

## RF Test Data for RLAN(5. 8G) (Conducted Measurement)

Product Name: DRONE

Trade Mark: /

Test Model: V11 Air

FCC ID: 2BBLM-V11AIRYK

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5℃     |
| Relative Humidity: | 58%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Allen Lai |
| Supervised by:     | Max Zhang |
| NOTE               | N/A       |

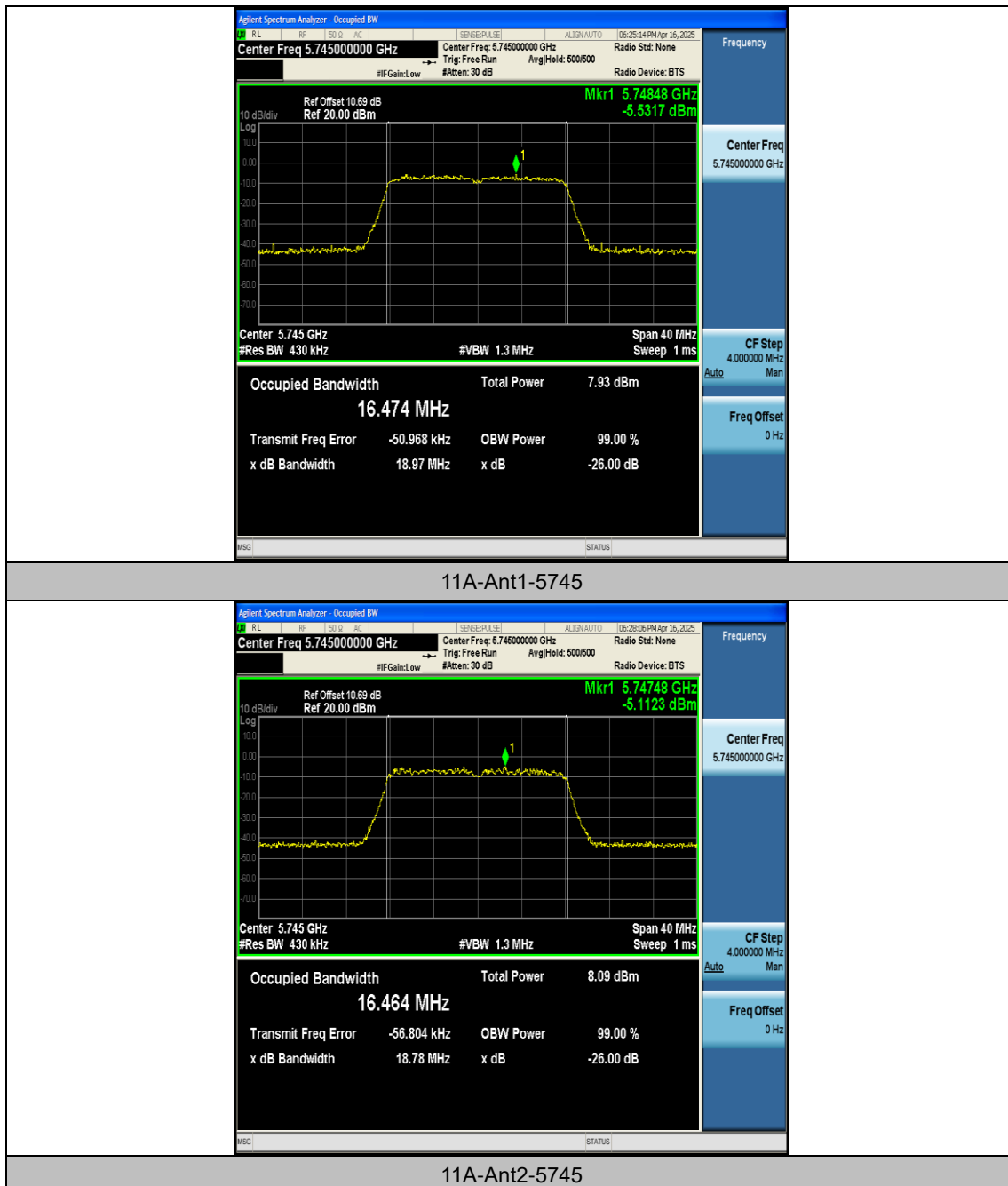
## Appendix A2: Occupied channel bandwidth

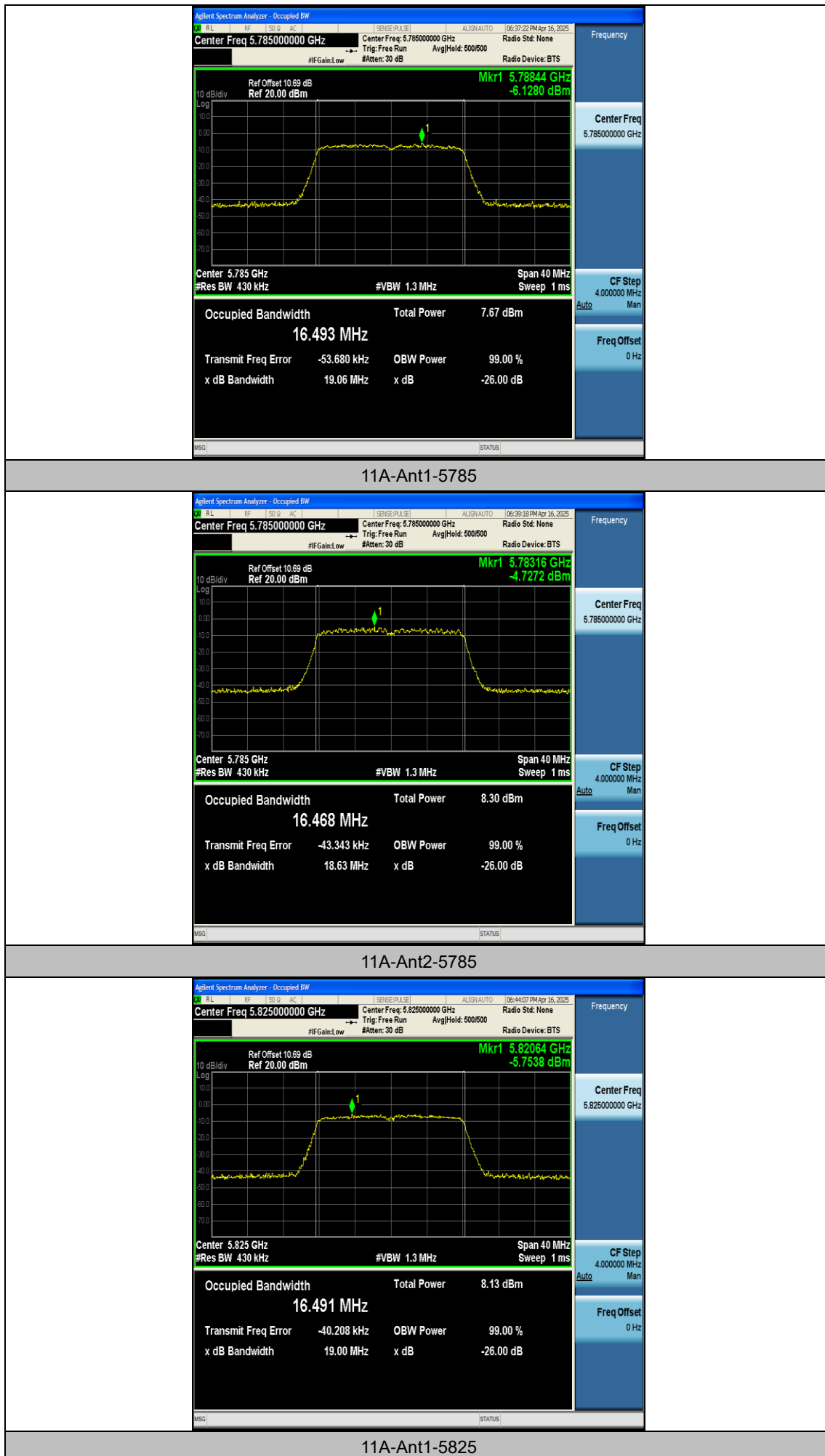
### Test Result

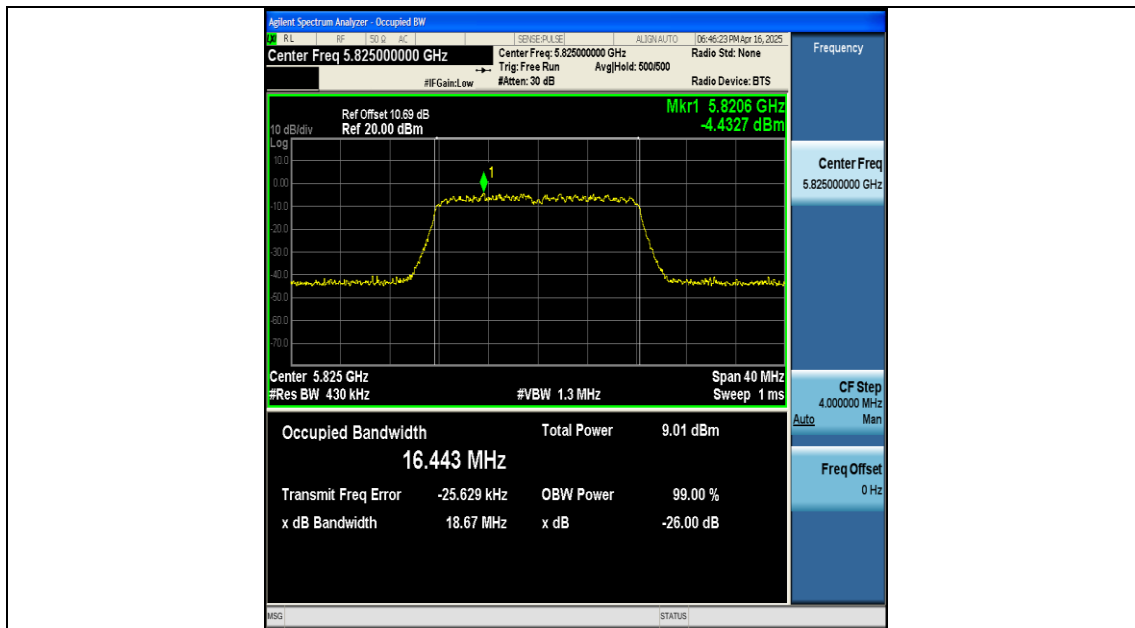
| Test Mode  | Antenna | Frequency<br>[MHz] | OCB<br>[MHz] | FL<br>[MHz] | FH<br>[MHz] | Limit<br>[MHz] | Verdict |
|------------|---------|--------------------|--------------|-------------|-------------|----------------|---------|
| 11A        | Ant1    | 5745               | 16.474       | 5736.7120   | 5753.1860   | ---            | ---     |
| 11A        | Ant2    | 5745               | 16.464       | 5736.7112   | 5753.1752   | ---            | ---     |
| 11A        | Ant1    | 5785               | 16.493       | 5776.6998   | 5793.1928   | ---            | ---     |
| 11A        | Ant2    | 5785               | 16.468       | 5776.7227   | 5793.1907   | ---            | ---     |
| 11A        | Ant1    | 5825               | 16.491       | 5816.7143   | 5833.2053   | ---            | ---     |
| 11A        | Ant2    | 5825               | 16.443       | 5816.7529   | 5833.1959   | ---            | ---     |
| 11N20MIMO  | Ant1    | 5745               | 17.661       | 5736.1037   | 5753.7647   | ---            | ---     |
| 11N20MIMO  | Ant2    | 5745               | 17.643       | 5736.1174   | 5753.7604   | ---            | ---     |
| 11N20MIMO  | Ant1    | 5785               | 17.661       | 5776.1203   | 5793.7813   | ---            | ---     |
| 11N20MIMO  | Ant2    | 5785               | 17.641       | 5776.1350   | 5793.7760   | ---            | ---     |
| 11N20MIMO  | Ant1    | 5825               | 17.622       | 5816.1587   | 5833.7807   | ---            | ---     |
| 11N20MIMO  | Ant2    | 5825               | 17.613       | 5816.1614   | 5833.7744   | ---            | ---     |
| 11AC20MIMO | Ant1    | 5745               | 17.646       | 5736.1077   | 5753.7537   | ---            | ---     |
| 11AC20MIMO | Ant2    | 5745               | 17.652       | 5736.1066   | 5753.7586   | ---            | ---     |
| 11AC20MIMO | Ant1    | 5785               | 17.630       | 5776.1229   | 5793.7529   | ---            | ---     |
| 11AC20MIMO | Ant2    | 5785               | 17.635       | 5776.1266   | 5793.7616   | ---            | ---     |
| 11AC20MIMO | Ant1    | 5825               | 17.642       | 5816.1410   | 5833.7830   | ---            | ---     |
| 11AC20MIMO | Ant2    | 5825               | 17.638       | 5816.1447   | 5833.7827   | ---            | ---     |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

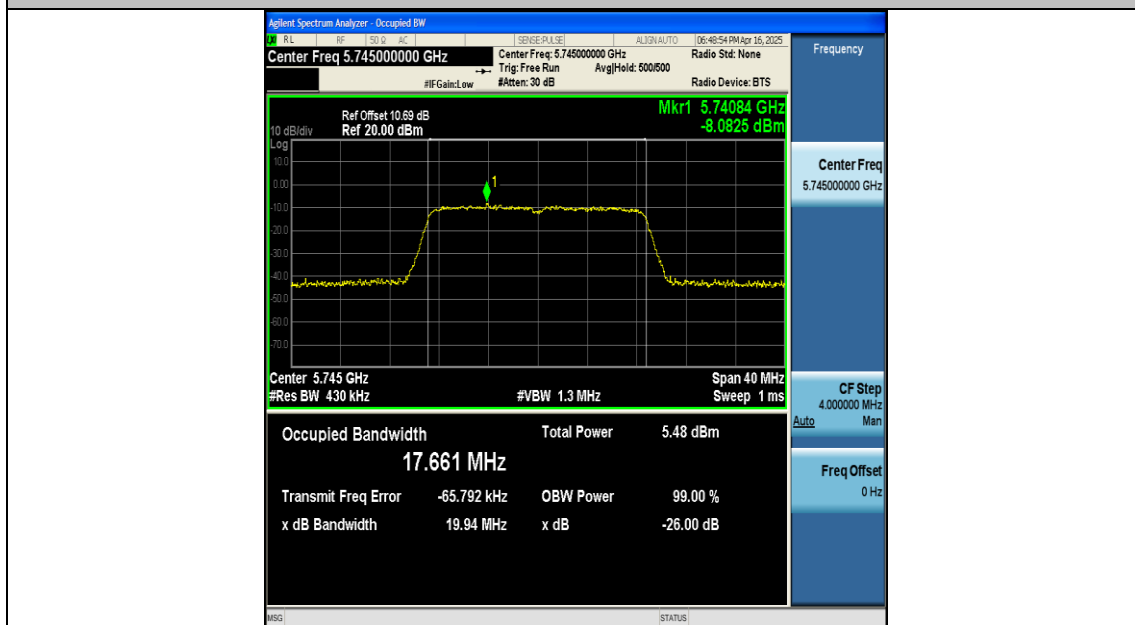
## Test Graphs



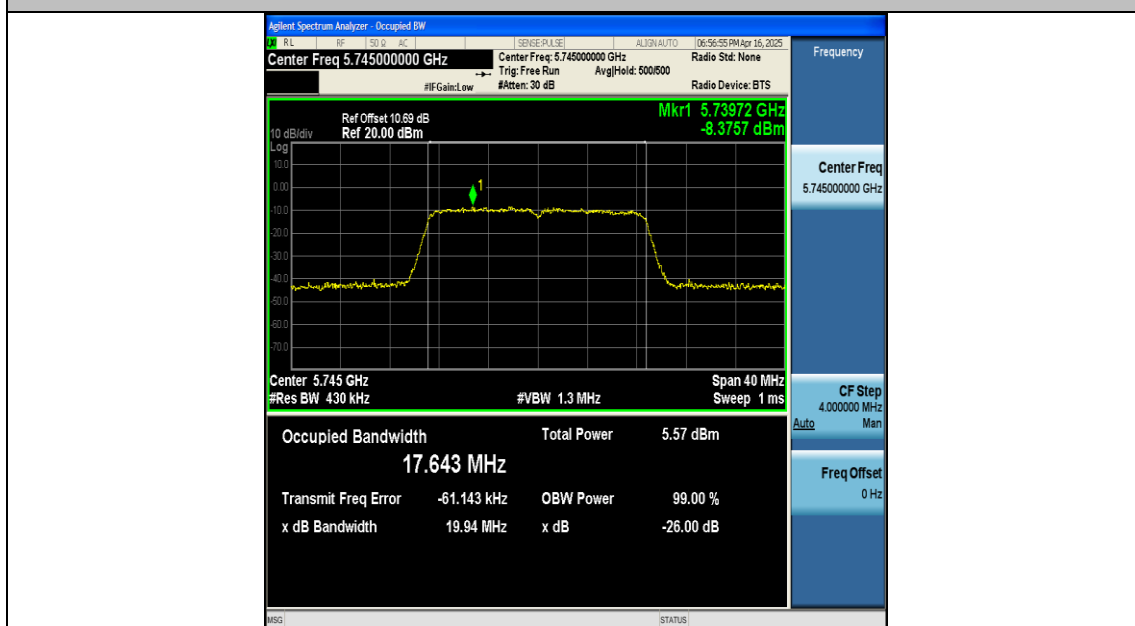




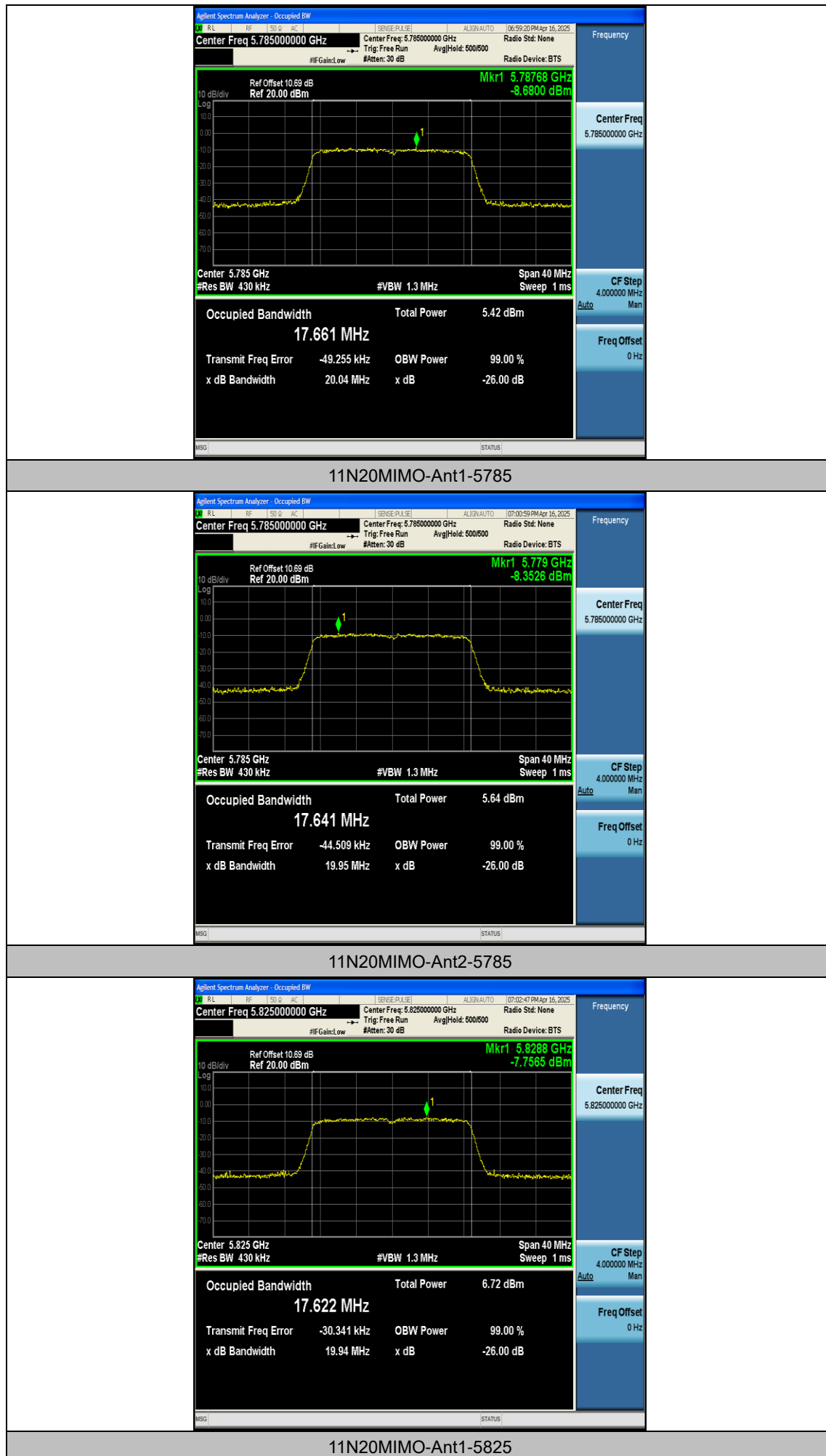
11A-Ant2-5825

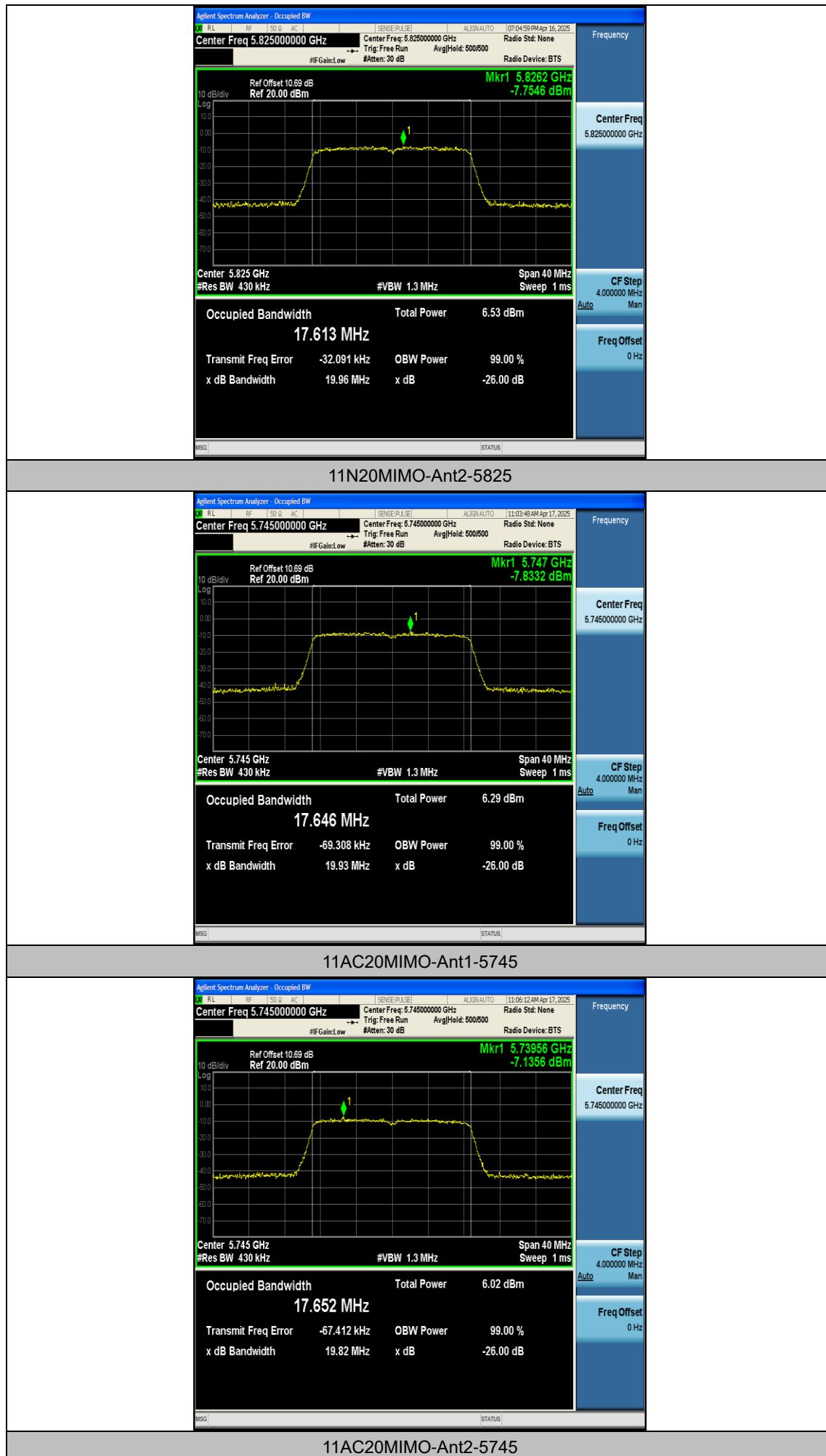


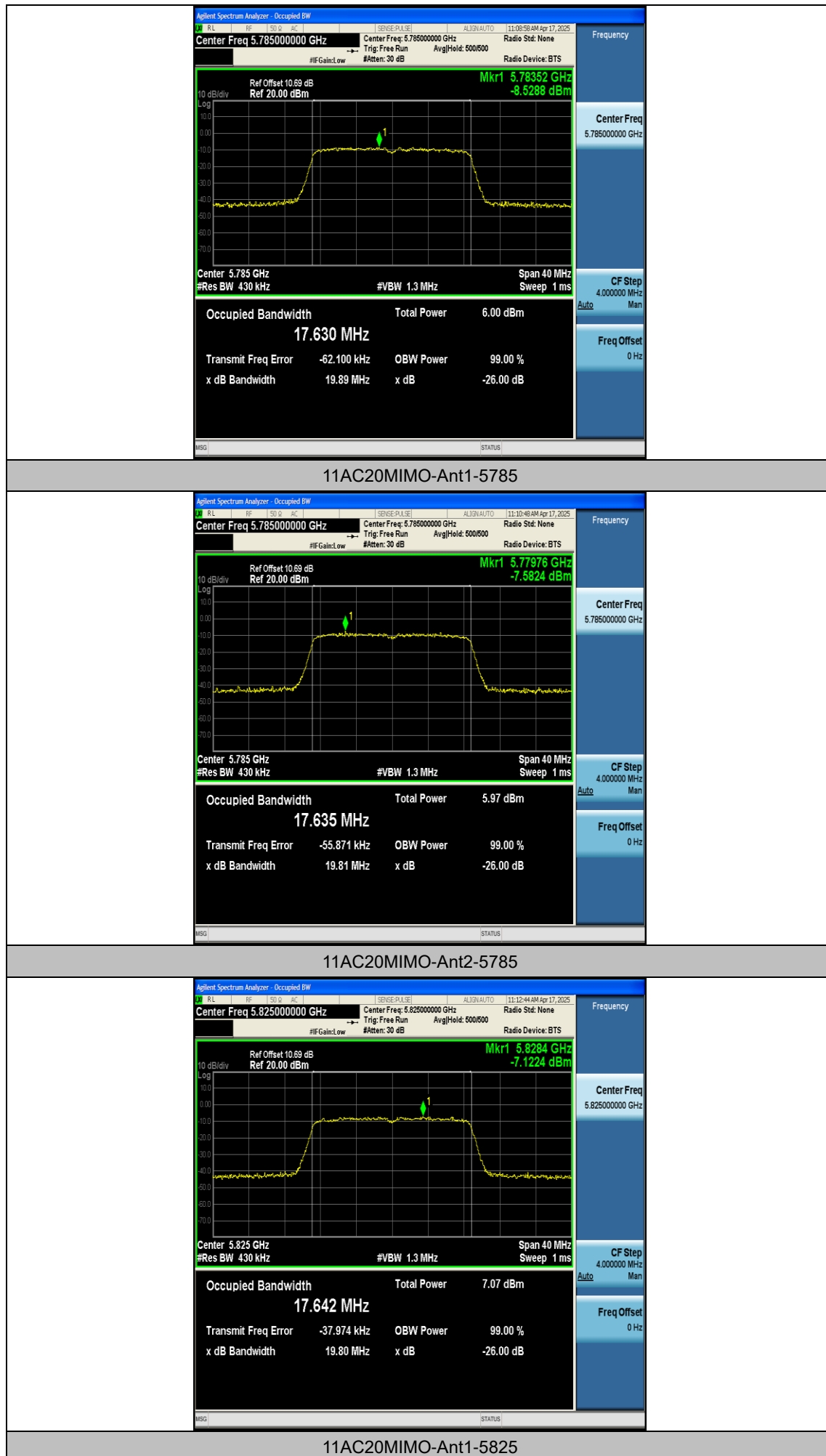
11N20MIMO-Ant1-5745



11N20MIMO-Ant2-5745









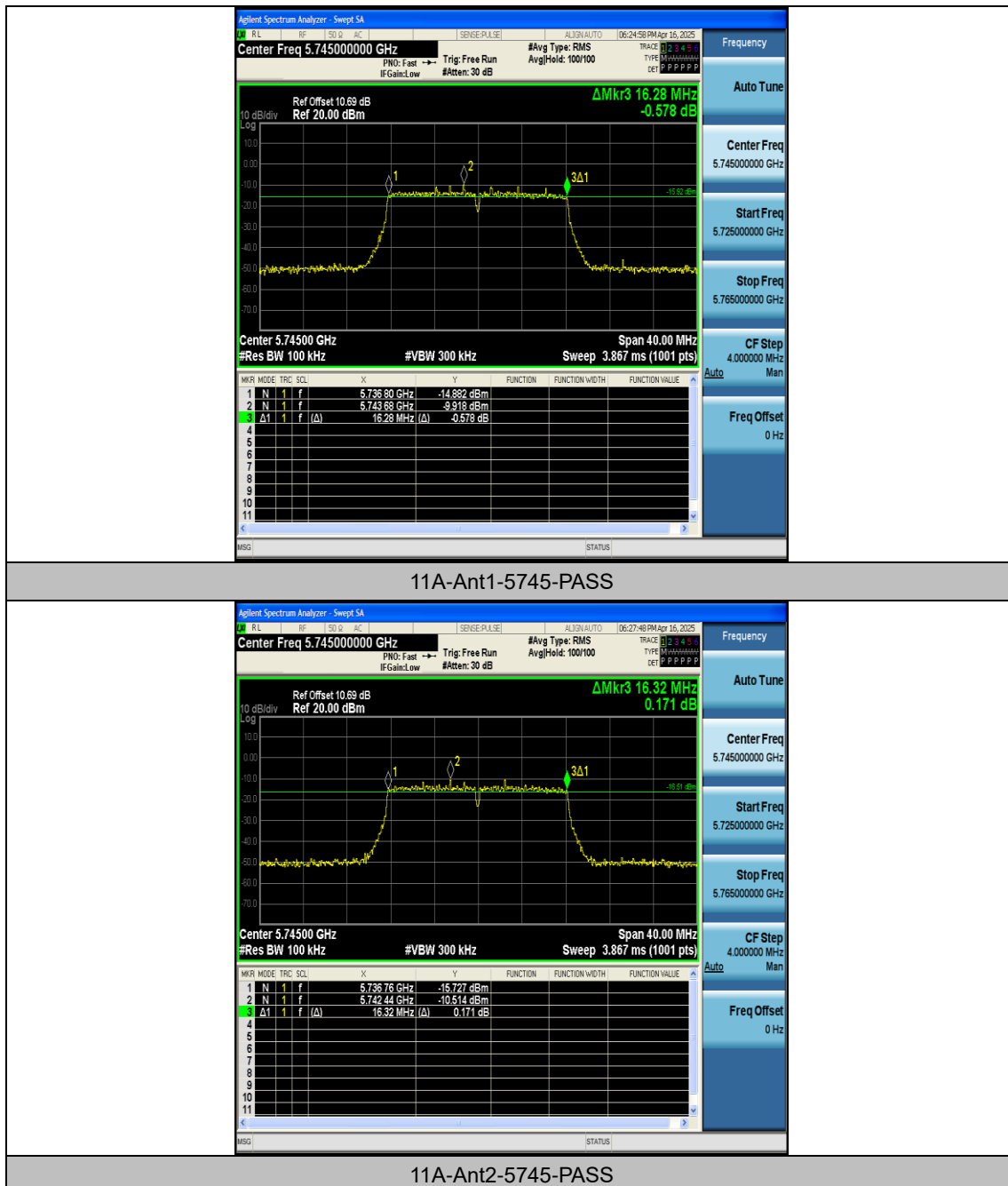
## Appendix A: Min emission bandwidth

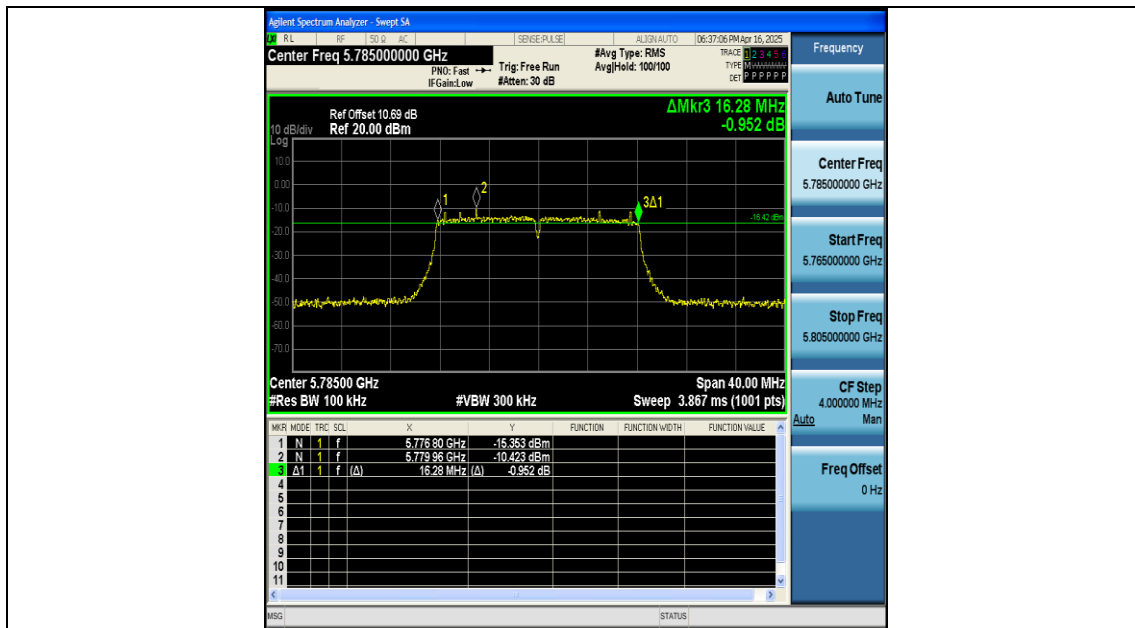
### Test Result

| Test Mode  | Antenna | Frequency [MHz] | 6db EBW [MHz] | FL [MHz] | FH [MHz] | Limit [MHz] | Verdict |
|------------|---------|-----------------|---------------|----------|----------|-------------|---------|
| 11A        | Ant1    | 5745            | 16.280        | 5736.800 | 5753.080 | 0.5         | PASS    |
| 11A        | Ant2    | 5745            | 16.320        | 5736.760 | 5753.080 | 0.5         | PASS    |
| 11A        | Ant1    | 5785            | 16.280        | 5776.800 | 5793.080 | 0.5         | PASS    |
| 11A        | Ant2    | 5785            | 16.280        | 5776.800 | 5793.080 | 0.5         | PASS    |
| 11A        | Ant1    | 5825            | 16.280        | 5816.800 | 5833.080 | 0.5         | PASS    |
| 11A        | Ant2    | 5825            | 16.280        | 5816.800 | 5833.080 | 0.5         | PASS    |
| 11N20MIMO  | Ant1    | 5745            | 17.160        | 5736.160 | 5753.320 | 0.5         | PASS    |
| 11N20MIMO  | Ant2    | 5745            | 17.520        | 5736.160 | 5753.680 | 0.5         | PASS    |
| 11N20MIMO  | Ant1    | 5785            | 17.200        | 5776.160 | 5793.360 | 0.5         | PASS    |
| 11N20MIMO  | Ant2    | 5785            | 17.560        | 5776.160 | 5793.720 | 0.5         | PASS    |
| 11N20MIMO  | Ant1    | 5825            | 17.280        | 5816.400 | 5833.680 | 0.5         | PASS    |
| 11N20MIMO  | Ant2    | 5825            | 17.520        | 5816.160 | 5833.680 | 0.5         | PASS    |
| 11AC20MIMO | Ant1    | 5745            | 17.280        | 5736.160 | 5753.440 | 0.5         | PASS    |
| 11AC20MIMO | Ant2    | 5745            | 17.360        | 5736.120 | 5753.480 | 0.5         | PASS    |
| 11AC20MIMO | Ant1    | 5785            | 17.520        | 5776.160 | 5793.680 | 0.5         | PASS    |
| 11AC20MIMO | Ant2    | 5785            | 17.160        | 5776.160 | 5793.320 | 0.5         | PASS    |
| 11AC20MIMO | Ant1    | 5825            | 17.560        | 5816.160 | 5833.720 | 0.5         | PASS    |
| 11AC20MIMO | Ant2    | 5825            | 17.280        | 5816.400 | 5833.680 | 0.5         | PASS    |

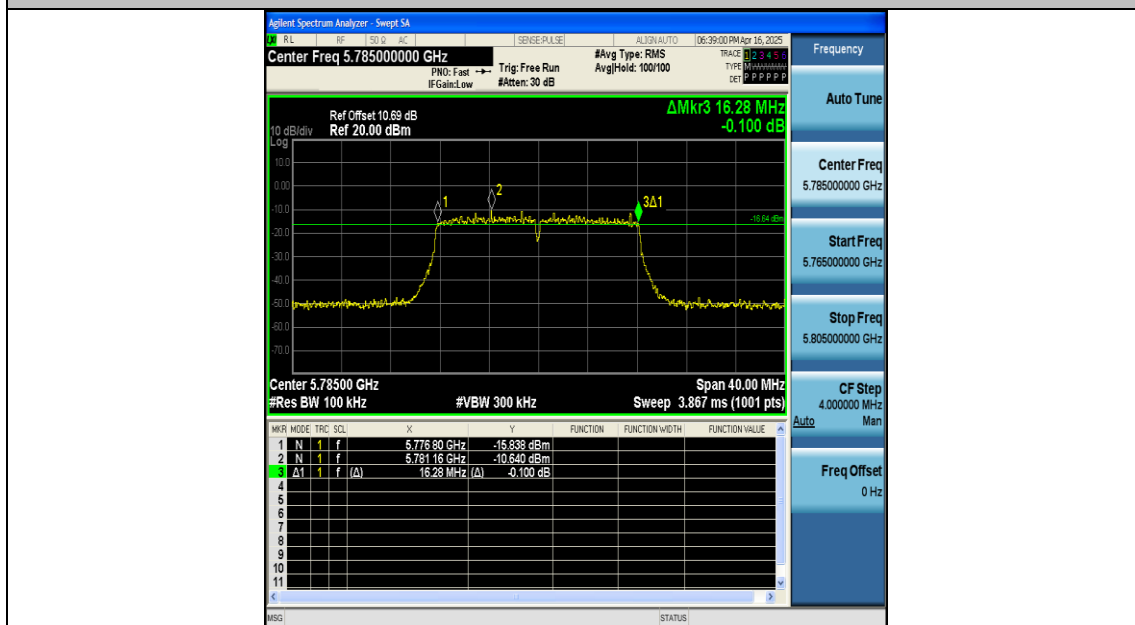
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs

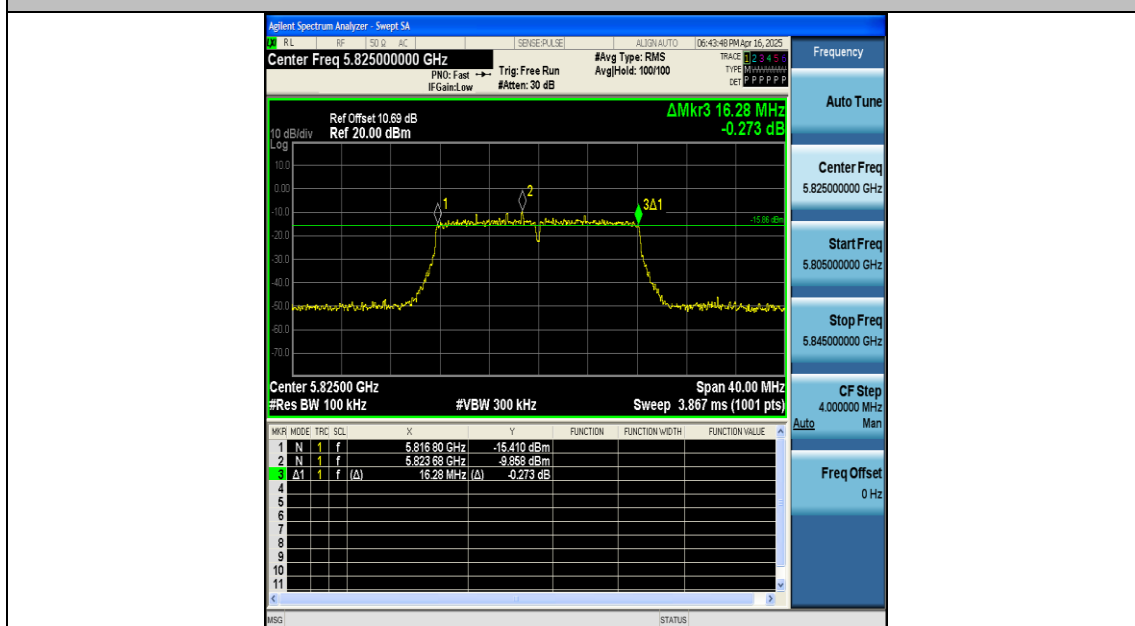




11A-Ant1-5785-PASS



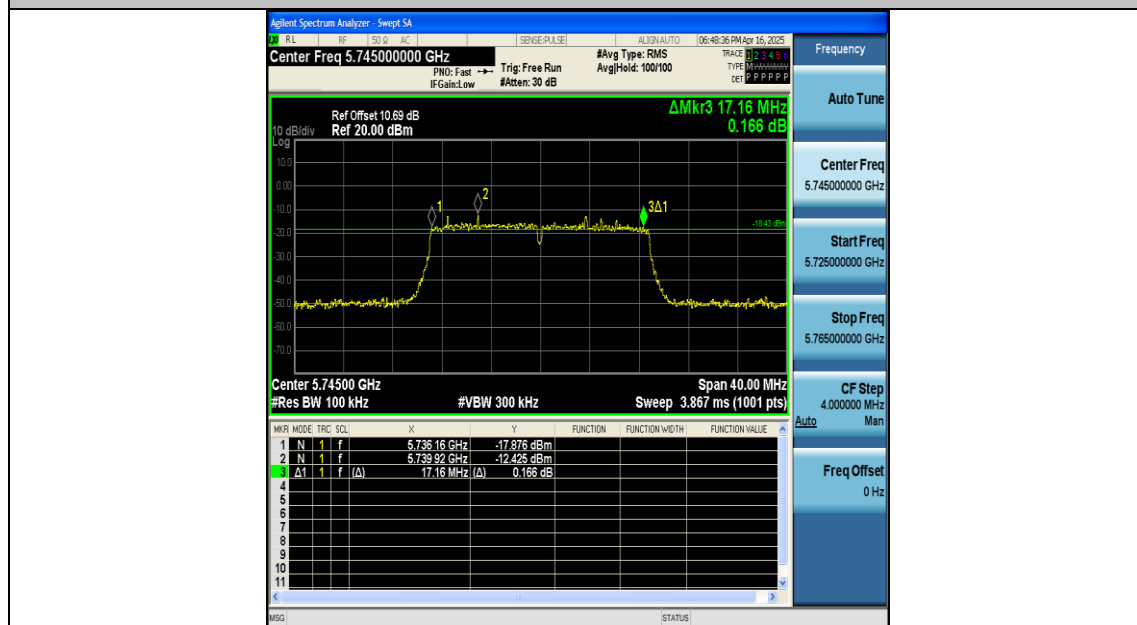
11A-Ant2-5785-PASS



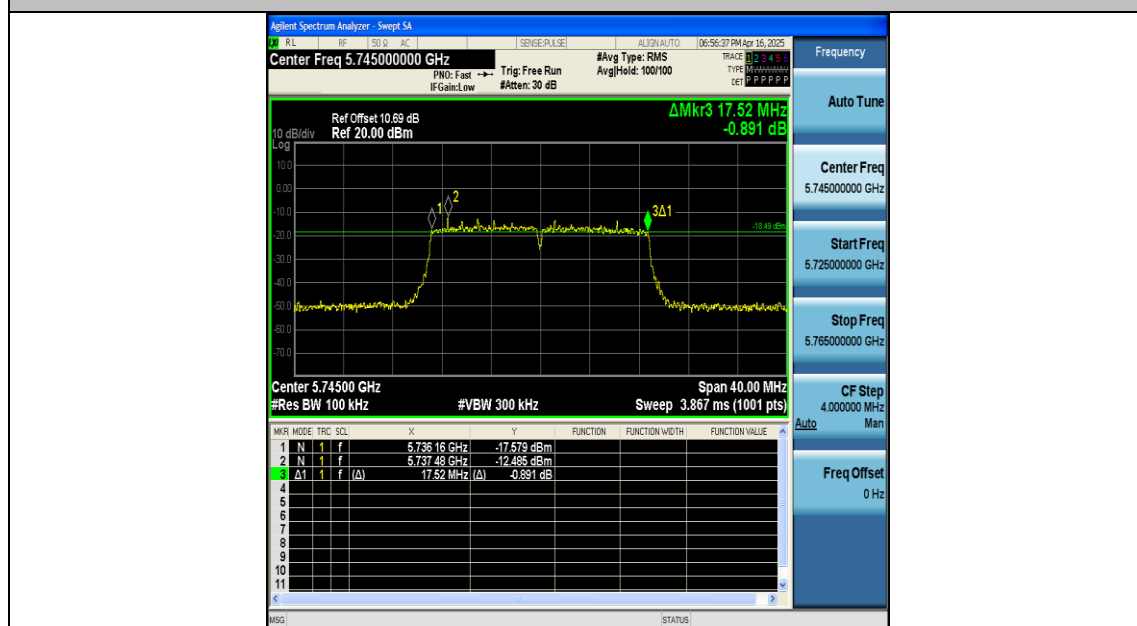
11A-Ant1-5825-PASS



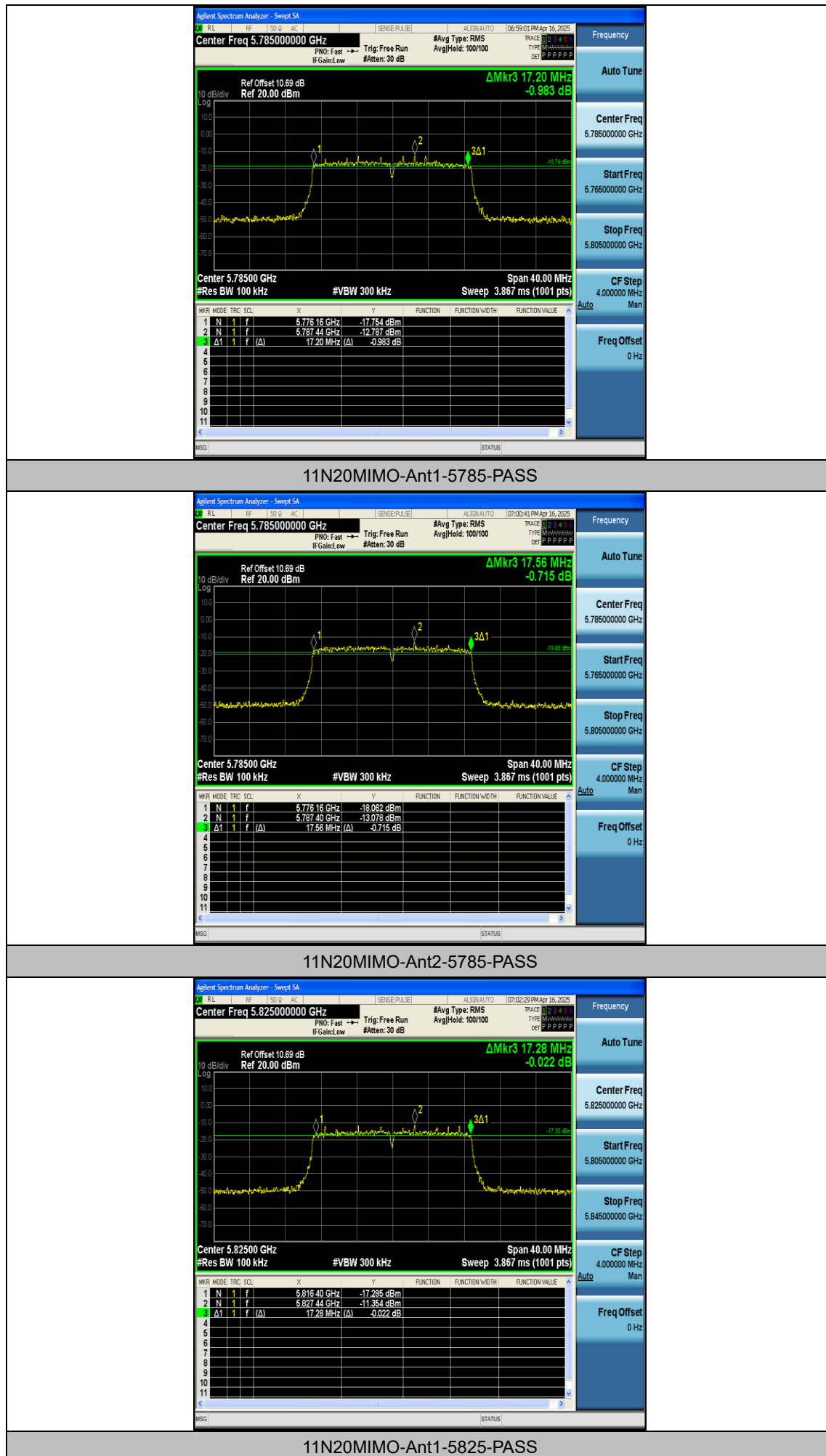
11A-Ant2-5825-PASS

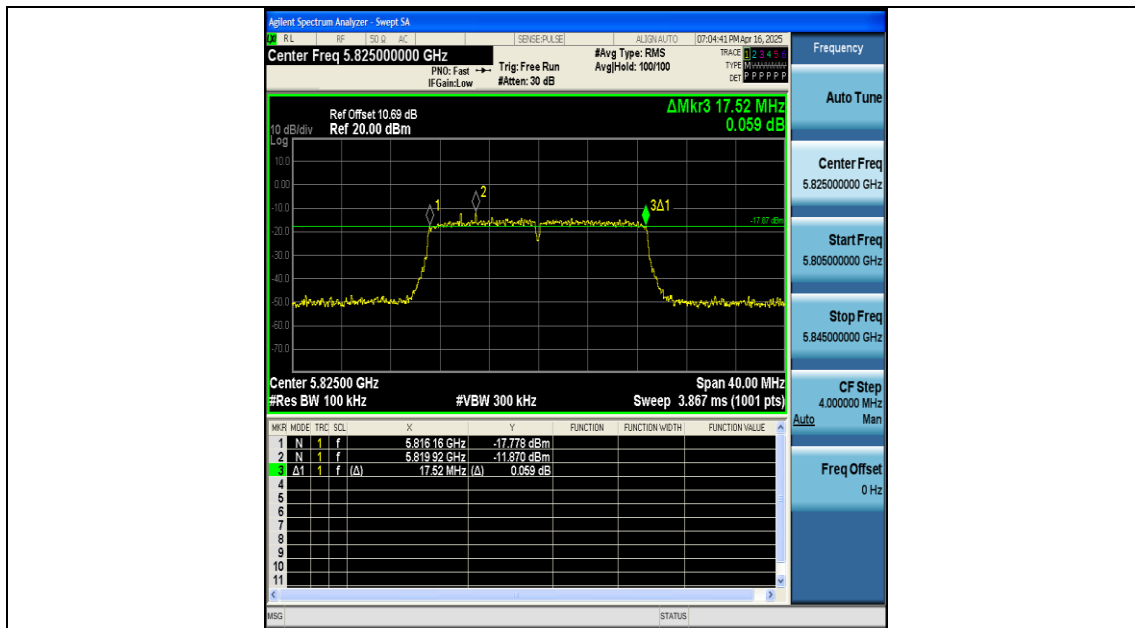


11N20MIMO-Ant1-5745-PASS

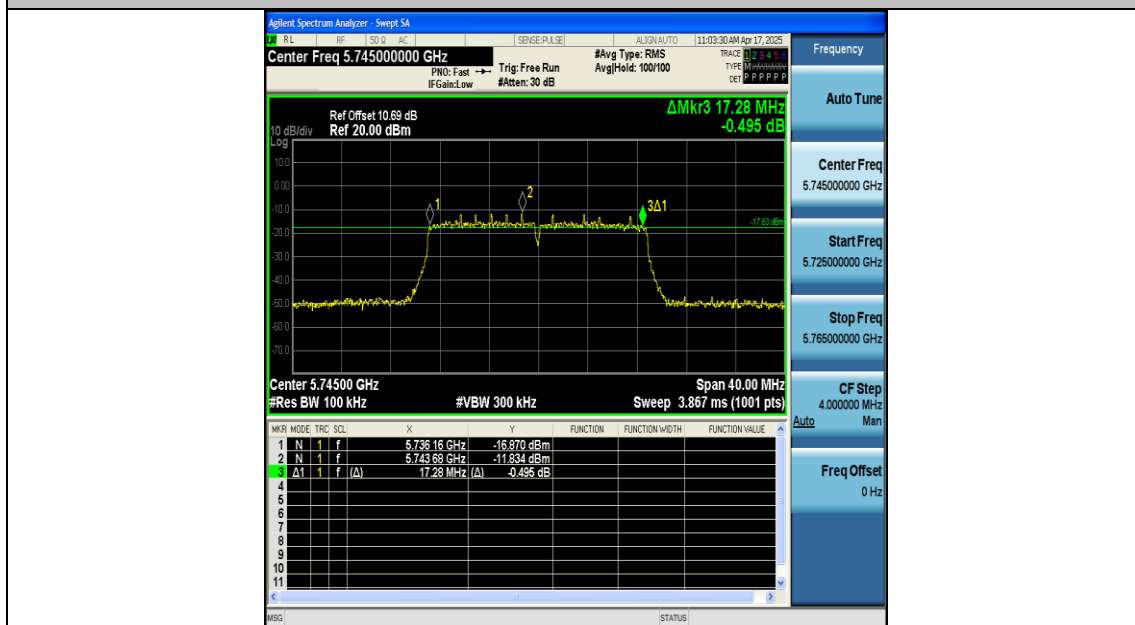


11N20MIMO-Ant2-5745-PASS

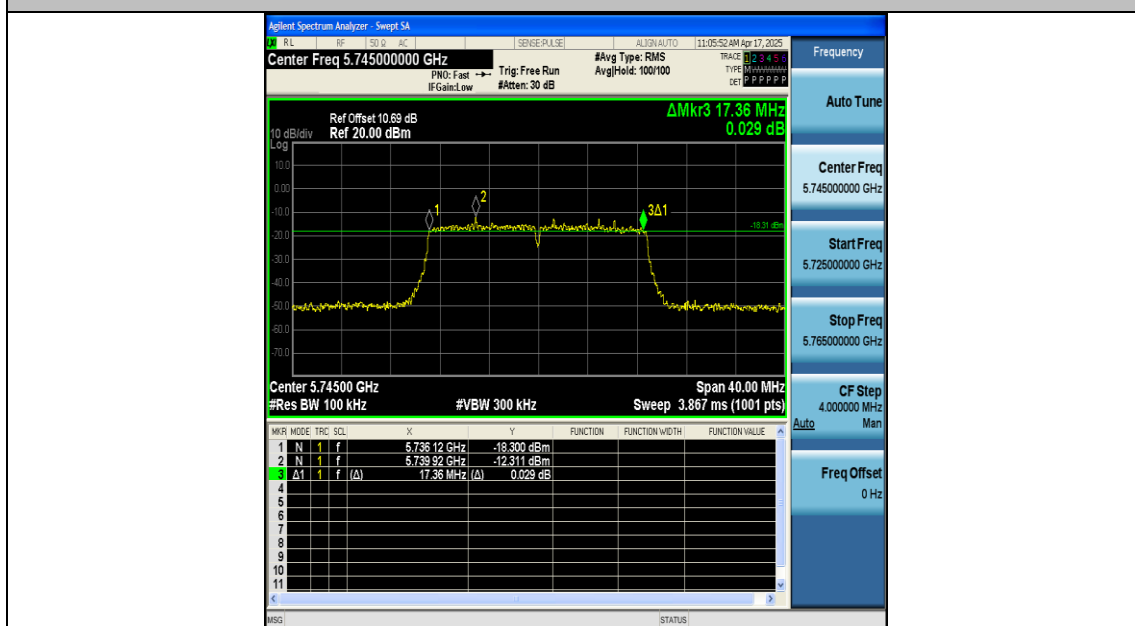




11N20MIMO-Ant2-5825-PASS



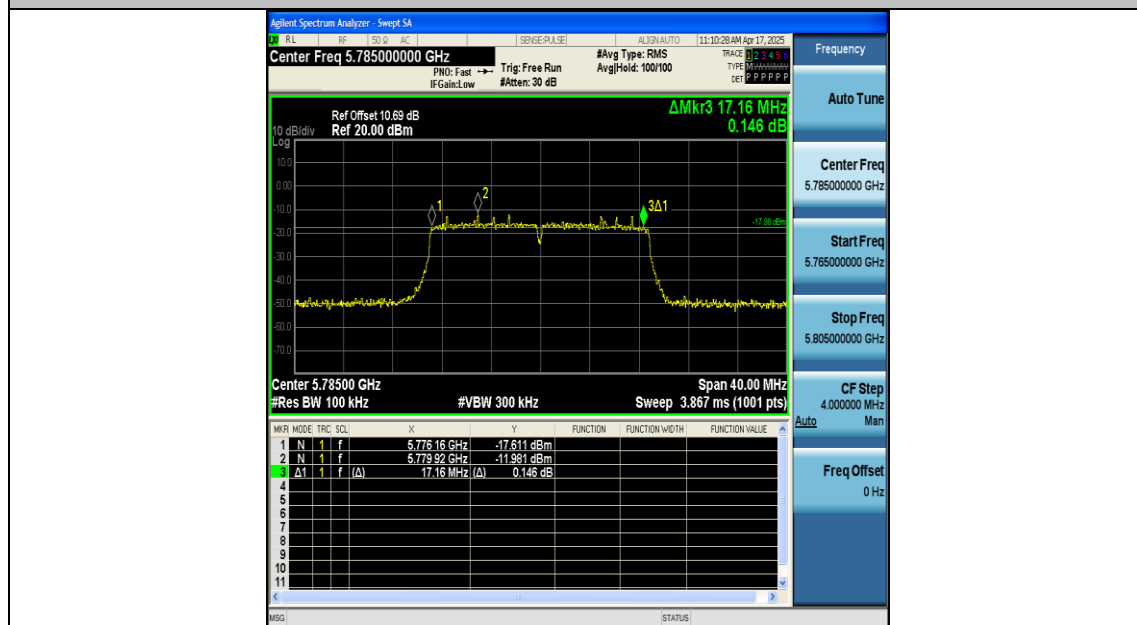
11AC20MIMO-Ant1-5745-PASS



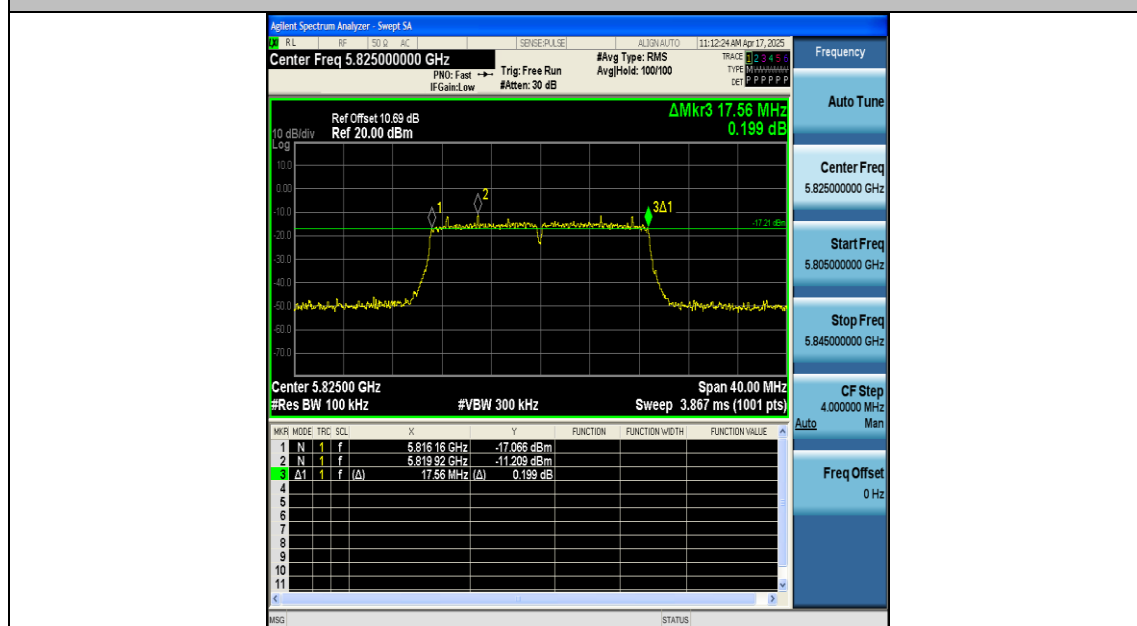
11AC20MIMO-Ant2-5745-PASS



11AC20MIMO-Ant1-5785-PASS



11AC20MIMO-Ant2-5785-PASS



11AC20MIMO-Ant1-5825-PASS



## Appendix B: Maximum conducted output power

### Test Result

| Test Mode  | Antenna | Frequency [MHz] | Conducted Power [dBm] | Conducted Limit [dBm] | Verdict |
|------------|---------|-----------------|-----------------------|-----------------------|---------|
| 11A        | Ant1    | 5745            | 1.46                  | ≤30.00                | PASS    |
| 11A        | Ant2    | 5745            | 1.20                  | ≤30.00                | PASS    |
| 11A        | Ant1    | 5785            | 1.05                  | ≤30.00                | PASS    |
| 11A        | Ant2    | 5785            | 1.05                  | ≤30.00                | PASS    |
| 11A        | Ant1    | 5825            | 1.63                  | ≤30.00                | PASS    |
| 11A        | Ant2    | 5825            | 1.87                  | ≤30.00                | PASS    |
| 11N20MIMO  | Ant1    | 5745            | -0.96                 | ≤30.00                | PASS    |
| 11N20MIMO  | Ant2    | 5745            | -1.01                 | ≤30.00                | PASS    |
| 11N20MIMO  | total   | 5745            | 2.03                  | ≤30.00                | PASS    |
| 11N20MIMO  | Ant1    | 5785            | -1.03                 | ≤30.00                | PASS    |
| 11N20MIMO  | Ant2    | 5785            | -0.80                 | ≤30.00                | PASS    |
| 11N20MIMO  | total   | 5785            | 2.10                  | ≤30.00                | PASS    |
| 11N20MIMO  | Ant1    | 5825            | 0.11                  | ≤30.00                | PASS    |
| 11N20MIMO  | Ant2    | 5825            | 0.08                  | ≤30.00                | PASS    |
| 11N20MIMO  | total   | 5825            | 3.11                  | ≤30.00                | PASS    |
| 11AC20MIMO | Ant1    | 5745            | -0.36                 | ≤30.00                | PASS    |
| 11AC20MIMO | Ant2    | 5745            | -0.54                 | ≤30.00                | PASS    |
| 11AC20MIMO | total   | 5745            | 2.56                  | ≤30.00                | PASS    |
| 11AC20MIMO | Ant1    | 5785            | -0.79                 | ≤30.00                | PASS    |
| 11AC20MIMO | Ant2    | 5785            | -0.67                 | ≤30.00                | PASS    |
| 11AC20MIMO | total   | 5785            | 2.28                  | ≤30.00                | PASS    |
| 11AC20MIMO | Ant1    | 5825            | 0.61                  | ≤30.00                | PASS    |
| 11AC20MIMO | Ant2    | 5825            | 0.11                  | ≤30.00                | PASS    |
| 11AC20MIMO | total   | 5825            | 3.38                  | ≤30.00                | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

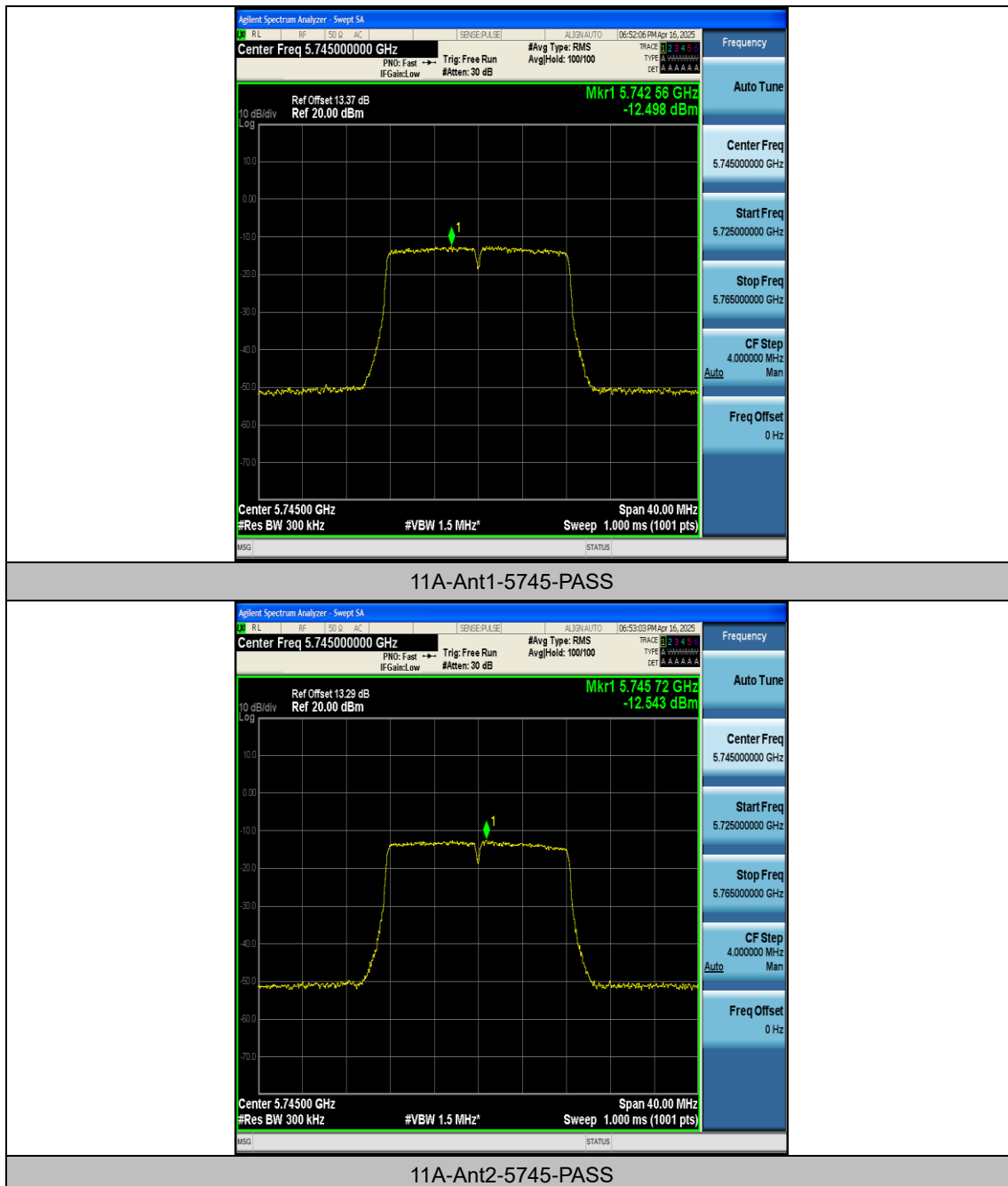
## Appendix C: Maximum power spectral density

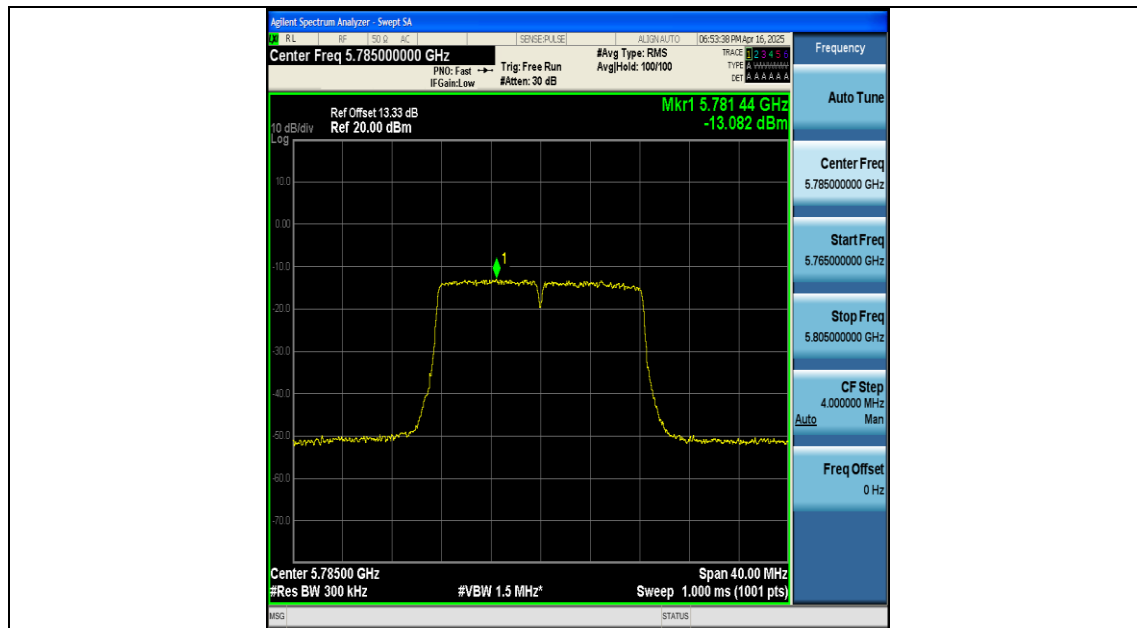
### Test Result

| Frequency<br>[MHz] | Test Mode  | Antenna | Result<br>[dBm/500KHz] | DC<br>Factor<br>[dB] | RBW<br>Factor<br>[dB] | Limit<br>[dBm/500KHz] | Verdict |
|--------------------|------------|---------|------------------------|----------------------|-----------------------|-----------------------|---------|
| 5745               | 11A        | Ant1    | -12.50                 | 0.46                 | 2.22                  | ≤30.00                | PASS    |
| 5745               | 11A        | Ant2    | -12.54                 | 0.38                 | 2.22                  | ≤30.00                | PASS    |
| 5785               | 11A        | Ant1    | -13.08                 | 0.42                 | 2.22                  | ≤30.00                | PASS    |
| 5785               | 11A        | Ant2    | -12.72                 | 0.29                 | 2.22                  | ≤30.00                | PASS    |
| 5825               | 11A        | Ant1    | -12.24                 | 0.36                 | 2.22                  | ≤30.00                | PASS    |
| 5825               | 11A        | Ant2    | -12.28                 | 0.30                 | 2.22                  | ≤30.00                | PASS    |
| 5745               | 11N20MIMO  | Ant1    | -14.85                 | 0.47                 | 2.22                  | ≤30.00                | PASS    |
| 5745               | 11N20MIMO  | Ant2    | -15.16                 | 0.35                 | 2.22                  | ≤30.00                | PASS    |
| 5745               | 11N20MIMO  | total   | -11.99                 | ---                  | ---                   | ≤29.60                | PASS    |
| 5785               | 11N20MIMO  | Ant1    | -14.99                 | 0.49                 | 2.22                  | ≤30.00                | PASS    |
| 5785               | 11N20MIMO  | Ant2    | -15.02                 | 0.49                 | 2.22                  | ≤30.00                | PASS    |
| 5785               | 11N20MIMO  | total   | -11.99                 | ---                  | ---                   | ≤29.60                | PASS    |
| 5825               | 11N20MIMO  | Ant1    | -13.73                 | 0.49                 | 2.22                  | ≤30.00                | PASS    |
| 5825               | 11N20MIMO  | Ant2    | -13.99                 | 0.49                 | 2.22                  | ≤30.00                | PASS    |
| 5825               | 11N20MIMO  | total   | -10.85                 | ---                  | ---                   | ≤29.60                | PASS    |
| 5745               | 11AC20MIMO | Ant1    | -14.70                 | 0.47                 | 2.22                  | ≤30.00                | PASS    |
| 5745               | 11AC20MIMO | Ant2    | -14.79                 | 0.51                 | 2.22                  | ≤30.00                | PASS    |
| 5745               | 11AC20MIMO | total   | -11.73                 | ---                  | ---                   | ≤29.60                | PASS    |
| 5785               | 11AC20MIMO | Ant1    | -14.90                 | 0.32                 | 2.22                  | ≤30.00                | PASS    |
| 5785               | 11AC20MIMO | Ant2    | -14.66                 | 0.45                 | 2.22                  | ≤30.00                | PASS    |
| 5785               | 11AC20MIMO | total   | -11.77                 | ---                  | ---                   | ≤29.60                | PASS    |
| 5825               | 11AC20MIMO | Ant1    | -13.65                 | 0.53                 | 2.22                  | ≤30.00                | PASS    |
| 5825               | 11AC20MIMO | Ant2    | -13.93                 | 0.45                 | 2.22                  | ≤30.00                | PASS    |
| 5825               | 11AC20MIMO | total   | -10.78                 | ---                  | ---                   | ≤29.60                | PASS    |

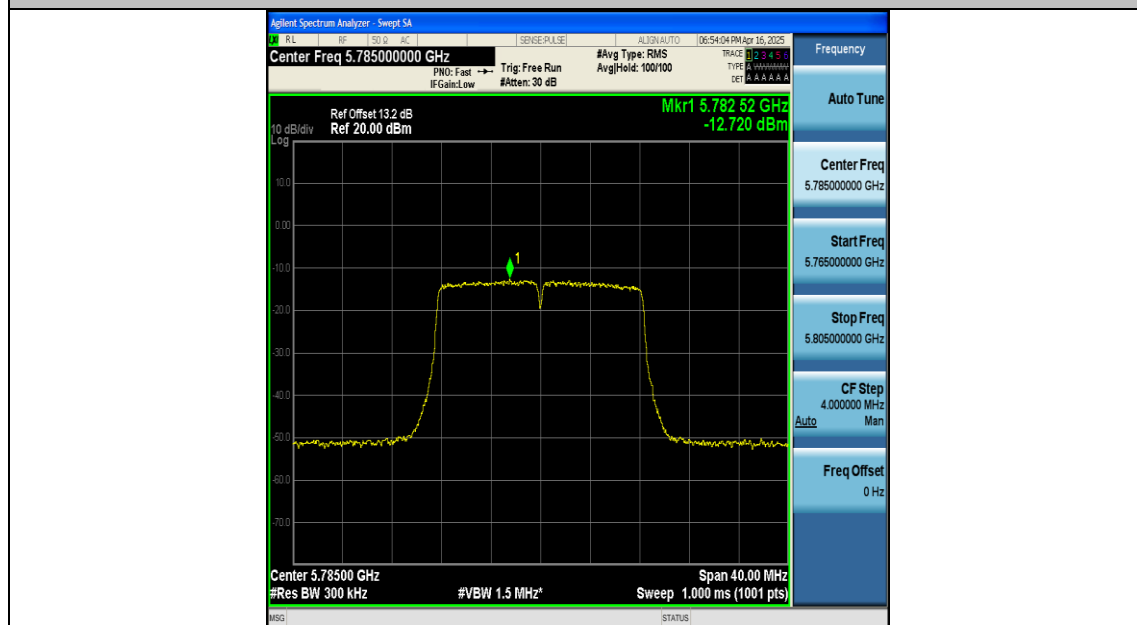
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB) + RB Factor(dB)

## Test Graphs

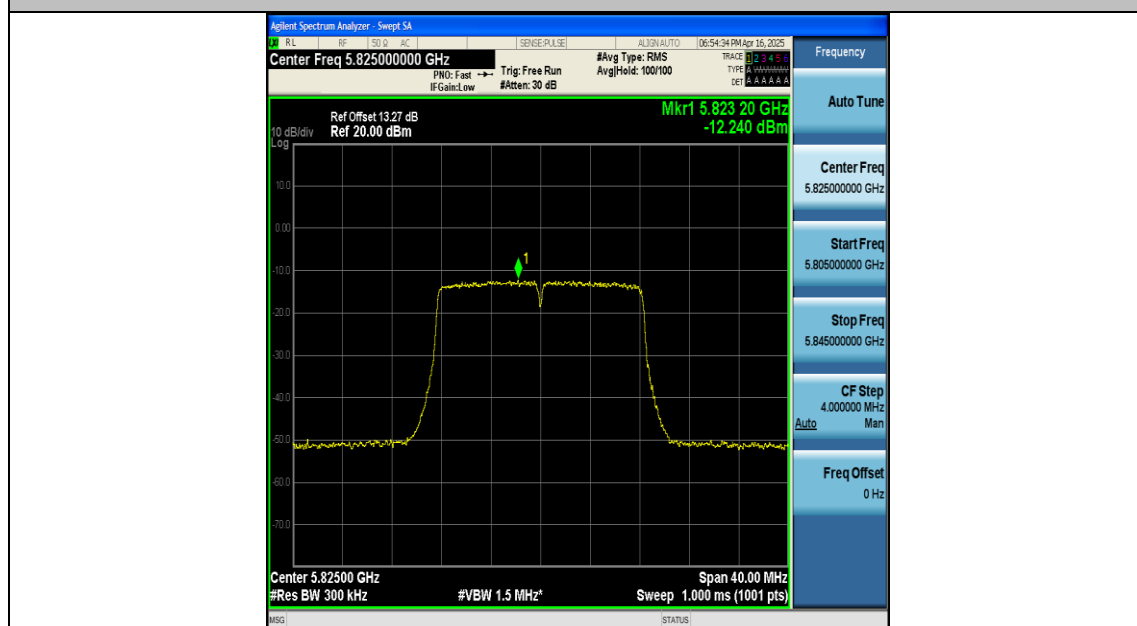




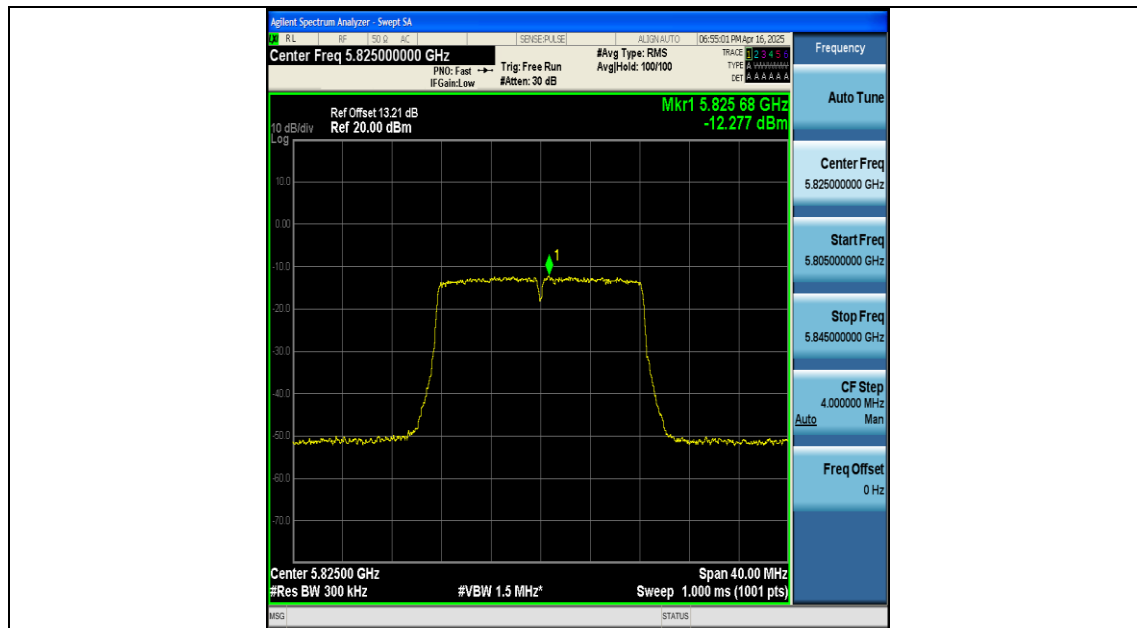
11A-Ant1-5785-PASS



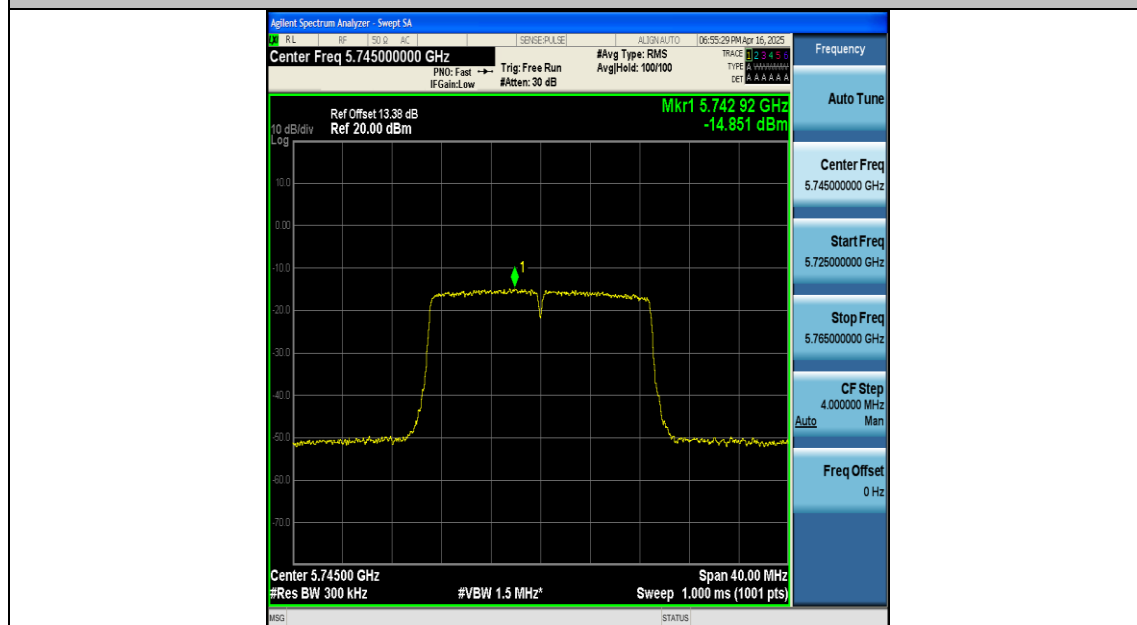
11A-Ant2-5785-PASS



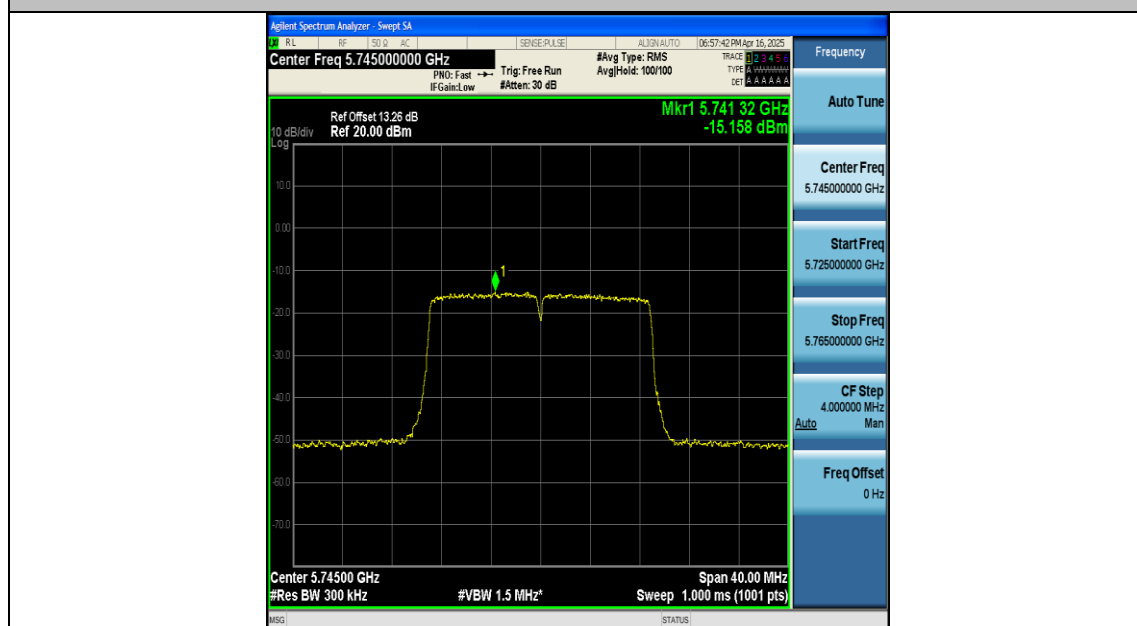
11A-Ant1-5825-PASS



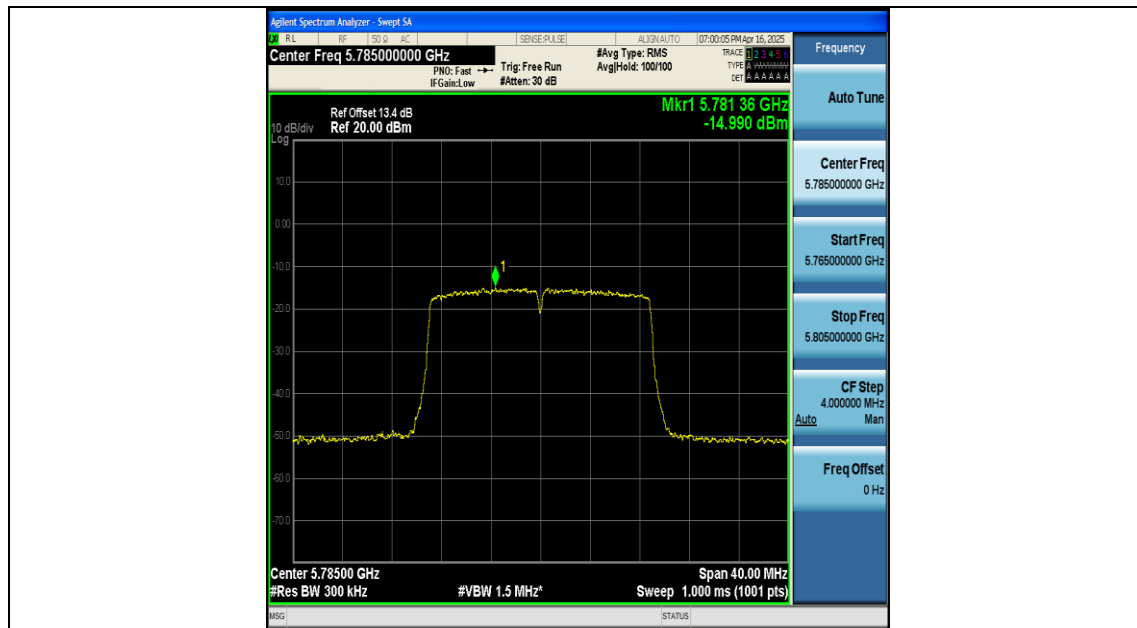
11A-Ant2-5825-PASS



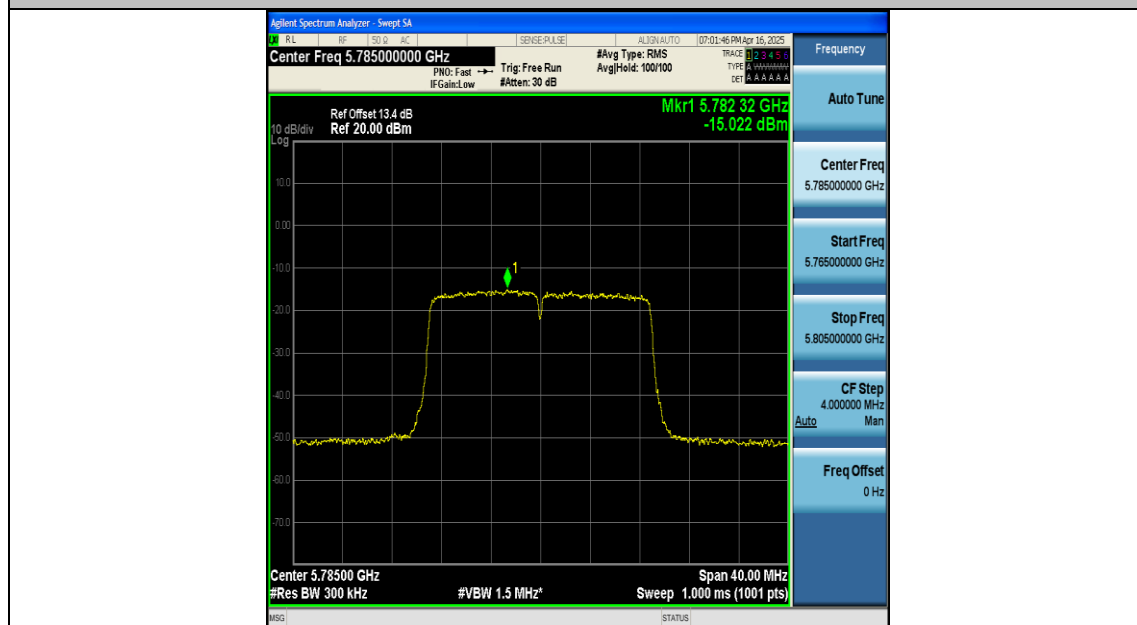
11N20MIMO-Ant1-5745-PASS



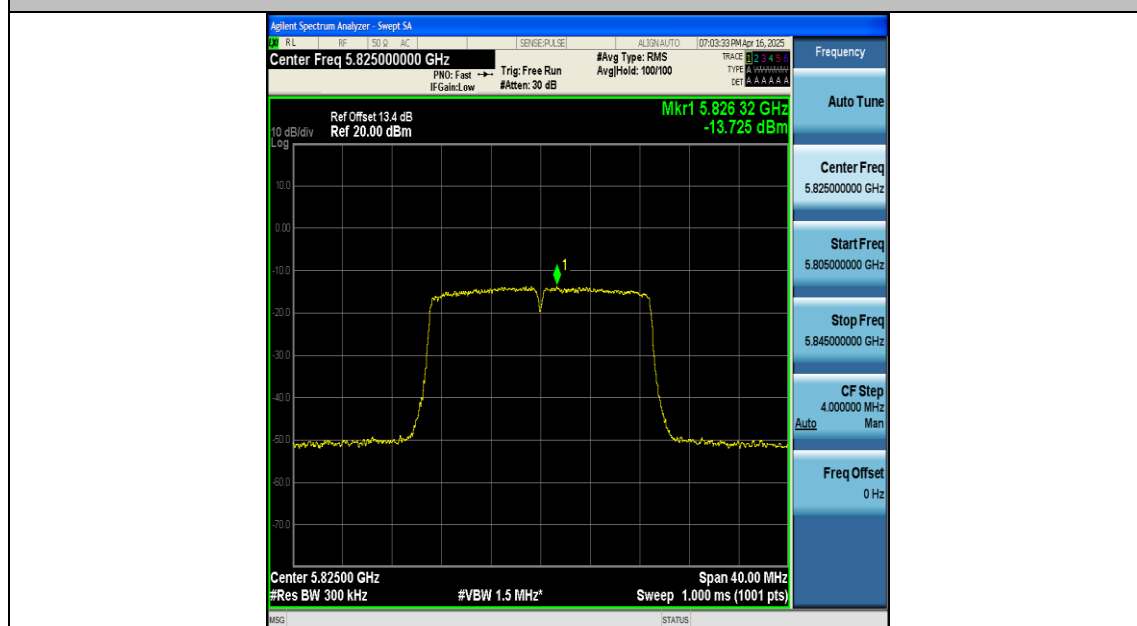
11N20MIMO-Ant2-5745-PASS



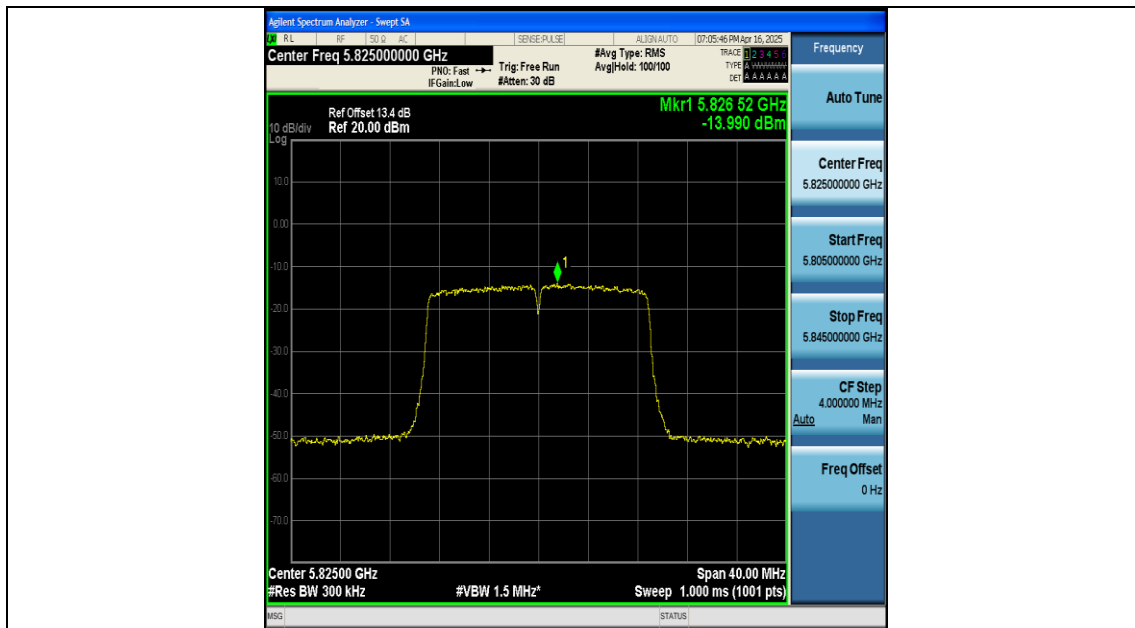
11N20MIMO-Ant1-5785-PASS



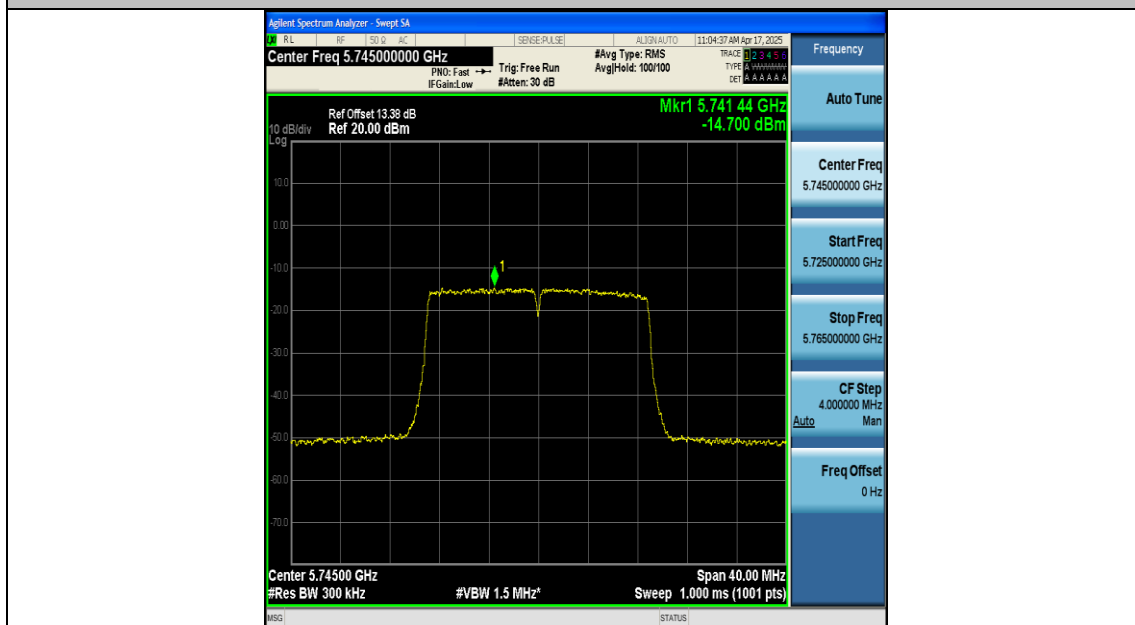
11N20MIMO-Ant2-5785-PASS



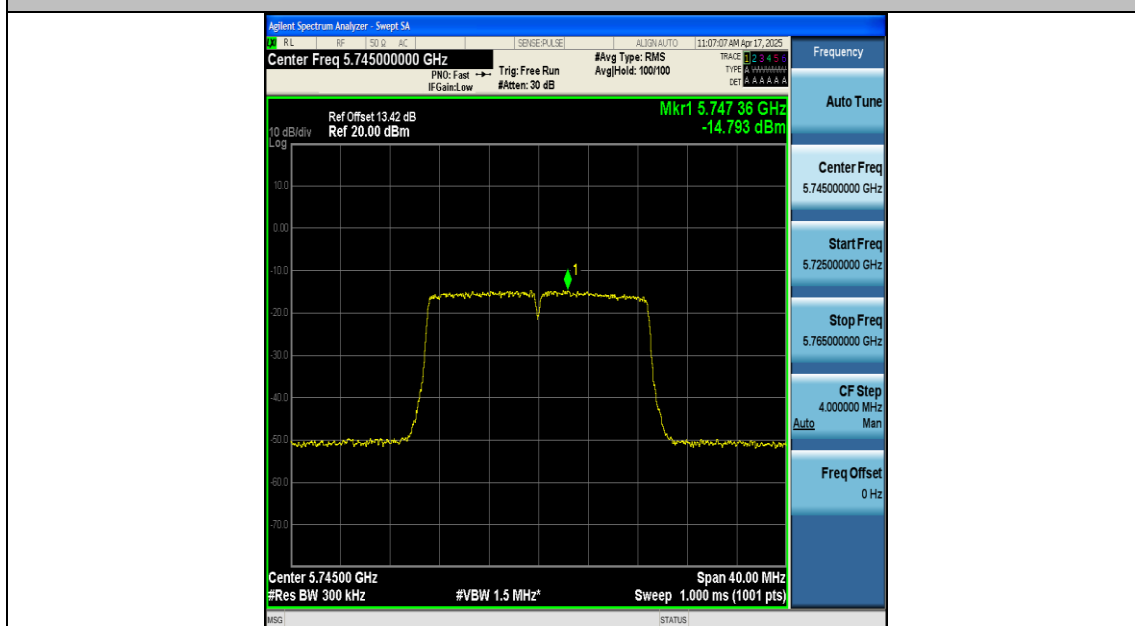
11N20MIMO-Ant1-5825-PASS



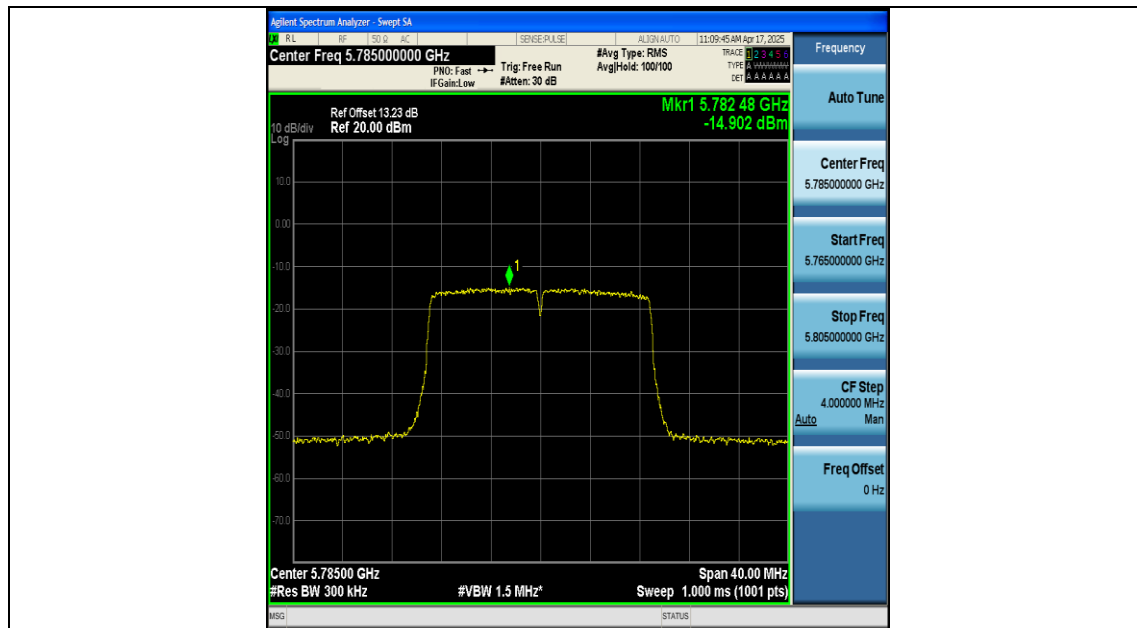
11N20MIMO-Ant2-5825-PASS



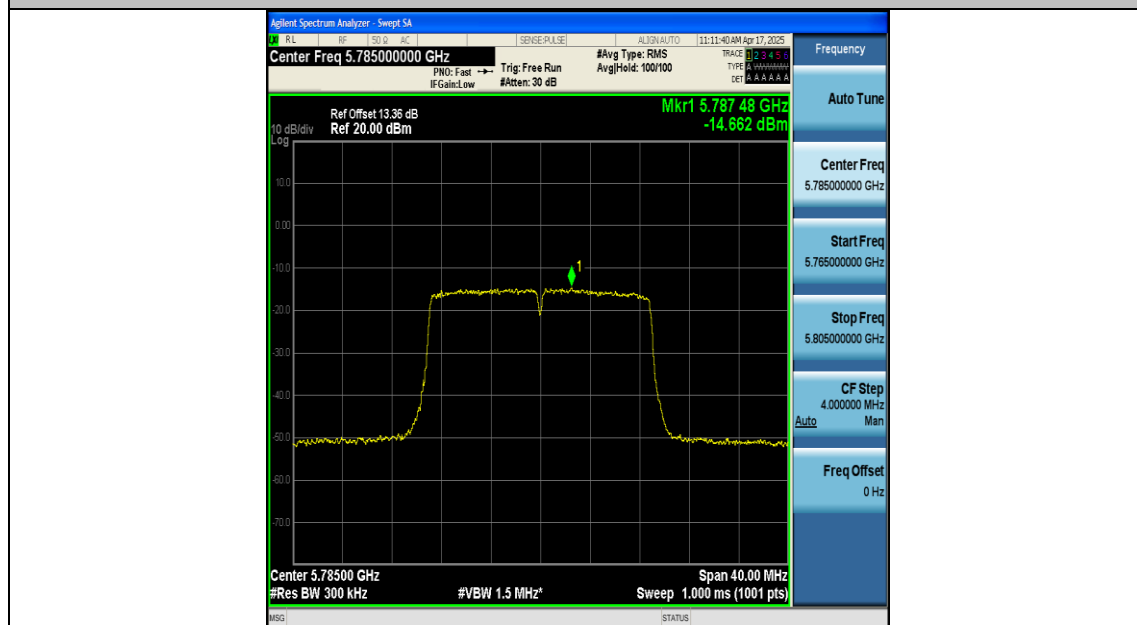
11AC20MIMO-Ant1-5745-PASS



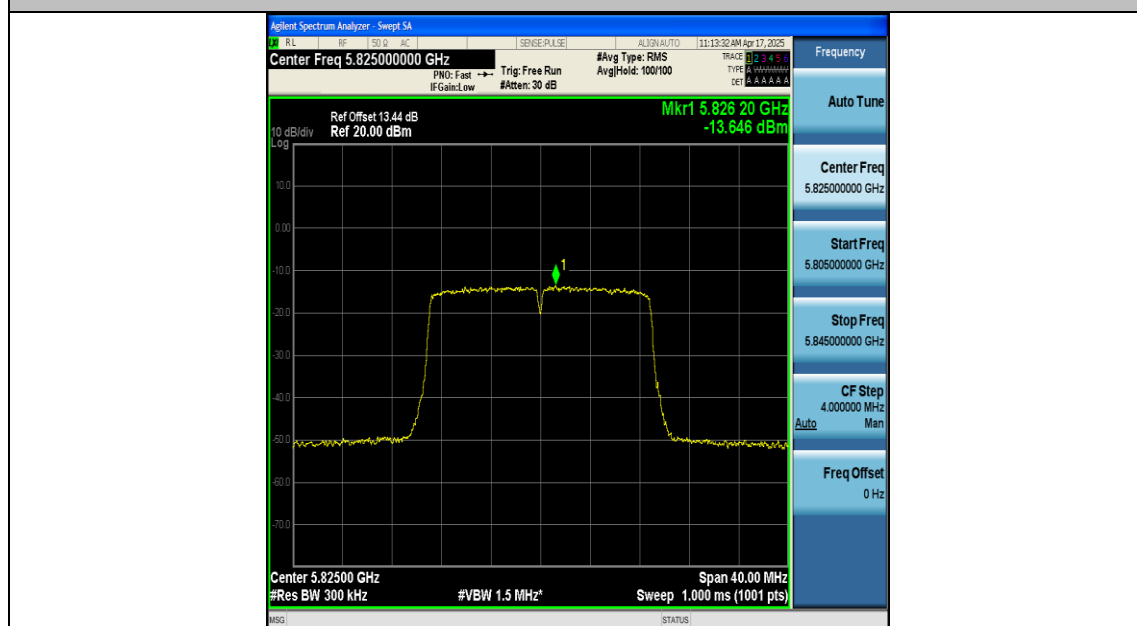
11AC20MIMO-Ant2-5745-PASS



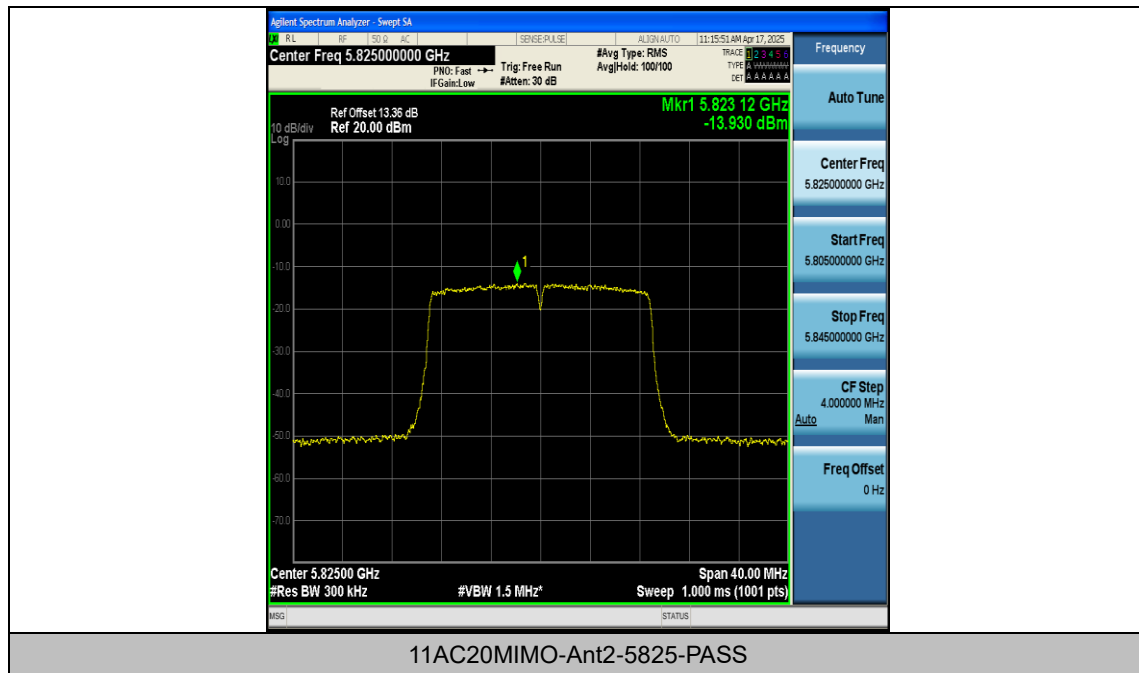
11AC20MIMO-Ant1-5785-PASS



11AC20MIMO-Ant2-5785-PASS



11AC20MIMO-Ant1-5825-PASS



## Appendix D: Band edge measurements

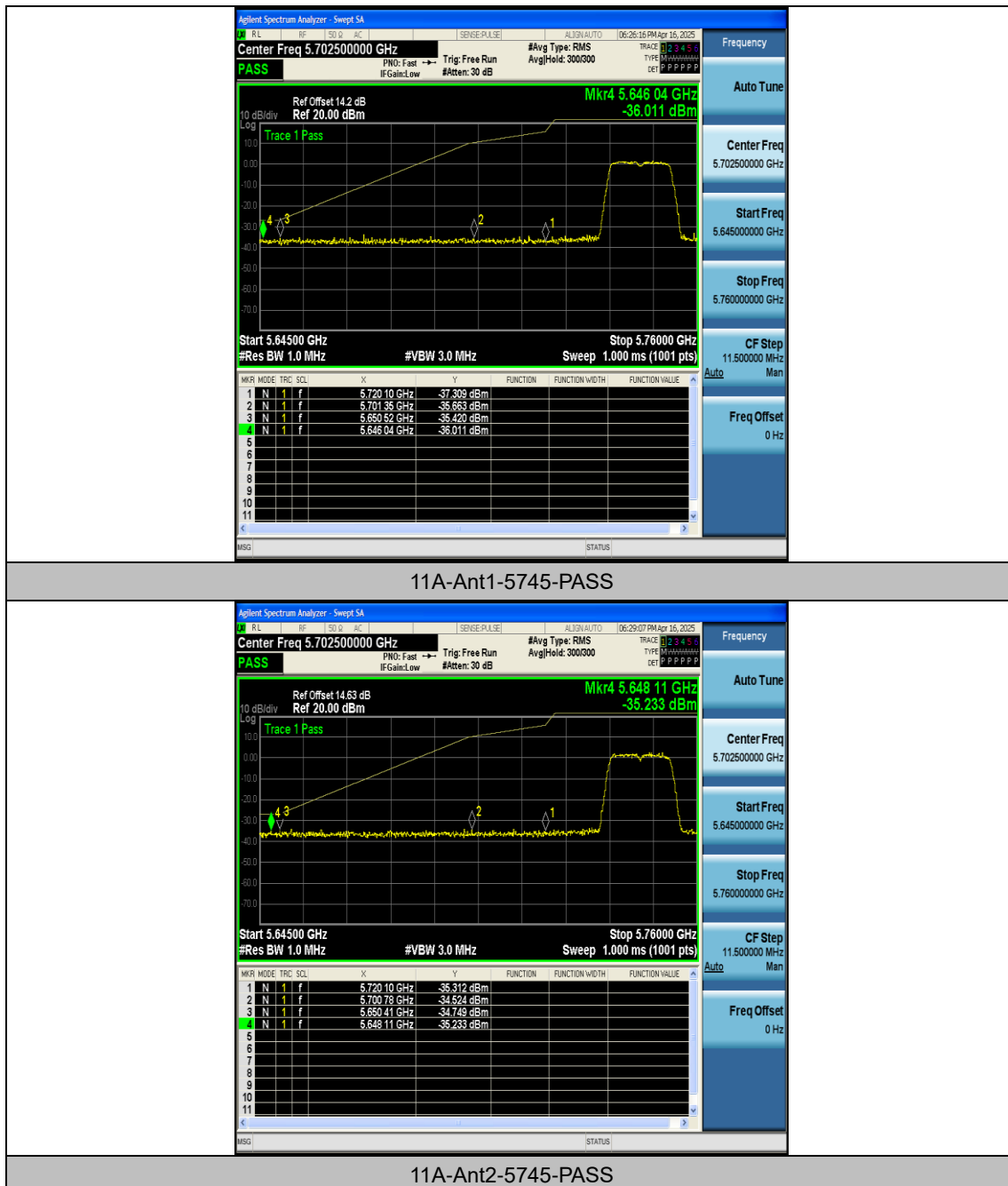
### Test Result

| Test Mode  | Antenna | Ch. Name | Frequency [MHz] | Freq. Range [MHz] | Result [dBm] | Limit [dBm] | Verdict |
|------------|---------|----------|-----------------|-------------------|--------------|-------------|---------|
| 11A        | Ant1    | Low      | 5745            | 5720~5725         | -37.31       | ≤15.82      | PASS    |
| 11A        | Ant1    | Low      | 5745            | 5700~5720         | -35.66       | ≤10.38      | PASS    |
| 11A        | Ant1    | Low      | 5745            | 5650~5700         | -35.42       | ≤-26.62     | PASS    |
| 11A        | Ant1    | Low      | 5745            | 5760~5650         | -36.01       | ≤-27        | PASS    |
| 11A        | Ant2    | Low      | 5745            | 5720~5725         | -35.31       | ≤15.82      | PASS    |
| 11A        | Ant2    | Low      | 5745            | 5700~5720         | -34.52       | ≤10.22      | PASS    |
| 11A        | Ant2    | Low      | 5745            | 5650~5700         | -34.75       | ≤-26.70     | PASS    |
| 11A        | Ant2    | Low      | 5745            | 5760~5650         | -35.23       | ≤-27        | PASS    |
| 11A        | Ant1    | High     | 5825            | 5850~5855         | -36.63       | ≤15.73      | PASS    |
| 11A        | Ant1    | High     | 5825            | 5855~5875         | -34.69       | ≤10.32      | PASS    |
| 11A        | Ant1    | High     | 5825            | 5875~5925         | -35.11       | ≤-26.71     | PASS    |
| 11A        | Ant1    | High     | 5825            | 5925~5935         | -35.12       | ≤-27        | PASS    |
| 11A        | Ant2    | High     | 5825            | 5850~5855         | -35.89       | ≤15.73      | PASS    |
| 11A        | Ant2    | High     | 5825            | 5855~5875         | -34.49       | ≤10.25      | PASS    |
| 11A        | Ant2    | High     | 5825            | 5875~5925         | -35.25       | ≤-26.31     | PASS    |
| 11A        | Ant2    | High     | 5825            | 5925~5935         | -33.05       | ≤-27        | PASS    |
| 11N20MI MO | Ant1    | Low      | 5745            | 5720~5725         | -34.82       | ≤17.13      | PASS    |
| 11N20MI MO | Ant1    | Low      | 5745            | 5700~5720         | -35.2        | ≤10.25      | PASS    |
| 11N20MI MO | Ant1    | Low      | 5745            | 5650~5700         | -36.79       | ≤-26.87     | PASS    |
| 11N20MI MO | Ant1    | Low      | 5745            | 5760~5650         | -36.74       | ≤-27        | PASS    |
| 11N20MI MO | Ant2    | Low      | 5745            | 5720~5725         | -37.02       | ≤16.08      | PASS    |
| 11N20MI MO | Ant2    | Low      | 5745            | 5700~5720         | -35.05       | ≤10.25      | PASS    |
| 11N20MI MO | Ant2    | Low      | 5745            | 5650~5700         | -35.55       | ≤-26.96     | PASS    |
| 11N20MI MO | Ant2    | Low      | 5745            | 5760~5650         | -35.43       | ≤-27        | PASS    |
| 11N20MI MO | Ant1    | High     | 5825            | 5850~5855         | -34.91       | ≤15.73      | PASS    |
| 11N20MI MO | Ant1    | High     | 5825            | 5855~5875         | -34.74       | ≤10.06      | PASS    |
| 11N20MI MO | Ant1    | High     | 5825            | 5875~5925         | -36.34       | ≤-26.91     | PASS    |
| 11N20MI MO | Ant1    | High     | 5825            | 5925~5935         | -35.01       | ≤-27        | PASS    |
| 11N20MI    | Ant2    | High     | 5825            | 5850~5855         | -36.73       | ≤15.73      | PASS    |

|                |      |      |      |           |        |         |      |
|----------------|------|------|------|-----------|--------|---------|------|
| MO             |      |      |      |           |        |         |      |
| 11N20MI<br>MO  | Ant2 | High | 5825 | 5855~5875 | -35.09 | ≤10.44  | PASS |
| 11N20MI<br>MO  | Ant2 | High | 5825 | 5875~5925 | -34.69 | ≤-26.81 | PASS |
| 11N20MI<br>MO  | Ant2 | High | 5825 | 5925~5935 | -35.42 | ≤-27    | PASS |
| 11AC20M<br>IMO | Ant1 | Low  | 5745 | 5720~5725 | -36.17 | ≤16.87  | PASS |
| 11AC20M<br>IMO | Ant1 | Low  | 5745 | 5700~5720 | -34.48 | ≤10.83  | PASS |
| 11AC20M<br>IMO | Ant1 | Low  | 5745 | 5650~5700 | -36.09 | ≤-26.02 | PASS |
| 11AC20M<br>IMO | Ant1 | Low  | 5745 | 5760~5650 | -35.81 | ≤-27    | PASS |
| 11AC20M<br>IMO | Ant2 | Low  | 5745 | 5720~5725 | -36.6  | ≤15.82  | PASS |
| 11AC20M<br>IMO | Ant2 | Low  | 5745 | 5700~5720 | -36.3  | ≤10.06  | PASS |
| 11AC20M<br>IMO | Ant2 | Low  | 5745 | 5650~5700 | -35.72 | ≤-26.70 | PASS |
| 11AC20M<br>IMO | Ant2 | Low  | 5745 | 5760~5650 | -35.87 | ≤-27    | PASS |
| 11AC20M<br>IMO | Ant1 | High | 5825 | 5850~5855 | -35.35 | ≤16.34  | PASS |
| 11AC20M<br>IMO | Ant1 | High | 5825 | 5855~5875 | -34.92 | ≤10.25  | PASS |
| 11AC20M<br>IMO | Ant1 | High | 5825 | 5875~5925 | -36.31 | ≤-26.51 | PASS |
| 11AC20M<br>IMO | Ant1 | High | 5825 | 5925~5935 | -35.35 | ≤-27    | PASS |
| 11AC20M<br>IMO | Ant2 | High | 5825 | 5850~5855 | -34.53 | ≤16.03  | PASS |
| 11AC20M<br>IMO | Ant2 | High | 5825 | 5855~5875 | -35.66 | ≤10.21  | PASS |
| 11AC20M<br>IMO | Ant2 | High | 5825 | 5875~5925 | -36.52 | ≤-26.81 | PASS |
| 11AC20M<br>IMO | Ant2 | High | 5825 | 5925~5935 | -35.11 | ≤-27    | PASS |

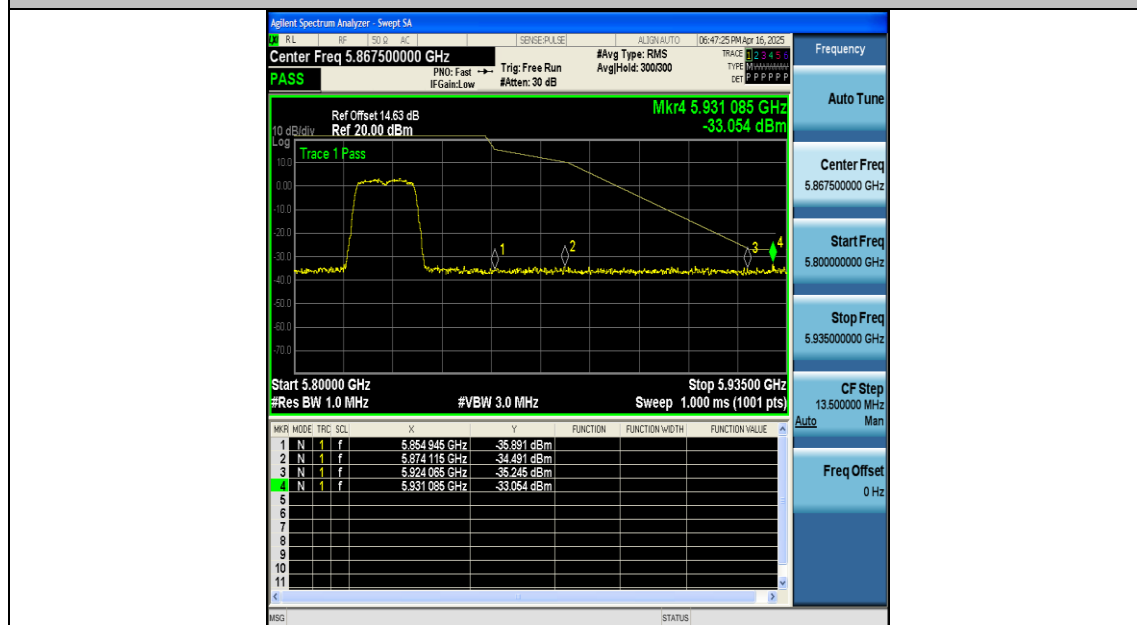
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs





11A-Ant1-5825-PASS



11A-Ant2-5825-PASS



11N20MIMO-Ant1-5745-PASS