

## Appendix E

### RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: Smart TV Box

Trade Mark: N/A

Test Model: T95

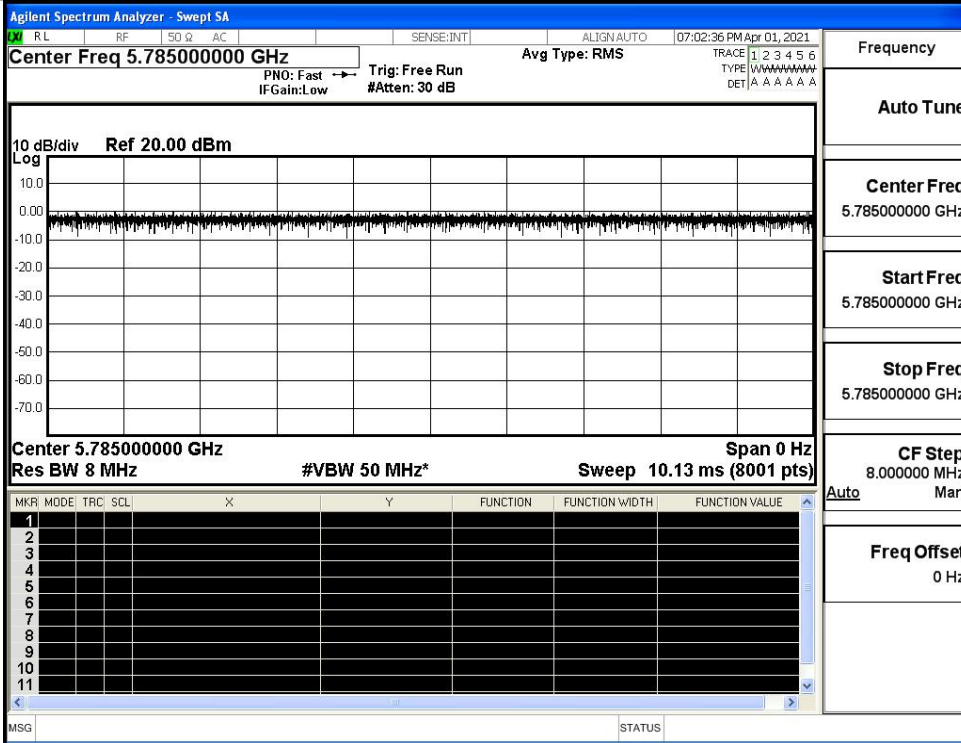
#### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 24.6 ° C  |
| Relative Humidity: | 54.1%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Jay Li    |
| Supervised by:     | Li Huan   |

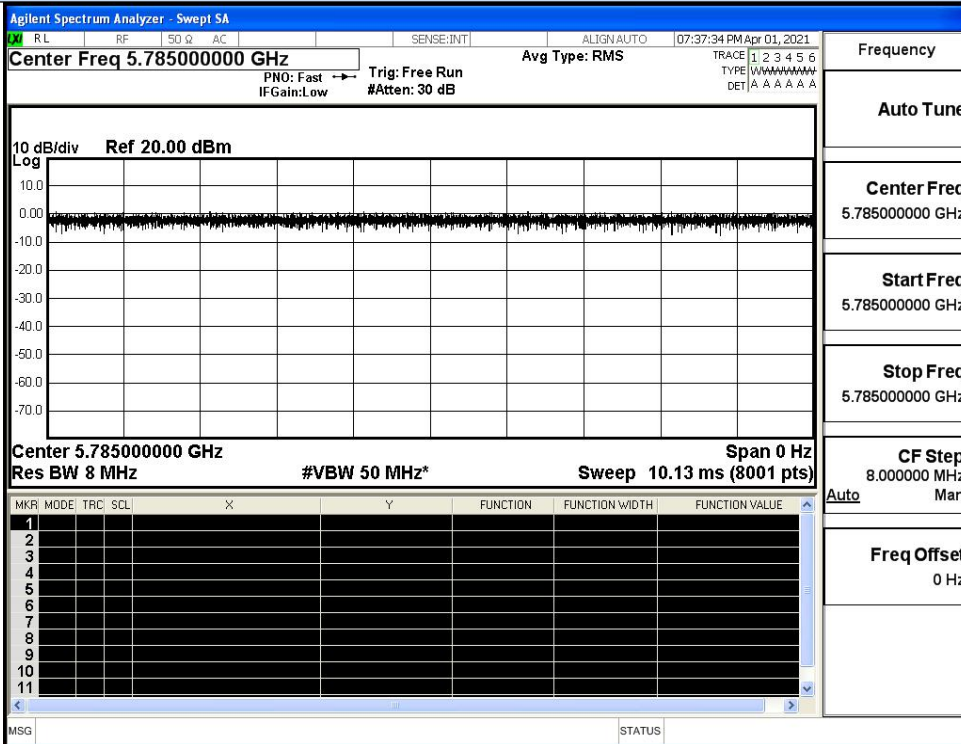
#### E.1 Duty Cycle

| Test Mode   | Test Frequency (MHz) | Duty Cycle (%) | 10log(1/x) Factor (dB) | 1/B Minimum VBW(KHz) |
|-------------|----------------------|----------------|------------------------|----------------------|
| 11A         | 5785                 | 100            | 0.00                   | 0.01                 |
| 11N20 SISO  | 5785                 | 100            | 0.00                   | 0.01                 |
| 11N40 SISO  | 5755                 | 100            | 0.00                   | 0.01                 |
| 11AC20 SISO | 5785                 | 100            | 0.00                   | 0.01                 |
| 11AC40 SISO | 5755                 | 100            | 0.00                   | 0.01                 |
| 11AC80 SISO | 5775                 | 100            | 0.00                   | 0.01                 |

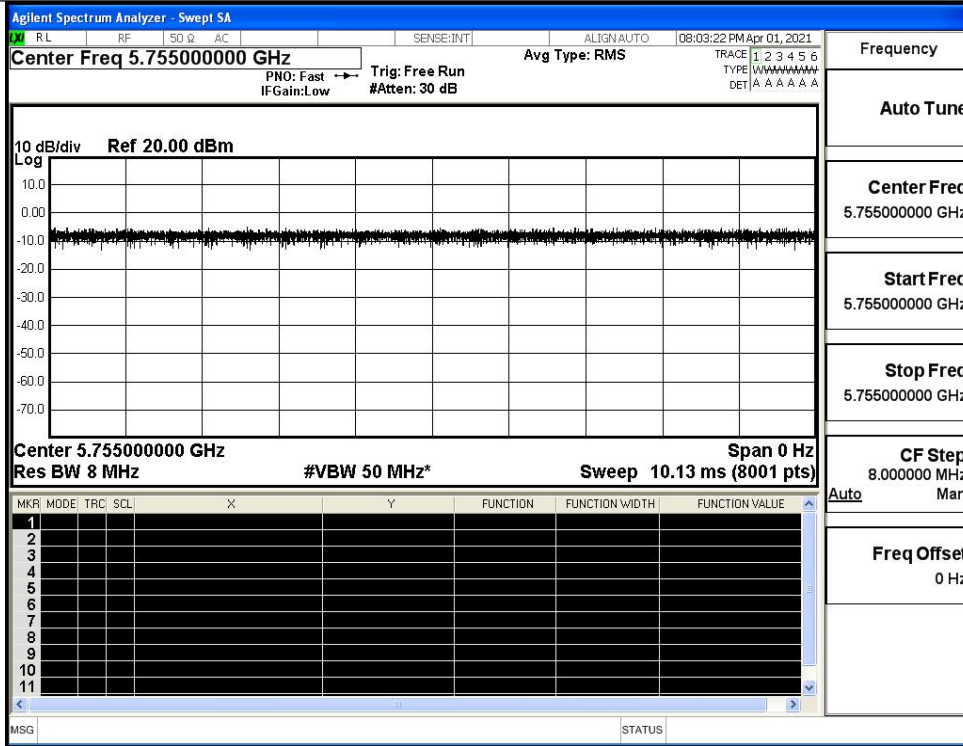
On Time and Duty Cycle



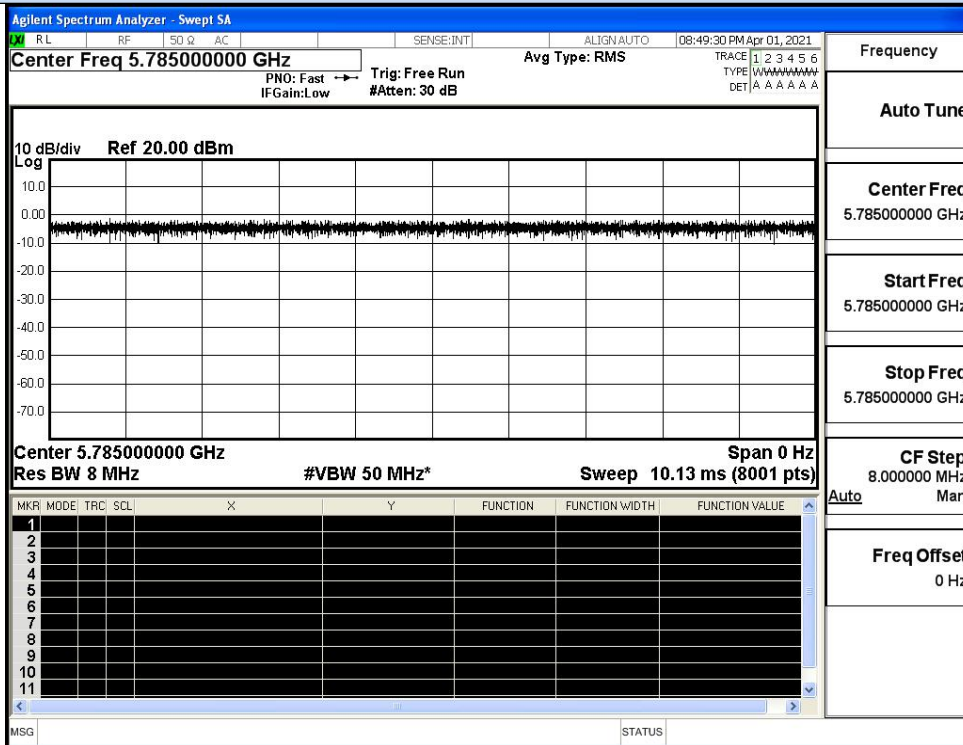
IEEE 802.11a



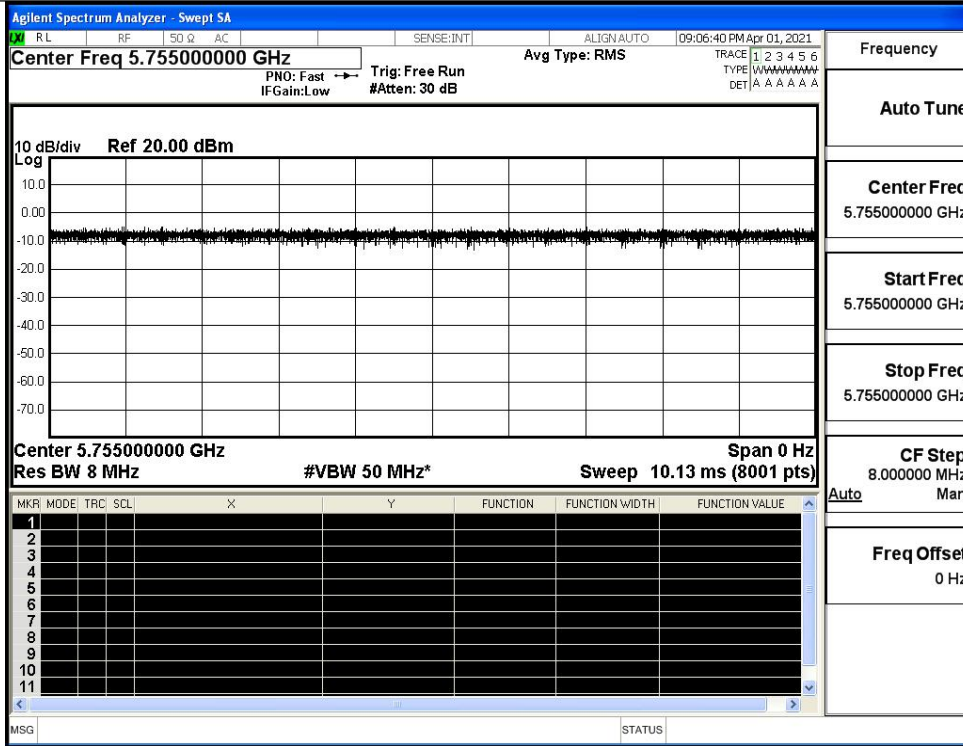
IEEE 802.11n HT20



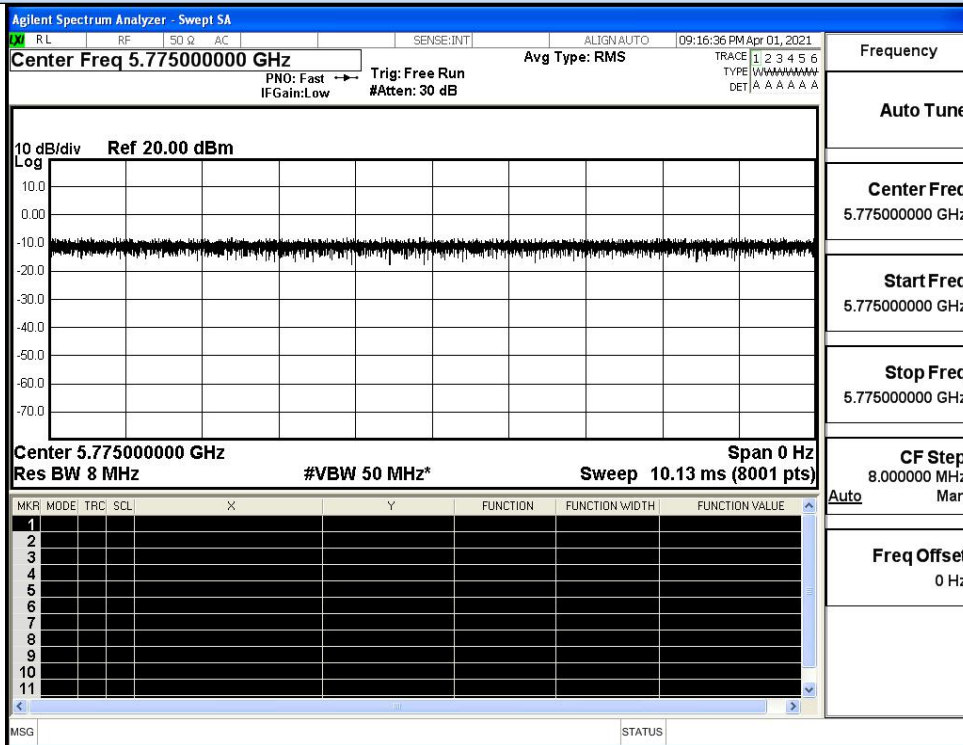
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40



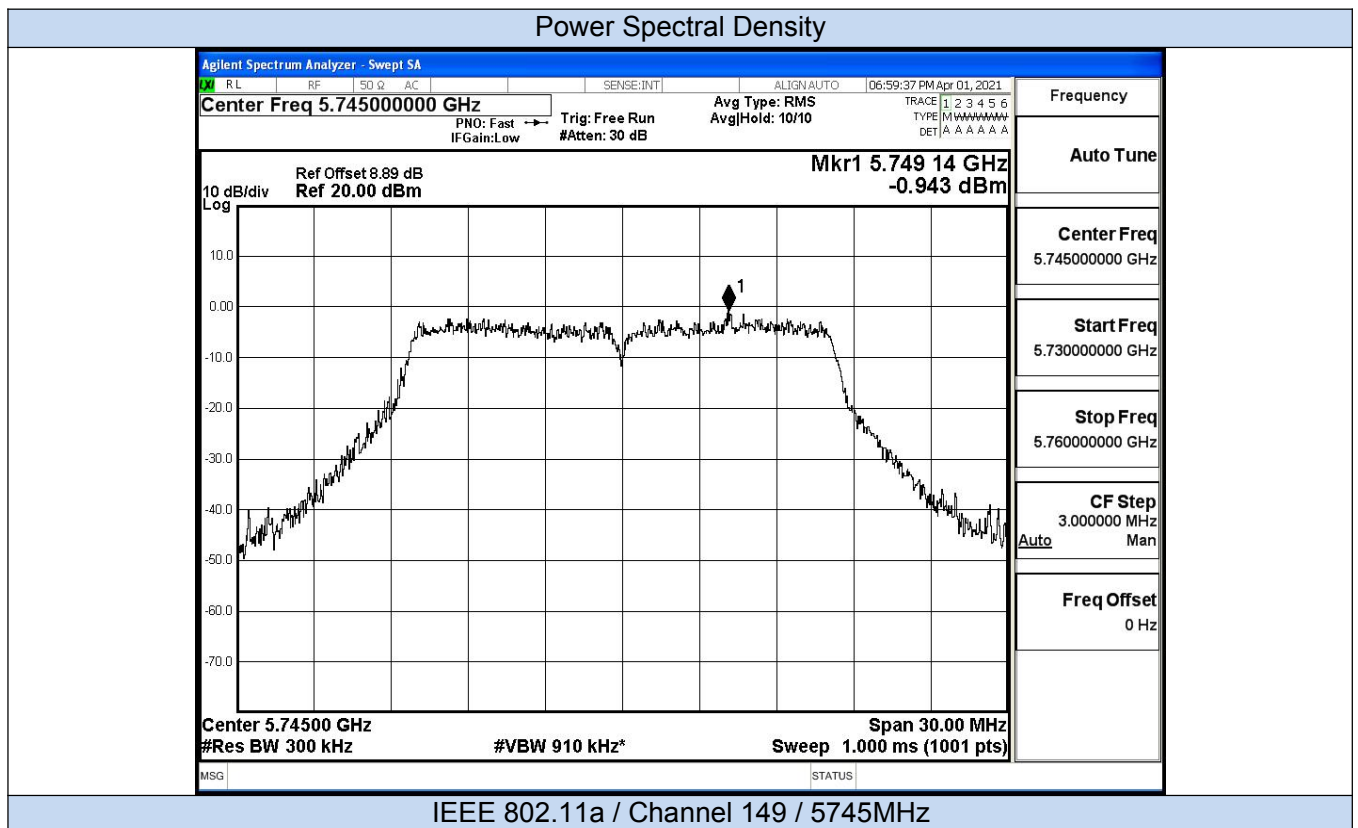
IEEE 802.11AC80

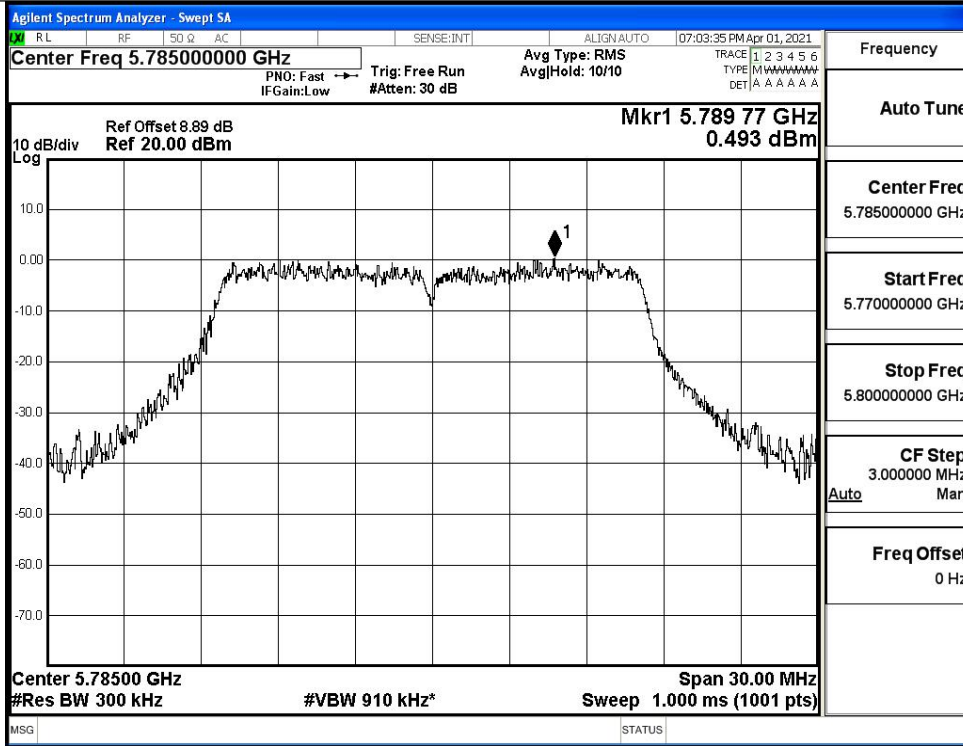
**E.2 Maximum Conduct Output Power**

| Test Mode   | Channel | Frequency (MHz) | AVG Conducted Power (dBm) | Duty Cycle Factor(dB) | Report Conducted Power(dBm) | Limit (dBm) | Verdict |
|-------------|---------|-----------------|---------------------------|-----------------------|-----------------------------|-------------|---------|
| 11A         | 149     | 5745            | 12.6                      | 0                     | 12.6                        | 30          | Pass    |
|             | 157     | 5785            | 12.32                     | 0                     | 12.32                       |             | Pass    |
|             | 165     | 5825            | 11.62                     | 0                     | 11.62                       |             | Pass    |
| 11N20 SISO  | 149     | 5745            | 14.91                     | 0                     | 14.91                       | 30          | Pass    |
|             | 157     | 5785            | 11.79                     | 0                     | 11.79                       |             | Pass    |
|             | 165     | 5825            | 11.57                     | 0                     | 11.57                       |             | Pass    |
| 11N40 SISO  | 151     | 5755            | 12.3                      | 0                     | 12.3                        | 30          | Pass    |
|             | 159     | 5795            | 12.25                     | 0                     | 12.25                       |             | Pass    |
| 11AC20 SISO | 149     | 5745            | 11.03                     | 0                     | 11.03                       | 30          | Pass    |
|             | 157     | 5785            | 10.66                     | 0                     | 10.66                       |             | Pass    |
|             | 165     | 5825            | 10.82                     | 0                     | 10.82                       |             | Pass    |
| 11AC40 SISO | 151     | 5755            | 11.75                     | 0                     | 11.75                       | 30          | Pass    |
|             | 159     | 5795            | 10.64                     | 0                     | 10.64                       |             | Pass    |
| 11AC80 SISO | 155     | 5775            | 10.86                     | 0                     | 10.86                       | 30          | Pass    |

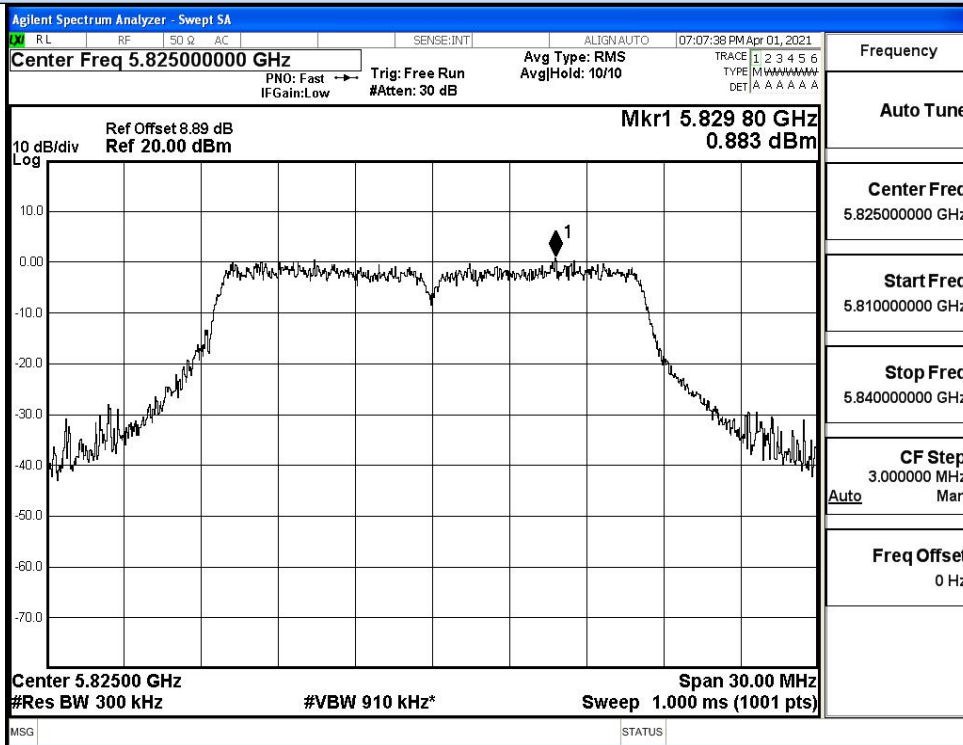
### E.3 Power Spectral Density

| Test Mode   | Channel | Frequency (MHz) | Power Density (dBm/300KHz) | Duty Cycle Factor (dB) | RBW Factor (dB) | Report Power Density (dBm/500KHz) | Limit (dBm/500KHz) | Verdict |
|-------------|---------|-----------------|----------------------------|------------------------|-----------------|-----------------------------------|--------------------|---------|
| 11A         | 149     | 5745            | -0.94                      | 0                      | 2.218           | 1.28                              | 30                 | Pass    |
|             | 157     | 5785            | 0.49                       | 0                      | 2.218           | 2.71                              |                    | Pass    |
|             | 165     | 5825            | 0.88                       | 0                      | 2.218           | 3.10                              |                    | Pass    |
| 11N20 SISO  | 149     | 5745            | 0.40                       | 0                      | 2.218           | 2.62                              | 30                 | Pass    |
|             | 157     | 5785            | -0.29                      | 0                      | 2.218           | 1.92                              |                    | Pass    |
|             | 165     | 5825            | -3.79                      | 0                      | 2.218           | -1.57                             |                    | Pass    |
| 11N40 SISO  | 151     | 5755            | -5.61                      | 0                      | 2.218           | -3.39                             | 30                 | Pass    |
|             | 159     | 5795            | -5.10                      | 0                      | 2.218           | -2.88                             |                    | Pass    |
| 11AC20 SISO | 149     | 5745            | -1.93                      | 0                      | 2.218           | 0.29                              | 30                 | Pass    |
|             | 157     | 5785            | -1.96                      | 0                      | 2.218           | 0.26                              |                    | Pass    |
|             | 165     | 5825            | -2.17                      | 0                      | 2.218           | 0.04                              |                    | Pass    |
| 11AC40 SISO | 151     | 5755            | -5.78                      | 0                      | 2.218           | -3.56                             | 30                 | Pass    |
|             | 159     | 5795            | -5.98                      | 0                      | 2.218           | -3.76                             |                    | Pass    |
| 11AC80 SISO | 155     | 5775            | -10.08                     | 0                      | 2.218           | -7.86                             | 30                 | Pass    |



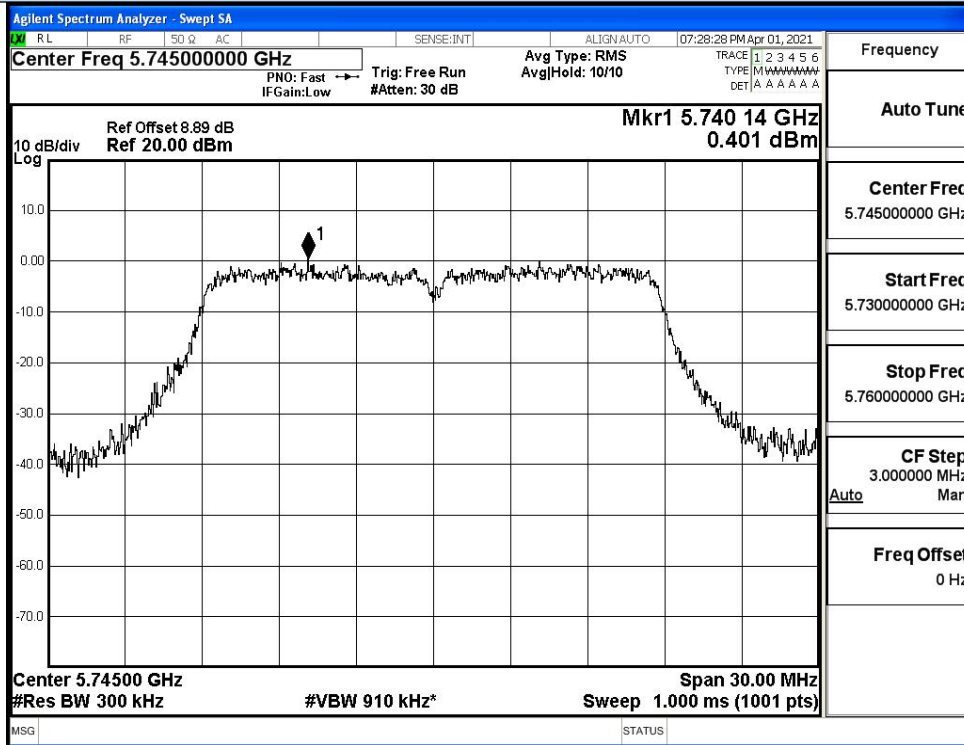


IEEE 802.11na / Channel 157 / 5785MHz

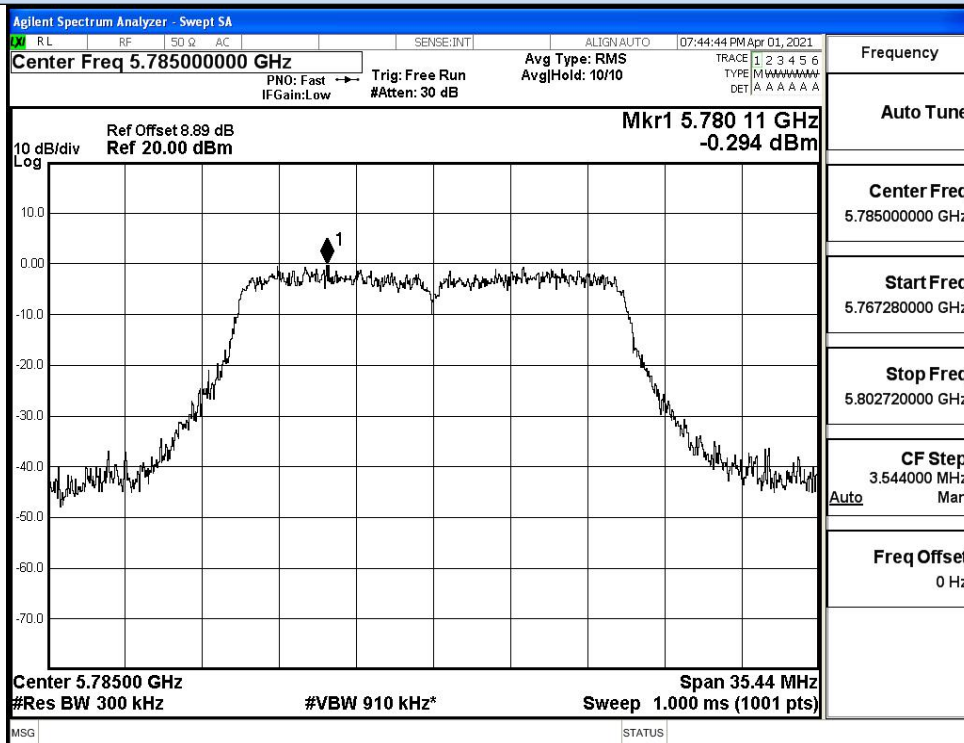


IEEE 802.11na / Channel 165 / 5825MHz

Power Spectral Density

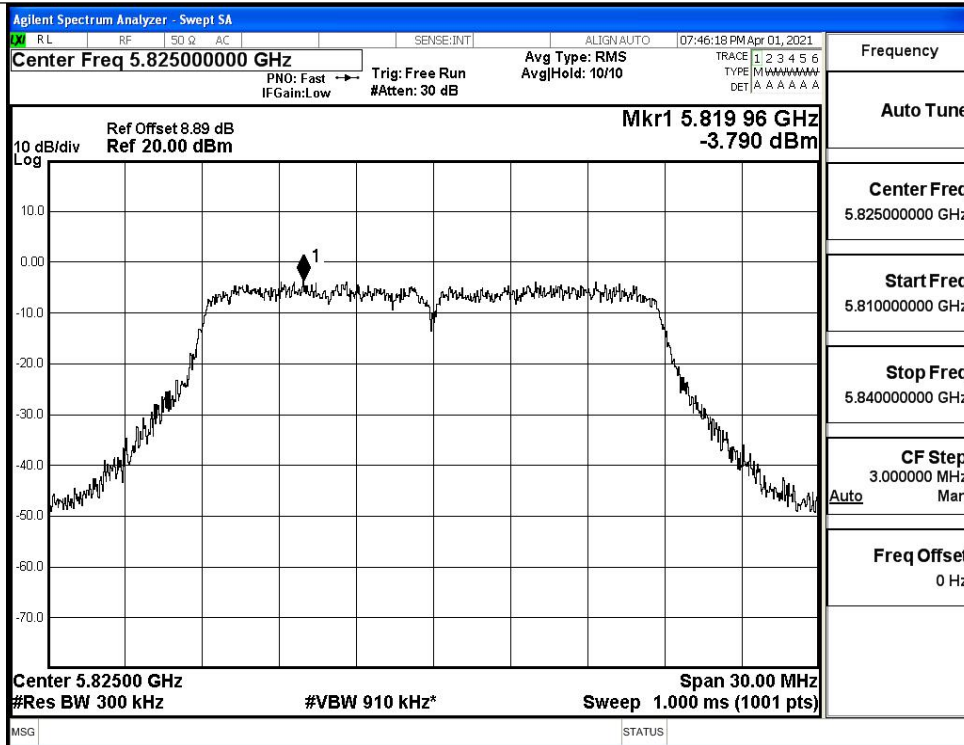


IEEE 802.11n20 / Channel 149 / 5745MHz



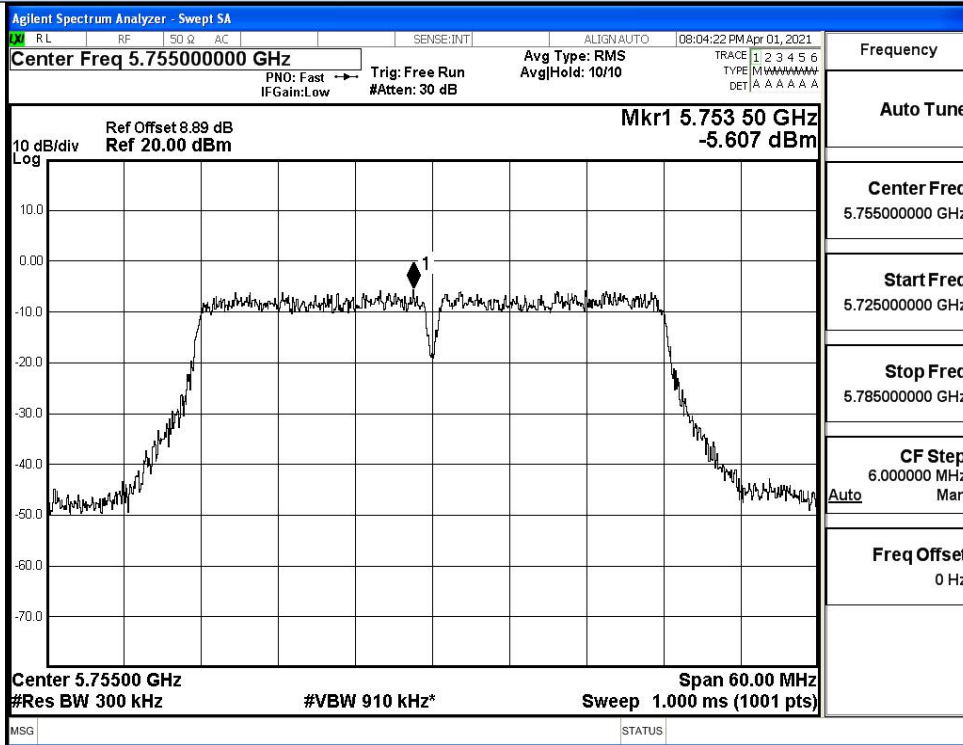
IEEE 802.11n20 / Channel 157 / 5785MHz



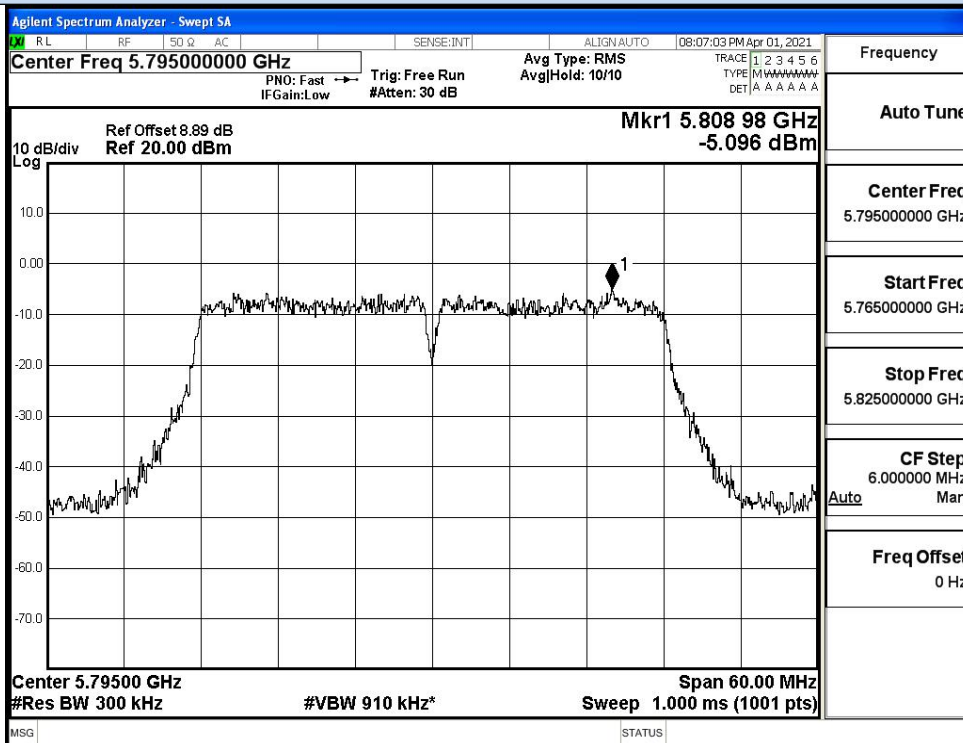


IEEE 802.11n20 / Channel 165 / 5825MHz

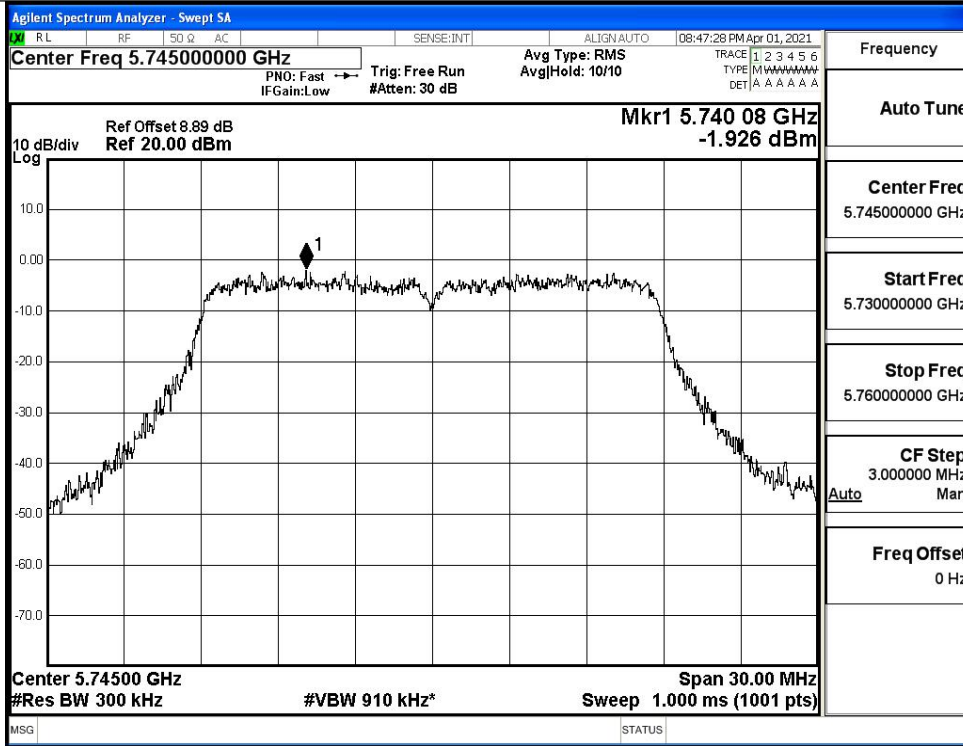
Power Spectral Density



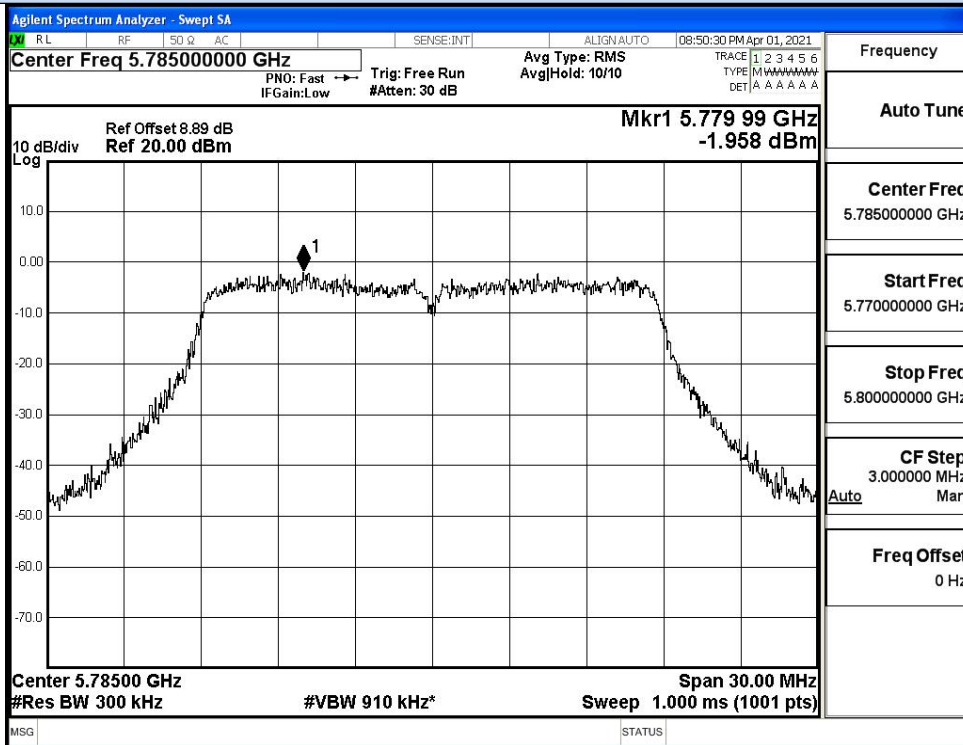
IEEE 802.11n40 / Channel 151 / 5755MHz



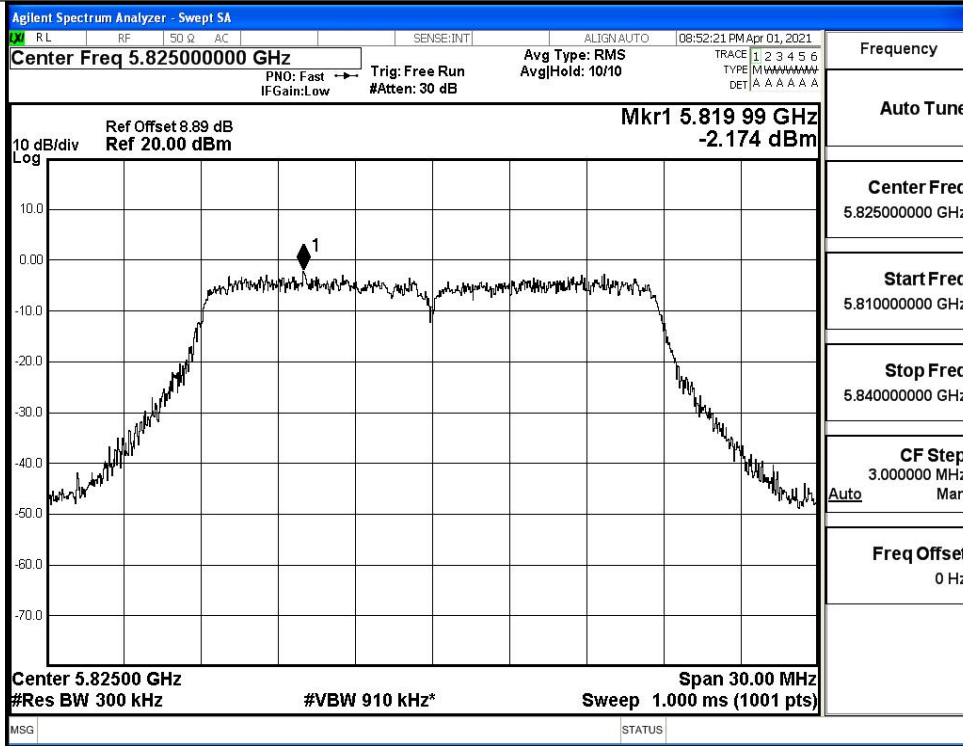
IEEE 802.11n40 / Channel 159 / 5795MHz



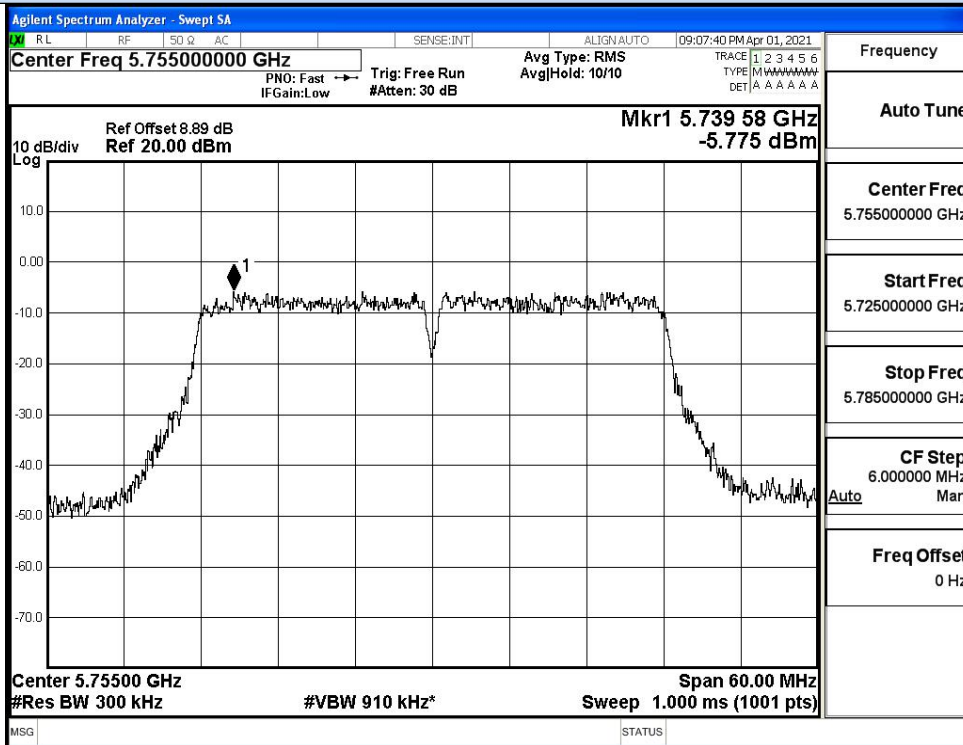
IEEE 802.11ac20 / Channel 149 / 5745MHz



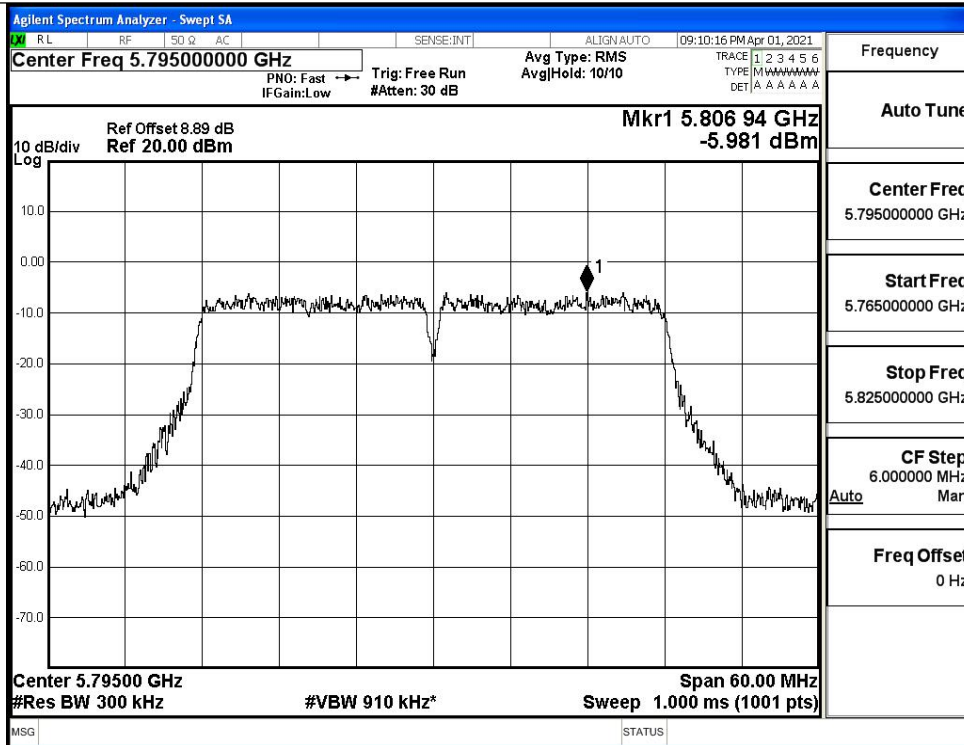
IEEE 802.11ac20 / Channel 157 / 5785MHz



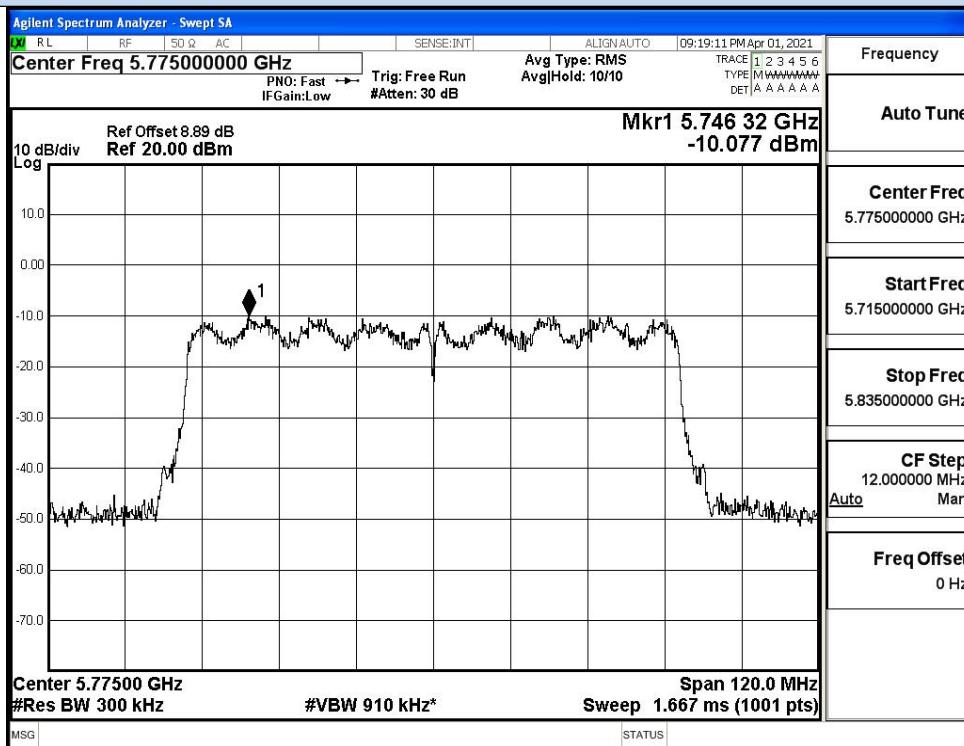
IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



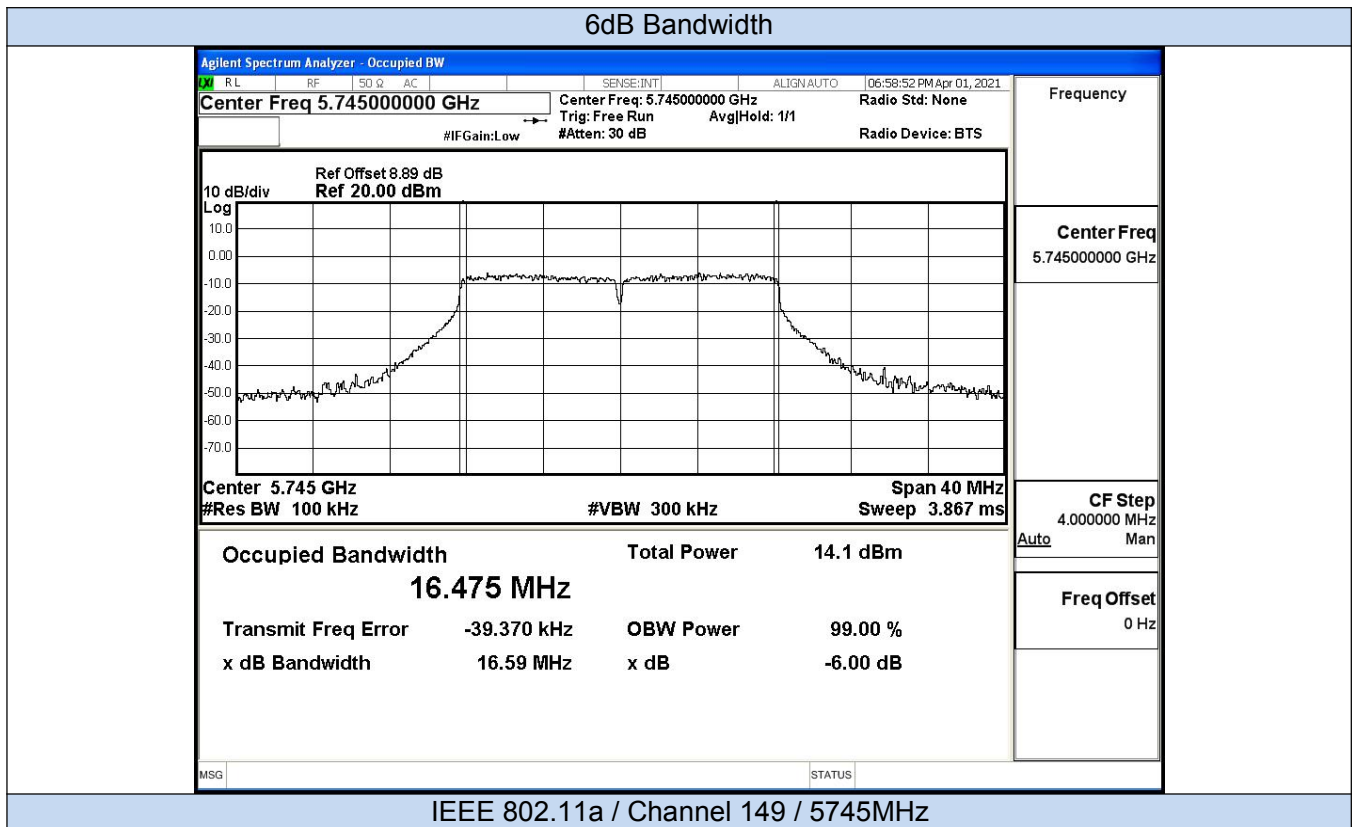
IEEE 802.11ac40 / Channel 159 / 5795MHz

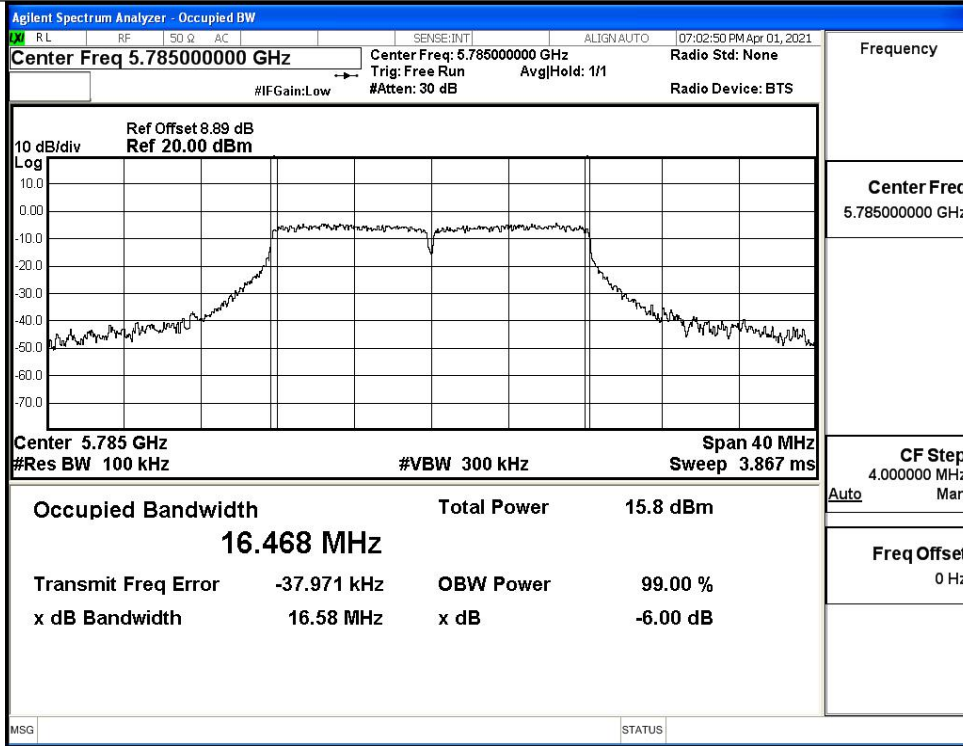


IEEE 802.11ac80 / Channel 155/ 5775MHz

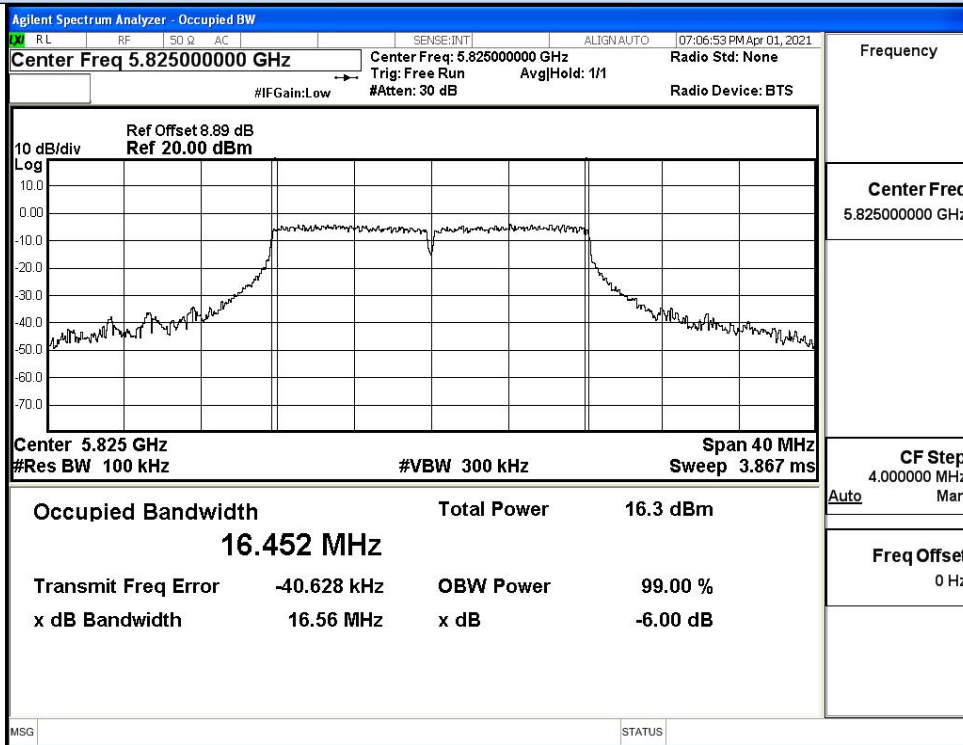
### E.4 Emission Bandwidth

| Test Mode   | Channel | Frequency (MHz) | 6dB Bandwidth (MHz) | Limit (MHz) | Verdict |
|-------------|---------|-----------------|---------------------|-------------|---------|
| 11A         | 149     | 5745            | 16.59               | >=0.5       | Pass    |
|             | 157     | 5785            | 16.58               |             | Pass    |
|             | 165     | 5825            | 16.56               |             | Pass    |
| 11N20 SISO  | 149     | 5745            | 17.69               | >=0.5       | Pass    |
|             | 157     | 5785            | 17.72               |             | Pass    |
|             | 165     | 5825            | 17.67               |             | Pass    |
| 11N40 SISO  | 151     | 5755            | 36.51               | >=0.5       | Pass    |
|             | 159     | 5795            | 36.54               |             | Pass    |
| 11AC20S ISO | 149     | 5745            | 17.73               | >=0.5       | Pass    |
|             | 157     | 5785            | 17.68               |             | Pass    |
|             | 165     | 5825            | 17.74               |             | Pass    |
| 11AC40S ISO | 151     | 5755            | 36.53               | >=0.5       | Pass    |
|             | 159     | 5795            | 36.53               |             | Pass    |
| 11AC80S ISO | 155     | 5775            | 76.42               | >=0.5       | Pass    |





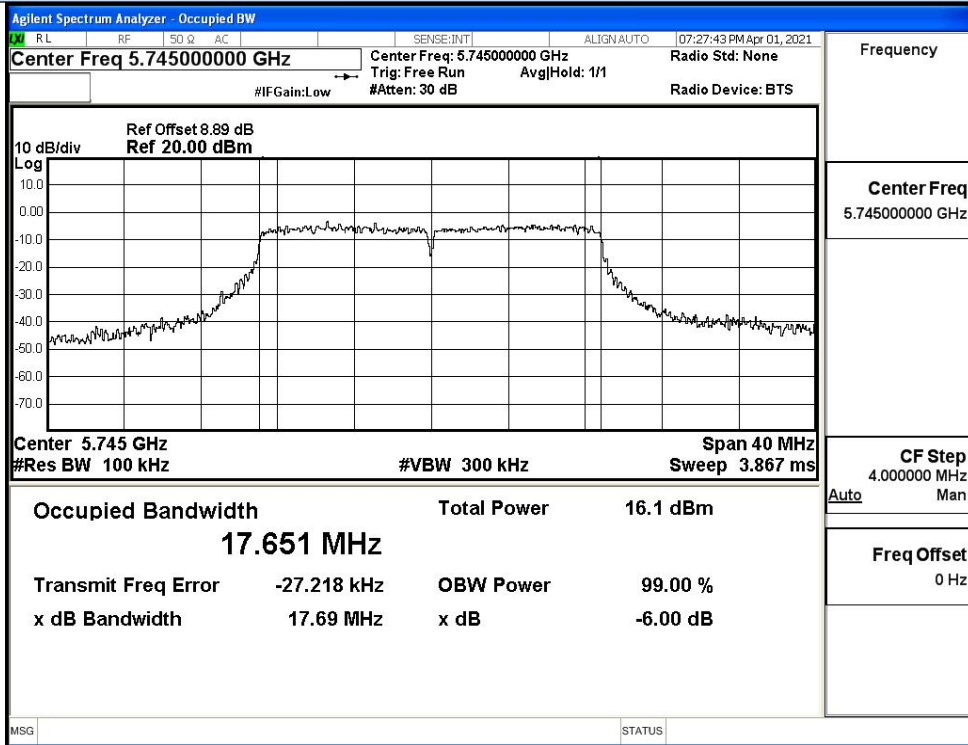
IEEE 802.11a / Channel 157 / 5785MHz



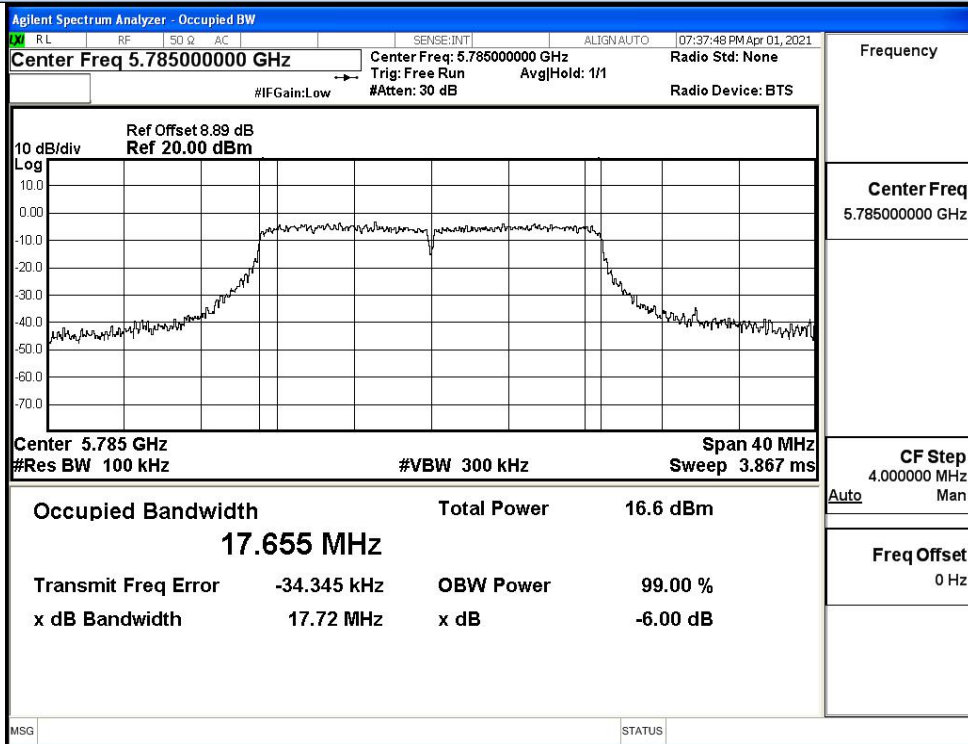
IEEE 802.11a / Channel 165 / 5825MHz



6dB Bandwidth

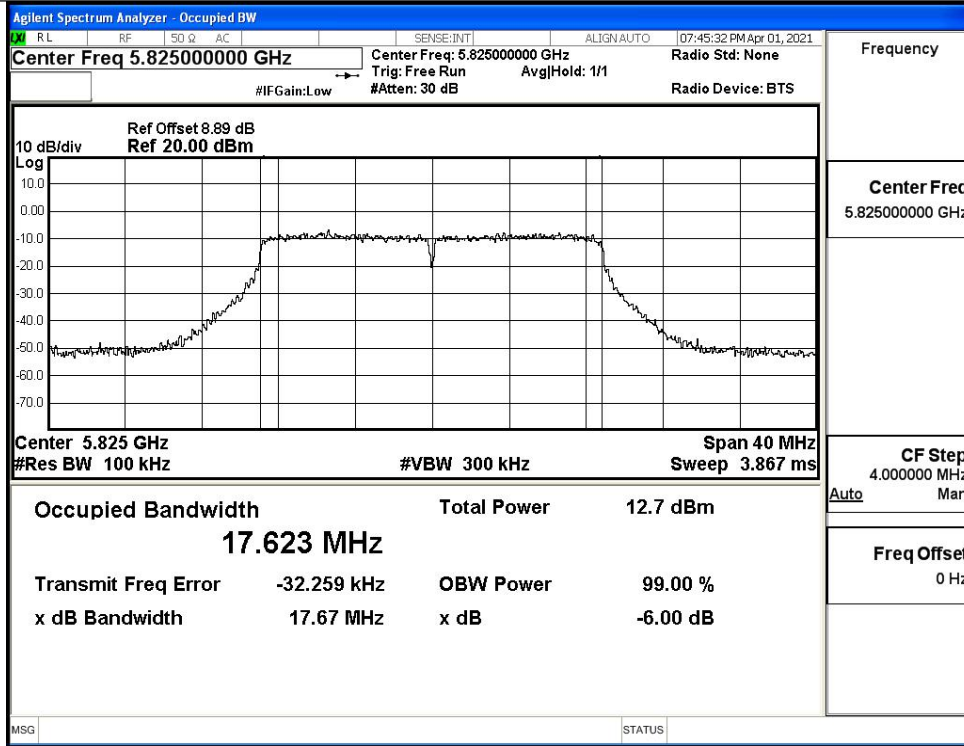


IEEE 802.11n20 / Channel 149 / 5745MHz



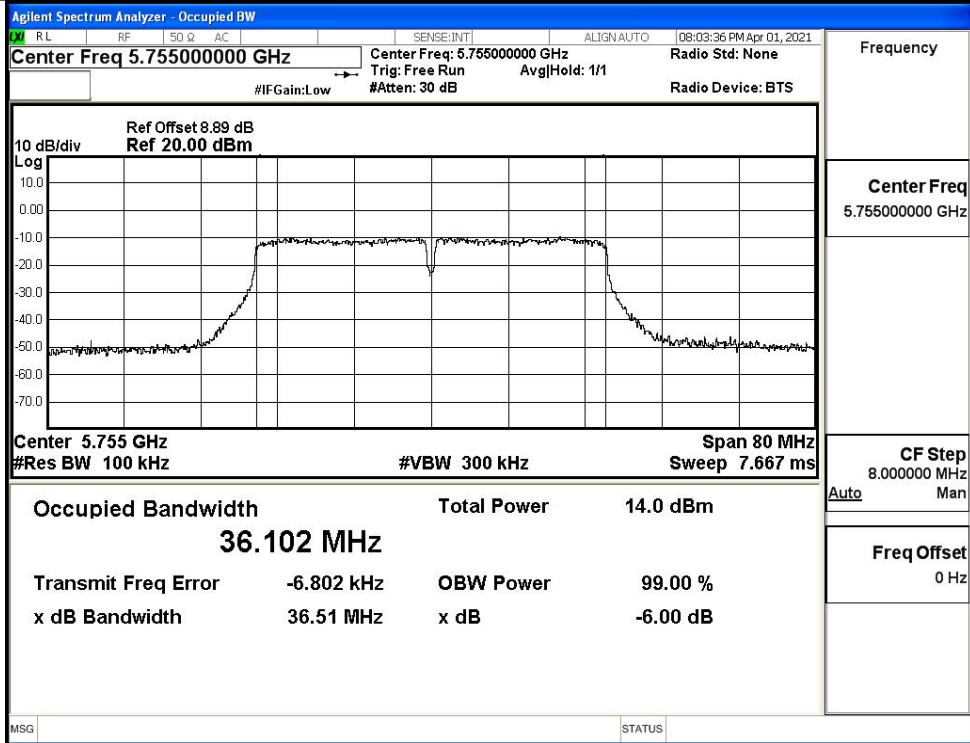
IEEE 802.11n20 / Channel 157 / 5785MHz



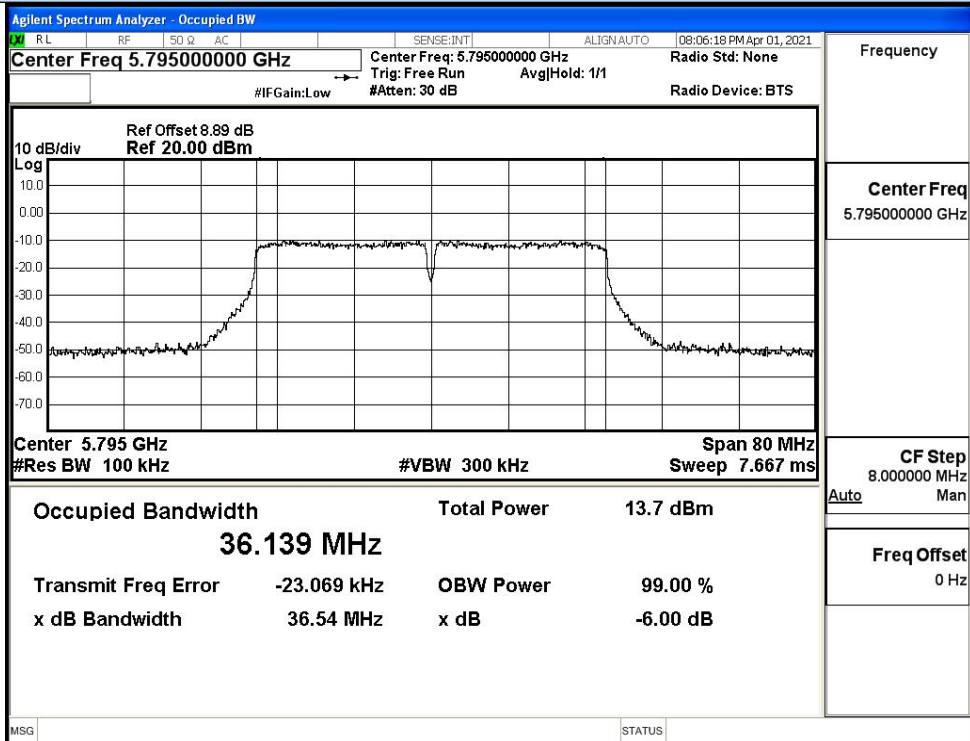


IEEE 802.11n20 / Channel 165 / 5825MHz

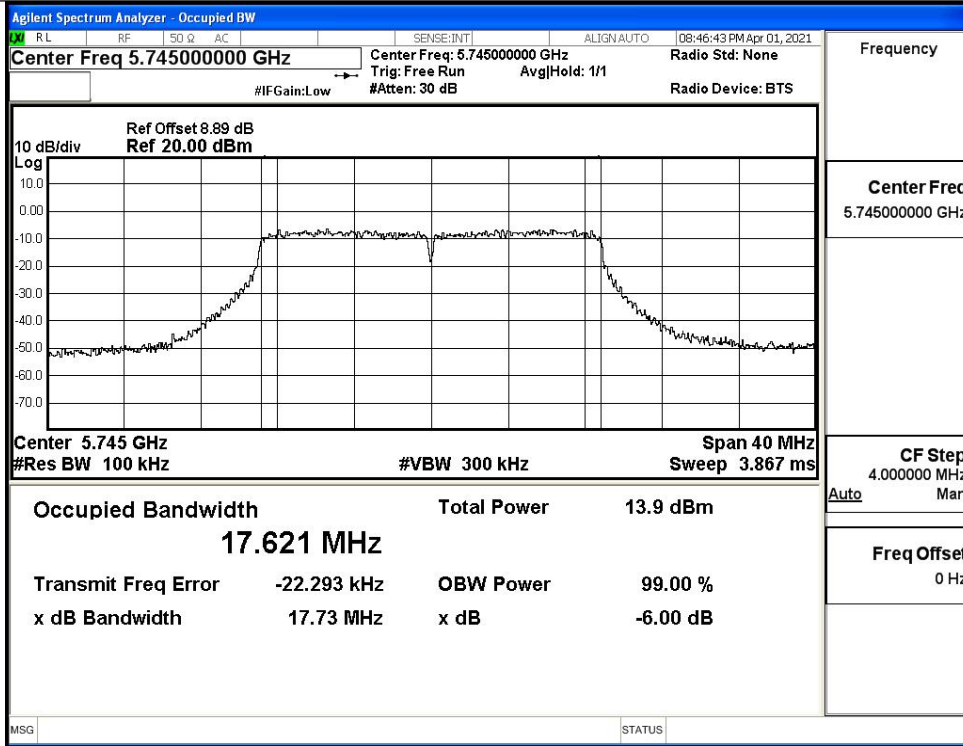
26dB Bandwidth



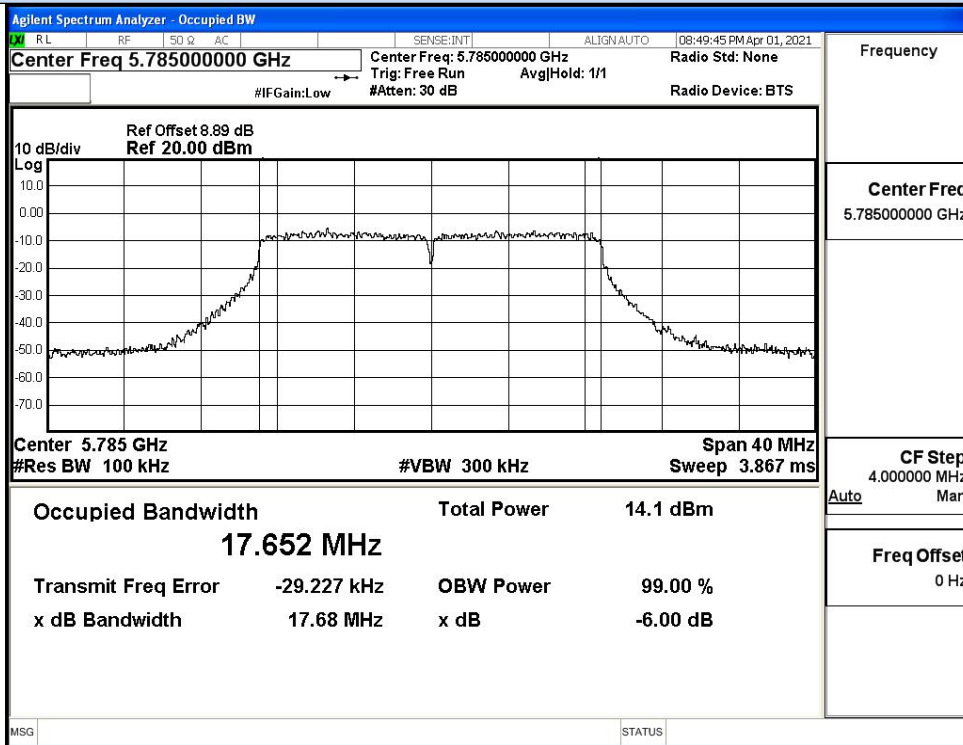
IEEE 802.11n40 / Channel 151 / 5755MHz



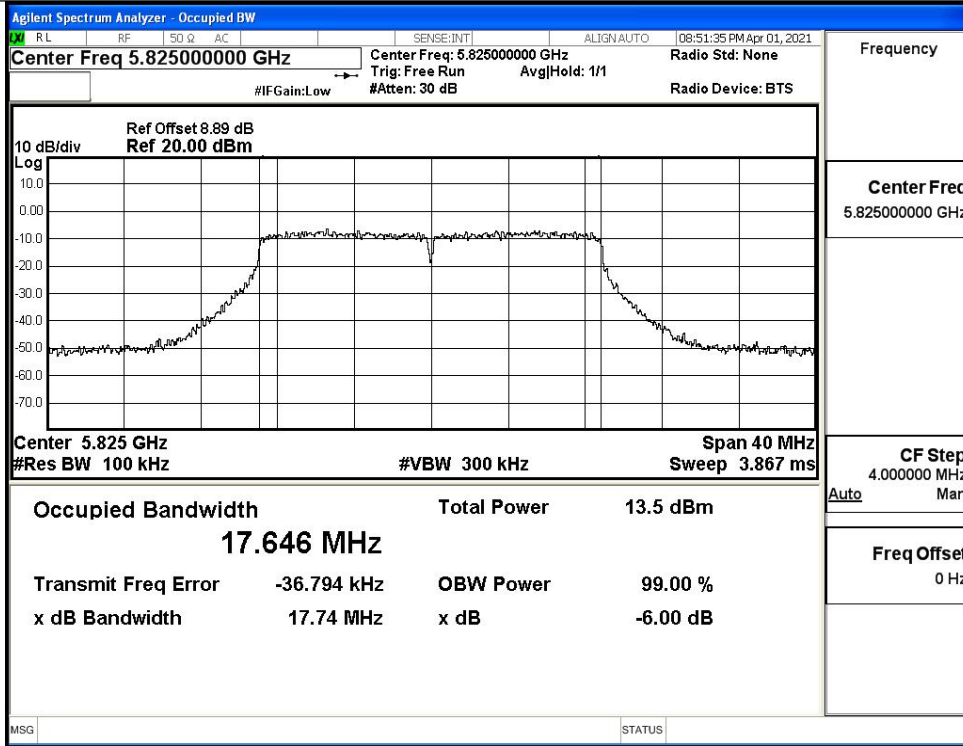
IEEE 802.11n40 / Channel 159 / 5795MHz



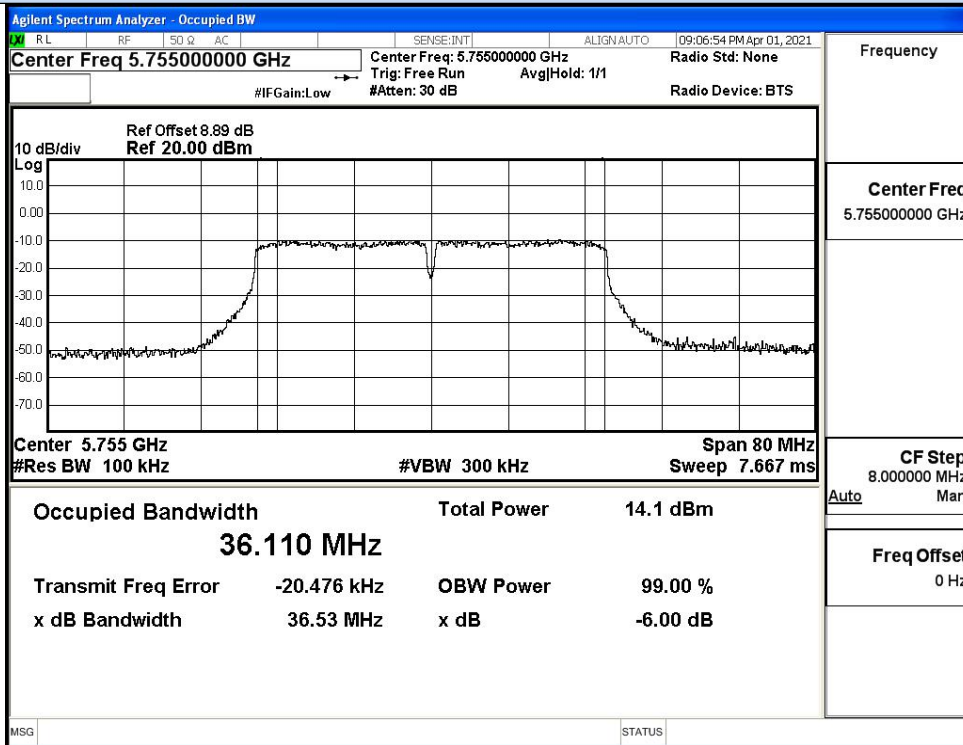
IEEE 802.11ac20 / Channel 149 / 5745MHz



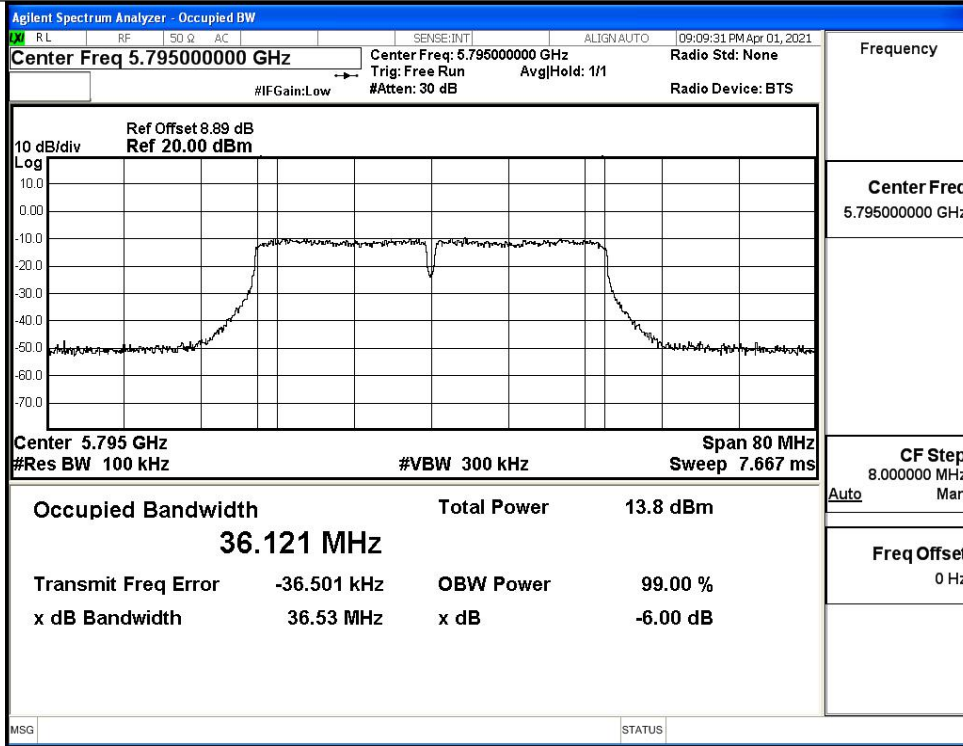
IEEE 802.11ac20 / Channel 157 / 5785MHz



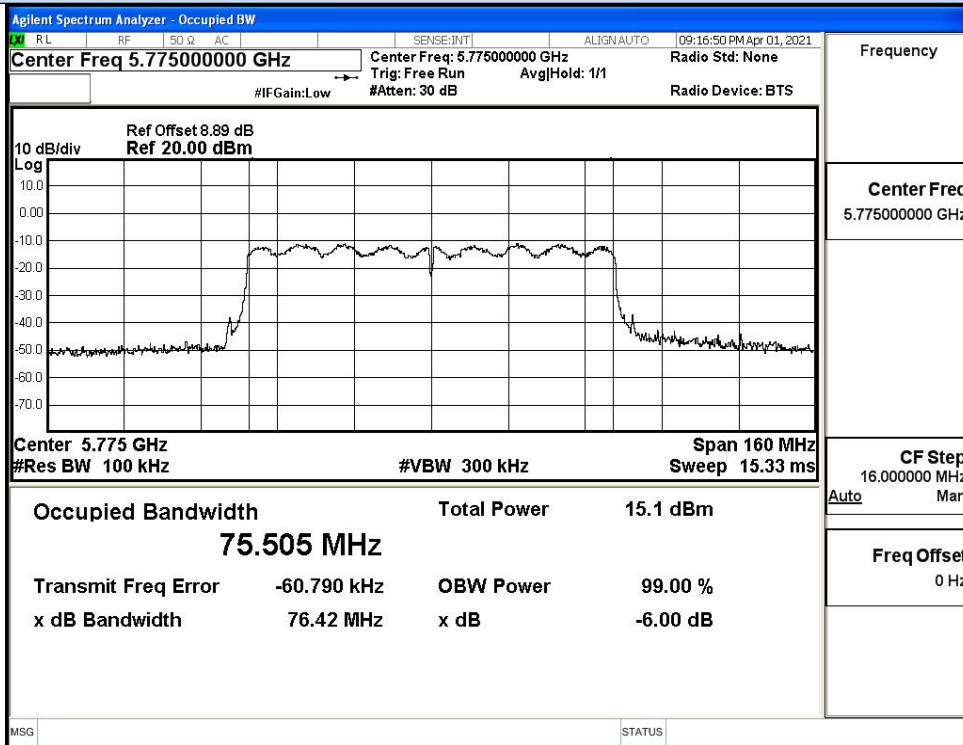
IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz



IEEE 802.11ac80 / Channel 155 / 5775MHz

### E.5 Undesirable Emissions Measurement

| Test Mode  | Channel | Frequency (MHz) | Conducted Power (dBm) | Antenna Gain (dBi) | EIRP (dBm/MHz) | Detector | Limit (dBm/MHz) | Verdict |
|------------|---------|-----------------|-----------------------|--------------------|----------------|----------|-----------------|---------|
| 11A        | 149     | 5650.0          | -48.85                | 2.00               | -46.85         | Peak     | -27.0           | Pass    |
|            |         | 5650.0          | -60.24                | 2.00               | -58.24         | Average  | -27.0           | Pass    |
|            |         | 5700.0          | -47.88                | 2.00               | -45.88         | Peak     | 10              | Pass    |
|            |         | 5700.0          | -59.39                | 2.00               | -57.39         | Average  | 10              | Pass    |
|            |         | 5720.0          | -46.35                | 2.00               | -44.35         | Peak     | 15.6            | Pass    |
|            |         | 5720.0          | -59.14                | 2.00               | -57.14         | Average  | 15.6            | Pass    |
|            |         | 5725.0          | -41.18                | 2.00               | -39.18         | Peak     | 27.0            | Pass    |
|            | 5725.0  | -57.89          | 2.00                  | -55.89             | Average        | 27.0     | Pass            |         |
|            | 165     | 5850.0          | -41.41                | 2.00               | -39.41         | Peak     | 27.0            | Pass    |
|            |         | 5850.0          | -57.19                | 2.00               | -55.19         | Average  | 27.0            | Pass    |
|            |         | 5855.0          | -44.70                | 2.00               | -42.70         | Peak     | 15.6            | Pass    |
|            |         | 5855.0          | -58.50                | 2.00               | -56.50         | Average  | 15.6            | Pass    |
|            |         | 5875.0          | -48.16                | 2.00               | -46.16         | Peak     | 10              | Pass    |
|            |         | 5875.0          | -59.49                | 2.00               | -57.49         | Average  | 10              | Pass    |
| 5925.0     |         | -48.53          | 2.00                  | -46.53             | Peak           | -27.0    | Pass            |         |
| 5925.0     | -59.96  | 2.00            | -57.96                | Average            | -27.0          | Pass     |                 |         |
| 11N20 SISO | 149     | 5650.0          | -48.40                | 2.00               | -46.40         | Peak     | -27.0           | Pass    |
|            |         | 5650.0          | -60.14                | 2.00               | -58.14         | Average  | -27.0           | Pass    |
|            |         | 5700.0          | -46.69                | 2.00               | -44.69         | Peak     | 10              | Pass    |
|            |         | 5700.0          | -56.81                | 2.00               | -54.81         | Average  | 10              | Pass    |
|            |         | 5720.0          | -37.29                | 2.00               | -35.29         | Peak     | 15.6            | Pass    |
|            |         | 5720.0          | -59.14                | 2.00               | -57.14         | Average  | 15.6            | Pass    |
|            |         | 5725.0          | -28.93                | 2.00               | -26.93         | Peak     | 27.0            | Pass    |
|            | 5725.0  | -52.81          | 2.00                  | -50.81             | Average        | 27.0     | Pass            |         |
|            | 165     | 5850.0          | -46.22                | 2.00               | -44.22         | Peak     | 27.0            | Pass    |
|            |         | 5850.0          | -59.04                | 2.00               | -57.04         | Average  | 27.0            | Pass    |
|            |         | 5855.0          | -47.81                | 2.00               | -45.81         | Peak     | 15.6            | Pass    |
|            |         | 5855.0          | -59.34                | 2.00               | -57.34         | Average  | 15.6            | Pass    |
|            |         | 5875.0          | -47.58                | 2.00               | -45.58         | Peak     | 10              | Pass    |
|            |         | 5875.0          | -59.76                | 2.00               | -57.76         | Average  | 10              | Pass    |
| 5925.0     |         | -49.15          | 2.00                  | -47.15             | Peak           | -27.0    | Pass            |         |
| 5925.0     | -60.21  | 2.00            | -58.21                | Average            | -27.0          | Pass     |                 |         |

| Test Mode    | Channel | Frequency (MHz) | Conducted Power (dBm) | Antenna Gain (dBi) | EIRP (dBm/MHz) | Detector | Limit (dBm/MHz) | Verdict |
|--------------|---------|-----------------|-----------------------|--------------------|----------------|----------|-----------------|---------|
| 11N40 SISO   | 151     | 5650.0          | -48.00                | 2.00               | -46.00         | Peak     | -27.0           | Pass    |
|              |         | 5650.0          | -60.11                | 2.00               | -58.11         | Average  | -27.0           | Pass    |
|              |         | 5700.0          | -47.60                | 2.00               | -45.60         | Peak     | 10              | Pass    |
|              |         | 5700.0          | -59.55                | 2.00               | -57.55         | Average  | 10              | Pass    |
|              |         | 5720.0          | -44.65                | 2.00               | -42.65         | Peak     | 15.6            | Pass    |
|              |         | 5720.0          | -57.19                | 2.00               | -55.19         | Average  | 15.6            | Pass    |
|              |         | 5725.0          | -41.51                | 2.00               | -39.51         | Peak     | 27.0            | Pass    |
|              | 5725.0  | -56.43          | 2.00                  | -54.43             | Average        | 27.0     | Pass            |         |
|              | 159     | 5850.0          | -47.70                | 2.00               | -45.70         | Peak     | 27.0            | Pass    |
|              |         | 5850.0          | -59.09                | 2.00               | -57.09         | Average  | 27.0            | Pass    |
|              |         | 5855.0          | -47.54                | 2.00               | -45.54         | Peak     | 15.6            | Pass    |
|              |         | 5855.0          | -59.24                | 2.00               | -57.24         | Average  | 15.6            | Pass    |
|              |         | 5875.0          | -47.48                | 2.00               | -45.48         | Peak     | 10              | Pass    |
|              |         | 5875.0          | -59.44                | 2.00               | -57.44         | Average  | 10              | Pass    |
| 5925.0       |         | -48.58          | 2.00                  | -46.58             | Peak           | -27.0    | Pass            |         |
| 5925.0       | -59.89  | 2.00            | -57.89                | Average            | -27.0          | Pass     |                 |         |
| 11AC2 0 SISO | 149     | 5650.0          | -48.22                | 2.00               | -46.22         | Peak     | -27.0           | Pass    |
|              |         | 5650.0          | -60.21                | 2.00               | -58.21         | Average  | -27.0           | Pass    |
|              |         | 5700.0          | -47.51                | 2.00               | -45.51         | Peak     | 10              | Pass    |
|              |         | 5700.0          | -59.02                | 2.00               | -57.02         | Average  | 10              | Pass    |
|              |         | 5720.0          | -45.98                | 2.00               | -43.98         | Peak     | 15.6            | Pass    |
|              |         | 5720.0          | -59.73                | 2.00               | -57.73         | Average  | 15.6            | Pass    |
|              |         | 5725.0          | -40.22                | 2.00               | -38.22         | Peak     | 27.0            | Pass    |
|              | 5725.0  | -57.62          | 2.00                  | -55.62             | Average        | 27.0     | Pass            |         |
|              | 165     | 5850.0          | -47.07                | 2.00               | -45.07         | Peak     | 27.0            | Pass    |
|              |         | 5850.0          | -58.81                | 2.00               | -56.81         | Average  | 27.0            | Pass    |
|              |         | 5855.0          | -47.55                | 2.00               | -45.55         | Peak     | 15.6            | Pass    |
|              |         | 5855.0          | -59.30                | 2.00               | -57.30         | Average  | 15.6            | Pass    |
|              |         | 5875.0          | -46.22                | 2.00               | -44.22         | Peak     | 10              | Pass    |
|              |         | 5875.0          | -59.72                | 2.00               | -57.72         | Average  | 10              | Pass    |
| 5925.0       |         | -48.68          | 2.00                  | -46.68             | Peak           | -27.0    | Pass            |         |
| 5925.0       | -60.18  | 2.00            | -58.18                | Average            | -27.0          | Pass     |                 |         |
| 11AC4 0 SISO | 151     | 5650.0          | -48.41                | 2.00               | -46.41         | Peak     | -27.0           | Pass    |
|              |         | 5650.0          | -60.08                | 2.00               | -58.08         | Average  | -27.0           | Pass    |
|              |         | 5700.0          | -47.94                | 2.00               | -45.94         | Peak     | 10              | Pass    |
|              |         | 5700.0          | -59.51                | 2.00               | -57.51         | Average  | 10              | Pass    |
|              |         | 5720.0          | -43.68                | 2.00               | -41.68         | Peak     | 15.6            | Pass    |
|              |         | 5720.0          | -57.05                | 2.00               | -55.05         | Average  | 15.6            | Pass    |
|              |         | 5725.0          | -41.68                | 2.00               | -39.68         | Peak     | 27.0            | Pass    |
|              | 5725.0  | -56.39          | 2.00                  | -54.39             | Average        | 27.0     | Pass            |         |
|              | 159     | 5850.0          | -47.57                | 2.00               | -45.57         | Peak     | 27.0            | Pass    |
|              |         | 5850.0          | -59.06                | 2.00               | -57.06         | Average  | 27.0            | Pass    |
|              |         | 5855.0          | -48.18                | 2.00               | -46.18         | Peak     | 15.6            | Pass    |
|              |         | 5855.0          | -59.24                | 2.00               | -57.24         | Average  | 15.6            | Pass    |
|              |         | 5875.0          | -48.23                | 2.00               | -46.23         | Peak     | 10              | Pass    |
|              |         | 5875.0          | -59.47                | 2.00               | -57.47         | Average  | 10              | Pass    |
| 5925.0       |         | -48.87          | 2.00                  | -46.87             | Peak           | -27.0    | Pass            |         |
| 5925.0       | -59.87  | 2.00            | -57.87                | Average            | -27.0          | Pass     |                 |         |
| 11AC8 0 SISO | 155     | 5725.0          | -46.03                | 2.00               | -44.03         | Peak     | 27.0            | Pass    |
|              |         | 5720.0          | -45.78                | 2.00               | -43.78         | Peak     | 15.6            | Pass    |
|              |         | 5700.0          | -47.31                | 2.00               | -45.31         | Peak     | 10              | Pass    |
|              |         | 5650.0          | -49.30                | 2.00               | -47.30         | Peak     | -27.0           | Pass    |
|              |         | 5725.0          | -57.24                | 2.00               | -55.24         | Average  | 27.0            | Pass    |
|              |         | 5720.0          | -57.65                | 2.00               | -55.65         | Average  | 15.6            | Pass    |
|              |         | 5700.0          | -58.89                | 2.00               | -56.89         | Average  | 10              | Pass    |
|              |         | 5650.0          | -59.61                | 2.00               | -57.61         | Average  | -27.0           | Pass    |
|              |         | 5850.0          | -46.03                | 2.00               | -44.03         | Peak     | 27.0            | Pass    |
|              |         | 5855.0          | -45.78                | 2.00               | -43.78         | Peak     | 15.6            | Pass    |
|              |         | 5875.0          | -47.31                | 2.00               | -45.31         | Peak     | 10              | Pass    |
|              |         | 5925.0          | -49.30                | 2.00               | -47.30         | Peak     | -27.0           | Pass    |
|              |         | 5850.0          | -57.24                | 2.00               | -55.24         | Average  | 27.0            | Pass    |
|              |         | 5855.0          | -57.65                | 2.00               | -55.65         | Average  | 15.6            | Pass    |
| 5875.0       | -58.89  | 2.00            | -56.89                | Average            | 10             | Pass     |                 |         |
| 5925.0       | -59.61  | 2.00            | -57.61                | Average            | -27.0          | Pass     |                 |         |