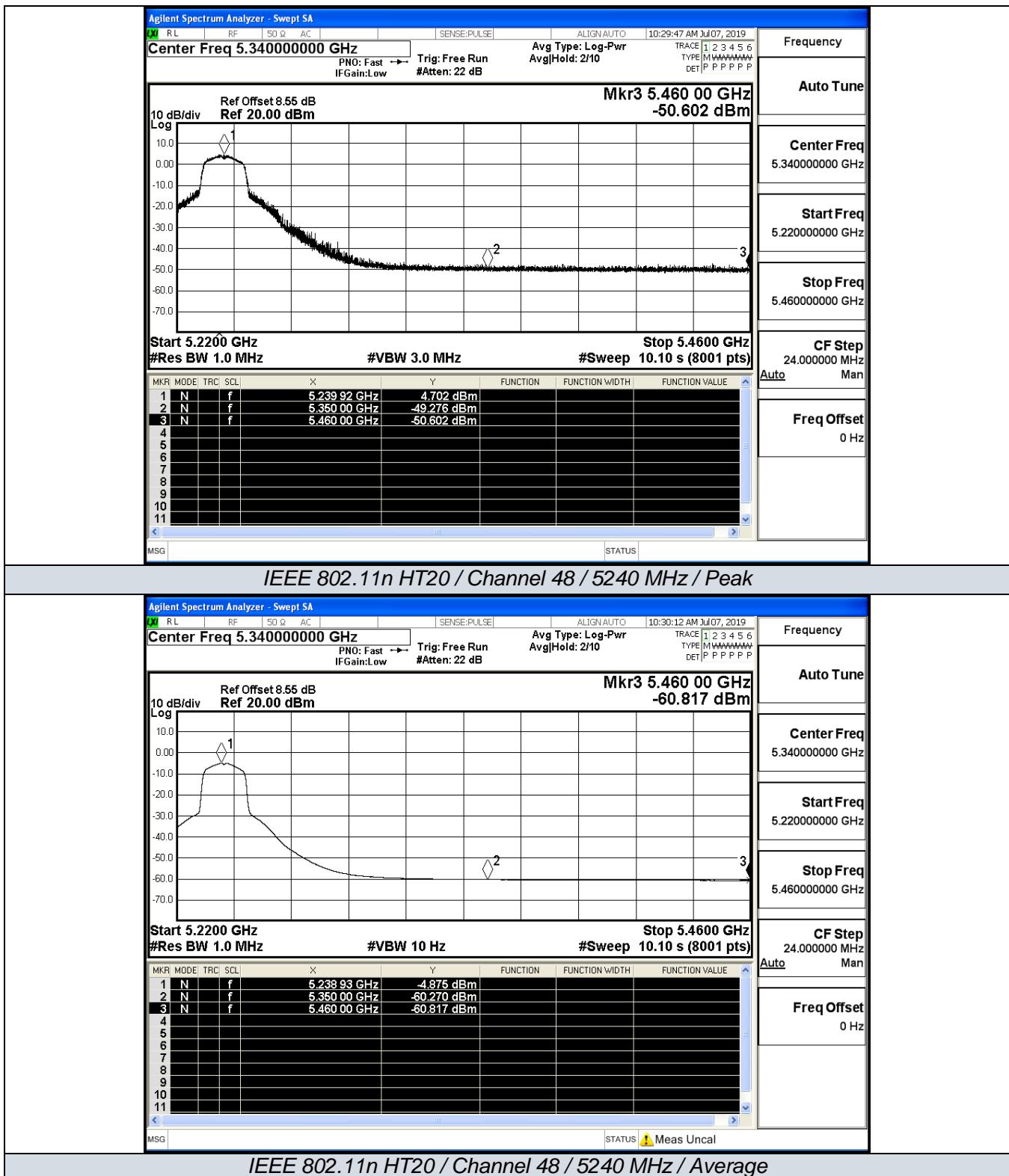
| Test Mode | Channel | Frequency (MHz) | Covert Radiated E Level At 3m (dBuV/m) | | | Ground Reflection Factor (dB) | Detector | Limit (dBuV/m) |
|----------------|---------|-----------------|--|--------|--------|-------------------------------|----------|----------------|
| | | | Ant0 | Ant1 | Sum | | | |
| 11N20 MIMO | 36 | 4500.0 | 34.938 | 36.076 | 41.546 | 0 | Peak | 68.20 |
| | | 4500.0 | 25.709 | 25.747 | 31.749 | 0 | Average | 54.00 |
| | | 5150.0 | 55.675 | 58.189 | 63.043 | 0 | Peak | 68.20 |
| | | 5150.0 | 37.522 | 37.523 | 43.543 | 0 | Average | 54.00 |
| | 48 | 5350.0 | 47.992 | 47.064 | 53.561 | 0 | Peak | 68.20 |
| | | 5350.0 | 36.998 | 36.897 | 42.968 | 0 | Average | 54.00 |
| | | 5460.0 | 46.666 | 47.539 | 53.134 | 0 | Peak | 68.20 |
| | | 5460.0 | 36.451 | 36.347 | 42.420 | 0 | Average | 54.00 |
| 11N40 MIMO | 38 | 4500.0 | 36.360 | 34.767 | 41.621 | 0 | Peak | 68.20 |
| | | 4500.0 | 25.696 | 25.679 | 31.708 | 0 | Average | 54.00 |
| | | 5150.0 | 58.094 | 58.113 | 64.124 | 0 | Peak | 68.20 |
| | | 5150.0 | 47.554 | 47.538 | 53.567 | 0 | Average | 54.00 |
| | 46 | 5350.0 | 47.745 | 47.946 | 53.867 | 0 | Peak | 68.20 |
| | | 5350.0 | 37.431 | 37.643 | 43.558 | 0 | Average | 54.00 |
| | | 5460.0 | 47.003 | 45.896 | 52.488 | 0 | Peak | 68.20 |
| | | 5460.0 | 36.766 | 36.662 | 42.735 | 0 | Average | 54.00 |
| 11AC20 MIMO | 36 | 4500.0 | 35.749 | 34.822 | 41.318 | 0 | Peak | 68.20 |
| | | 4500.0 | 25.730 | 25.747 | 31.759 | 0 | Average | 54.00 |
| | | 5150.0 | 53.396 | 57.816 | 61.905 | 0 | Peak | 68.20 |
| | | 5150.0 | 37.544 | 37.571 | 43.578 | 0 | Average | 54.00 |
| | 48 | 5350.0 | 46.902 | 46.852 | 52.898 | 0 | Peak | 68.20 |
| | | 5350.0 | 36.952 | 36.938 | 42.966 | 0 | Average | 54.00 |
| | | 5460.0 | 47.521 | 46.737 | 53.158 | 0 | Peak | 68.20 |
| | | 5460.0 | 36.510 | 36.358 | 42.455 | 0 | Average | 54.00 |
| 11AC40 MIMO | 38 | 4500.0 | 34.767 | 35.797 | 41.318 | 0 | Peak | 68.20 |
| | | 4500.0 | 36.826 | 25.631 | 38.940 | 0 | Average | 54.00 |
| | | 5150.0 | 57.670 | 57.945 | 63.829 | 0 | Peak | 68.20 |
| | | 5150.0 | 47.798 | 47.499 | 53.670 | 0 | Average | 54.00 |
| | 46 | 5350.0 | 48.140 | 48.169 | 54.175 | 0 | Peak | 68.20 |
| | | 5350.0 | 37.515 | 37.363 | 43.460 | 0 | Average | 54.00 |
| | | 5460.0 | 47.282 | 46.230 | 52.793 | 0 | Peak | 68.20 |
| | | 5460.0 | 36.795 | 36.345 | 42.594 | 0 | Average | 54.00 |
| 11AC80 MIMO | 42 | 4500.0 | 35.930 | 35.339 | 41.660 | 0 | Peak | 68.20 |
| | | 4500.0 | 25.693 | 25.687 | 31.711 | 0 | Average | 54.00 |

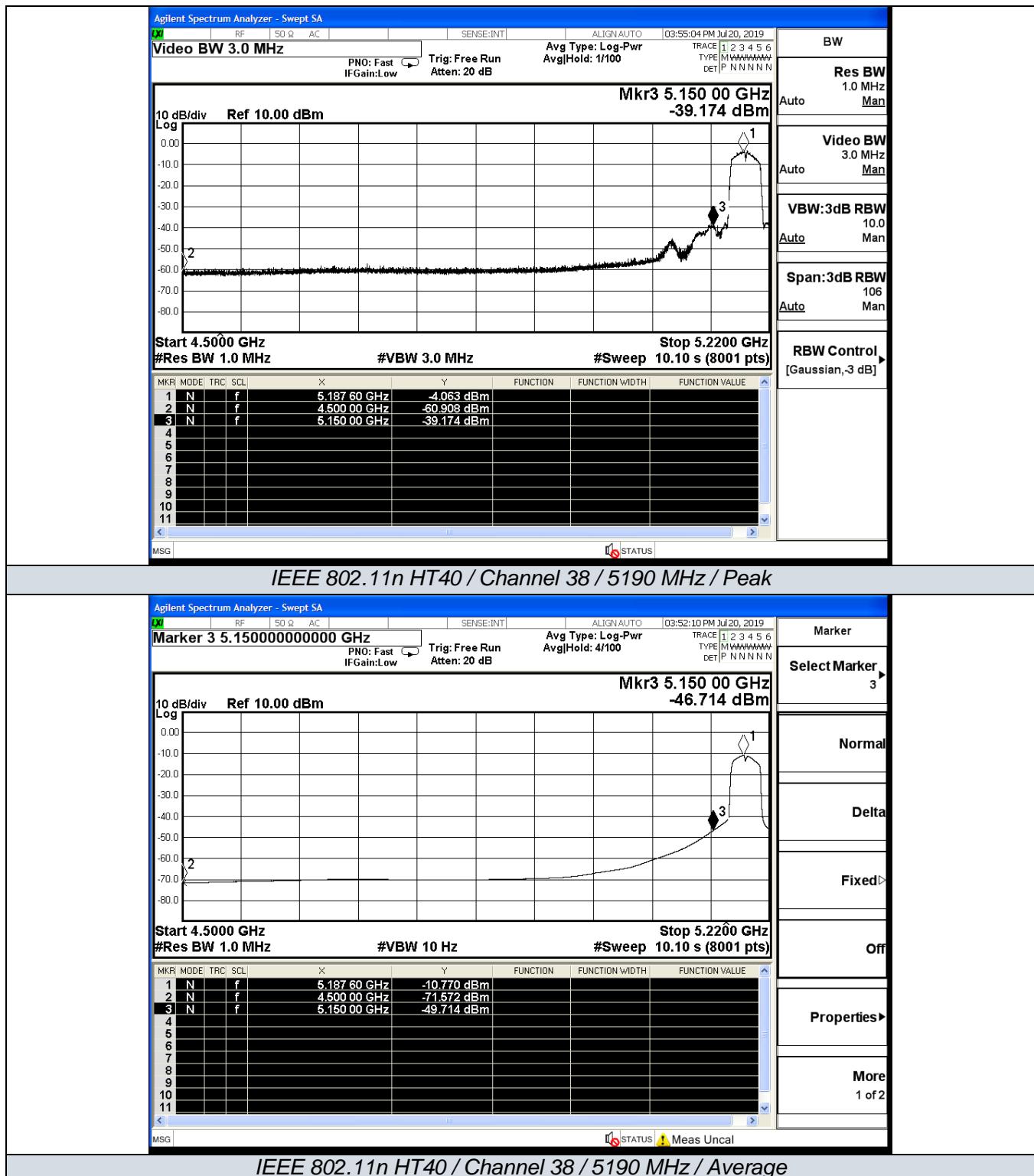
| | | | | | | | | |
|--|--|--------|--------|--------|--------|---|---------|-------|
| | | 5150.0 | 57.792 | 59.046 | 64.462 | 0 | Peak | 68.20 |
| | | 5150.0 | 39.879 | 39.874 | 45.897 | 0 | Average | 54.00 |
| | | 5350.0 | 57.803 | 56.870 | 63.370 | 0 | Peak | 68.20 |
| | | 5350.0 | 44.363 | 43.368 | 49.900 | 0 | Average | 54.00 |
| | | 5460.0 | 47.318 | 46.812 | 53.089 | 0 | Peak | 68.20 |
| | | 5460.0 | 37.433 | 37.015 | 43.247 | 0 | Average | 54.00 |

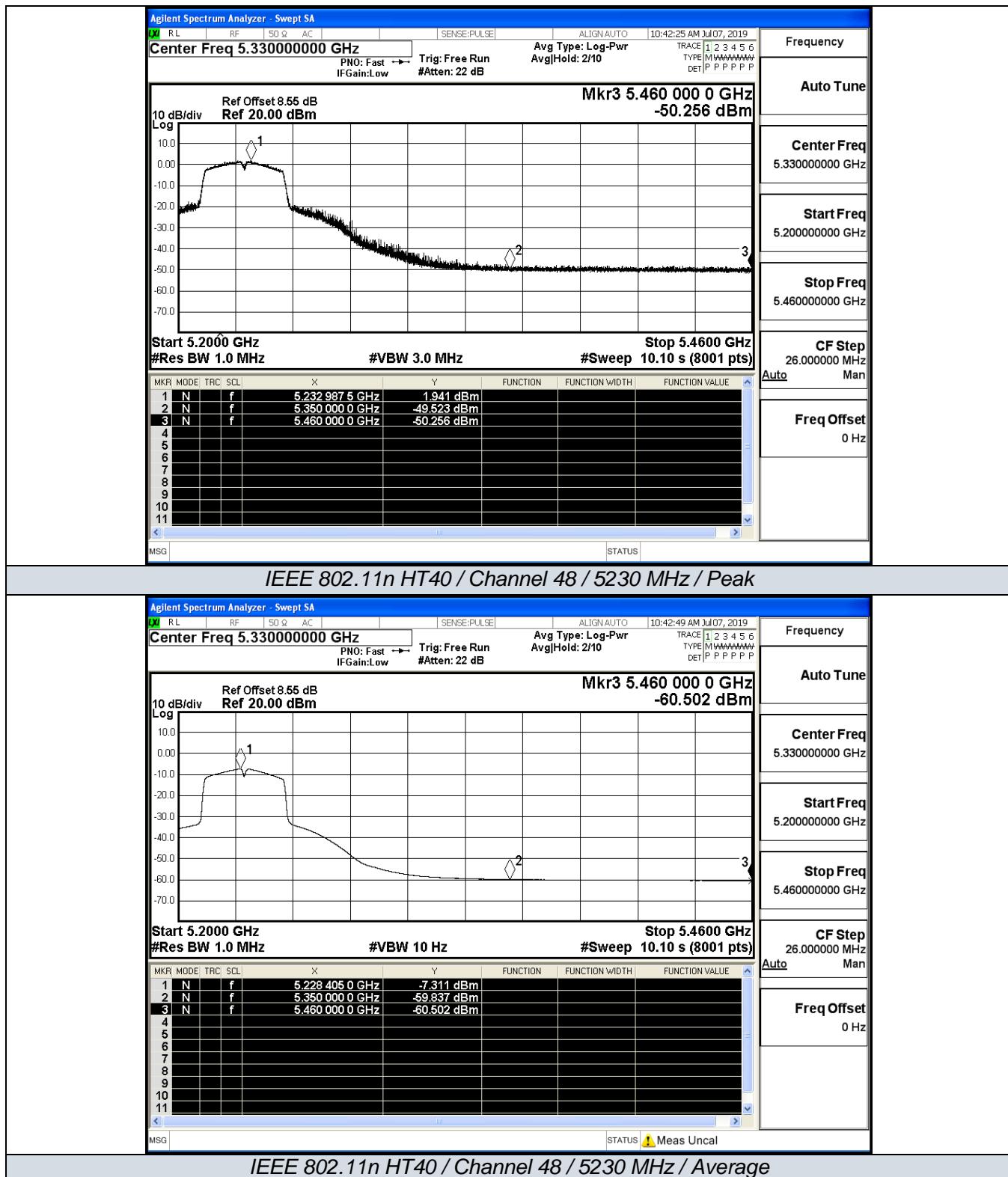


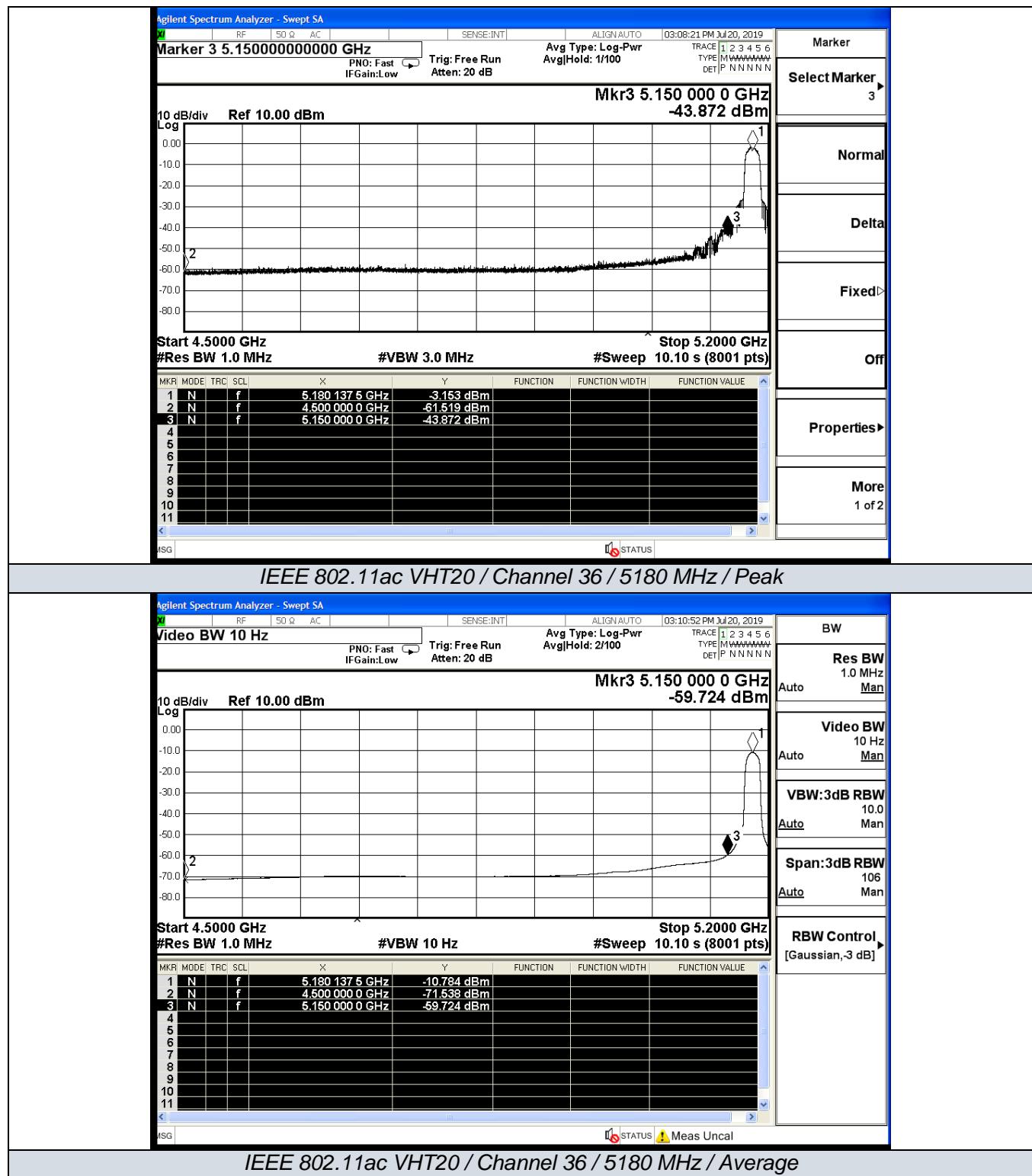


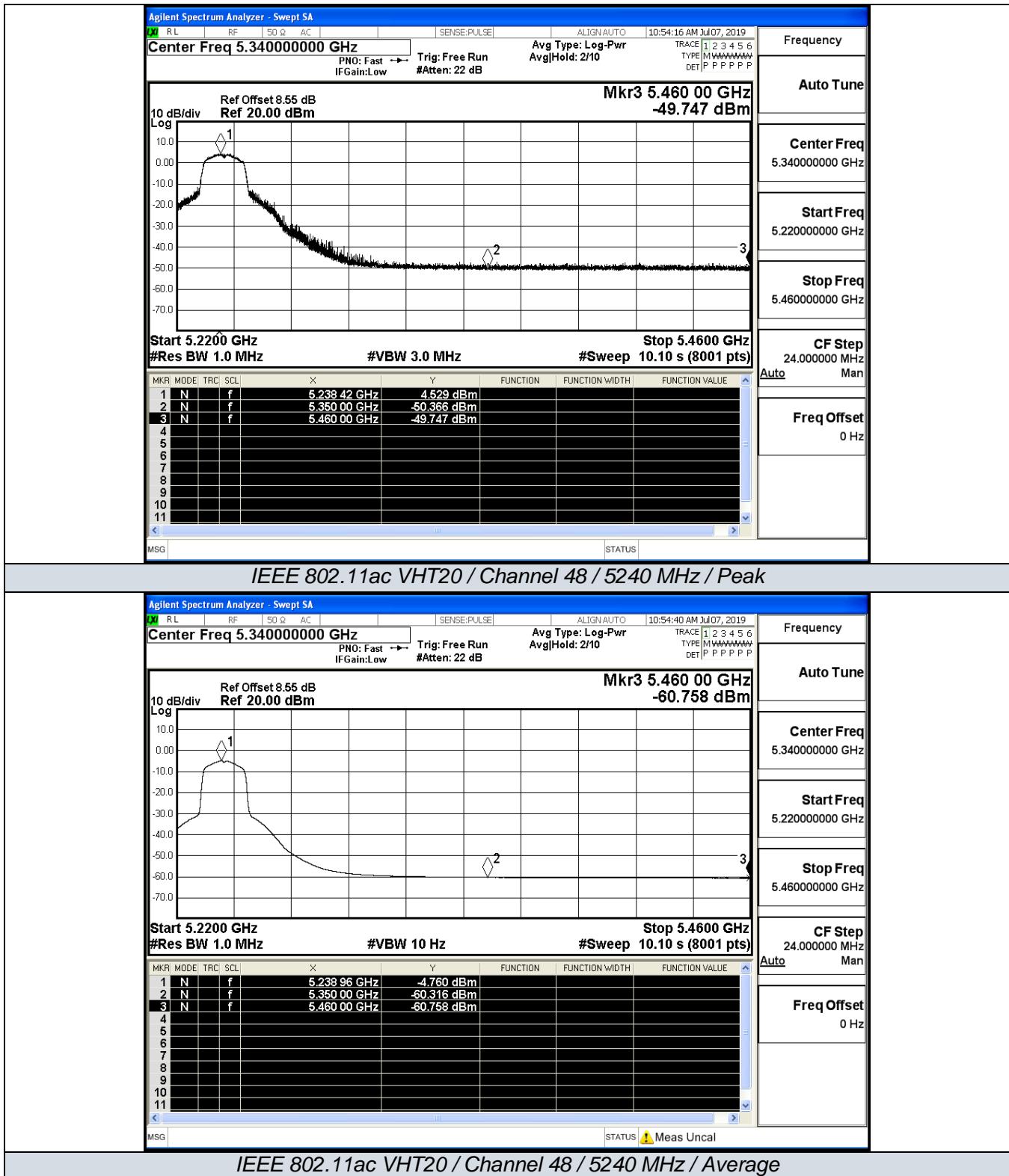


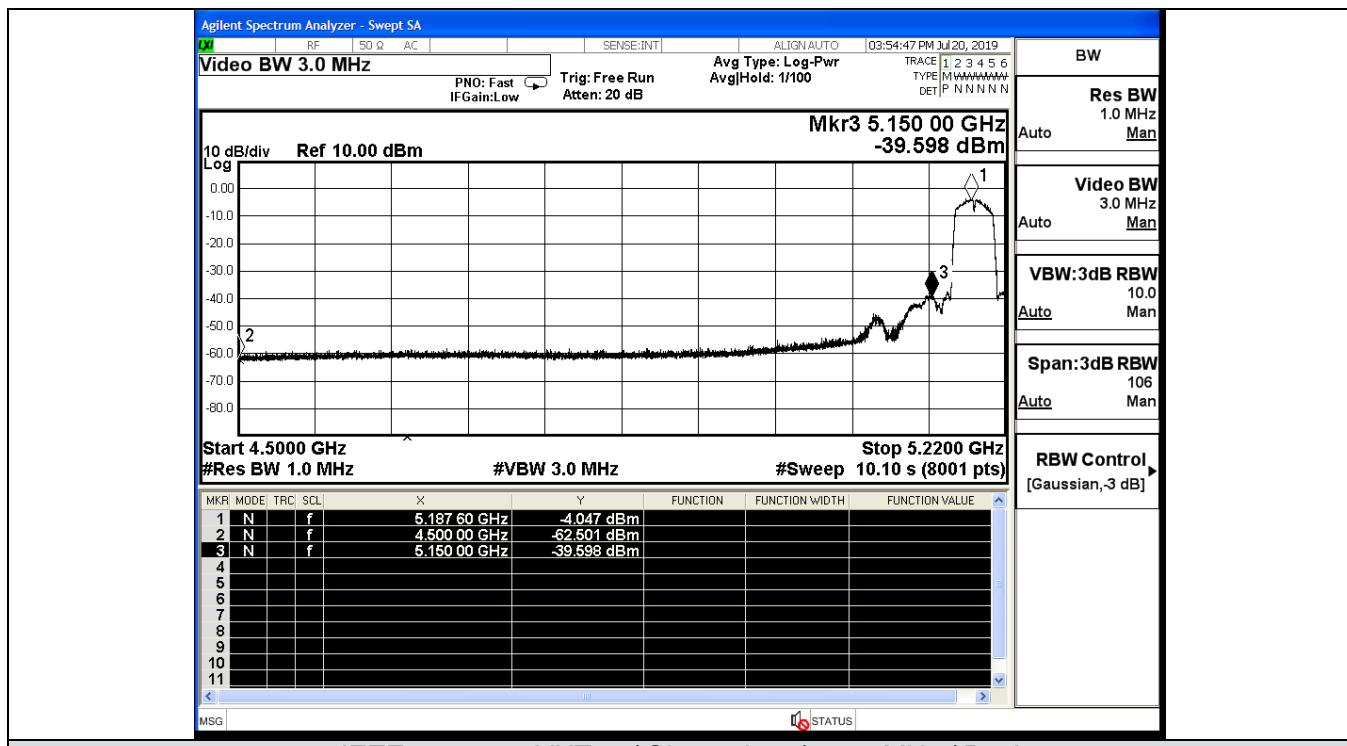




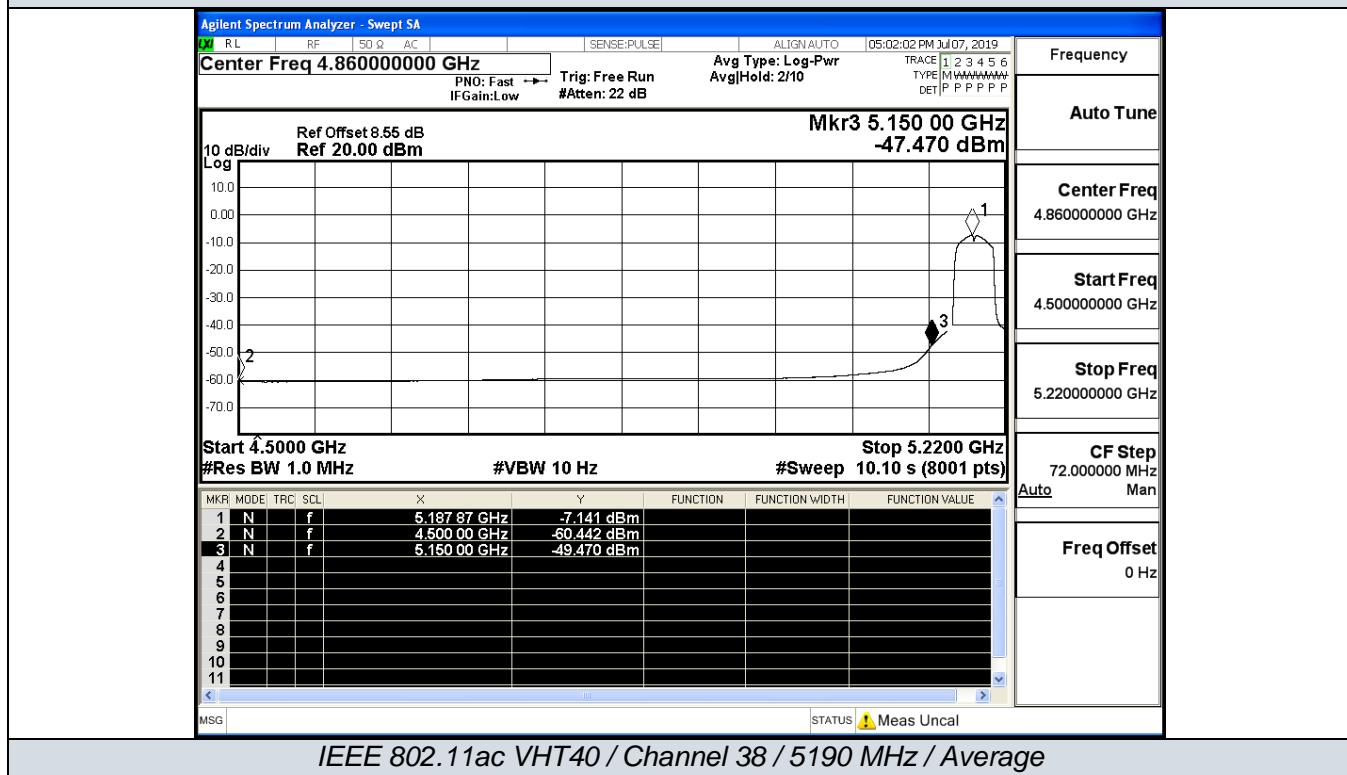




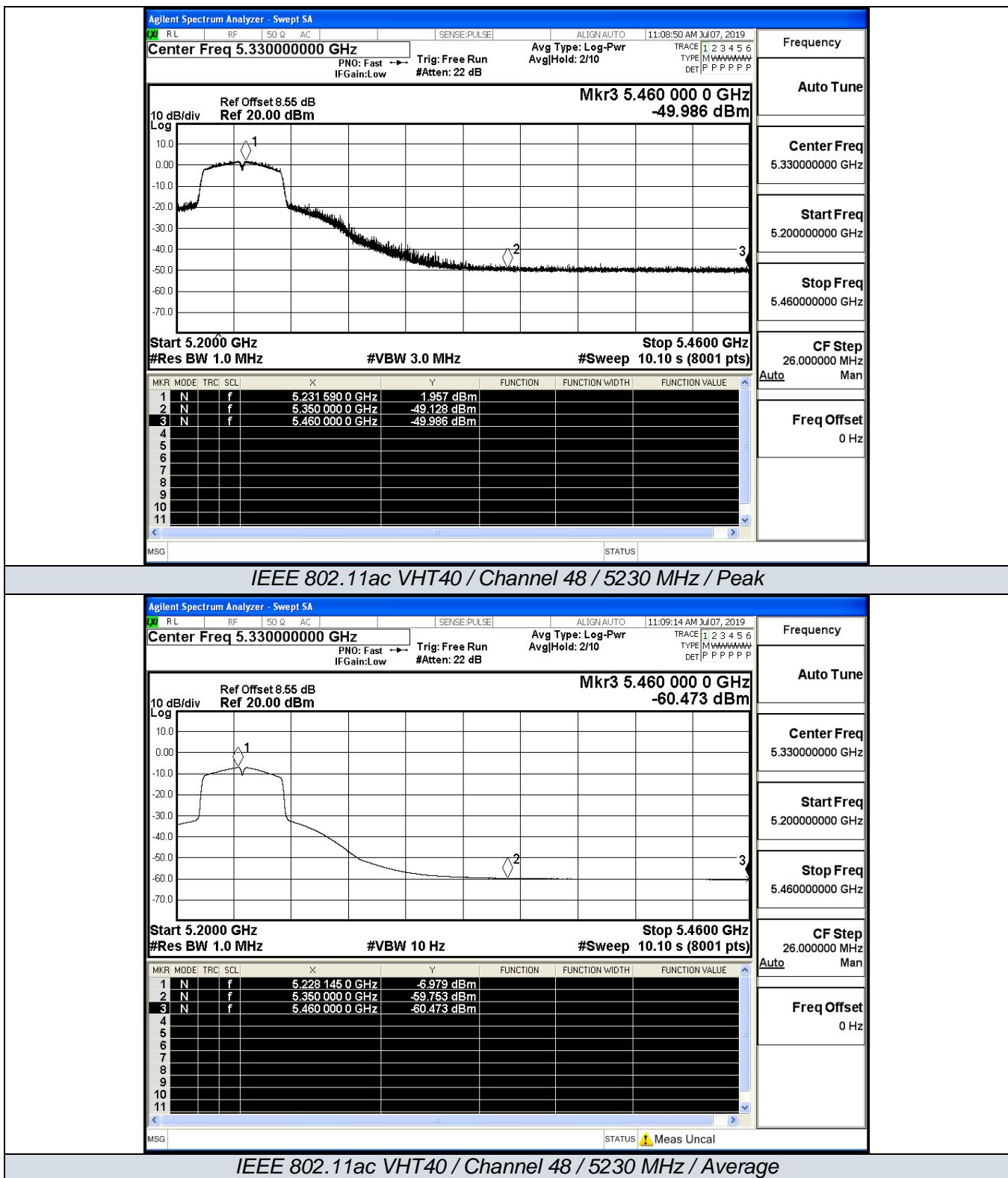


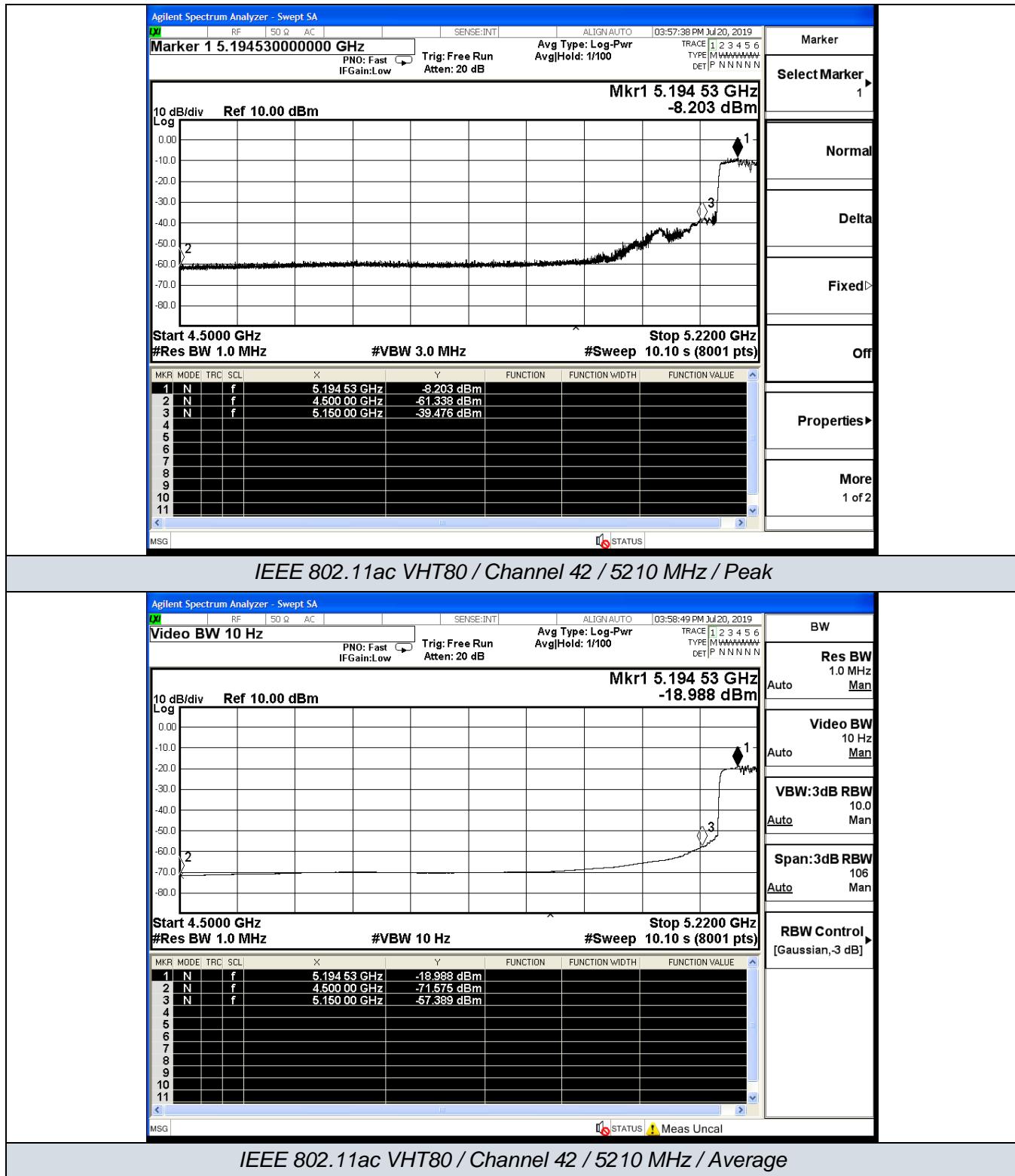


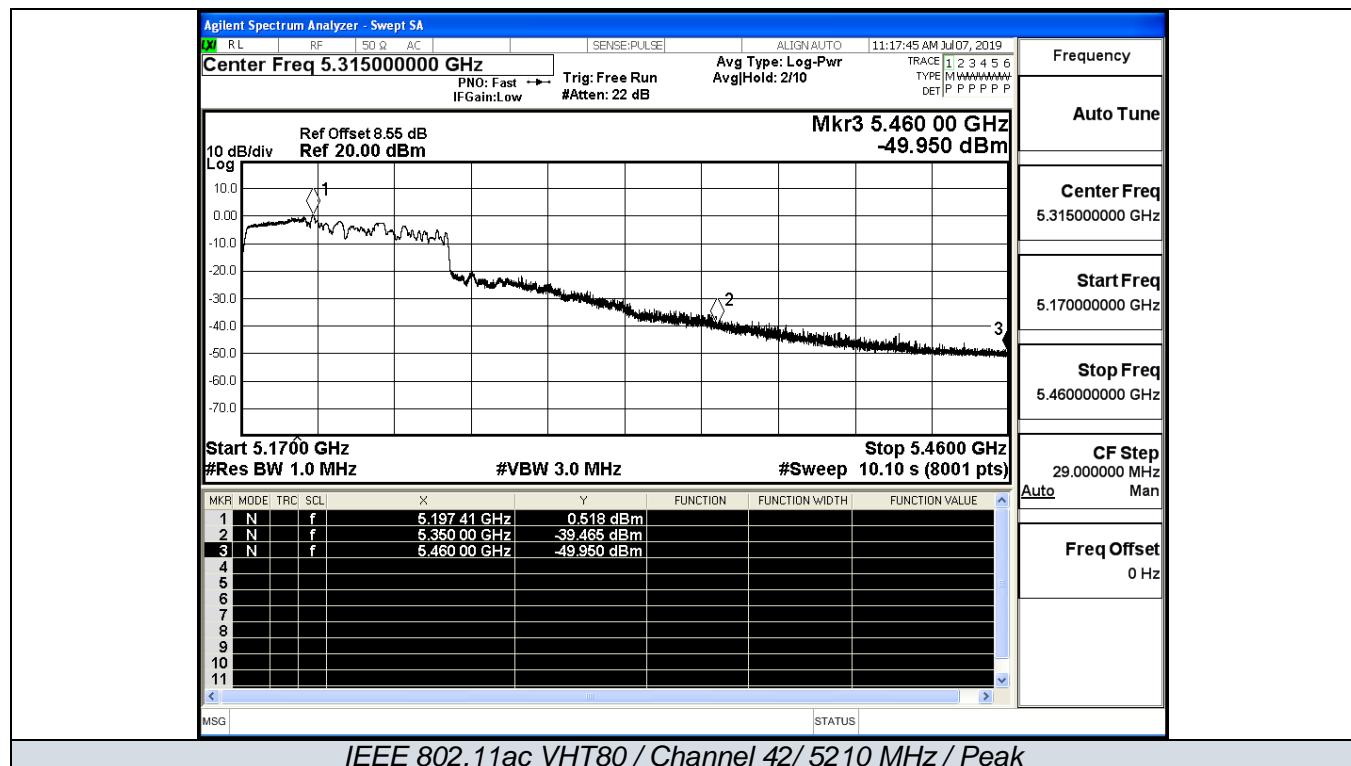
IEEE 802.11ac VHT40 / Channel 38 / 5190 MHz / Peak



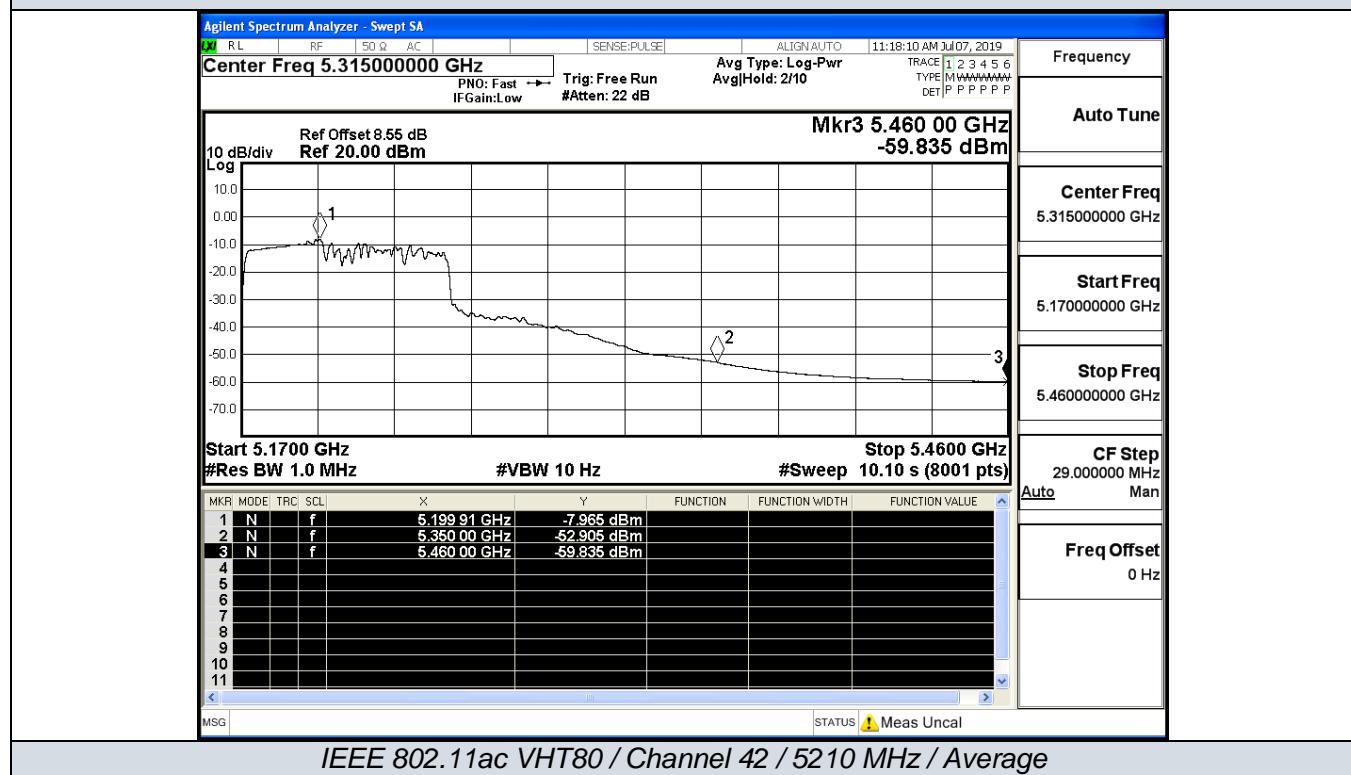
IEEE 802.11ac VHT40 / Channel 38 / 5190 MHz / Average





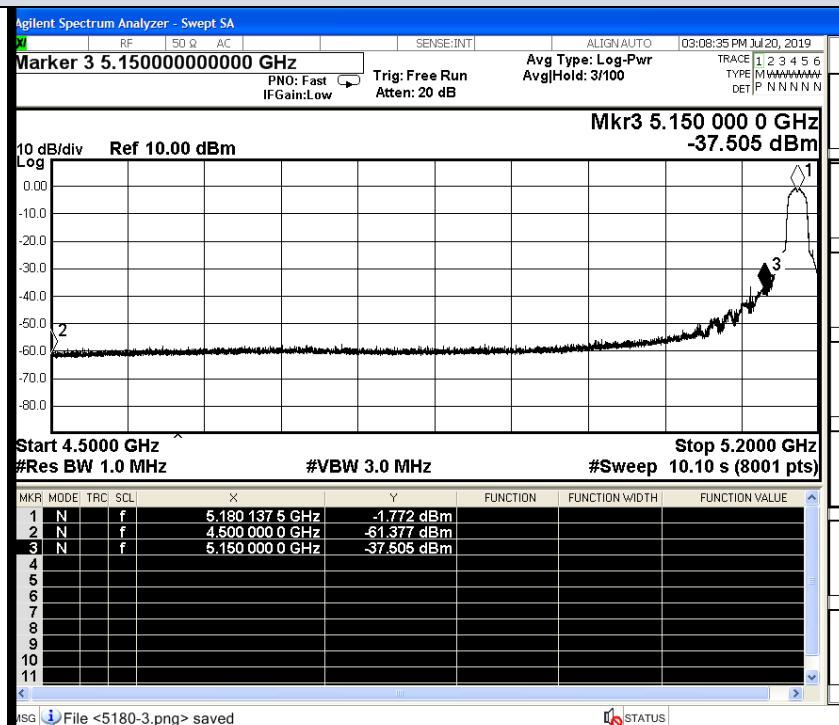


IEEE 802.11ac VHT80 / Channel 42 / 5210 MHz / Peak

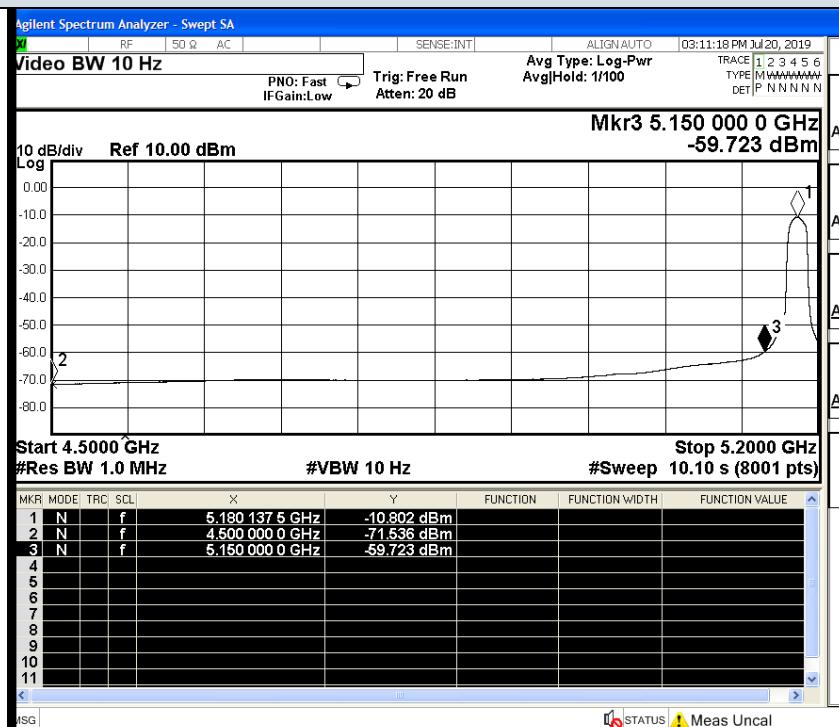


IEEE 802.11ac VHT80 / Channel 42 / 5210 MHz / Average

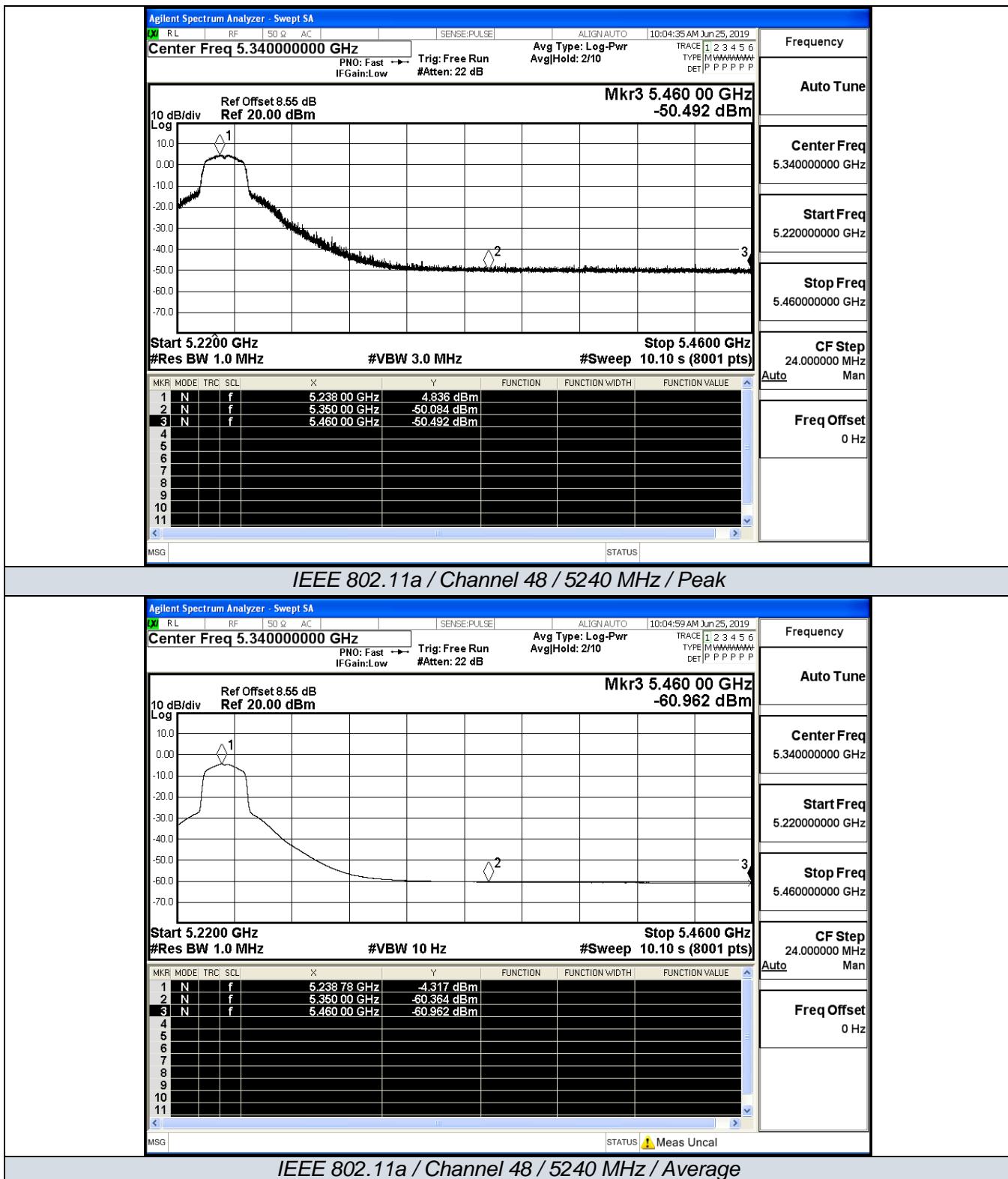
Undesirable Emissions Measurement Ant 1

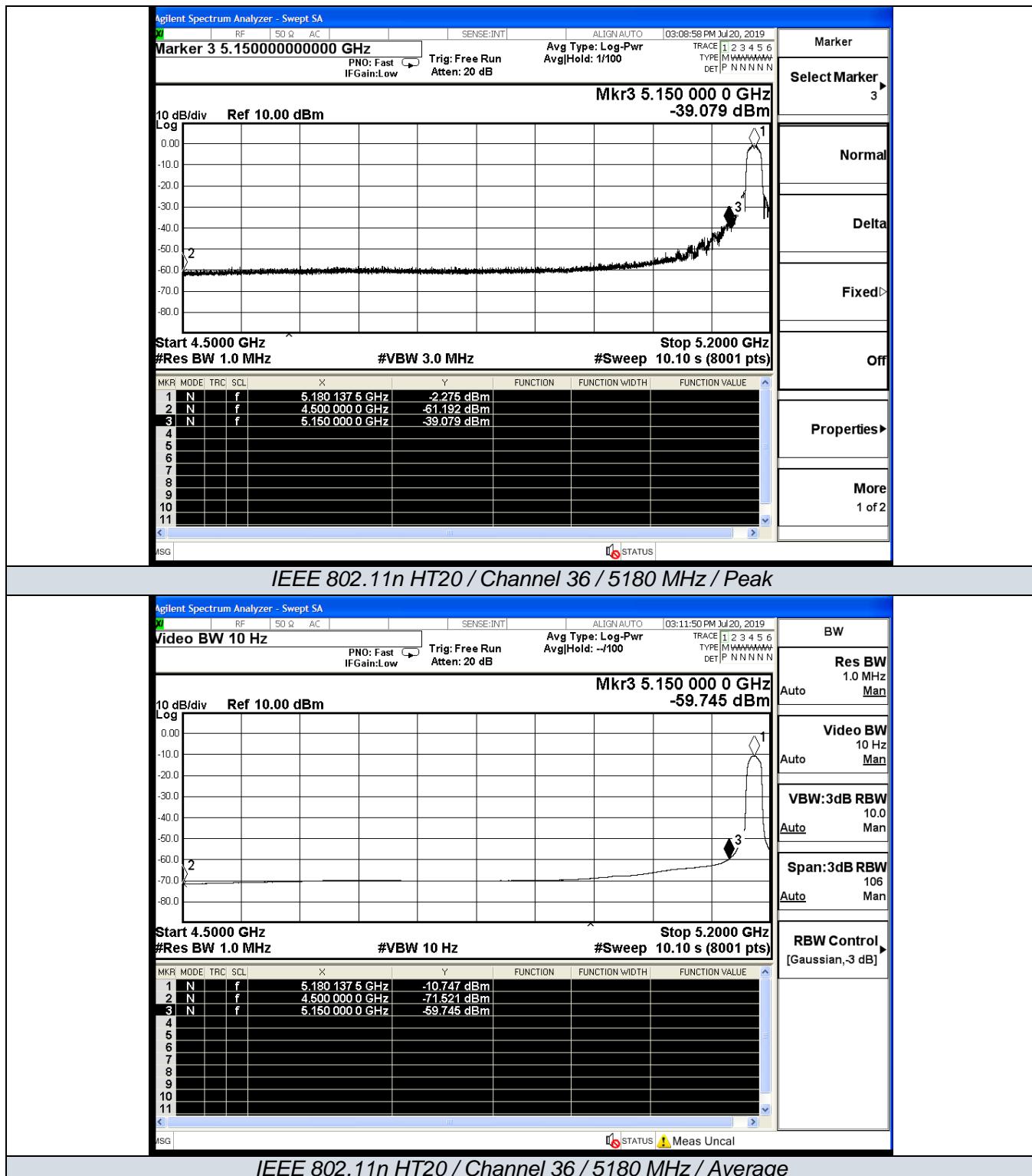


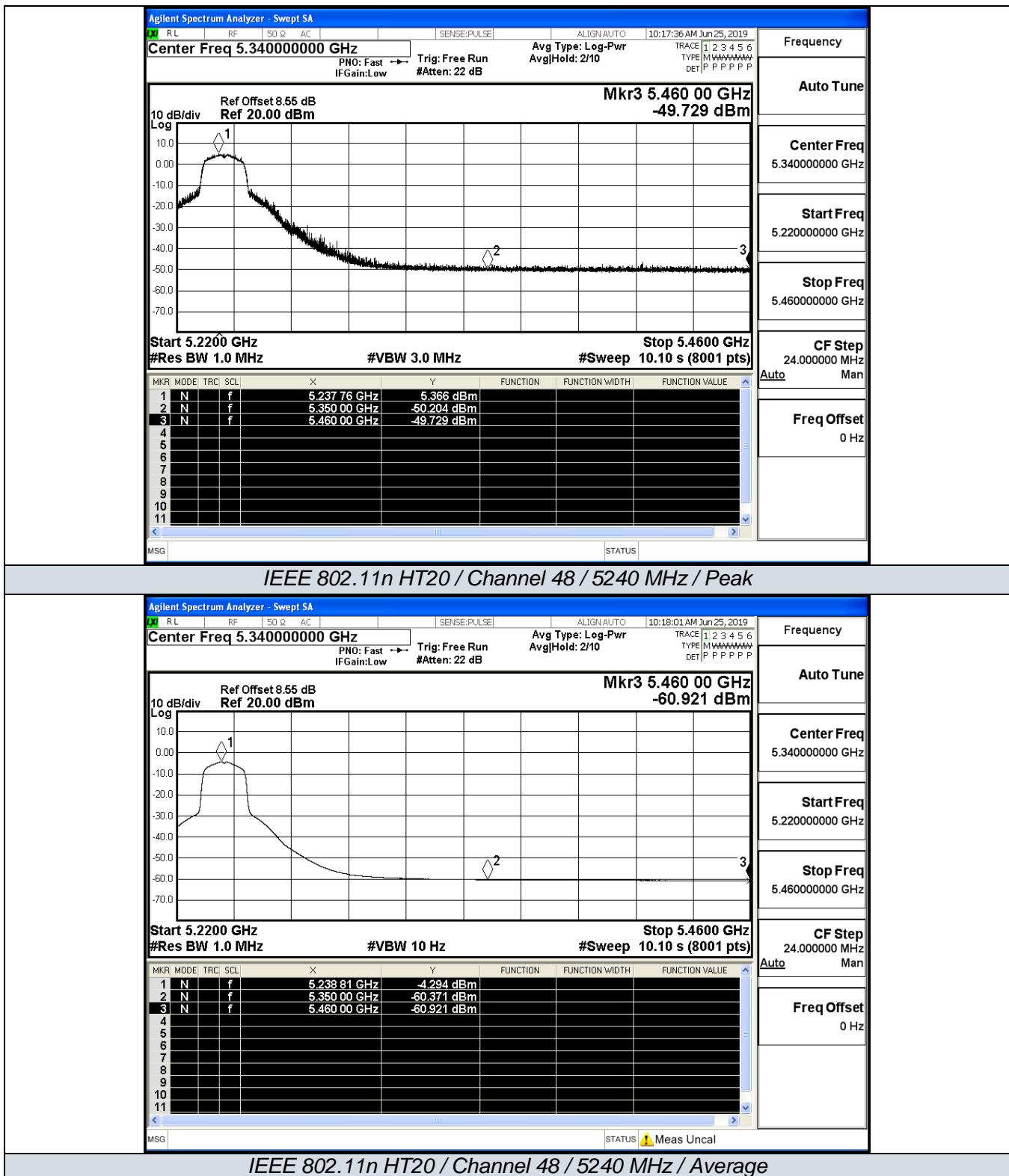
IEEE 802.11a / Channel 36 / 5180 MHz / Peak

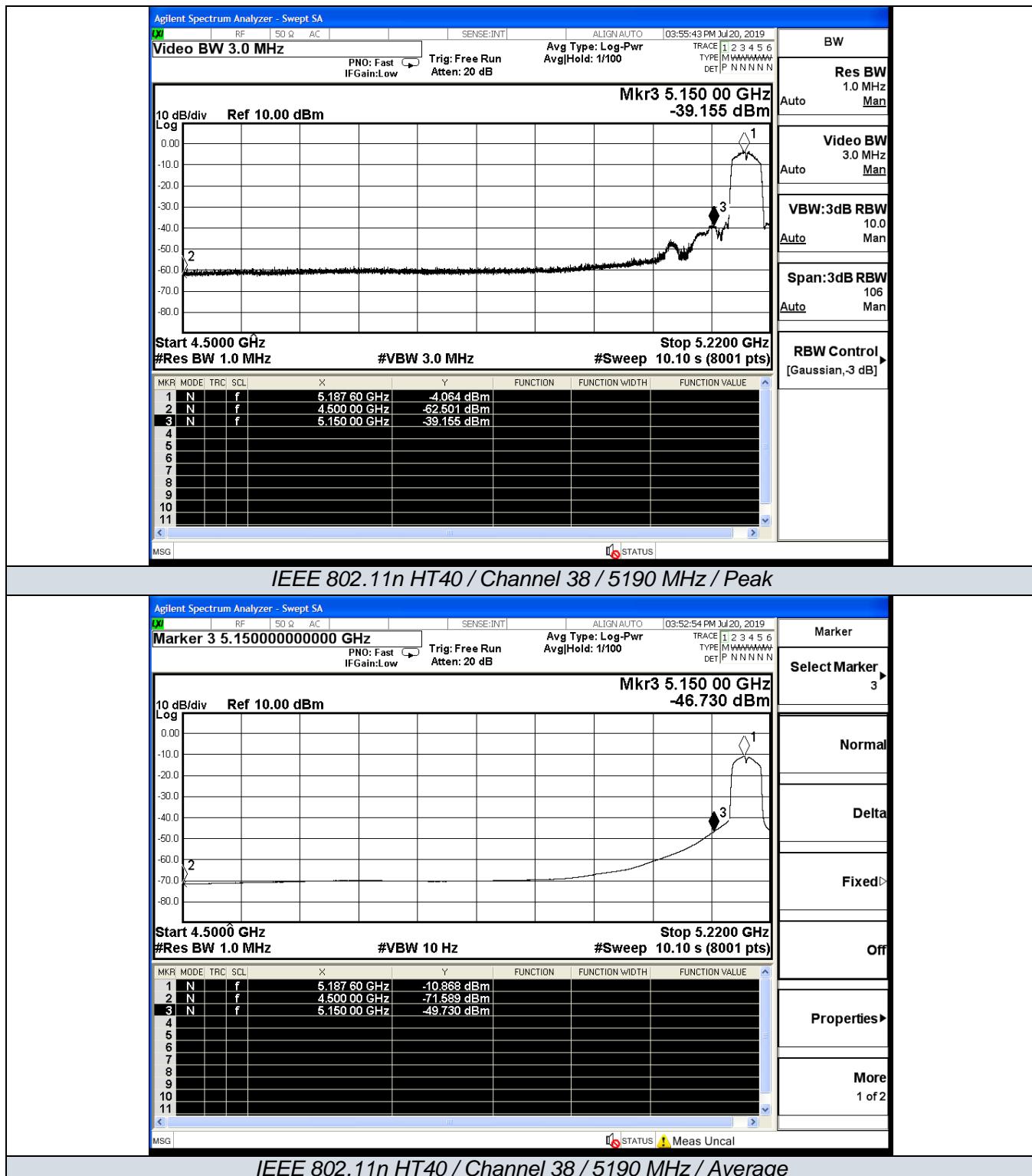


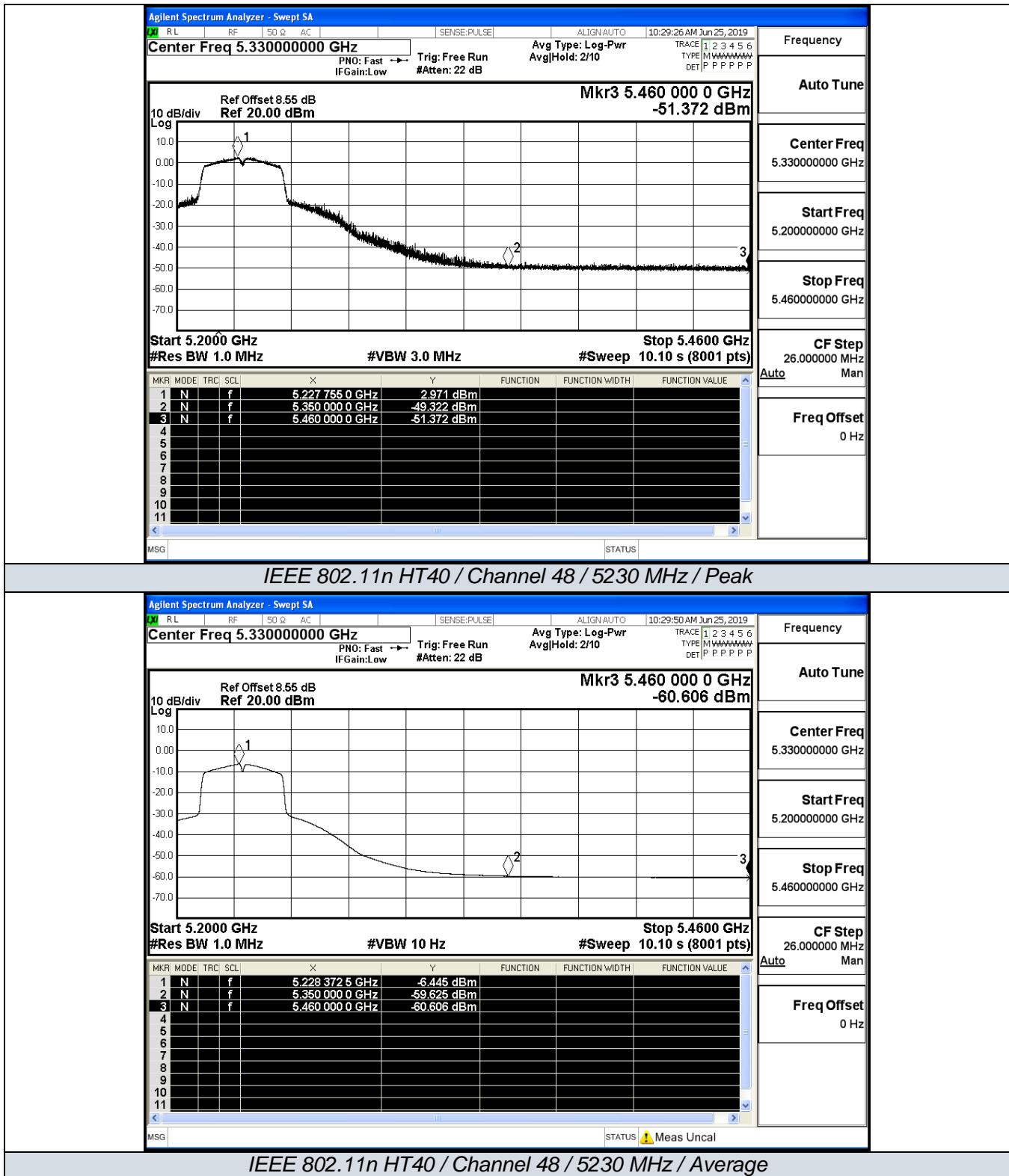
IEEE 802.11a / Channel 36 / 5180 MHz / Average

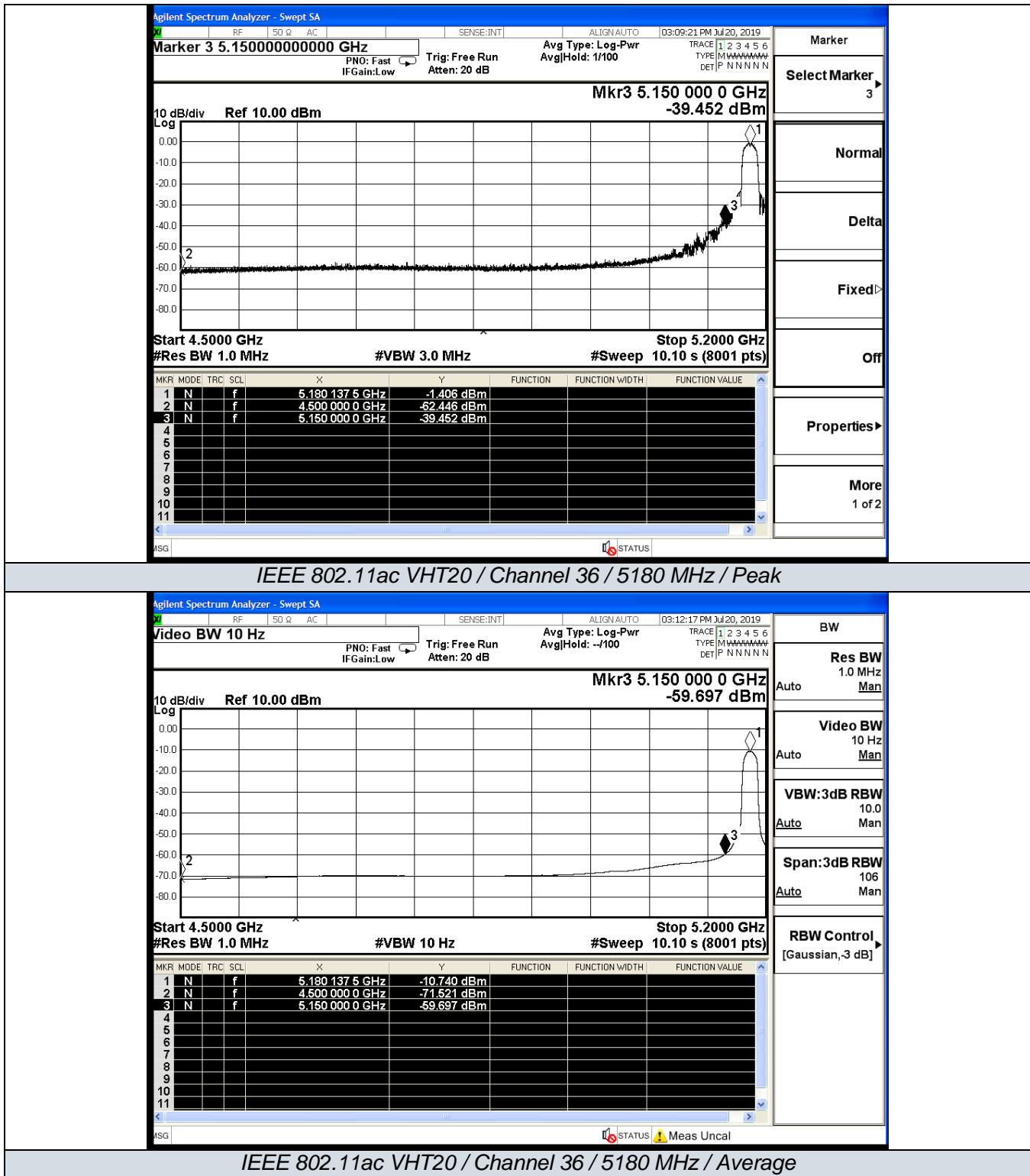


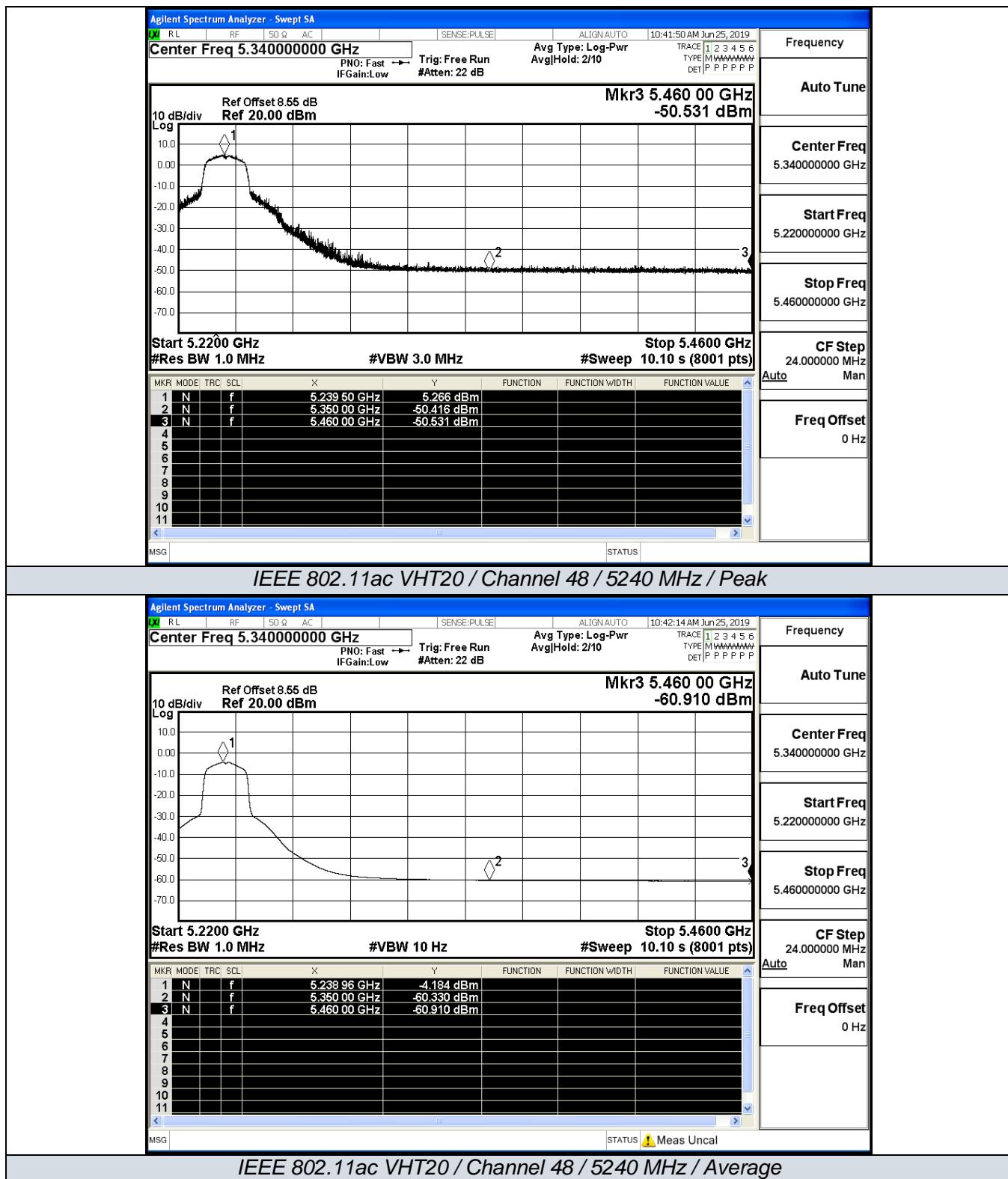


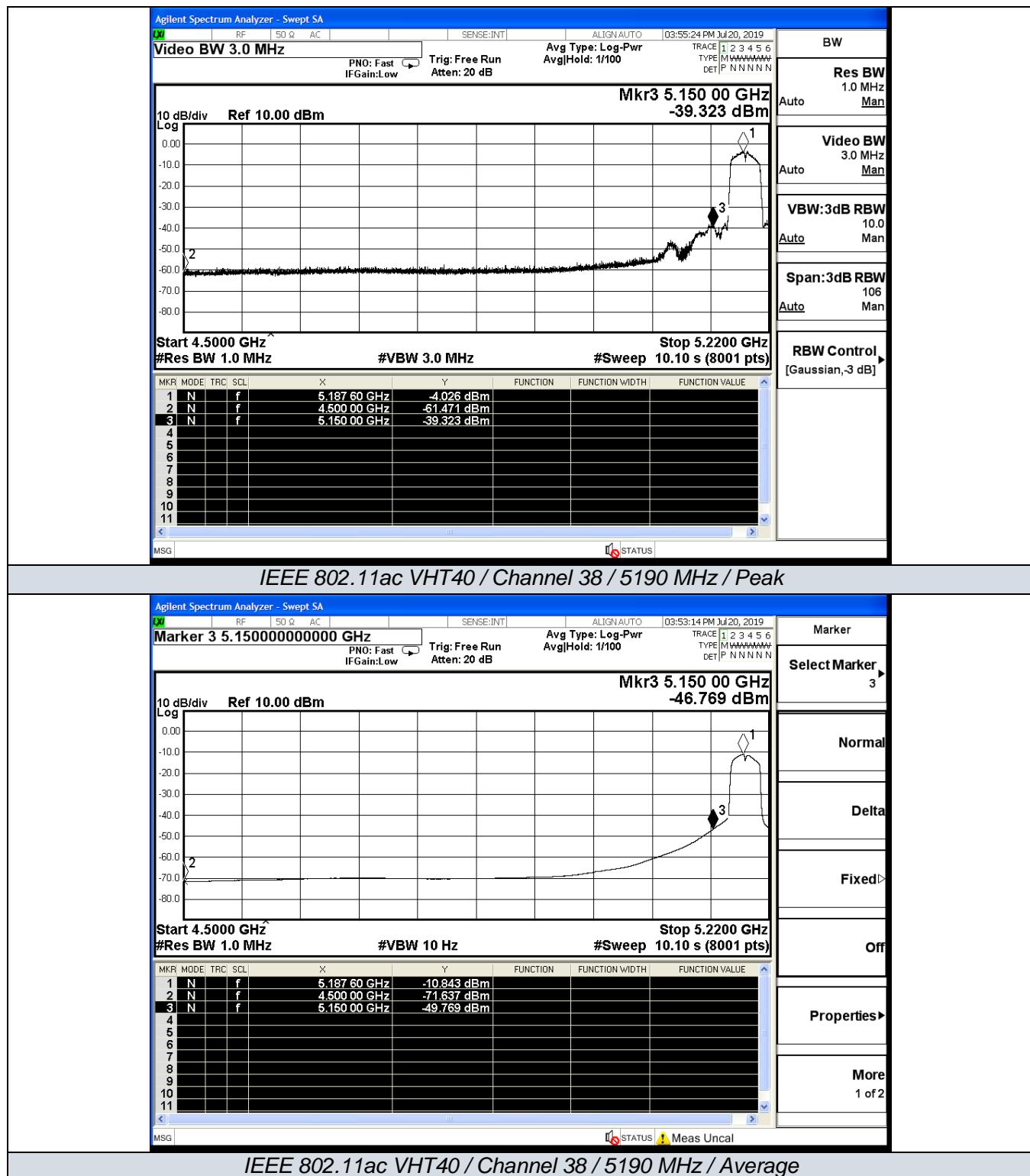


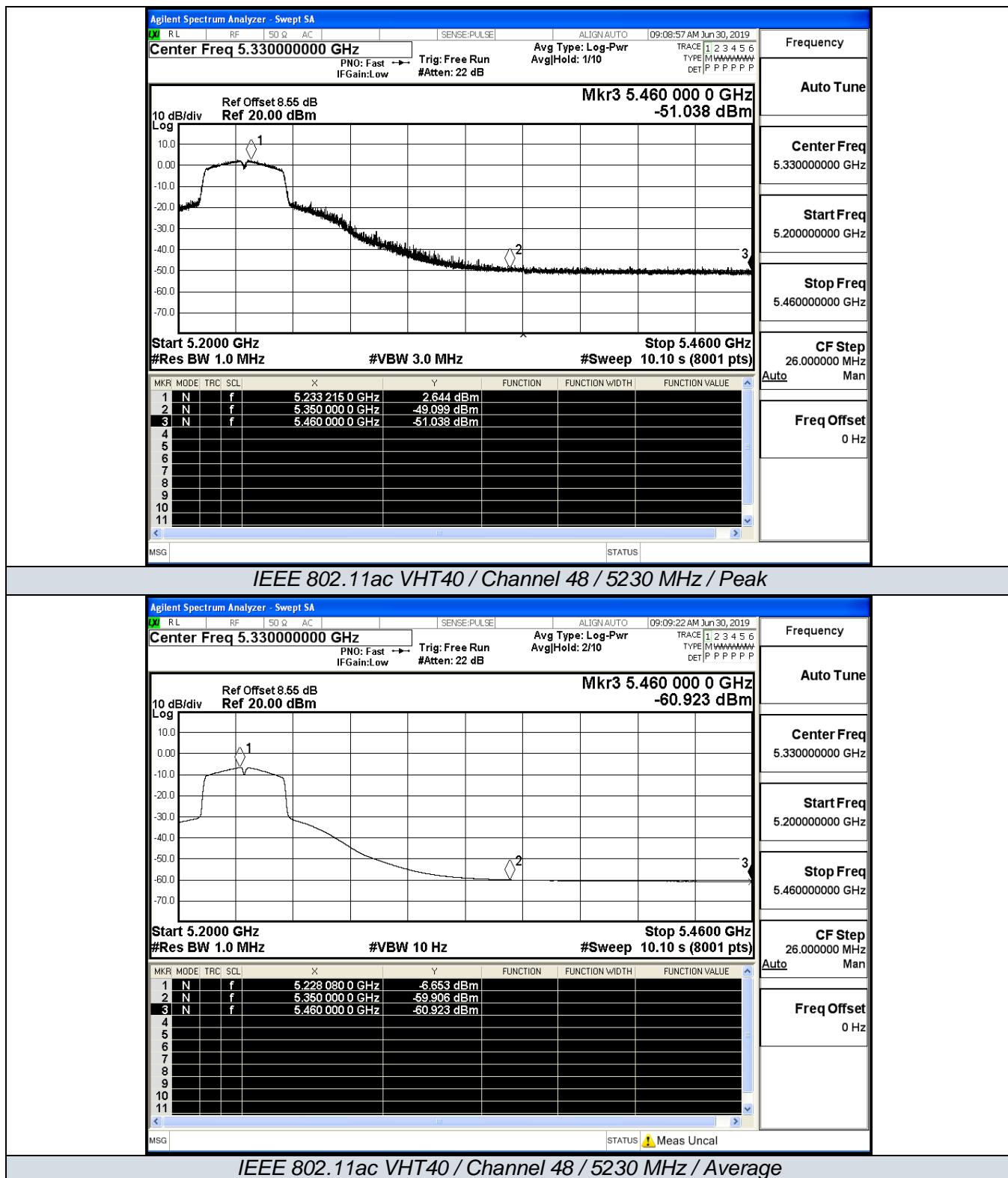


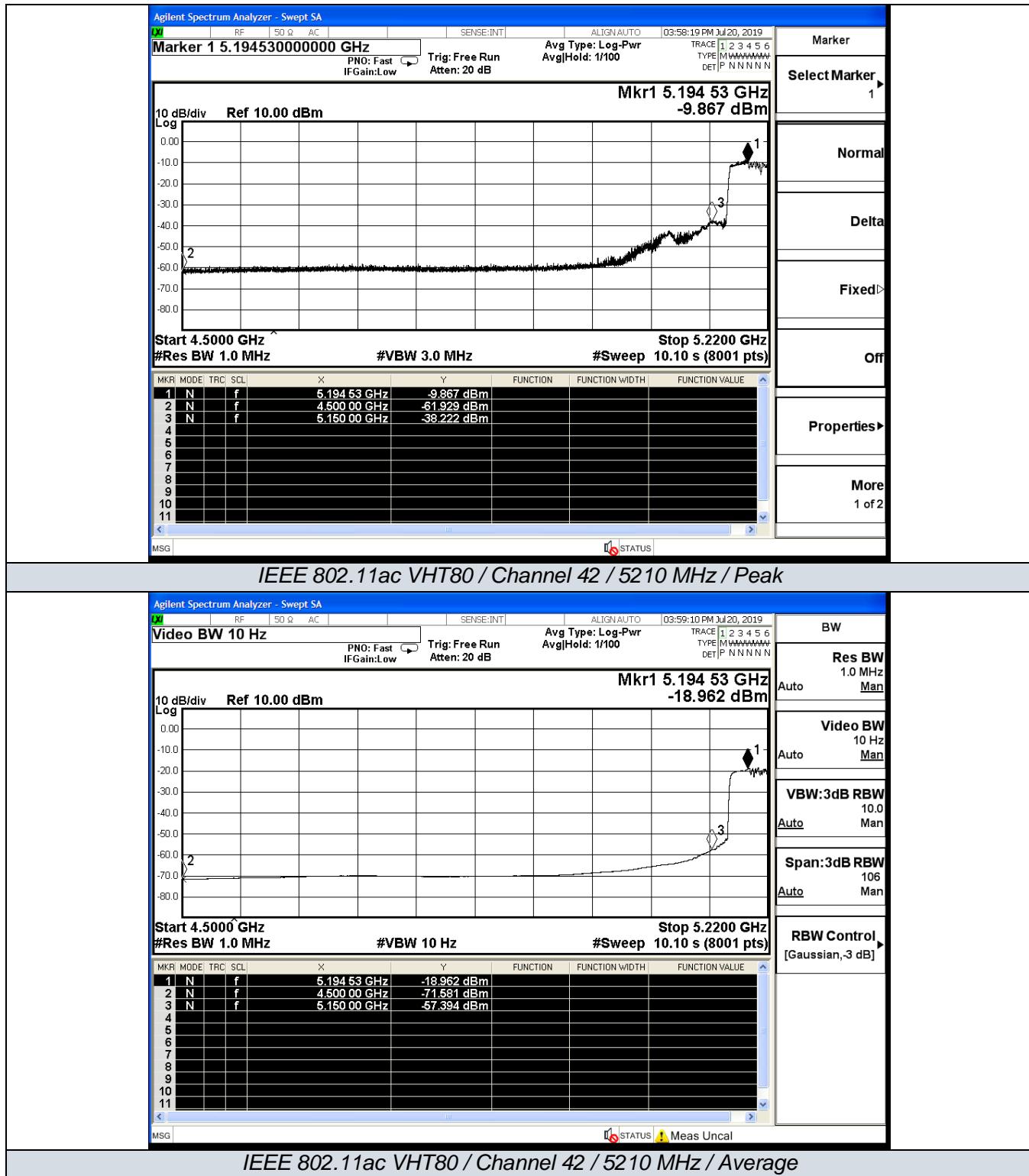


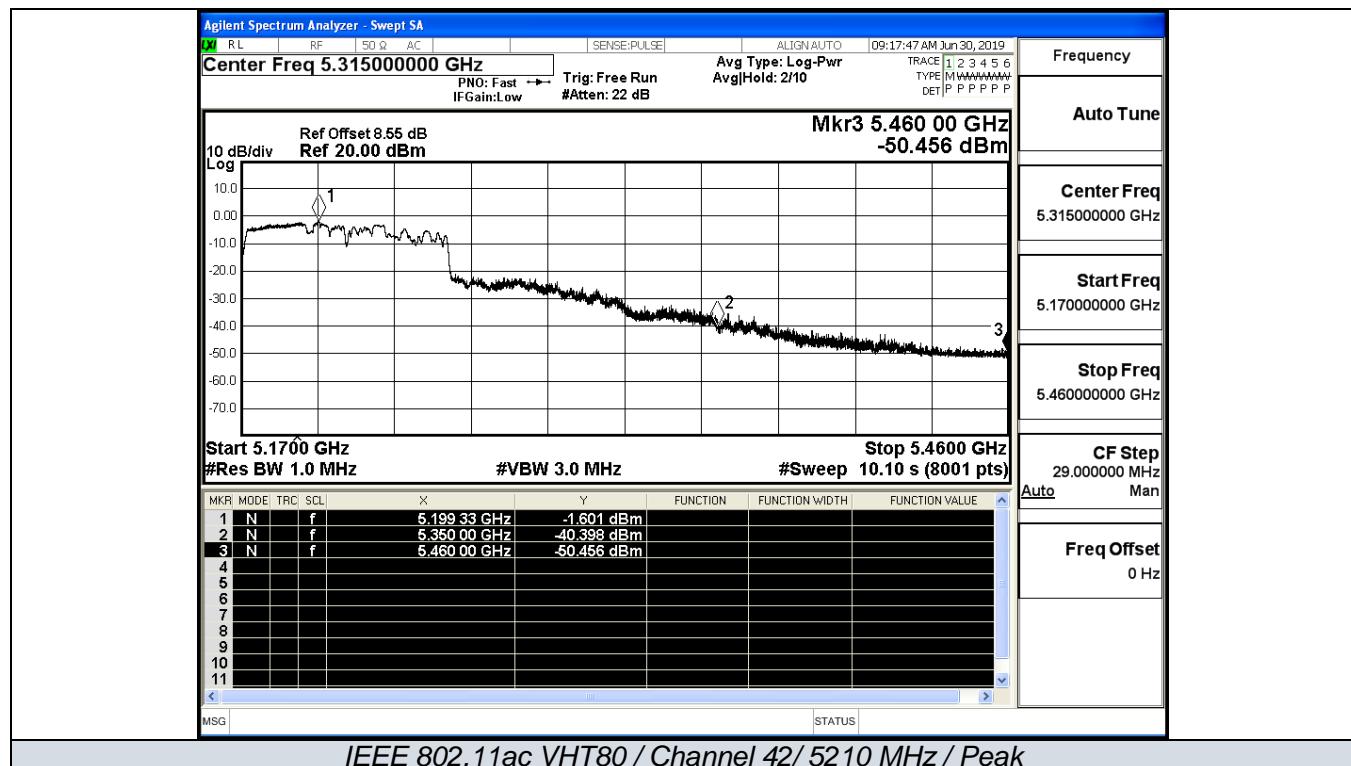




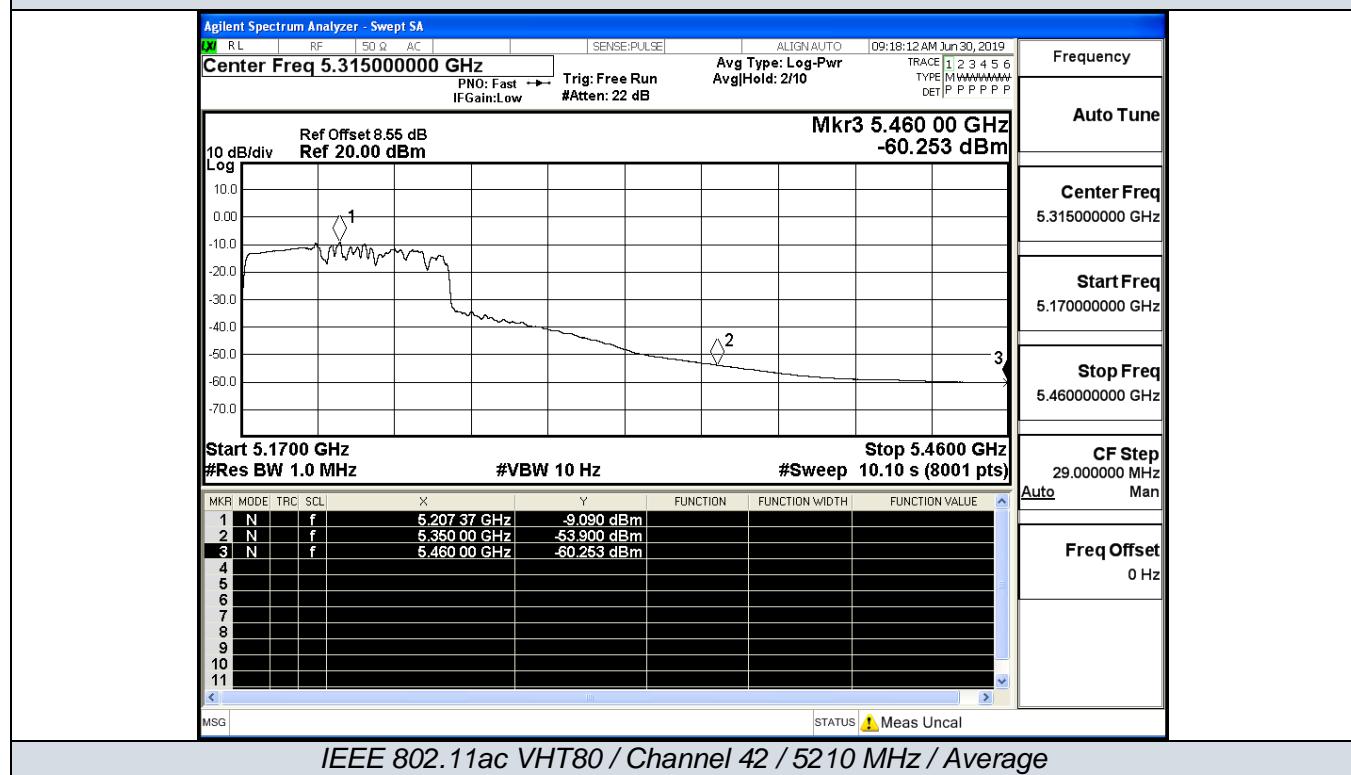








IEEE 802.11ac VHT80 / Channel 42 / 5210 MHz / Peak



IEEE 802.11ac VHT80 / Channel 42 / 5210 MHz / Average