













































## 9. 26dB Bandwidth, 6dB Bandwidth and 99% Bandwidth

### 9.1. Block Diagram of Test Setup

Same as section 8.1

### 9.2. Limits

| FCC Part15, Subpart E/ RSS-247 |                                |                                                            |
|--------------------------------|--------------------------------|------------------------------------------------------------|
| Test Item                      | Limit                          | Frequency Range (MHz)                                      |
| Bandwidth                      | 26 dB Bandwidth                | 5150 - 5250                                                |
|                                | 26 dB Bandwidth                | 5250 - 5350                                                |
|                                | 26 dB Bandwidth                | For FCC: 5470 - 5725<br>For IC: 5470 - 5600<br>5650 - 5725 |
|                                | Minimum 500 kHz 6 dB Bandwidth | 5725 - 5850                                                |
|                                | For reporting purposes only.   | For IC: 5150 ~ 5825                                        |

### 9.3. Test Procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

|                  |                                                                                                                                                                         |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Center Frequency | The centre frequency of the channel under test                                                                                                                          |
| Detector         | Peak                                                                                                                                                                    |
| RBW              | For 6 dB Bandwidth: RBW=100 kHz<br>For 26 dB Bandwidth: approximately 1% of the emission bandwidth.<br>For 99 % Occupied Bandwidth: approximately 1 % ~ 5 % of the OBW. |
| VBW              | For 6 dB Bandwidth: VBW=300 kHz<br>For 26 dB Bandwidth: >3*RBW<br>For 99 % Bandwidth: >3*RBW                                                                            |
| Trace            | Max hold                                                                                                                                                                |
| Sweep            | Auto couple                                                                                                                                                             |

(2) Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB and 6 dB relative to the maximum level measured in the fundamental emission.

(3) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

### 9.4. Test Result

| Test Mode | Ant. | Freq. (MHz) | OCB (MHz) | FL (MHz)  | FH (MHz)  | Limit (MHz) | Verdict |
|-----------|------|-------------|-----------|-----------|-----------|-------------|---------|
| 11A       | Ant1 | 5180        | 16.748    | 5171.6336 | 5188.3816 | ---         | ---     |
|           | Ant2 | 5180        | 16.690    | 5171.6421 | 5188.3321 | ---         | ---     |
|           | Ant1 | 5200        | 16.736    | 5191.6085 | 5208.3445 | ---         | ---     |
|           | Ant2 | 5200        | 16.734    | 5191.6299 | 5208.3639 | ---         | ---     |
|           | Ant1 | 5240        | 16.768    | 5231.6196 | 5248.3876 | ---         | ---     |
|           | Ant2 | 5240        | 16.762    | 5231.6044 | 5248.3664 | ---         | ---     |
|           | Ant1 | 5260        | 16.778    | 5251.5896 | 5268.3676 | ---         | ---     |
|           | Ant2 | 5260        | 16.802    | 5251.5636 | 5268.3656 | ---         | ---     |
|           | Ant1 | 5280        | 16.778    | 5271.6234 | 5288.4014 | ---         | ---     |
|           | Ant2 | 5280        | 16.687    | 5271.6392 | 5288.3262 | ---         | ---     |
|           | Ant1 | 5320        | 16.778    | 5311.5830 | 5328.3610 | ---         | ---     |
|           | Ant2 | 5320        | 16.749    | 5311.5623 | 5328.3113 | ---         | ---     |
|           | Ant1 | 5500        | 16.682    | 5491.6341 | 5508.3161 | ---         | ---     |
|           | Ant2 | 5500        | 16.729    | 5491.6074 | 5508.3364 | ---         | ---     |
|           | Ant1 | 5580        | 16.791    | 5571.5854 | 5588.3764 | ---         | ---     |
|           | Ant2 | 5580        | 16.742    | 5571.6172 | 5588.3592 | ---         | ---     |
|           | Ant1 | 5700        | 16.730    | 5691.6093 | 5708.3393 | ---         | ---     |

|           |      |              |        |           |           |     |     |
|-----------|------|--------------|--------|-----------|-----------|-----|-----|
|           | Ant2 | 5700         | 16.815 | 5691.5473 | 5708.3623 | --- | --- |
|           | Ant1 | 5720         | 16.775 | 5711.6118 | 5728.3868 | --- | --- |
|           | Ant2 | 5720         | 16.817 | 5711.6173 | 5728.4343 | --- | --- |
|           | Ant1 | 5720 UNII-2C | 13.388 | 5711.6118 | 5725      | --- | --- |
|           | Ant2 | 5720 UNII-2C | 13.383 | 5711.6173 | 5725      | --- | --- |
|           | Ant1 | 5720 UNII-3  | 3.387  | 5725      | 5728.3868 | --- | --- |
|           | Ant2 | 5720 UNII-3  | 3.434  | 5725      | 5728.4343 | --- | --- |
|           | Ant1 | 5745         | 16.811 | 5736.6206 | 5753.4316 | --- | --- |
|           | Ant2 | 5745         | 16.716 | 5736.6595 | 5753.3755 | --- | --- |
|           | Ant1 | 5785         | 16.725 | 5776.6148 | 5793.3398 | --- | --- |
|           | Ant2 | 5785         | 16.861 | 5776.5719 | 5793.4329 | --- | --- |
|           | Ant1 | 5825         | 16.758 | 5816.6265 | 5833.3845 | --- | --- |
|           | Ant2 | 5825         | 16.810 | 5816.6000 | 5833.4100 | --- | --- |
|           | Ant1 | 5180         | 17.772 | 5171.1038 | 5188.8758 | --- | --- |
| 11N20MIMO | Ant2 | 5180         | 17.736 | 5171.0732 | 5188.8092 | --- | --- |
|           | Ant1 | 5200         | 17.719 | 5191.1200 | 5208.8390 | --- | --- |
|           | Ant2 | 5200         | 17.674 | 5191.1352 | 5208.8092 | --- | --- |
|           | Ant1 | 5240         | 17.797 | 5231.0906 | 5248.8876 | --- | --- |
|           | Ant2 | 5240         | 17.691 | 5231.1564 | 5248.8474 | --- | --- |
|           | Ant1 | 5260         | 17.768 | 5251.0959 | 5268.8639 | --- | --- |
|           | Ant2 | 5260         | 17.694 | 5251.1271 | 5268.8211 | --- | --- |
|           | Ant1 | 5280         | 17.778 | 5271.1414 | 5288.9194 | --- | --- |
|           | Ant2 | 5280         | 17.683 | 5271.1456 | 5288.8286 | --- | --- |
|           | Ant1 | 5320         | 17.760 | 5311.1512 | 5328.9112 | --- | --- |
|           | Ant2 | 5320         | 17.674 | 5311.1880 | 5328.8620 | --- | --- |
|           | Ant1 | 5500         | 17.750 | 5491.1314 | 5508.8814 | --- | --- |
|           | Ant2 | 5500         | 17.710 | 5491.1688 | 5508.8788 | --- | --- |
|           | Ant1 | 5580         | 17.794 | 5571.0859 | 5588.8799 | --- | --- |
|           | Ant2 | 5580         | 17.738 | 5571.1745 | 5588.9125 | --- | --- |
|           | Ant1 | 5700         | 17.739 | 5691.1263 | 5708.8653 | --- | --- |
|           | Ant2 | 5700         | 17.662 | 5691.1848 | 5708.8468 | --- | --- |
|           | Ant1 | 5720         | 17.791 | 5711.1206 | 5728.9116 | --- | --- |
|           | Ant2 | 5720         | 17.707 | 5711.1542 | 5728.8612 | --- | --- |
|           | Ant1 | 5720 UNII-2C | 13.879 | 5711.1206 | 5725      | --- | --- |
|           | Ant2 | 5720 UNII-2C | 13.846 | 5711.1542 | 5725      | --- | --- |
|           | Ant1 | 5720 UNII-3  | 3.912  | 5725      | 5728.9116 | --- | --- |
|           | Ant2 | 5720 UNII-3  | 3.861  | 5725      | 5728.8612 | --- | --- |
|           | Ant1 | 5745         | 17.746 | 5736.1516 | 5753.8976 | --- | --- |
|           | Ant2 | 5745         | 17.700 | 5736.1659 | 5753.8659 | --- | --- |
|           | Ant1 | 5785         | 17.712 | 5776.1608 | 5793.8728 | --- | --- |
|           | Ant2 | 5785         | 17.738 | 5776.1257 | 5793.8637 | --- | --- |
|           | Ant1 | 5825         | 17.748 | 5816.1402 | 5833.8882 | --- | --- |
|           | Ant2 | 5825         | 17.755 | 5816.1544 | 5833.9094 | --- | --- |
| 11N40MIMO | Ant1 | 5190         | 36.020 | 5171.9254 | 5207.9454 | --- | --- |
|           | Ant2 | 5190         | 36.097 | 5171.8184 | 5207.9154 | --- | --- |
|           | Ant1 | 5230         | 36.072 | 5211.9248 | 5247.9968 | --- | --- |
|           | Ant2 | 5230         | 36.067 | 5211.9927 | 5248.0597 | --- | --- |
|           | Ant1 | 5270         | 36.146 | 5251.9508 | 5288.0968 | --- | --- |
|           | Ant2 | 5270         | 36.052 | 5251.8605 | 5287.9125 | --- | --- |
|           | Ant1 | 5310         | 36.062 | 5291.9999 | 5328.0619 | --- | --- |
|           | Ant2 | 5310         | 36.043 | 5291.9735 | 5328.0165 | --- | --- |
|           | Ant1 | 5510         | 36.112 | 5491.8940 | 5528.0060 | --- | --- |
|           | Ant2 | 5510         | 36.093 | 5492.0201 | 5528.1131 | --- | --- |
|           | Ant1 | 5550         | 36.092 | 5531.9071 | 5567.9991 | --- | --- |
|           | Ant2 | 5550         | 36.021 | 5531.9121 | 5567.9331 | --- | --- |
|           | Ant1 | 5670         | 36.185 | 5651.9074 | 5688.0924 | --- | --- |
|           | Ant2 | 5670         | 36.074 | 5652.0924 | 5688.1664 | --- | --- |
|           | Ant1 | 5710         | 36.078 | 5691.9709 | 5728.0489 | --- | --- |
|           | Ant2 | 5710         | 36.106 | 5691.8455 | 5727.9515 | --- | --- |
|           | Ant1 | 5710 UNII-2C | 33.029 | 5691.9709 | 5725      | --- | --- |

|            |      |              |        |           |           |     |     |
|------------|------|--------------|--------|-----------|-----------|-----|-----|
|            | Ant2 | 5710 UNII-2C | 33.154 | 5691.8455 | 5725      | --- | --- |
|            | Ant1 | 5710 UNII-3  | 3.049  | 5725      | 5728.0489 | --- | --- |
|            | Ant2 | 5710 UNII-3  | 2.952  | 5725      | 5727.9515 | --- | --- |
|            | Ant1 | 5755         | 36.015 | 5736.9700 | 5772.9850 | --- | --- |
|            | Ant2 | 5755         | 36.172 | 5737.0070 | 5773.1790 | --- | --- |
|            | Ant1 | 5795         | 36.055 | 5777.0664 | 5813.1214 | --- | --- |
|            | Ant2 | 5795         | 36.153 | 5776.8991 | 5813.0521 | --- | --- |
| 11AC20MIMO | Ant1 | 5180         | 17.718 | 5171.1300 | 5188.8480 | --- | --- |
|            | Ant2 | 5180         | 17.661 | 5171.1302 | 5188.7912 | --- | --- |
|            | Ant1 | 5200         | 17.746 | 5191.1133 | 5208.8593 | --- | --- |
|            | Ant2 | 5200         | 17.753 | 5191.1017 | 5208.8547 | --- | --- |
|            | Ant1 | 5240         | 17.745 | 5231.1811 | 5248.9261 | --- | --- |
|            | Ant2 | 5240         | 17.703 | 5231.1622 | 5248.8652 | --- | --- |
|            | Ant1 | 5260         | 17.724 | 5251.1426 | 5268.8666 | --- | --- |
|            | Ant2 | 5260         | 17.702 | 5251.1261 | 5268.8281 | --- | --- |
|            | Ant1 | 5280         | 17.745 | 5271.1491 | 5288.8941 | --- | --- |
|            | Ant2 | 5280         | 17.709 | 5271.1066 | 5288.8156 | --- | --- |
|            | Ant1 | 5320         | 17.754 | 5311.1315 | 5328.8855 | --- | --- |
|            | Ant2 | 5320         | 17.738 | 5311.1333 | 5328.8713 | --- | --- |
|            | Ant1 | 5500         | 17.719 | 5491.1238 | 5508.8428 | --- | --- |
|            | Ant2 | 5500         | 17.702 | 5491.1467 | 5508.8487 | --- | --- |
|            | Ant1 | 5580         | 17.774 | 5571.1022 | 5588.8762 | --- | --- |
|            | Ant2 | 5580         | 17.699 | 5571.1900 | 5588.8890 | --- | --- |
|            | Ant1 | 5700         | 17.762 | 5691.1366 | 5708.8986 | --- | --- |
|            | Ant2 | 5700         | 17.711 | 5691.1668 | 5708.8778 | --- | --- |
|            | Ant1 | 5720         | 17.739 | 5711.1760 | 5728.9150 | --- | --- |
|            | Ant2 | 5720         | 17.710 | 5711.1534 | 5728.8634 | --- | --- |
|            | Ant1 | 5720 UNII-2C | 13.824 | 5711.1760 | 5725      | --- | --- |
|            | Ant2 | 5720 UNII-2C | 13.847 | 5711.1534 | 5725      | --- | --- |
|            | Ant1 | 5720 UNII-3  | 3.915  | 5725      | 5728.9150 | --- | --- |
|            | Ant2 | 5720 UNII-3  | 3.863  | 5725      | 5728.8634 | --- | --- |
|            | Ant1 | 5745         | 17.762 | 5736.1292 | 5753.8912 | --- | --- |
|            | Ant2 | 5745         | 17.738 | 5736.1440 | 5753.8820 | --- | --- |
|            | Ant1 | 5785         | 17.726 | 5776.1586 | 5793.8846 | --- | --- |
|            | Ant2 | 5785         | 17.694 | 5776.1200 | 5793.8140 | --- | --- |
|            | Ant1 | 5825         | 17.713 | 5816.1344 | 5833.8474 | --- | --- |
|            | Ant2 | 5825         | 17.739 | 5816.1271 | 5833.8661 | --- | --- |
| 11AC40MIMO | Ant1 | 5190         | 36.065 | 5171.9115 | 5207.9765 | --- | --- |
|            | Ant2 | 5190         | 36.069 | 5171.8573 | 5207.9263 | --- | --- |
|            | Ant1 | 5230         | 36.028 | 5211.9678 | 5247.9958 | --- | --- |
|            | Ant2 | 5230         | 36.061 | 5212.0123 | 5248.0733 | --- | --- |
|            | Ant1 | 5270         | 36.138 | 5251.9134 | 5288.0514 | --- | --- |
|            | Ant2 | 5270         | 36.117 | 5251.8622 | 5287.9792 | --- | --- |
|            | Ant1 | 5310         | 36.061 | 5291.9195 | 5327.9805 | --- | --- |
|            | Ant2 | 5310         | 36.181 | 5291.8585 | 5328.0395 | --- | --- |
|            | Ant1 | 5510         | 36.069 | 5491.9204 | 5527.9894 | --- | --- |
|            | Ant2 | 5510         | 36.071 | 5491.9746 | 5528.0456 | --- | --- |
|            | Ant1 | 5550         | 36.030 | 5531.9058 | 5567.9358 | --- | --- |
|            | Ant2 | 5550         | 36.101 | 5531.7871 | 5567.8881 | --- | --- |
|            | Ant1 | 5670         | 36.031 | 5651.9817 | 5688.0127 | --- | --- |
|            | Ant2 | 5670         | 36.084 | 5652.1022 | 5688.1862 | --- | --- |
|            | Ant1 | 5710         | 36.146 | 5691.9366 | 5728.0826 | --- | --- |
|            | Ant2 | 5710         | 36.098 | 5691.8513 | 5727.9493 | --- | --- |
|            | Ant1 | 5710 UNII-2C | 33.063 | 5691.9366 | 5725      | --- | --- |
|            | Ant2 | 5710 UNII-2C | 33.149 | 5691.8513 | 5725      | --- | --- |
|            | Ant1 | 5710 UNII-3  | 3.083  | 5725      | 5728.0826 | --- | --- |
|            | Ant2 | 5710 UNII-3  | 2.949  | 5725      | 5727.9493 | --- | --- |
|            | Ant1 | 5755         | 36.043 | 5736.9497 | 5772.9927 | --- | --- |
|            | Ant2 | 5755         | 36.085 | 5737.0708 | 5773.1558 | --- | --- |
|            | Ant1 | 5795         | 36.018 | 5777.0436 | 5813.0616 | --- | --- |

|            |      |              |        |           |           |     |     |
|------------|------|--------------|--------|-----------|-----------|-----|-----|
| 11AC80MIMO | Ant2 | 5795         | 36.148 | 5776.8467 | 5812.9947 | --- | --- |
|            | Ant1 | 5210         | 75.573 | 5172.1260 | 5247.6990 | --- | --- |
|            | Ant2 | 5210         | 75.880 | 5171.9382 | 5247.8182 | --- | --- |
|            | Ant1 | 5290         | 75.664 | 5252.1757 | 5327.8397 | --- | --- |
|            | Ant2 | 5290         | 75.728 | 5251.9167 | 5327.6447 | --- | --- |
|            | Ant1 | 5530         | 75.523 | 5492.1201 | 5567.6431 | --- | --- |
|            | Ant2 | 5530         | 75.214 | 5492.2120 | 5567.4260 | --- | --- |
|            | Ant1 | 5610         | 75.468 | 5572.1696 | 5647.6376 | --- | --- |
|            | Ant2 | 5610         | 74.822 | 5572.6021 | 5647.4241 | --- | --- |
|            | Ant1 | 5690         | 75.995 | 5652.0872 | 5728.0822 | --- | --- |
|            | Ant2 | 5690         | 75.193 | 5652.5274 | 5727.7204 | --- | --- |
|            | Ant1 | 5690_UNII-2C | 72.913 | 5652.0872 | 5725      | --- | --- |
|            | Ant2 | 5690_UNII-2C | 72.473 | 5652.5274 | 5725      | --- | --- |
|            | Ant1 | 5690_UNII-3  | 3.082  | 5725      | 5728.0822 | --- | --- |
|            | Ant2 | 5690_UNII-3  | 2.72   | 5725      | 5727.7204 | --- | --- |
|            | Ant1 | 5775         | 76.044 | 5737.0297 | 5813.0737 | --- | --- |
|            | Ant2 | 5775         | 75.437 | 5737.3764 | 5812.8134 | --- | --- |

| Test Mode | Ant. | Freq.<br>(MHz) | 26dB<br>EBW (MHz) | FL<br>(MHz) | FH<br>(MHz) | Limit<br>(MHz) | Verdict |
|-----------|------|----------------|-------------------|-------------|-------------|----------------|---------|
| 11A       | Ant1 | 5180           | 20.080            | 5169.840    | 5189.920    | ---            | ---     |
|           | Ant2 | 5180           | 20.120            | 5169.880    | 5190.000    | ---            | ---     |
|           | Ant1 | 5200           | 20.000            | 5190.000    | 5210.000    | ---            | ---     |
|           | Ant2 | 5200           | 20.000            | 5189.960    | 5209.960    | ---            | ---     |
|           | Ant1 | 5240           | 19.800            | 5230.120    | 5249.920    | ---            | ---     |
|           | Ant2 | 5240           | 19.800            | 5230.040    | 5249.840    | ---            | ---     |
|           | Ant1 | 5260           | 19.920            | 5250.000    | 5269.920    | ---            | ---     |
|           | Ant2 | 5260           | 19.880            | 5250.080    | 5269.960    | ---            | ---     |
|           | Ant1 | 5280           | 20.120            | 5269.920    | 5290.040    | ---            | ---     |
|           | Ant2 | 5280           | 20.240            | 5269.880    | 5290.120    | ---            | ---     |
|           | Ant1 | 5320           | 19.640            | 5310.120    | 5329.760    | ---            | ---     |
|           | Ant2 | 5320           | 20.120            | 5309.880    | 5330.000    | ---            | ---     |
|           | Ant1 | 5500           | 19.880            | 5490.080    | 5509.960    | ---            | ---     |
|           | Ant2 | 5500           | 20.040            | 5490.000    | 5510.040    | ---            | ---     |
|           | Ant1 | 5580           | 19.880            | 5570.120    | 5590.000    | ---            | ---     |
|           | Ant2 | 5580           | 19.760            | 5570.120    | 5589.880    | ---            | ---     |
|           | Ant1 | 5700           | 20.000            | 5689.960    | 5709.960    | ---            | ---     |
|           | Ant2 | 5700           | 19.800            | 5690.120    | 5709.920    | ---            | ---     |
|           | Ant1 | 5720           | 20.000            | 5710.000    | 5730.000    | ---            | ---     |
|           | Ant2 | 5720           | 19.680            | 5710.200    | 5729.880    | ---            | ---     |
|           | Ant1 | 5720_UNII-2C   | 15                | 5710.000    | 5725        | ---            | ---     |
|           | Ant2 | 5720_UNII-2C   | 14.8              | 5710.200    | 5725        | ---            | ---     |
|           | Ant1 | 5720_UNII-3    | 5                 | 5725        | 5730.000    | ---            | ---     |
|           | Ant2 | 5720_UNII-3    | 4.88              | 5725        | 5729.880    | ---            | ---     |
|           | Ant1 | 5745           | 19.840            | 5734.960    | 5754.800    | ---            | ---     |
|           | Ant2 | 5745           | 20.120            | 5734.800    | 5754.920    | ---            | ---     |
|           | Ant1 | 5785           | 20.160            | 5775.040    | 5795.200    | ---            | ---     |
|           | Ant2 | 5785           | 20.400            | 5774.640    | 5795.040    | ---            | ---     |
|           | Ant1 | 5825           | 19.840            | 5815.120    | 5834.960    | ---            | ---     |
|           | Ant2 | 5825           | 20.320            | 5814.840    | 5835.160    | ---            | ---     |
| 11N20MIMO | Ant1 | 5180           | 20.240            | 5169.880    | 5190.120    | ---            | ---     |
|           | Ant2 | 5180           | 20.080            | 5169.880    | 5189.960    | ---            | ---     |
|           | Ant1 | 5200           | 20.200            | 5189.800    | 5210.000    | ---            | ---     |
|           | Ant2 | 5200           | 20.160            | 5189.960    | 5210.120    | ---            | ---     |
|           | Ant1 | 5240           | 20.040            | 5229.960    | 5250.000    | ---            | ---     |
|           | Ant2 | 5240           | 20.200            | 5229.920    | 5250.120    | ---            | ---     |
|           | Ant1 | 5260           | 20.080            | 5249.960    | 5270.040    | ---            | ---     |
|           | Ant2 | 5260           | 20.040            | 5250.000    | 5270.040    | ---            | ---     |
|           | Ant1 | 5280           | 20.200            | 5269.880    | 5290.080    | ---            | ---     |
|           | Ant2 | 5280           | 20.320            | 5269.880    | 5290.200    | ---            | ---     |

|            |      |              |        |          |          |     |     |
|------------|------|--------------|--------|----------|----------|-----|-----|
|            | Ant1 | 5320         | 20.040 | 5309.960 | 5330.000 | --- | --- |
|            | Ant2 | 5320         | 20.240 | 5309.800 | 5330.040 | --- | --- |
|            | Ant1 | 5500         | 19.960 | 5490.000 | 5509.960 | --- | --- |
|            | Ant2 | 5500         | 20.280 | 5490.040 | 5510.320 | --- | --- |
|            | Ant1 | 5580         | 20.320 | 5569.800 | 5590.120 | --- | --- |
|            | Ant2 | 5580         | 20.160 | 5569.960 | 5590.120 | --- | --- |
|            | Ant1 | 5700         | 20.280 | 5689.840 | 5710.120 | --- | --- |
|            | Ant2 | 5700         | 20.120 | 5689.920 | 5710.040 | --- | --- |
|            | Ant1 | 5720         | 20.320 | 5709.960 | 5730.280 | --- | --- |
|            | Ant2 | 5720         | 20.360 | 5709.840 | 5730.200 | --- | --- |
|            | Ant1 | 5720_UNII-2C | 15.04  | 5709.960 | 5725     | --- | --- |
|            | Ant2 | 5720_UNII-2C | 15.16  | 5709.840 | 5725     | --- | --- |
|            | Ant1 | 5720_UNII-3  | 5.28   | 5725     | 5730.280 | --- | --- |
|            | Ant2 | 5720_UNII-3  | 5.2    | 5725     | 5730.200 | --- | --- |
|            | Ant1 | 5745         | 20.280 | 5734.960 | 5755.240 | --- | --- |
|            | Ant2 | 5745         | 19.880 | 5735.040 | 5754.920 | --- | --- |
|            | Ant1 | 5785         | 20.240 | 5774.960 | 5795.200 | --- | --- |
|            | Ant2 | 5785         | 20.480 | 5774.640 | 5795.120 | --- | --- |
|            | Ant1 | 5825         | 20.080 | 5814.960 | 5835.040 | --- | --- |
|            | Ant2 | 5825         | 20.240 | 5815.040 | 5835.280 | --- | --- |
| 11N40MIMO  | Ant1 | 5190         | 40.640 | 5169.280 | 5209.920 | --- | --- |
|            | Ant2 | 5190         | 39.920 | 5169.840 | 5209.760 | --- | --- |
|            | Ant1 | 5230         | 40.400 | 5209.680 | 5250.080 | --- | --- |
|            | Ant2 | 5230         | 40.080 | 5210.080 | 5250.160 | --- | --- |
|            | Ant1 | 5270         | 41.120 | 5249.120 | 5290.240 | --- | --- |
|            | Ant2 | 5270         | 39.760 | 5249.920 | 5289.680 | --- | --- |
|            | Ant1 | 5310         | 40.160 | 5290.080 | 5330.240 | --- | --- |
|            | Ant2 | 5310         | 40.080 | 5290.000 | 5330.080 | --- | --- |
|            | Ant1 | 5510         | 40.720 | 5489.600 | 5530.320 | --- | --- |
|            | Ant2 | 5510         | 40.160 | 5489.760 | 5529.920 | --- | --- |
|            | Ant1 | 5550         | 40.160 | 5529.840 | 5570.000 | --- | --- |
|            | Ant2 | 5550         | 39.520 | 5530.000 | 5569.520 | --- | --- |
|            | Ant1 | 5670         | 39.920 | 5650.080 | 5690.000 | --- | --- |
|            | Ant2 | 5670         | 39.760 | 5650.240 | 5690.000 | --- | --- |
|            | Ant1 | 5710         | 40.880 | 5689.680 | 5730.560 | --- | --- |
|            | Ant2 | 5710         | 40.000 | 5689.920 | 5729.920 | --- | --- |
|            | Ant1 | 5710_UNII-2C | 35.32  | 5689.680 | 5725     | --- | --- |
|            | Ant2 | 5710_UNII-2C | 35.08  | 5689.920 | 5725     | --- | --- |
|            | Ant1 | 5710_UNII-3  | 5.56   | 5725     | 5730.560 | --- | --- |
|            | Ant2 | 5710_UNII-3  | 4.92   | 5725     | 5729.920 | --- | --- |
| 11AC20MIMO | Ant1 | 5755         | 40.640 | 5734.600 | 5775.240 | --- | --- |
|            | Ant2 | 5755         | 40.240 | 5735.240 | 5775.480 | --- | --- |
|            | Ant1 | 5795         | 40.560 | 5774.680 | 5815.240 | --- | --- |
|            | Ant2 | 5795         | 40.160 | 5774.840 | 5815.000 | --- | --- |
|            | Ant1 | 5180         | 20.360 | 5169.840 | 5190.200 | --- | --- |
|            | Ant2 | 5180         | 20.080 | 5170.040 | 5190.120 | --- | --- |
|            | Ant1 | 5200         | 20.120 | 5189.960 | 5210.080 | --- | --- |
|            | Ant2 | 5200         | 19.960 | 5190.000 | 5209.960 | --- | --- |
|            | Ant1 | 5240         | 20.000 | 5230.040 | 5250.040 | --- | --- |
|            | Ant2 | 5240         | 19.960 | 5230.040 | 5250.000 | --- | --- |
|            | Ant1 | 5260         | 20.280 | 5249.880 | 5270.160 | --- | --- |
|            | Ant2 | 5260         | 20.080 | 5250.120 | 5270.200 | --- | --- |
|            | Ant1 | 5280         | 20.280 | 5269.800 | 5290.080 | --- | --- |
|            | Ant2 | 5280         | 19.880 | 5270.080 | 5289.960 | --- | --- |
|            | Ant1 | 5320         | 20.000 | 5309.920 | 5329.920 | --- | --- |
|            | Ant2 | 5320         | 19.960 | 5310.000 | 5329.960 | --- | --- |
|            | Ant1 | 5500         | 20.120 | 5489.960 | 5510.080 | --- | --- |
|            | Ant2 | 5500         | 20.120 | 5489.960 | 5510.080 | --- | --- |
|            | Ant1 | 5580         | 19.880 | 5570.040 | 5589.920 | --- | --- |
|            | Ant2 | 5580         | 19.960 | 5570.080 | 5590.040 | --- | --- |

|            |      |              |        |          |          |     |     |
|------------|------|--------------|--------|----------|----------|-----|-----|
|            | Ant1 | 5700         | 19.960 | 5690.080 | 5710.040 | --- | --- |
|            | Ant2 | 5700         | 19.960 | 5690.000 | 5709.960 | --- | --- |
|            | Ant1 | 5720         | 20.120 | 5709.880 | 5730.000 | --- | --- |
|            | Ant2 | 5720         | 19.960 | 5710.040 | 5730.000 | --- | --- |
|            | Ant1 | 5720 UNII-2C | 15.12  | 5709.880 | 5725     | --- | --- |
|            | Ant2 | 5720 UNII-2C | 14.96  | 5710.040 | 5725     | --- | --- |
|            | Ant1 | 5720 UNII-3  | 5      | 5725     | 5730.000 | --- | --- |
|            | Ant2 | 5720 UNII-3  | 5      | 5725     | 5730.000 | --- | --- |
|            | Ant1 | 5745         | 20.160 | 5734.880 | 5755.040 | --- | --- |
|            | Ant2 | 5745         | 20.200 | 5735.040 | 5755.240 | --- | --- |
|            | Ant1 | 5785         | 20.000 | 5775.040 | 5795.040 | --- | --- |
|            | Ant2 | 5785         | 20.120 | 5774.840 | 5794.960 | --- | --- |
|            | Ant1 | 5825         | 19.920 | 5815.080 | 5835.000 | --- | --- |
|            | Ant2 | 5825         | 20.080 | 5815.000 | 5835.080 | --- | --- |
|            | Ant1 | 5190         | 40.240 | 5169.760 | 5210.000 | --- | --- |
|            | Ant2 | 5190         | 39.840 | 5169.840 | 5209.680 | --- | --- |
| 11AC40MIMO | Ant1 | 5230         | 40.800 | 5209.280 | 5250.080 | --- | --- |
|            | Ant2 | 5230         | 40.480 | 5209.840 | 5250.320 | --- | --- |
|            | Ant1 | 5270         | 40.240 | 5249.840 | 5290.080 | --- | --- |
|            | Ant2 | 5270         | 39.680 | 5250.080 | 5289.760 | --- | --- |
|            | Ant1 | 5310         | 40.400 | 5289.680 | 5330.080 | --- | --- |
|            | Ant2 | 5310         | 39.840 | 5290.000 | 5329.840 | --- | --- |
|            | Ant1 | 5510         | 40.320 | 5490.000 | 5530.320 | --- | --- |
|            | Ant2 | 5510         | 40.160 | 5490.080 | 5530.240 | --- | --- |
|            | Ant1 | 5550         | 40.480 | 5529.600 | 5570.080 | --- | --- |
|            | Ant2 | 5550         | 40.080 | 5529.840 | 5569.920 | --- | --- |
|            | Ant1 | 5670         | 40.400 | 5649.920 | 5690.320 | --- | --- |
|            | Ant2 | 5670         | 39.920 | 5650.160 | 5690.080 | --- | --- |
|            | Ant1 | 5710         | 40.480 | 5689.760 | 5730.240 | --- | --- |
|            | Ant2 | 5710         | 39.920 | 5689.920 | 5729.840 | --- | --- |
|            | Ant1 | 5710 UNII-2C | 35.24  | 5689.760 | 5725     | --- | --- |
|            | Ant2 | 5710 UNII-2C | 35.08  | 5689.920 | 5725     | --- | --- |
|            | Ant1 | 5710 UNII-3  | 5.24   | 5725     | 5730.240 | --- | --- |
|            | Ant2 | 5710 UNII-3  | 4.84   | 5725     | 5729.840 | --- | --- |
|            | Ant1 | 5755         | 40.960 | 5734.360 | 5775.320 | --- | --- |
|            | Ant2 | 5755         | 40.080 | 5735.160 | 5775.240 | --- | --- |
|            | Ant1 | 5795         | 40.240 | 5774.840 | 5815.080 | --- | --- |
|            | Ant2 | 5795         | 40.240 | 5774.760 | 5815.000 | --- | --- |
| 11AC80MIMO | Ant1 | 5210         | 80.320 | 5169.680 | 5250.000 | --- | --- |
|            | Ant2 | 5210         | 80.640 | 5169.360 | 5250.000 | --- | --- |
|            | Ant1 | 5290         | 80.640 | 5249.520 | 5330.160 | --- | --- |
|            | Ant2 | 5290         | 80.320 | 5249.680 | 5330.000 | --- | --- |
|            | Ant1 | 5530         | 80.480 | 5489.520 | 5570.000 | --- | --- |
|            | Ant2 | 5530         | 79.680 | 5489.840 | 5569.520 | --- | --- |
|            | Ant1 | 5610         | 80.640 | 5569.680 | 5650.320 | --- | --- |
|            | Ant2 | 5610         | 79.200 | 5570.480 | 5649.680 | --- | --- |
|            | Ant1 | 5690         | 81.120 | 5649.520 | 5730.640 | --- | --- |
|            | Ant2 | 5690         | 78.880 | 5650.640 | 5729.520 | --- | --- |
|            | Ant1 | 5690 UNII-2C | 75.48  | 5649.520 | 5725     | --- | --- |
|            | Ant2 | 5690 UNII-2C | 74.36  | 5650.640 | 5725     | --- | --- |
|            | Ant1 | 5690 UNII-3  | 5.64   | 5725     | 5730.640 | --- | --- |
|            | Ant2 | 5690 UNII-3  | 4.52   | 5725     | 5729.520 | --- | --- |
|            | Ant1 | 5775         | 80.800 | 5734.360 | 5815.160 | --- | --- |
|            | Ant2 | 5775         | 79.520 | 5735.320 | 5814.840 | --- | --- |

| Test Mode | Ant. | Freq.<br>(MHz) | 6dB<br>EBW (MHz) | FL<br>(MHz) | FH<br>(MHz) | Limit<br>(MHz) | Verdict |
|-----------|------|----------------|------------------|-------------|-------------|----------------|---------|
| 11A       | Ant1 | 5745           | 12.880           | 5739.360    | 5752.240    | 0.5            | PASS    |
|           | Ant2 | 5745           | 13.880           | 5737.440    | 5751.320    | 0.5            | PASS    |
|           | Ant1 | 5785           | 15.320           | 5777.440    | 5792.760    | 0.5            | PASS    |

|            |      |      |        |          |          |     |      |
|------------|------|------|--------|----------|----------|-----|------|
|            | Ant2 | 5785 | 15.000 | 5777.520 | 5792.520 | 0.5 | PASS |
|            | Ant1 | 5825 | 13.760 | 5817.480 | 5831.240 | 0.5 | PASS |
|            | Ant2 | 5825 | 16.280 | 5816.840 | 5833.120 | 0.5 | PASS |
| 11N20MIMO  | Ant1 | 5745 | 16.040 | 5737.120 | 5753.160 | 0.5 | PASS |
|            | Ant2 | 5745 | 15.000 | 5737.520 | 5752.520 | 0.5 | PASS |
|            | Ant1 | 5785 | 14.440 | 5777.440 | 5791.880 | 0.5 | PASS |
|            | Ant2 | 5785 | 15.000 | 5777.480 | 5792.480 | 0.5 | PASS |
|            | Ant1 | 5825 | 16.040 | 5817.480 | 5833.520 | 0.5 | PASS |
|            | Ant2 | 5825 | 16.280 | 5816.880 | 5833.160 | 0.5 | PASS |
|            | Ant1 | 5755 | 35.040 | 5737.480 | 5772.520 | 0.5 | PASS |
| 11N40MIMO  | Ant2 | 5755 | 35.040 | 5737.480 | 5772.520 | 0.5 | PASS |
|            | Ant1 | 5795 | 35.040 | 5777.480 | 5812.520 | 0.5 | PASS |
|            | Ant2 | 5795 | 35.120 | 5777.480 | 5812.600 | 0.5 | PASS |
|            | Ant1 | 5745 | 16.520 | 5736.880 | 5753.400 | 0.5 | PASS |
| 11AC20MIMO | Ant2 | 5745 | 15.960 | 5737.440 | 5753.400 | 0.5 | PASS |
|            | Ant1 | 5785 | 15.080 | 5777.480 | 5792.560 | 0.5 | PASS |
|            | Ant2 | 5785 | 16.280 | 5776.240 | 5792.520 | 0.5 | PASS |
|            | Ant1 | 5825 | 13.880 | 5818.680 | 5832.560 | 0.5 | PASS |
|            | Ant2 | 5825 | 15.640 | 5817.480 | 5833.120 | 0.5 | PASS |
|            | Ant1 | 5755 | 33.840 | 5738.680 | 5772.520 | 0.5 | PASS |
| 11AC40MIMO | Ant2 | 5755 | 35.120 | 5737.480 | 5772.600 | 0.5 | PASS |
|            | Ant1 | 5795 | 35.040 | 5777.480 | 5812.520 | 0.5 | PASS |
|            | Ant2 | 5795 | 35.040 | 5777.480 | 5812.520 | 0.5 | PASS |
|            | Ant1 | 5775 | 75.360 | 5737.400 | 5812.760 | 0.5 | PASS |
| 11AC80MIMO | Ant2 | 5775 | 75.040 | 5737.560 | 5812.600 | 0.5 | PASS |

## 9.5. Original Test Data

99% Bandwidth:





11A\_Ant1\_5240



11A\_Ant2\_5240



11A\_Ant1\_5260



11A\_Ant2\_5260



11A\_Ant1\_5280



11A\_Ant2\_5280







11A\_Ant1\_5700



11A\_Ant2\_5700



11A\_Ant1\_5720









