























6.7 Restricted Band

Test Requirement : FCC Part15 E Section 15.407(b)

Test site : Measurement Distance: 3m

Test Limit :

| Frequency | Limit (dBuV/m @3m) | Remark |
|------------|-----------------------|---------------|
| Above 1GHz | 74 | Peak Value |
| | 54 | Average Value |

Test Procedure:

1. The EUT was placed on a styrofoam table which is 1.5m above ground plane.

- 2. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions. The spectrum was investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.
- 7. The radiation measurements are tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.
- 8. The test above 1GHz must be use the fully anechoic room, and the test below 1GHz use the half anechoic room

Test Result:

| Worst | case mode: | Ant2_802 | .11a(6Mb s) | Test o | hannel: | 36 | | |
|-------|----------------|-----------------------|----------------|-------------------------------|-------------------|--------------|----------|------------------|
| NO. | Freq. [MHz] | level [dBµV/ m] | Factor [dB] | Emission level [dBµV/m] | Limit [dBµV/m] | Over [dB] | Polarity | Detector Type |
| 1 | 5150 | 50.72 | 6.53 | 57.25 | 68.2 | 10.95 | Н | Peak |
| 2 | 5150 | 39.81 | 6.53 | 46.34 | 54 | 7.66 | Н | Average |
| 3 | 5150 | 49.09 | 6.53 | 55.62 | 68.2 | 12.58 | V | Peak |
| 4 | 5150 | 38.37 | 6.53 | 44.9 | 54 | 9.1 | V | Average |



| Worst | case mode: | Ant2_802 | .11a(6Mb s) | Test o | hannel: | 48 | | |
|-------|----------------|-----------------------|----------------|-------------------------------|-------------------|--------------|----------|------------------|
| NO. | Freq. [MHz] | level [dBµV/ m] | Factor [dB] | Emission level [dBµV/m] | Limit [dBµV/m] | Over [dB] | Polarity | Detector Type |
| 1 | 5350 | 50.41 | 6.56 | 56.97 | 68.2 | 11.23 | Н | Peak |
| 2 | 5350 | 39.79 | 6.56 | 46.35 | 54 | 7.65 | Н | Average |
| 3 | 5350 | 49.86 | 6.56 | 56.42 | 68.2 | 11.78 | V | Peak |
| 4 | 5350 | 38.35 | 6.56 | 44.91 | 54 | 9.09 | V | Average |

| Worst | case mode: | Ant2_802 | .11a(6Mb s) | Test o | hannel: | 165 | | |
|-------|----------------|-----------------------|----------------|-------------------------------|-------------------|--------------|----------|------------------|
| NO. | Freq. [MHz] | level [dBµV/ m] | Factor [dB] | Emission level [dBµV/m] | Limit [dBµV/m] | Over [dB] | Polarity | Detector Type |
| 1 | 5850 | 50.16 | 6.64 | 56.8 | 68.2 | 11.4 | Н | Peak |
| 2 | 5850 | 40.47 | 6.64 | 47.11 | 54 | 6.89 | Н | Average |
| 3 | 5850 | 48.84 | 6.64 | 55.48 | 68.2 | 12.72 | V | Peak |
| 4 | 5850 | 37.78 | 6.64 | 44.42 | 54 | 9.58 | V | Average |

Note: Only recorded the worst case in the report.



7 Emission Bandwidth and Occupied Bandwidth

Test Requirement : FCC CFR47 Part 15 Section 15.407(a)(e)

Test Method : ANSI C63.10:2013

According to FCC §15.407(a),

The maximum power spectral density is measured as a conducted

emission by direct connection of a calibrated

test instrument to the equipment under test. If the device cannot be

connected directly, alternative techniques

acceptable to the Commission may be used. Measurements in the 5.725-

5.85 GHz band are made over a

reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the

device, whichever is less.

Test Limit Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725

GHz bands are made over a bandwidth

of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less.

A narrower resolution bandwidth

can be used, provided that the measured power is integrated over the full

reference bandwidth.

As per FCC §15.407(e): for equipment operating in the band 5725 – 5850

MHz, the minimum 6 dB bandwidth of U-NII devices shall be 500 kHz.

7.1 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, Emission Bandwidth (EBW)

a) Set RBW = approximately 1% of the emission bandwidth; b) Set the VBW > RBW; c) Detector = Peak; d) Trace mode = max hold; e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%;99% Occupied Bandwidth

The 99% occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99% occupied bandwidth is required only as a condition for using the optional bandedge measurement techniques described in II.G.3.d). Measurements of 99% occupied bandwidth may also optionally be used in lieu of the EBW to define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:

- 1. Set center frequency to the nominal EUT channel center frequency.
- 2. Set span = 1.5 times to 5.0 times the OBW.
- 3. Set RBW = 1% to 5% of the OBW
- 4. Set VBW ≥ 3 RBW
- 5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise,

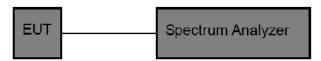
peak detection and max hold mode (until the trace stabilizes) shall be used.

- 6. Use the 99 % power bandwidth function of the instrument (if available).
- 7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency.



The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

7.2 Test setup



7.3 Test Result

PASS

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations / data rates and antenna ports. Following channel was selected for the final test as listed below.

26 dB emission bandwidth:

| TestMode | Antenna | Frequency[MHz] | 26db EBW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|------------|---------|----------------|-------------------|----------|----------|------------|---------|
| 11A | Ant1 | 5745 | 25.040 | 5732.680 | 5757.720 | | - |
| 11A | Ant1 | 5785 | 24.520 | 5772.160 | 5796.680 | | |
| 11A | Ant1 | 5825 | 20.640 | 5814.880 | 5835.520 | | |
| 11A | Ant1 | 5180 | 20.720 | 5169.800 | 5190.520 | | |
| 11A | Ant1 | 5200 | 20.240 | 5189.840 | 5210.080 | | |
| 11A | Ant1 | 5240 | 20.680 | 5229.800 | 5250.480 | | |
| 11N20SISO | Ant1 | 5180 | 20.960 | 5169.480 | 5190.440 | | |
| 11N20SISO | Ant1 | 5745 | 32.760 | 5729.280 | 5762.040 | | |
| 11N20SISO | Ant1 | 5785 | 29.600 | 5769.880 | 5799.480 | | - |
| 11N20SISO | Ant1 | 5825 | 23.040 | 5813.880 | 5836.920 | | |
| 11N40SISO | Ant1 | 5755 | 40.320 | 5736.600 | 5776.920 | | |
| 11N40SISO | Ant1 | 5795 | 35.840 | 5777.160 | 5813.000 | | |
| 11AC20SISO | Ant1 | 5745 | 31.800 | 5730.160 | 5761.960 | | |
| 11AC20SISO | Ant1 | 5785 | 28.280 | 5769.240 | 5797.520 | | |
| 11AC20SISO | Ant1 | 5825 | 23.840 | 5813.760 | 5837.600 | | |
| 11N20SISO | Ant1 | 5200 | 20.880 | 5189.520 | 5210.400 | | |
| 11N20SISO | Ant1 | 5240 | 20.640 | 5229.760 | 5250.400 | | |
| 11N40SISO | Ant1 | 5190 | 50.960 | 5168.160 | 5219.120 | | |
| 11N40SISO | Ant1 | 5230 | 48.960 | 5206.160 | 5255.120 | | |
| 11AC20SISO | Ant1 | 5180 | 20.800 | 5169.400 | 5190.200 | | |
| 11AC20SISO | Ant1 | 5200 | 20.680 | 5189.720 | 5210.400 | | |
| 11AC20SISO | Ant1 | 5240 | 20.880 | 5229.440 | 5250.320 | | |
| TestMode | Antenna | Frequency[MHz] | 26db EBW | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
| | | | [MHz] | | | | |
| 11A | Ant2 | 5180 | 29.160 | 5165.440 | 5194.600 | | |
| 11A | Ant2 | 5200 | 22.440 | 5189.800 | 5212.240 | | |
| 11A | Ant2 | 5240 | 20.640 | 5229.840 | 5250.480 | | |
| 11A | Ant2 | 5745 | 31.920 | 5729.880 | 5761.800 | | |
| 11A | Ant2 | 5785 | 32.520 | 5769.120 | 5801.640 | | |
| 11A | Ant2 | 5825 | 34.320 | 5808.640 | 5842.960 | | |
| 11N20SISO | Ant2 | 5180 | 26.920 | 5165.520 | 5192.440 | | |
| 11N20SISO | Ant2 | 5200 | 23.520 | 5188.800 | 5212.320 | | |
| 11N20SISO | Ant2 | 5240 | 21.000 | 5229.640 | 5250.640 | | |



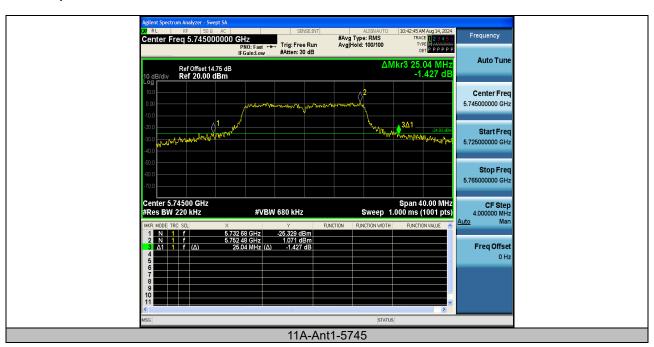
| | 5763.480 | 5728.520 | 34.960 | 5745 | Ant2 | 11N20SISO |
|------|----------|----------|--------|------|------|------------|
| | 5801.760 | 5768.560 | 33.200 | 5785 | Ant2 | 11N20SISO |
| | 5841.040 | 5808.720 | 32.320 | 5825 | Ant2 | 11N20SISO |
| | 5214.480 | 5169.680 | 44.800 | 5190 | Ant2 | 11N40SISO |
| | 5253.040 | 5209.280 | 43.760 | 5230 | Ant2 | 11N40SISO |
| | 5783.560 | 5728.120 | 55.440 | 5755 | Ant2 | 11N40SISO |
| | 5817.160 | 5774.280 | 42.880 | 5795 | Ant2 | 11N40SISO |
| | 5192.320 | 5164.360 | 27.960 | 5180 | Ant2 | 11AC20SISO |
| | 5212.120 | 5187.560 | 24.560 | 5200 | Ant2 | 11AC20SISO |
| | 5250.360 | 5229.120 | 21.240 | 5240 | Ant2 | 11AC20SISO |
| | 5762.680 | 5729.920 | 32.760 | 5745 | Ant2 | 11AC20SISO |
| | 5802.080 | 5769.320 | 32.760 | 5785 | Ant2 | 11AC20SISO |
| | 5843.560 | 5807.440 | 36.120 | 5825 | Ant2 | 11AC20SISO |



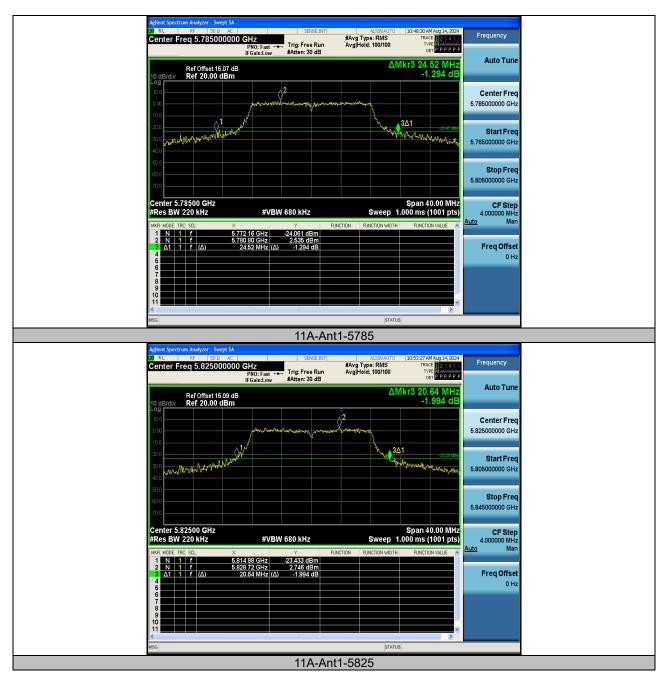
minimum 6 dB bandwidth:

| TestMode | Antenna | Frequency[MHz] | 6db EBW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|------------|---------|----------------|------------------|----------|----------|------------|---------|
| 11A | Ant1 | 5745 | 16.320 | 5736.840 | 5753.160 | 0.5 | PASS |
| 11A | Ant1 | 5785 | 16.320 | 5776.800 | 5793.120 | 0.5 | PASS |
| 11A | Ant1 | 5825 | 16.280 | 5816.840 | 5833.120 | 0.5 | PASS |
| 11N20SISO | Ant1 | 5745 | 16.320 | 5737.080 | 5753.400 | 0.5 | PASS |
| 11N20SISO | Ant1 | 5785 | 17.560 | 5776.200 | 5793.760 | 0.5 | PASS |
| 11N20SISO | Ant1 | 5825 | 17.160 | 5816.560 | 5833.720 | 0.5 | PASS |
| 11N40SISO | Ant1 | 5755 | 17.600 | 5746.200 | 5763.800 | 0.5 | PASS |
| 11N40SISO | Ant1 | 5795 | 17.600 | 5786.200 | 5803.800 | 0.5 | PASS |
| 11AC20SISO | Ant1 | 5745 | 17.400 | 5736.360 | 5753.760 | 0.5 | PASS |
| 11AC20SISO | Ant1 | 5785 | 16.920 | 5776.560 | 5793.480 | 0.5 | PASS |
| 11AC20SISO | Ant1 | 5825 | 17.560 | 5816.200 | 5833.760 | 0.5 | PASS |
| TestMode | Antenna | Frequency[MHz] | 6db EBW | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
| | | | [MHz] | | | | |
| 11A | Ant2 | 5745 | 16.000 | 5736.840 | 5752.840 | 0.5 | PASS |
| 11A | Ant2 | 5785 | 16.320 | 5776.800 | 5793.120 | 0.5 | PASS |
| 11A | Ant2 | 5825 | 16.320 | 5816.800 | 5833.120 | 0.5 | PASS |
| 11N20SISO | Ant2 | 5745 | 16.920 | 5736.440 | 5753.360 | 0.5 | PASS |
| 11N20SISO | Ant2 | 5785 | 16.800 | 5776.520 | 5793.320 | 0.5 | PASS |
| 11N20SISO | Ant2 | 5825 | 17.560 | 5816.200 | 5833.760 | 0.5 | PASS |
| 11N40SISO | Ant2 | 5755 | 17.600 | 5746.120 | 5763.720 | 0.5 | PASS |
| 11N40SISO | Ant2 | 5795 | 17.600 | 5786.120 | 5803.720 | 0.5 | PASS |
| 11AC20SISO | Ant2 | 5745 | 16.280 | 5737.080 | 5753.360 | 0.5 | PASS |
| 11AC20SISO | Ant2 | 5785 | 16.800 | 5776.520 | 5793.320 | 0.5 | PASS |
| 11AC20SISO | Ant2 | 5825 | 16.880 | 5816.600 | 5833.480 | 0.5 | PASS |

Test Graphs:







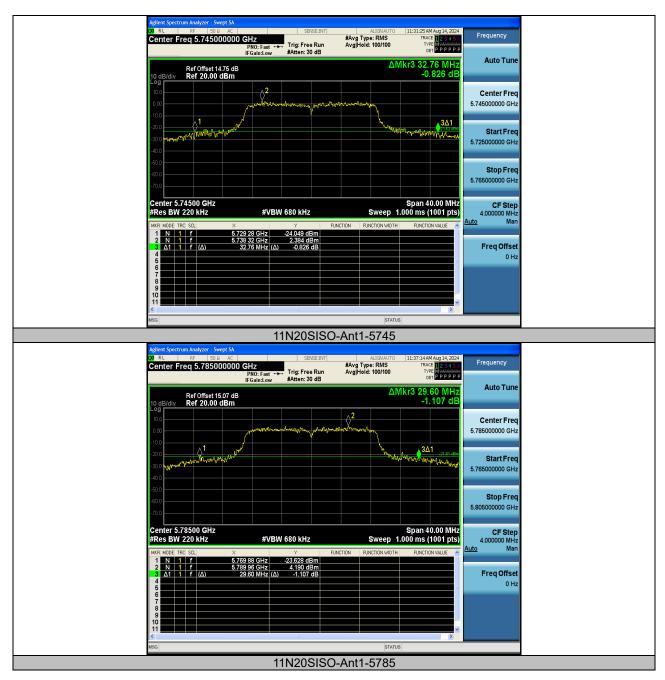




















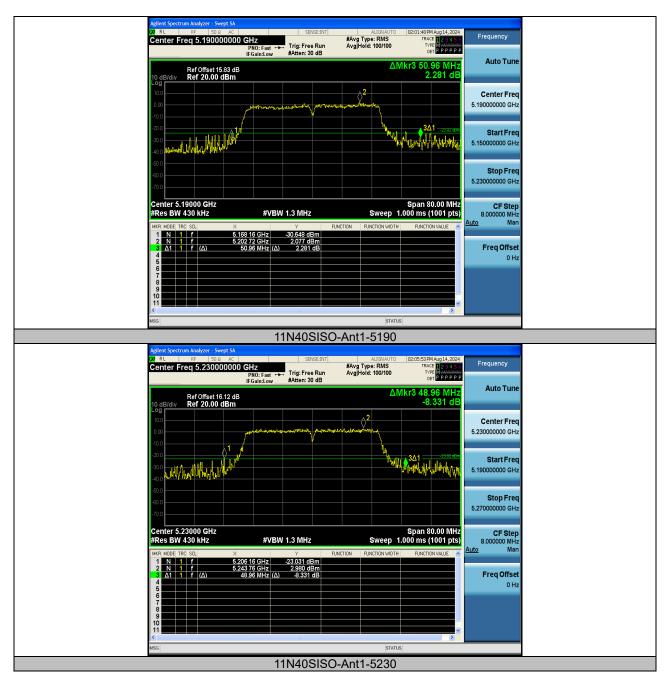










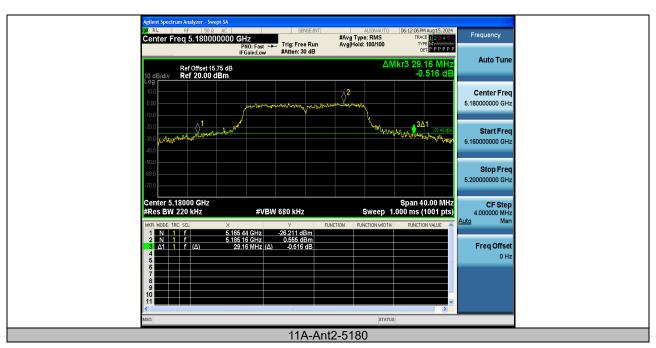




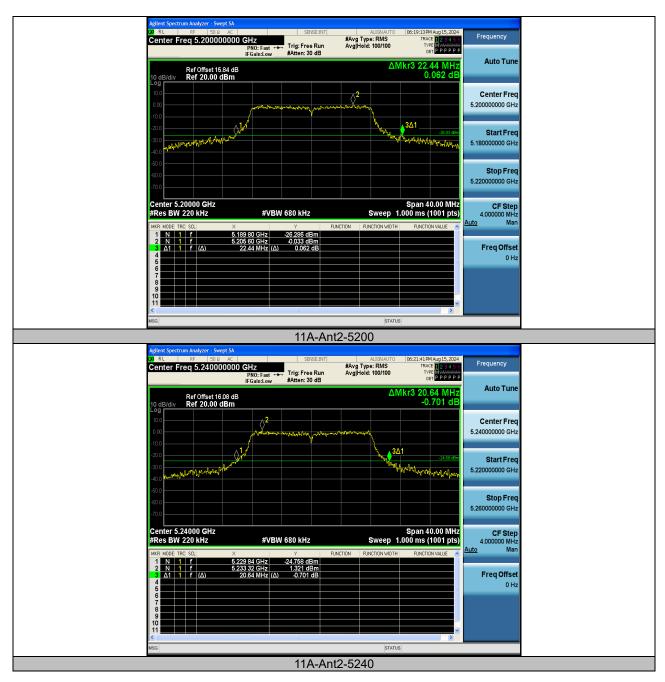




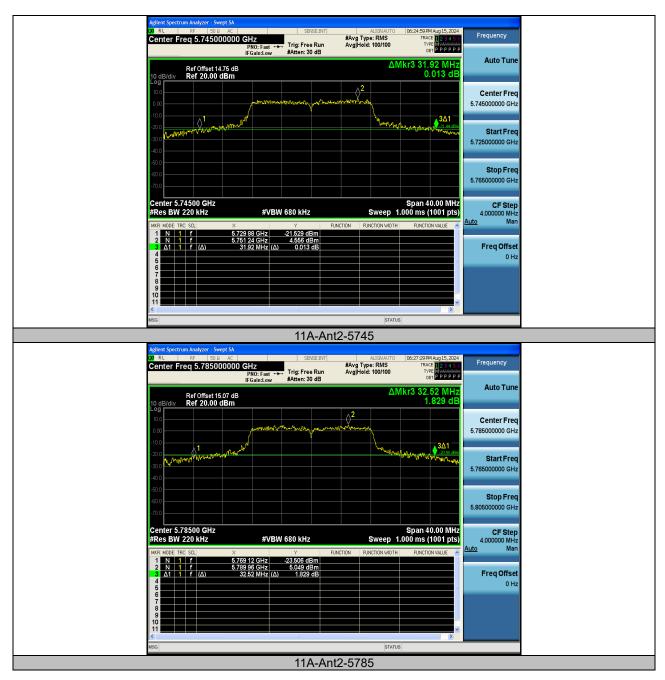




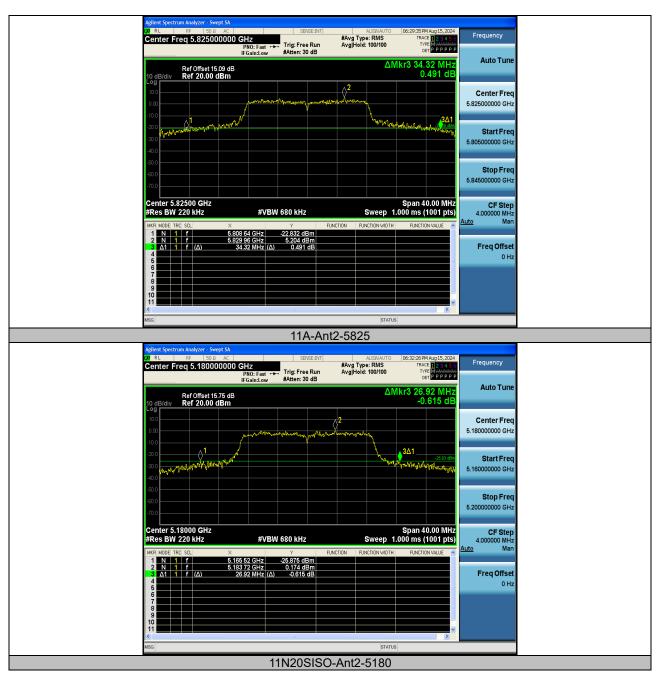




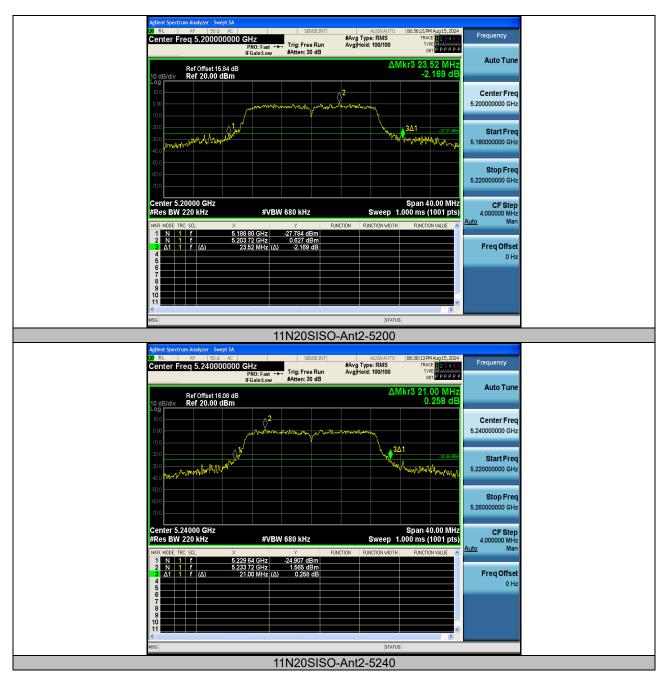




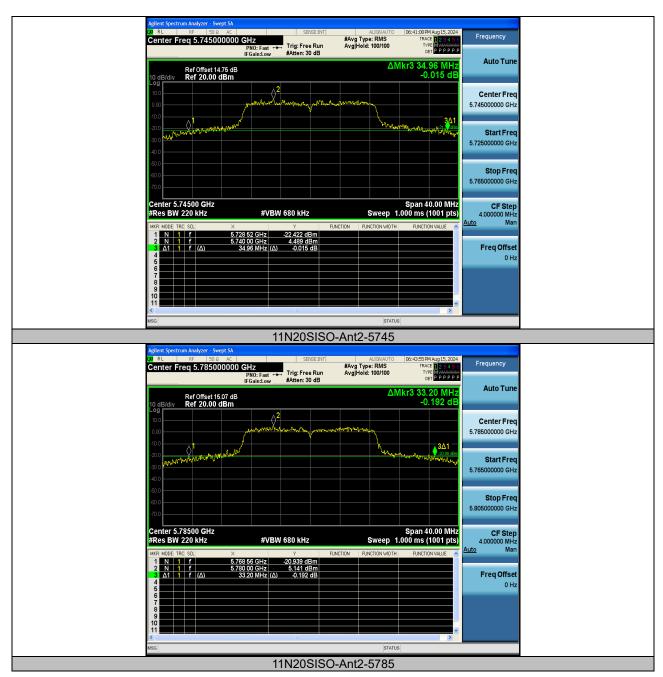
















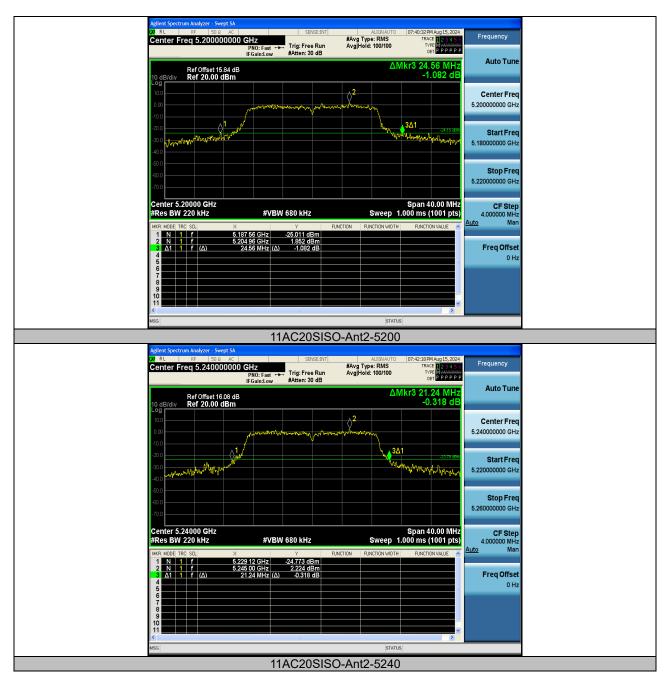




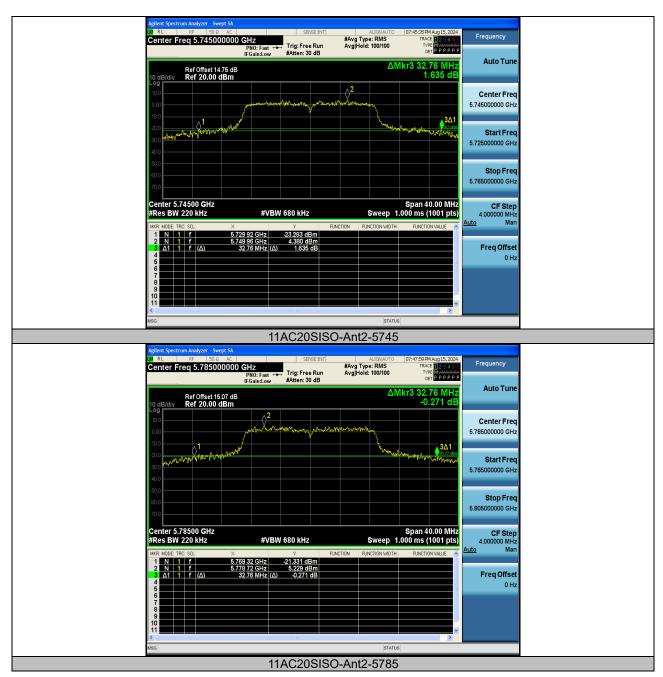




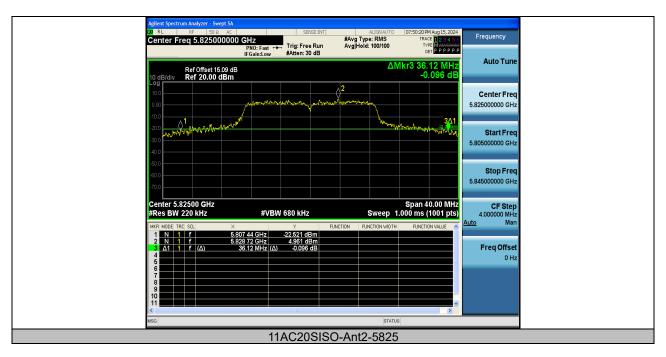










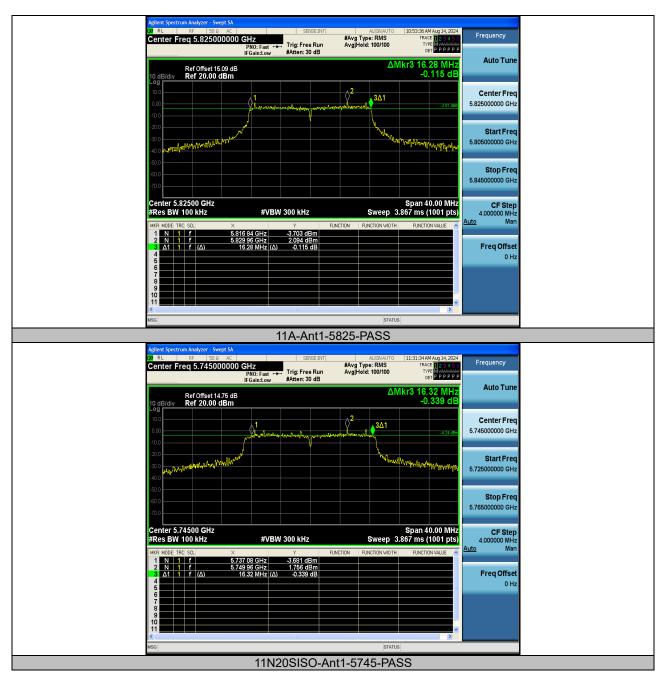




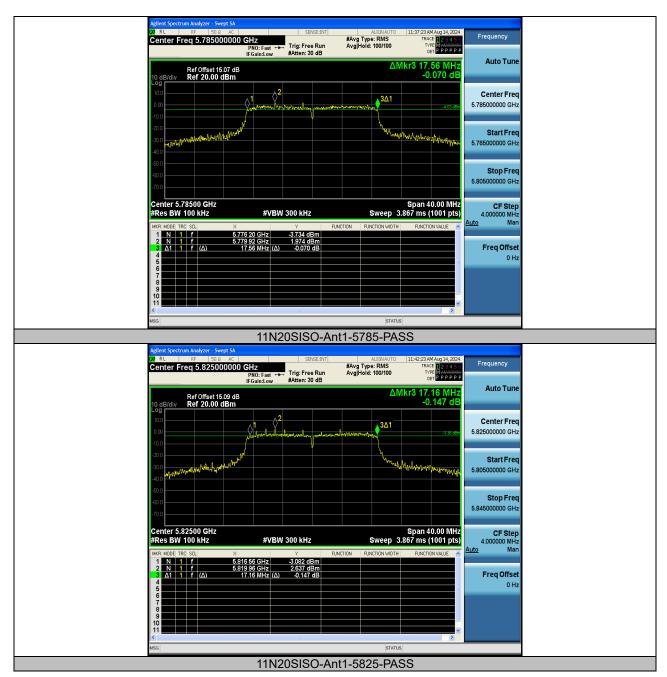
Min emission bandwidth Test Graphs:











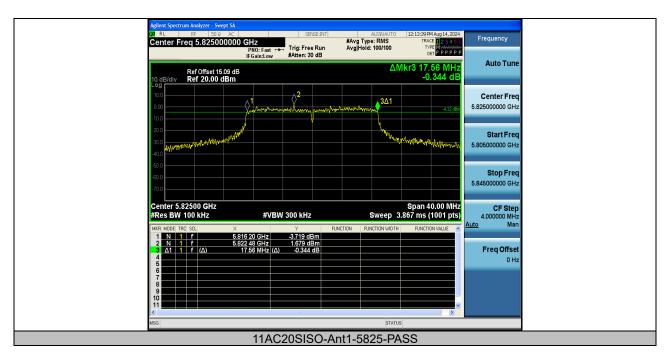


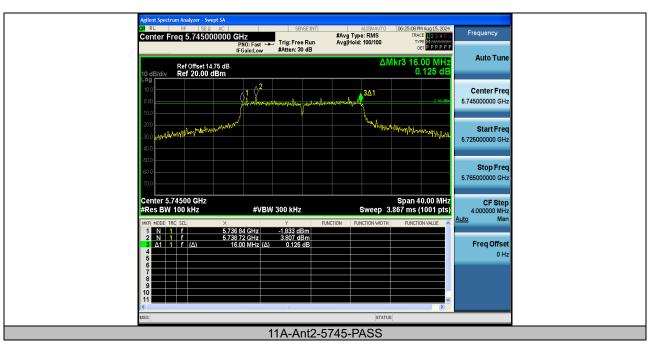




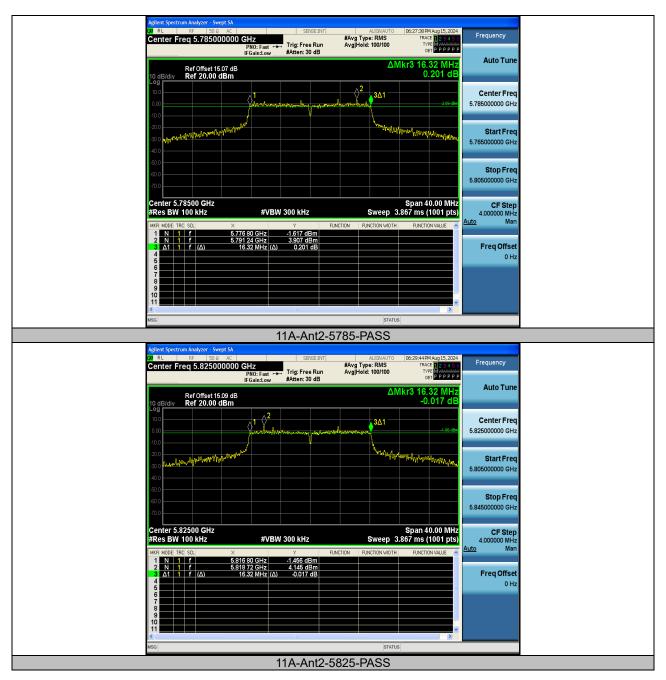




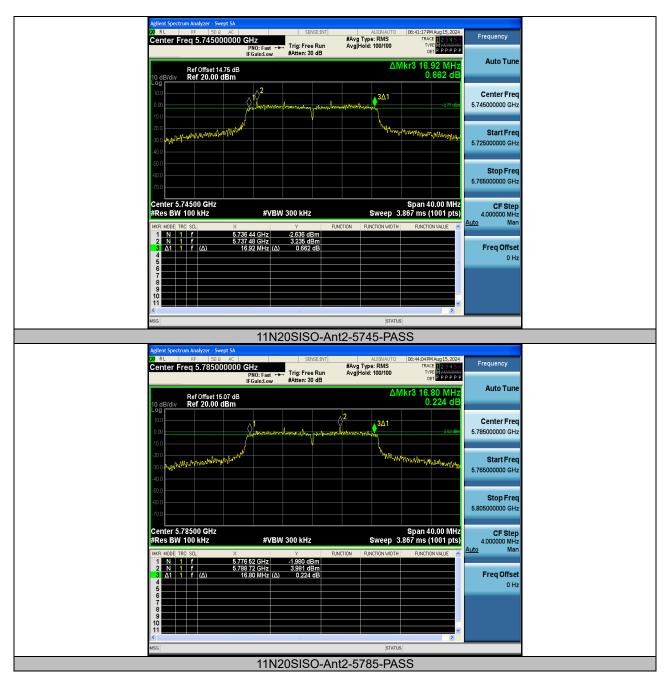




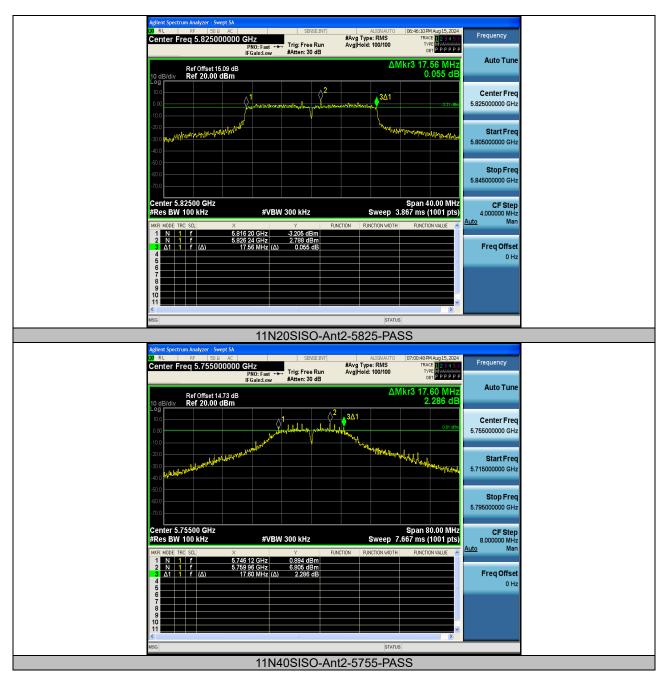








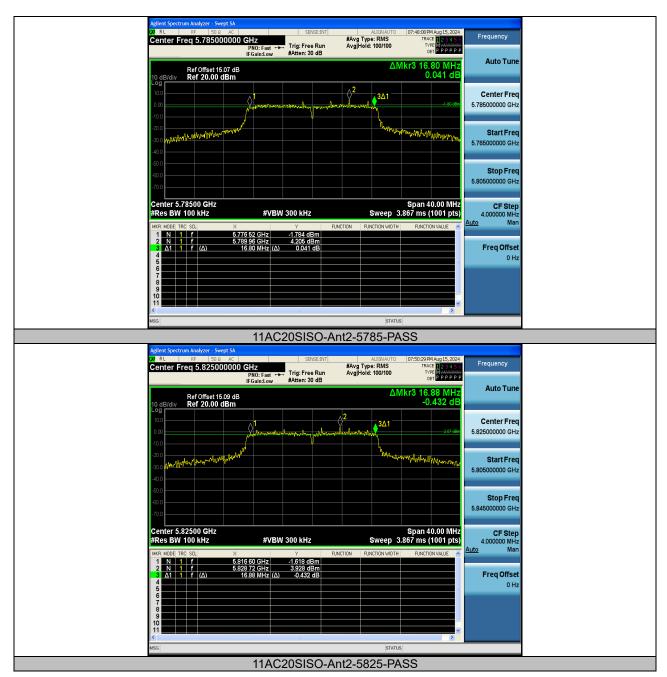














8 Maximum Conducted Output Power

Test Requirement : FCC CFR47 Part 15 Section 15.407(a)

Test Method : ANSI C63.10:2013

Test Limit : For client devices in the 5.15-5.25 GHz band, the maximum

conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6

dBi

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-topoint U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-topoint operations exclude the use of point-to multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

8.1 Test Setup



8.2 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, The use Power Meter 1. Place the EUT on a bench and set it in transmitting mode. 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to a Power meter.





8.3 Test Result

| Test Mode | Antenna | Frequency[MHz] | Result [dBm] | Limit [dBm] | Verdict |
|--------------|---------|----------------|--------------|-------------|---------|
| 11A | Ant1 | 5180 | 10.46 | ≤23.98 | PASS |
| 11A | Ant1 | 5200 | 12.32 | ≤23.98 | PASS |
| 11A | Ant1 | 5240 | 12.76 | ≤23.98 | PASS |
| 11A | Ant1 | 5745 | 11.10 | ≤30.00 | PASS |
| 11A | Ant1 | 5785 | 13.14 | ≤30.00 | PASS |
| 11A | Ant1 | 5825 | 12.44 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5745 | 12.54 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5785 | 14.18 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5825 | 13.78 | ≤30.00 | PASS |
| 11N40SISO | Ant1 | 5755 | 11.62 | ≤30.00 | PASS |
| 11N40SISO | Ant1 | 5795 | 13.18 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5180 | 11.01 | ≤23.98 | PASS |
| 11N20SISO | Ant1 | 5200 | 12.79 | ≤23.98 | PASS |
| 11AC20SISO | Ant1 | 5745 | 12.51 | ≤30.00 | PASS |
| 11AC20SISO | Ant1 | 5785 | 13.45 | ≤30.00 | PASS |
| 11AC20SISO | Ant1 | 5825 | 13.78 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5240 | 13.88 | ≤23.98 | PASS |
| 11N40SISO | Ant1 | 5190 | 12.02 | ≤23.98 | PASS |
| 11N40SISO | Ant1 | 5230 | 14.01 | ≤23.98 | PASS |
| 11AC20SISO | Ant1 | 5180 | 10.87 | ≤23.98 | PASS |
| 11AC20SISO | Ant1 | 5200 | 12.99 | ≤23.98 | PASS |
| 11AC20SISO | Ant1 | 5240 | 14.39 | ≤23.98 | PASS |



| Toot | | | | | |
|--------------|---------|----------------|--------------|-------------|---------|
| Test Mode | Antenna | Frequency[MHz] | Result [dBm] | Limit [dBm] | Verdict |
| 11A | Ant2 | 5180 | 11.05 | ≤23.98 | PASS |
| 11A | Ant2 | 5200 | 10.82 | ≤23.98 | PASS |
| 11A | Ant2 | 5240 | 11.67 | ≤23.98 | PASS |
| 11A | Ant2 | 5745 | 14.15 | ≤30.00 | PASS |
| 11A | Ant2 | 5785 | 15.00 | ≤30.00 | PASS |
| 11A | Ant2 | 5825 | 14.50 | ≤30.00 | PASS |
| 11N20SISO | Ant2 | 5180 | 10.21 | ≤23.98 | PASS |
| 11N20SISO | Ant2 | 5200 | 10.56 | ≤23.98 | PASS |
| 11N20SISO | Ant2 | 5240 | 11.54 | ≤23.98 | PASS |
| 11N20SISO | Ant2 | 5745 | 14.34 | ≤30.00 | PASS |
| 11N20SISO | Ant2 | 5785 | 15.01 | ≤30.00 | PASS |
| 11N20SISO | Ant2 | 5825 | 14.23 | ≤30.00 | PASS |
| 11N40SISO | Ant2 | 5190 | 13.36 | ≤23.98 | PASS |
| 11N40SISO | Ant2 | 5230 | 14.70 | ≤23.98 | PASS |
| 11N40SISO | Ant2 | 5755 | 17.12 | ≤30.00 | PASS |
| 11N40SISO | Ant2 | 5795 | 15.27 | ≤30.00 | PASS |
| 11AC20SISO | Ant2 | 5180 | 10.73 | ≤23.98 | PASS |
| 11AC20SISO | Ant2 | 5200 | 11.42 | ≤23.98 | PASS |
| 11AC20SISO | Ant2 | 5240 | 12.04 | ≤23.98 | PASS |
| 11AC20SISO | Ant2 | 5745 | 13.78 | ≤30.00 | PASS |
| 11AC20SISO | Ant2 | 5785 | 14.85 | ≤30.00 | PASS |
| 11AC20SISO | Ant2 | 5825 | 14.77 | ≤30.00 | PASS |



9 Power Spectral density

Test Requirement : FCC CFR47 Part 15 Section 15.2407(a)

Test Method : ANSI C63.10:2013

Test Limit : For client devices in the 5.15-5.25 GHz band, the maximum conducted

output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6

dBi..

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHzband. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed. point-to-point operations exclude the use of point-to-multipoint systems. omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations

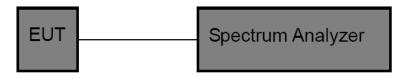


9.1 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 and ANSI 63.10: 2013 Sec 10.3.7.For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set the RBW to 1 MHz.
- b) Set the VBW to be at least 1 MHz (a VBW of 3 MHz is desirable).
- c) Set the frequency span to examine the spectrum across a convenient frequency segment (e.g., 600 MHz).
- d) Select the power averaging (rms) detector.
- e) Set the sweep time so that there is no more than a 1 ms integration period over each measurement bin.
- f) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

9.2 Test Setup





9.3 Test Result

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations / data rates and antenna ports.

Following channel was selected for the final test as listed below

| TestMode | Antenna | Frequency[MHz] | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|------------|---------|----------------|------------------|----------------|---------|
| 11A | Ant1 | 5180 | 0.4 | ≤11.00 | PASS |
| 11A | Ant1 | 5200 | 1.73 | ≤11.00 | PASS |
| 11A | Ant1 | 5240 | 1.96 | ≤11.00 | PASS |
| 11A | Ant1 | 5785 | -0.4 | ≤30.00 | PASS |
| 11A | Ant1 | 5825 | -0.57 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5745 | -1.09 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5785 | 0.1 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5825 | 0 | ≤30.00 | PASS |
| 11N40SISO | Ant1 | 5755 | -2.08 | ≤30.00 | PASS |
| 11N40SISO | Ant1 | 5795 | -1.55 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5180 | 0.4 | ≤11.00 | PASS |
| 11N20SISO | Ant1 | 5200 | 2.09 | ≤11.00 | PASS |
| 11AC20SISO | Ant1 | 5745 | -1.43 | ≤30.00 | PASS |
| 11AC20SISO | Ant1 | 5785 | 0.51 | ≤30.00 | PASS |
| 11AC20SISO | Ant1 | 5825 | -0.09 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 5240 | 3.05 | ≤11.00 | PASS |
| 11N40SISO | Ant1 | 5190 | -0.97 | ≤11.00 | PASS |
| 11N40SISO | Ant1 | 5230 | 0.55 | ≤11.00 | PASS |
| 11AC20SISO | Ant1 | 5180 | 0.26 | ≤11.00 | PASS |
| 11AC20SISO | Ant1 | 5200 | 2.72 | ≤11.00 | PASS |
| 11AC20SISO | Ant1 | 5240 | 3.88 | ≤11.00 | PASS |

| TestMode | Antenna | Frequency[MHz] | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|------------|---------|----------------|------------------|----------------|---------|
| 11A | Ant2 | 5180 | 0.04 | ≤11.00 | PASS |
| 11A | Ant2 | 5200 | -0.1 | ≤11.00 | PASS |
| 11A | Ant2 | 5240 | 0.44 | ≤11.00 | PASS |
| 11A | Ant2 | 5745 | 0.41 | ≤30.00 | PASS |
| 11A | Ant2 | 5785 | 1.39 | ≤30.00 | PASS |
| 11A | Ant2 | 5825 | 1.16 | ≤30.00 | PASS |
| 11N20SISO | Ant2 | 5180 | -0.59 | ≤11.00 | PASS |
| 11N20SISO | Ant2 | 5200 | -0.33 | ≤11.00 | PASS |
| 11N20SISO | Ant2 | 5240 | 0.63 | ≤11.00 | PASS |
| 11N20SISO | Ant2 | 5745 | 0.44 | ≤30.00 | PASS |
| 11N20SISO | Ant2 | 5785 | 0.95 | ≤30.00 | PASS |
| 11N20SISO | Ant2 | 5825 | 0.3 | ≤30.00 | PASS |
| 11N40SISO | Ant2 | 5190 | 1.81 | ≤11.00 | PASS |
| 11N40SISO | Ant2 | 5230 | 3.52 | ≤11.00 | PASS |
| 11N40SISO | Ant2 | 5755 | 2.82 | ≤30.00 | PASS |
| 11N40SISO | Ant2 | 5795 | 1.38 | ≤30.00 | PASS |
| 11AC20SISO | Ant2 | 5180 | -0.58 | ≤11.00 | PASS |



| 11AC20SISO | Ant2 | 5200 | 0.18 | ≤11.00 | PASS |
|------------|------|------|------|--------|------|
| 11AC20SISO | Ant2 | 5240 | 0.66 | ≤11.00 | PASS |
| 11AC20SISO | Ant2 | 5745 | 0.51 | ≤30.00 | PASS |
| 11AC20SISO | Ant2 | 5785 | 1.22 | ≤30.00 | PASS |
| 11AC20SISO | Ant2 | 5825 | 1.26 | ≤30.00 | PASS |

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.



Test Graphs:

