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11.6. APPENDIX F: FREQUENCY STABILITY 11.6.1. Test Result

| | Frequency Error vs. Voltage | | | | | | | | |
|-------|---------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---|--------------------|
| | 802.11a:5180MHz | | | | | | | | |
| _ | | 0 Minute | | 2 Minute | | 5 Minute | | 10 Minute | |
| Temp. | Volt. | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) | nce Freq.Error Toleran) (MHz) (ppm) | Tolerance (ppm) |
| TN | VL | 5180.0148 | 2.85 | 5179.9760 | -4.64 | 5179.9873 | -2.46 | 5179.9775 | -4.34 |
| TN | VN | 5179.9995 | -0.09 | 5179.9836 | -3.17 | 5179.9958 | -0.81 | 5180.0210 | 4.06 |
| TN | VH | 5179.9772 | -4.41 | 5179.9830 | -3.29 | 5179.9881 | -2.31 | 5179.9893 | -2.07 |
| | Frequency Error vs. Temperature | | | | | | | | |
| | 802.11a:5180MHz | | | | | | | | |

| - | V 16 | 0 Min | 0 Minute 2 Minute | | 5 Minute | | 10 Minute | | |
|-------|-------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
| Temp. | Volt. | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) |
| 70 | VN | 5179.9885 | -2.22 | 5179.9758 | -4.67 | 5180.0046 | 0.89 | 5180.0085 | 1.64 |
| 60 | VN | 5179.9826 | -3.36 | 5180.0087 | 1.68 | 5180.0126 | 2.44 | 5180.0056 | 1.08 |
| 50 | VN | 5180.0174 | 3.35 | 5179.9866 | -2.58 | 5180.0086 | 1.67 | 5180.0219 | 4.23 |
| 40 | VN | 5180.0236 | 4.56 | 5179.9982 | -0.35 | 5179.9853 | -2.84 | 5180.0196 | 3.78 |
| 30 | VN | 5180.0207 | 3.99 | 5179.9757 | -4.70 | 5180.0072 | 1.40 | 5179.9824 | -3.40 |
| 20 | VN | 5180.0004 | 0.08 | 5179.9987 | -0.25 | 5180.0072 | 1.40 | 5180.0164 | 3.18 |
| 10 | VN | 5180.0162 | 3.12 | 5180.0061 | 1.19 | 5180.0195 | 3.76 | 5179.9920 | -1.54 |
| 0 | VN | 5180.0171 | 3.30 | 5180.0190 | 3.66 | 5179.9917 | -1.60 | 5179.9966 | -0.67 |
| -10 | VN | 5179.9893 | -2.06 | 5180.0167 | 3.22 | 5180.0003 | 0.05 | 5179.9813 | -3.61 |

Note:

- 1. All antennas, test modes and test channels have been tested, only the worst data record in the report.
- 2. For the detail Test Conditions, please refer to section 7.5 TEST ENVIRONMENT.



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| | Frequency Error vs. Voltage | | | | | | | | |
|-------|---------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
| | 802.11a:5825MHz | | | | | | | | |
| | | 0 Min | ute | 2 Minute | | 5 Minute | | 10 Minute | |
| Temp. | Volt. | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) |
| TN | VL | 5824.9830 | -2.92 | 5824.9834 | -2.84 | 5824.9774 | -3.87 | 5824.9757 | -4.18 |
| TN | VN | 5824.9840 | -2.75 | 5825.0195 | 3.34 | 5825.0143 | 2.45 | 5825.0048 | 0.83 |
| TN | VH | 5825.0014 | 0.25 | 5825.0190 | 3.26 | 5824.9834 | -2.86 | 5824.9878 | -2.09 |
| | Frequency Error vs. Temperature | | | | | | | | |
| | 802.11a:5825MHz | | | | | | | | |
| _ | | 0 Minute | | 2 Minute | | 5 Minute | | 10 Minute | |
| Temp. | Volt. | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) | Freq.Error (MHz) | Tolerance (ppm) |
| 70 | VN | 5825.0087 | 1.49 | 5825.0028 | 0.48 | 5824.9885 | -1.98 | 5825.0036 | 0.62 |
| 60 | VN | 5825.0022 | 0.37 | 5825.0015 | 0.26 | 5825.0127 | 2.19 | 5824.9993 | -0.13 |
| 50 | VN | 5824.9903 | -1.66 | 5824.9930 | -1.20 | 5825.0069 | 1.19 | 5824.9780 | -3.78 |
| 40 | VN | 5824.9879 | -2.08 | 5825.0230 | 3.95 | 5824.9921 | -1.36 | 5824.9845 | -2.65 |
| 30 | VN | 5825.0207 | 3.56 | 5824.9826 | -2.99 | 5825.0151 | 2.60 | 5824.9973 | -0.47 |
| 20 | VN | 5825.0138 | 2.38 | 5825.0025 | 0.43 | 5824.9847 | -2.63 | 5824.9793 | -3.55 |
| 10 | VN | 5824.9887 | -1.94 | 5825.0051 | 0.88 | 5824.9848 | -2.62 | 5825.0099 | 1.70 |
| 0 | VN | 5825.0101 | 1.73 | 5824.9759 | -4.14 | 5825.0217 | 3.73 | 5825.0211 | 3.62 |

Note:

- 1. All antennas, test modes and test channels have been tested, only the worst data record in the report.
- 2. For the detail Test Conditions, please refer to section 7.5 TEST ENVIRONMENT.



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11.7. APPENDIX G: DUTY CYCLE 11.7.1. Test Result

| Test Mode | On Time (msec) | Period (msec) | Duty Cycle x (Linear) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | 1/T Minimum VBW (kHz) | Final setting For VBW (kHz) |
|------------|-------------------|------------------|--------------------------------|----------------------|--|--------------------------------|--------------------------------------|
| 11A | 1.39 | 1.61 | 0.8634 | 86.34 | 0.64 | 0.72 | 1 |
| 11N20MIMO | 1.29 | 1.51 | 0.8543 | 85.43 | 0.68 | 0.78 | 1 |
| 11N40MIMO | 0.64 | 0.87 | 0.7356 | 73.56 | 1.33 | 1.56 | 2 |
| 11AC80MIMO | 0.32 | 0.54 | 0.5926 | 59.26 | 2.27 | 3.13 | 5 |
| 11AX20MIMO | 1.02 | 1.24 | 0.8226 | 82.26 | 0.85 | 0.98 | 1 |
| 11AX40MIMO | 0.54 | 0.76 | 0.7105 | 71.05 | 1.48 | 1.85 | 2 |
| 11AX80MIMO | 0.3 | 0.52 | 0.5769 | 57.69 | 2.39 | 3.33 | 5 |

Note:

Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time

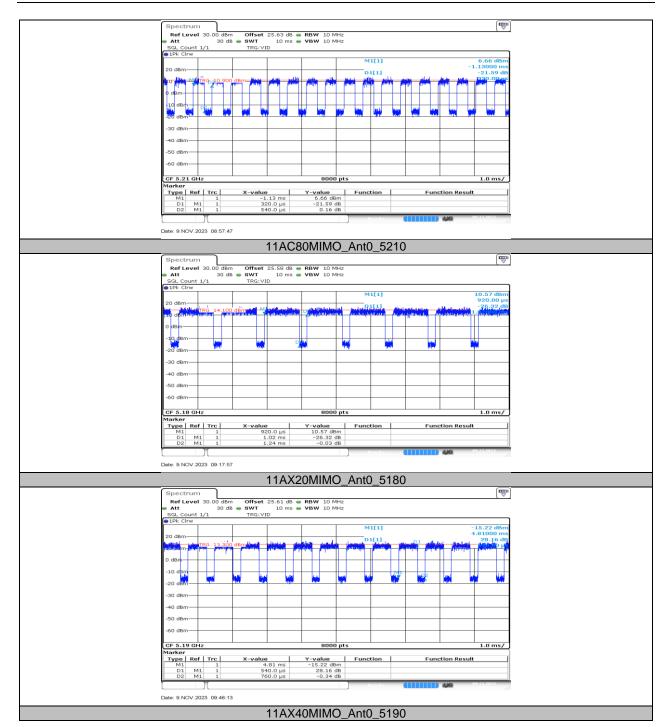
If that calculated VBW is not available on the analyzer then the next higher value should be used.



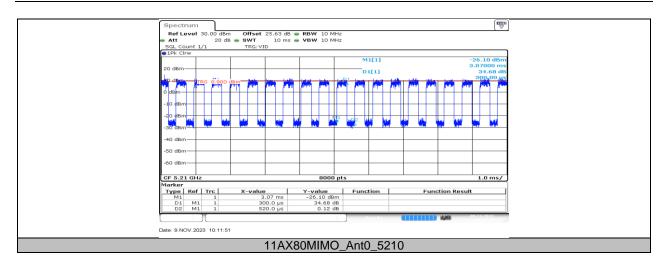
11.7.2. Test Graphs











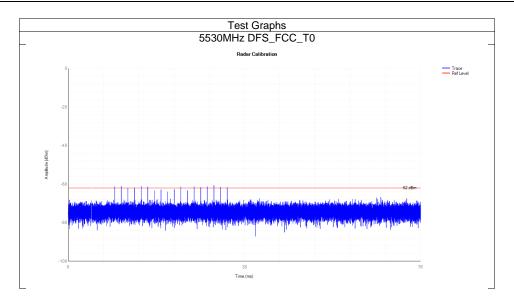


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11.8. APPENDIX H: CALIBRATION

| Mode | Frequency (MHz) | Type | Result | Verdict |
|------|-----------------|------------|----------------|---------|
| ax80 | 5530 | DFS_FCC_T0 | See test Graph | Pass |







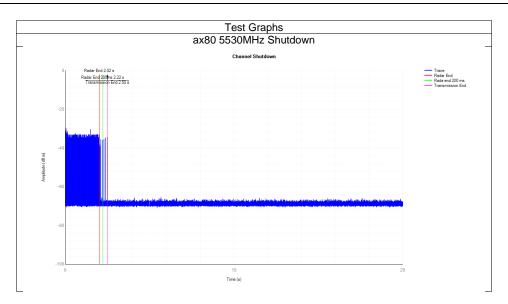
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11.9. APPENDIX I: SHUTDOWN TIME

| Mode | Frequency (MHz) | Channel Move Time (s) | Limit Channel Move Time (s) | Close Transmission Time (s) | Limit Close Transmission Time (s) | Close Transmission Time after 200ms(s) | Limit Close Transmission Time after 200ms (s) | Verdict |
|------|--------------------|-----------------------------|--------------------------------------|-----------------------------------|---|---|--|---------|
| ax80 | 5530 | 0.472 | 10 | 0.017 | 0.26 | 0.003 | 0.06 | Pass |

Note: All modes have been tested, only the worst data recorded in the report.







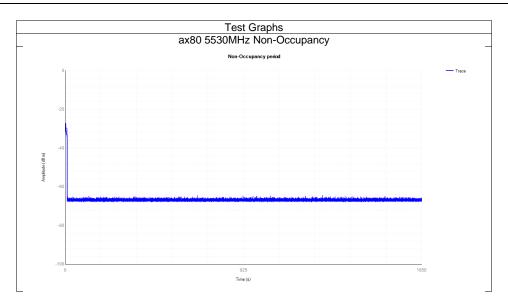
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11.10. APPENDIX J: NON-OCCUPANCY

| Mode | Frequency (MHz) | Result | Verdict |
|------|-----------------|----------------|---------|
| ax80 | 5530 | See test Graph | Pass |

Note: All modes have been tested, only the worst data recorded in the report.





END OF REPORT