

Appendix for 15.407

1. Bandwidth

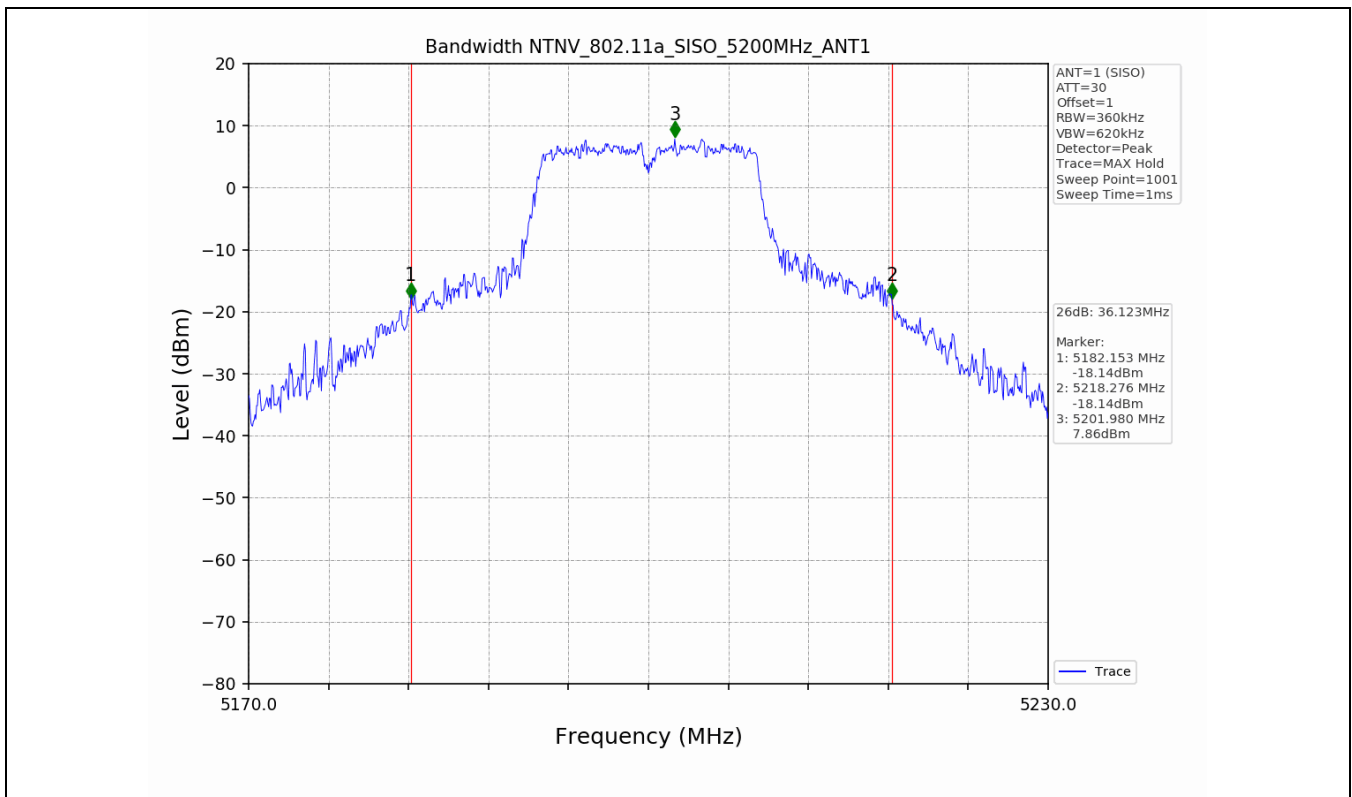
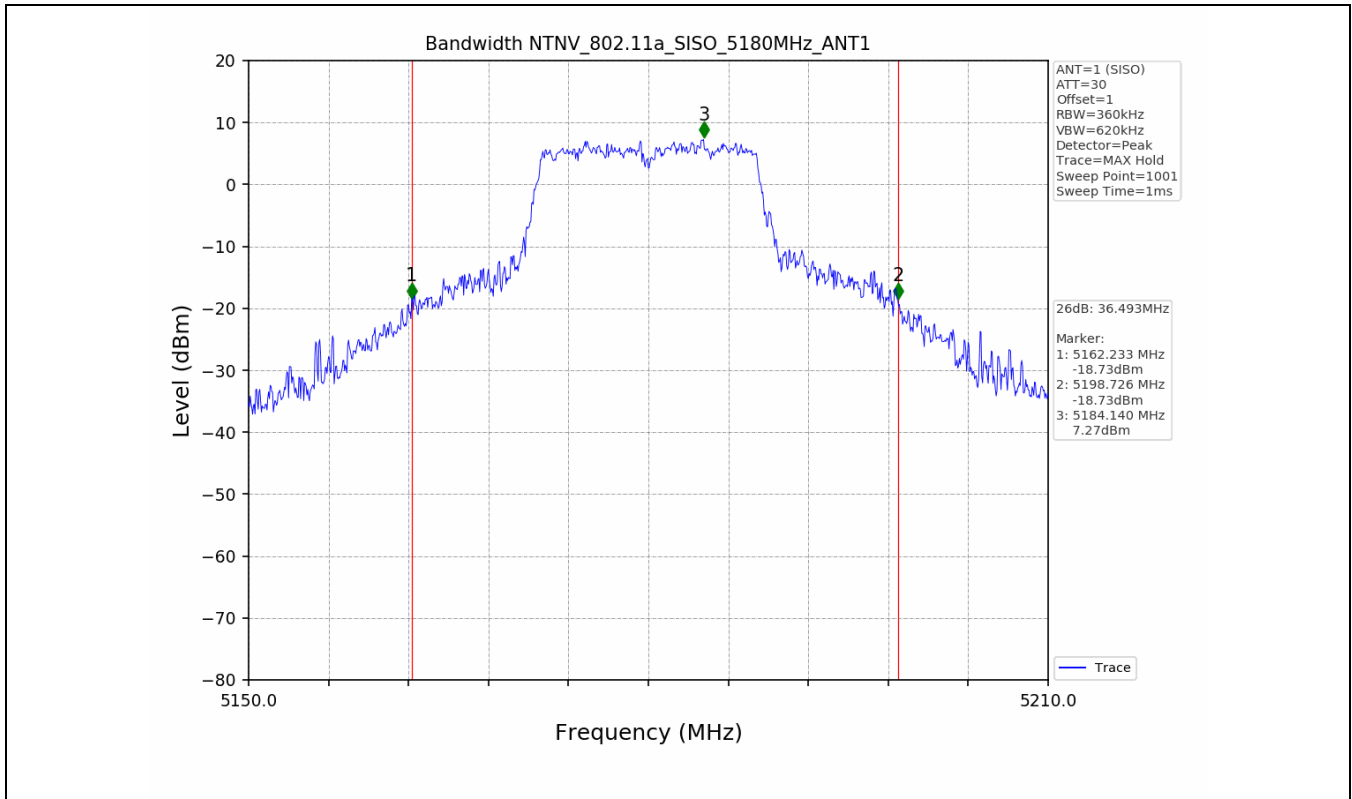
1.1 Test Result

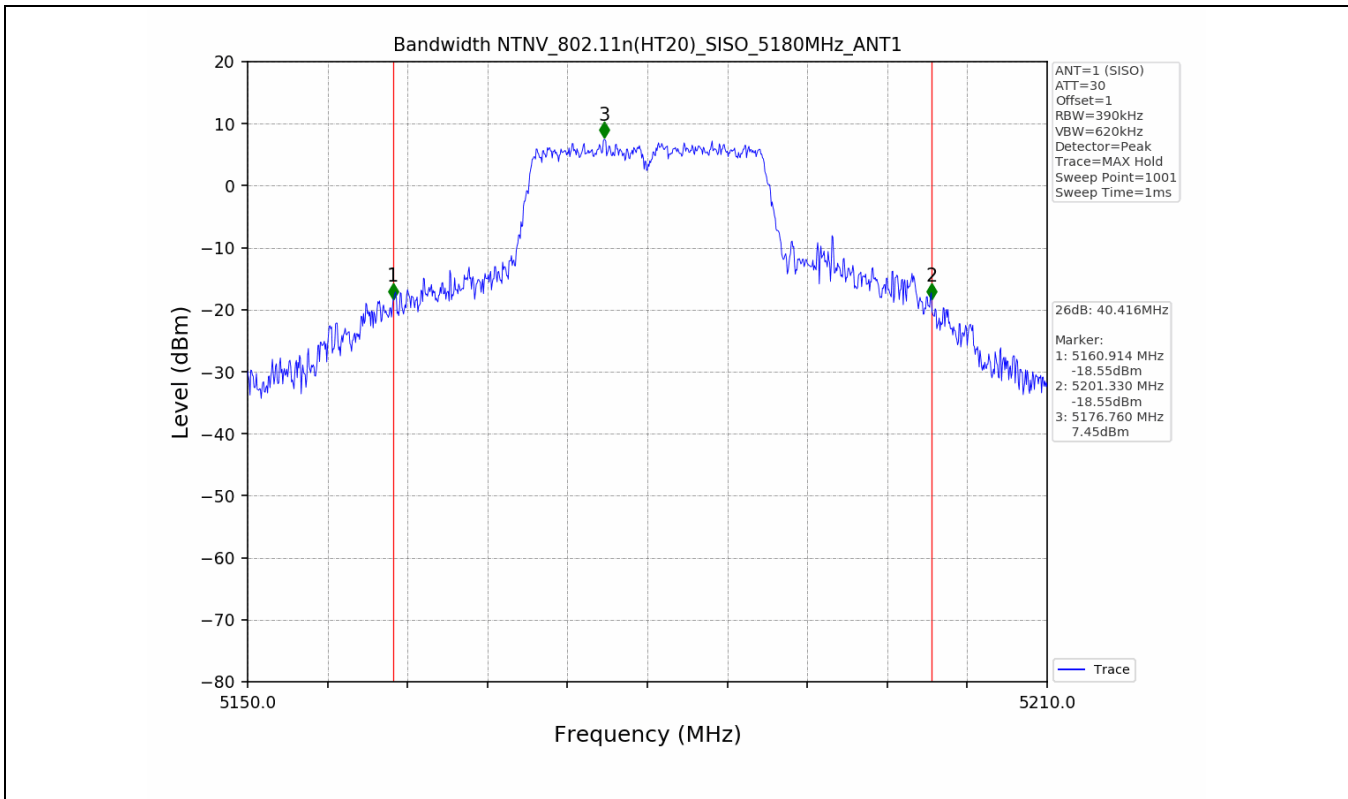
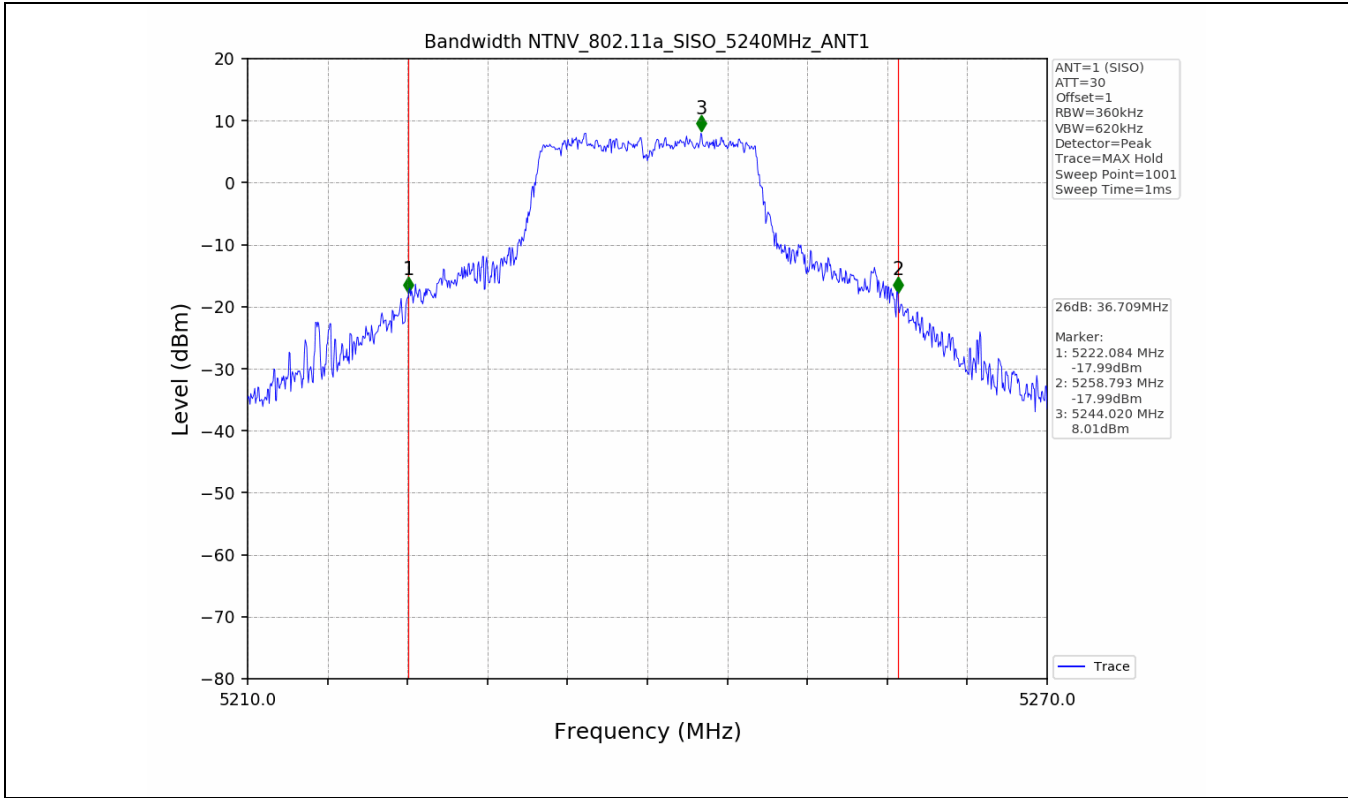
| Test Mode | Frequency (MHz) | TX Type | ANT No. | Emission Bandwidth | | Verdict |
|---------------|-----------------|---------|---------|--------------------|---------------------|---------|
| | | | | Test Result (MHz) | Limits (MHz) | |
| 802.11a | 5180 | SISO | 1 | 36.493 | Only for Report Use | PASS |
| | 5200 | SISO | 1 | 36.123 | Only for Report Use | PASS |
| | 5240 | SISO | 1 | 36.709 | Only for Report Use | PASS |
| 802.11n(HT20) | 5180 | SISO | 1 | 40.416 | Only for Report Use | PASS |
| | 5200 | SISO | 1 | 41.317 | Only for Report Use | PASS |
| | 5240 | SISO | 1 | 42.309 | Only for Report Use | PASS |
| 802.11n(HT40) | 5190 | SISO | 1 | 86.494 | Only for Report Use | PASS |
| | 5230 | SISO | 1 | 86.744 | Only for Report Use | PASS |

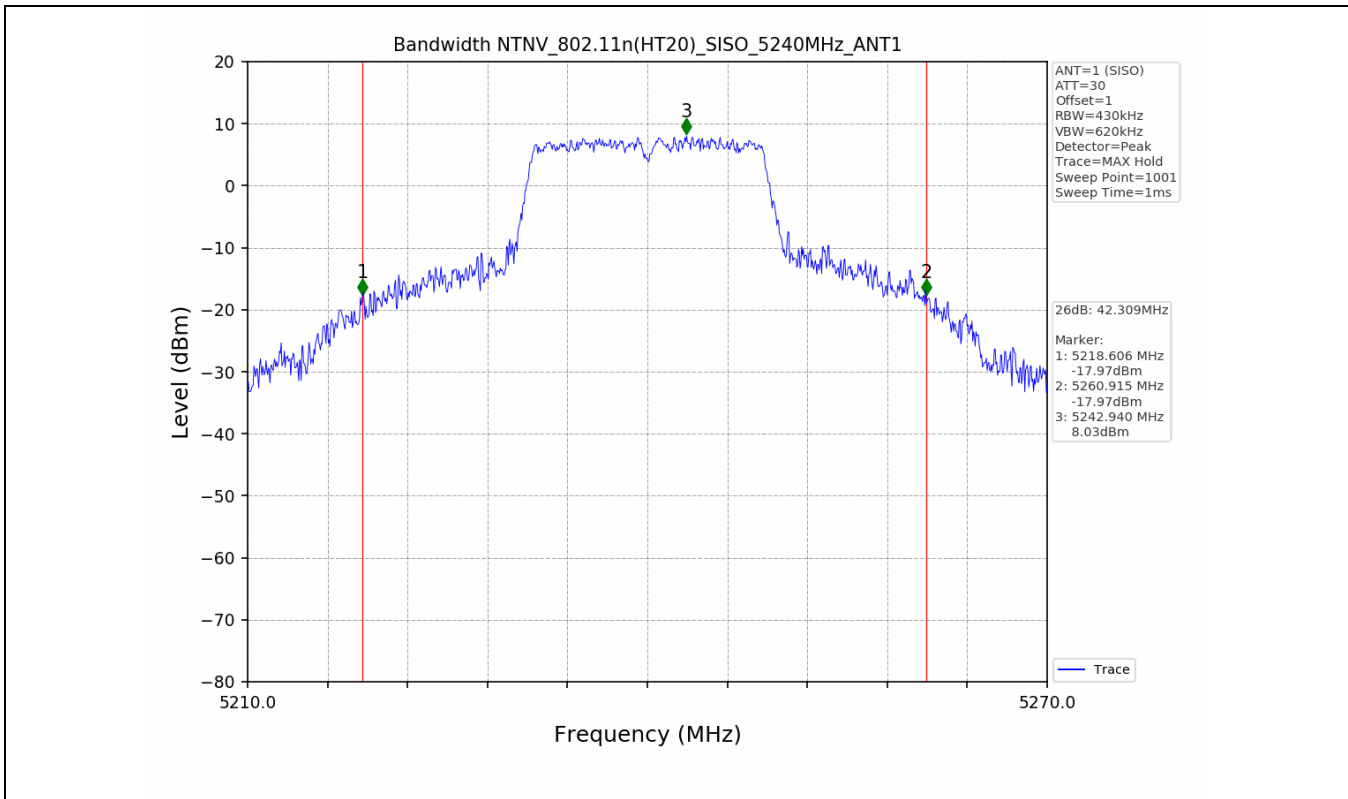
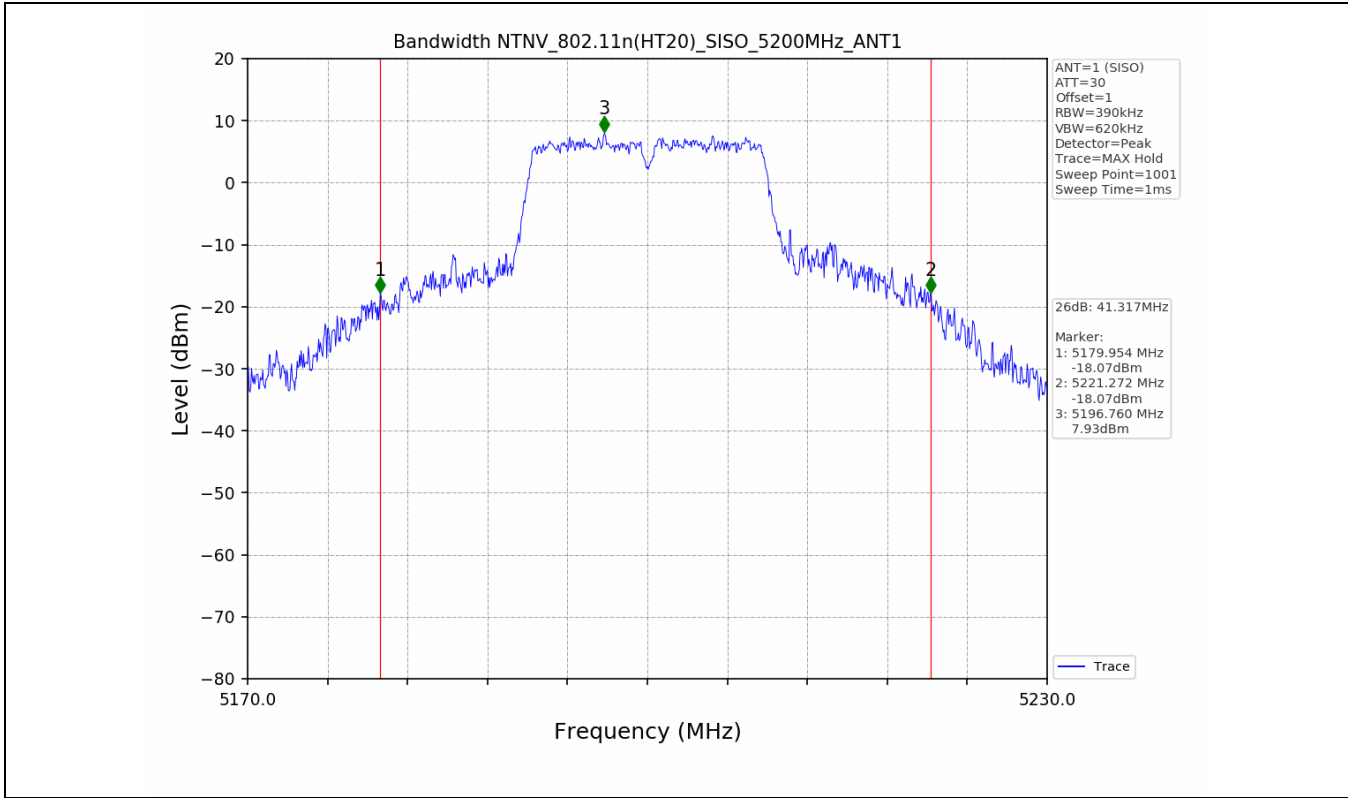
| Test Mode | Frequency (MHz) | TX Type | ANT No. | Emission Bandwidth | | Verdict |
|---------------|-----------------|---------|---------|--------------------|--------------|---------|
| | | | | Test Result (MHz) | Limits (MHz) | |
| 802.11a | 5745 | SISO | 1 | 16.406 | ≥0.5 | PASS |
| | 5785 | SISO | 1 | 16.409 | ≥0.5 | PASS |
| | 5825 | SISO | 1 | 16.418 | ≥0.5 | PASS |
| 802.11n(HT20) | 5745 | SISO | 1 | 17.668 | ≥0.5 | PASS |
| | 5785 | SISO | 1 | 17.639 | ≥0.5 | PASS |
| | 5825 | SISO | 1 | 17.833 | ≥0.5 | PASS |
| 802.11n(HT40) | 5755 | SISO | 1 | 33.609 | ≥0.5 | PASS |
| | 5795 | SISO | 1 | 35.525 | ≥0.5 | PASS |

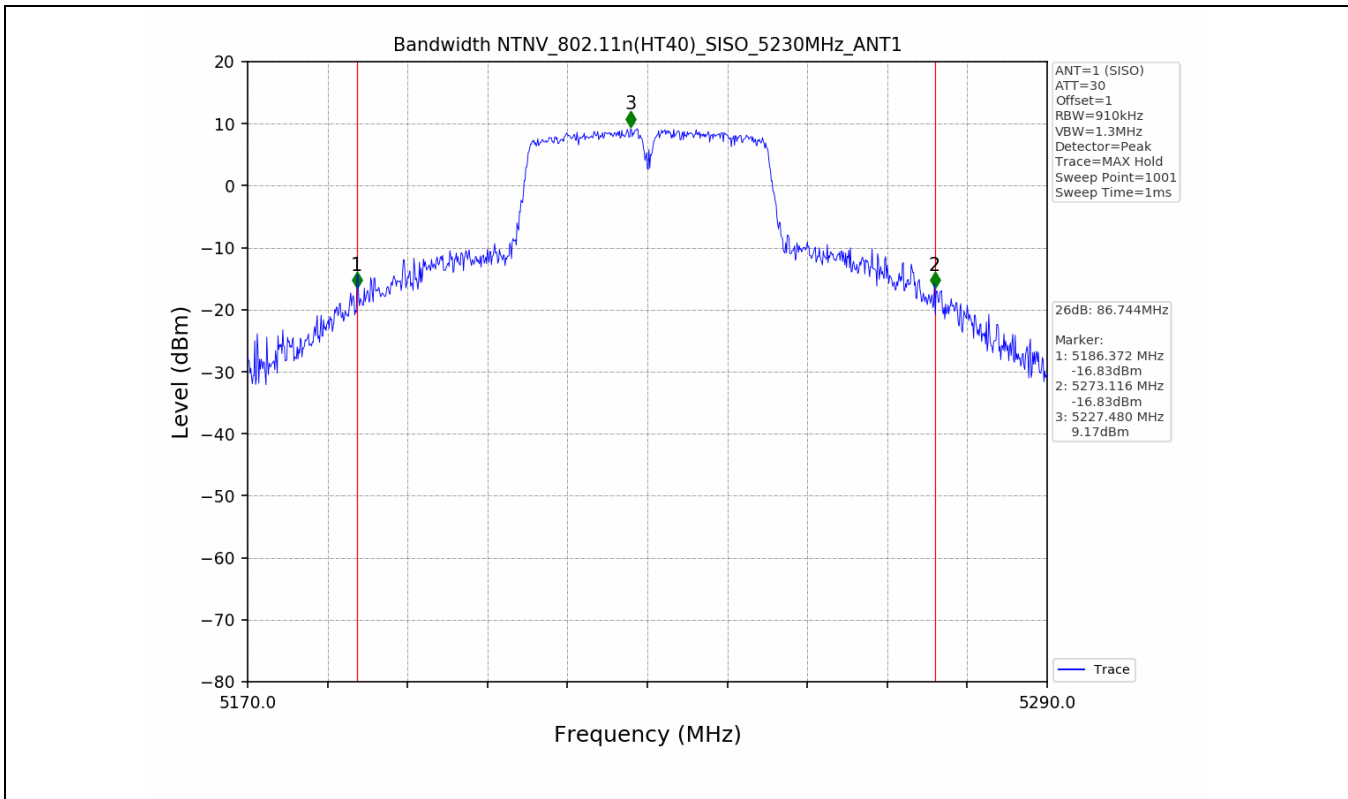
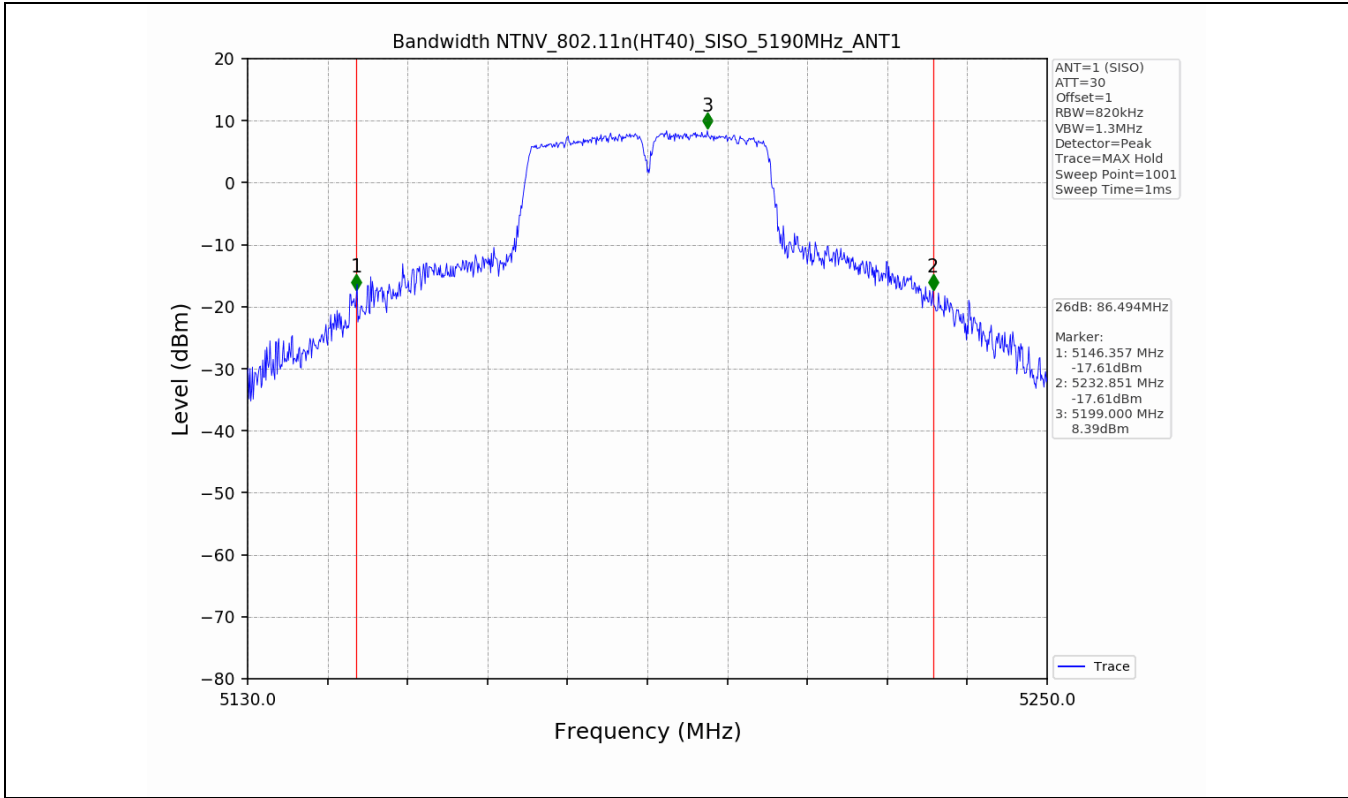
| Test Mode | Frequency (MHz) | TX Type | ANT No. | 99% Occupied Bandwidth | |
|---------------|-----------------|---------|---------|------------------------|---------------------|
| | | | | Test Result (MHz) | |
| 802.11a | 5180 | SISO | 1 | 19.125 | Only for Report Use |
| | 5200 | SISO | 1 | 19.282 | Only for Report Use |
| | 5240 | SISO | 1 | 19.187 | Only for Report Use |
| | 5745 | SISO | 1 | 17.321 | Only for Report Use |
| | 5785 | SISO | 1 | 17.296 | Only for Report Use |
| | 5825 | SISO | 1 | 17.248 | Only for Report Use |
| 802.11n(HT20) | 5180 | SISO | 1 | 21.399 | Only for Report Use |
| | 5200 | SISO | 1 | 20.766 | Only for Report Use |
| | 5240 | SISO | 1 | 20.519 | Only for Report Use |
| | 5745 | SISO | 1 | 18.098 | Only for Report Use |
| | 5785 | SISO | 1 | 18.057 | Only for Report Use |
| | 5825 | SISO | 1 | 18.084 | Only for Report Use |
| 802.11n(HT40) | 5190 | SISO | 1 | 43.036 | Only for Report Use |
| | 5230 | SISO | 1 | 44.378 | Only for Report Use |
| | 5755 | SISO | 1 | 36.928 | Only for Report Use |
| | 5795 | SISO | 1 | 36.956 | Only for Report Use |

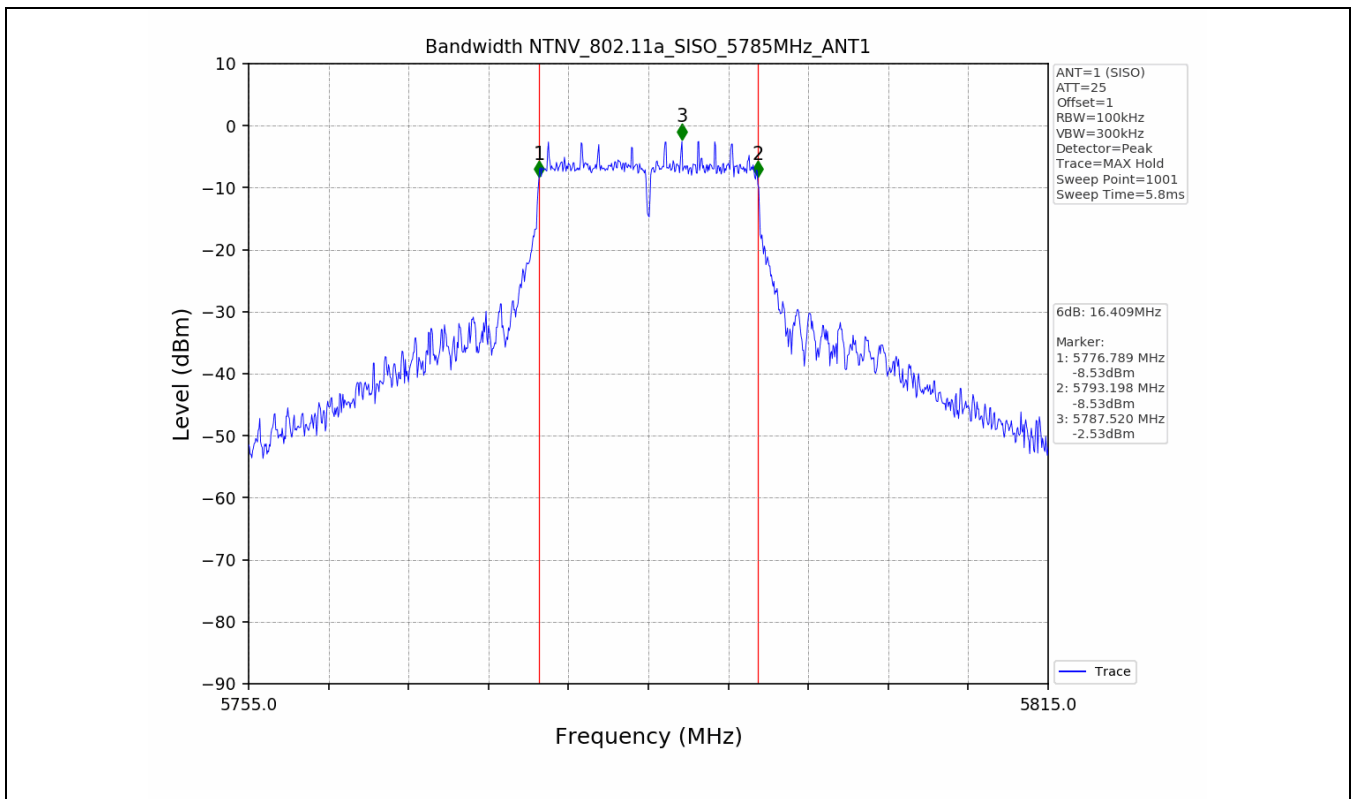
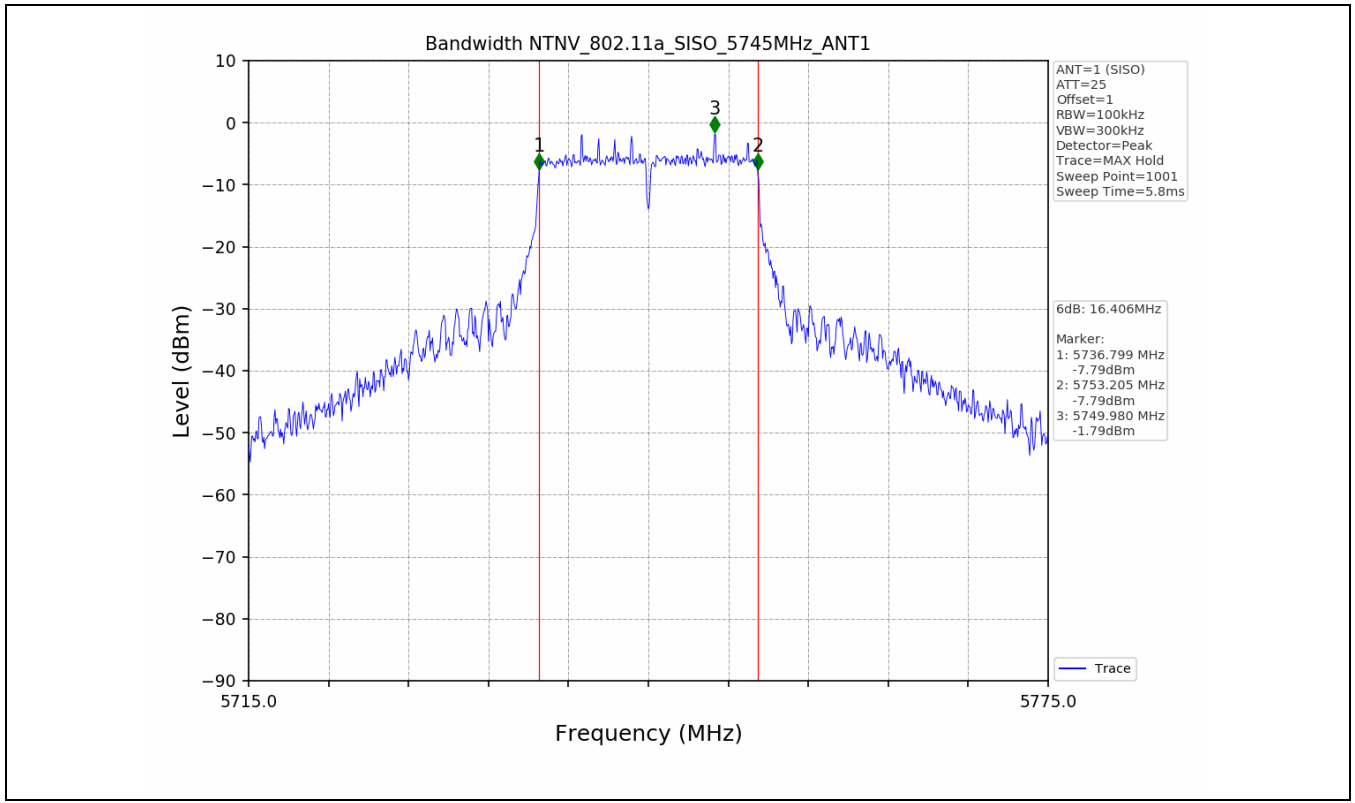
1.2 Test Graph - Emission Bandwidth

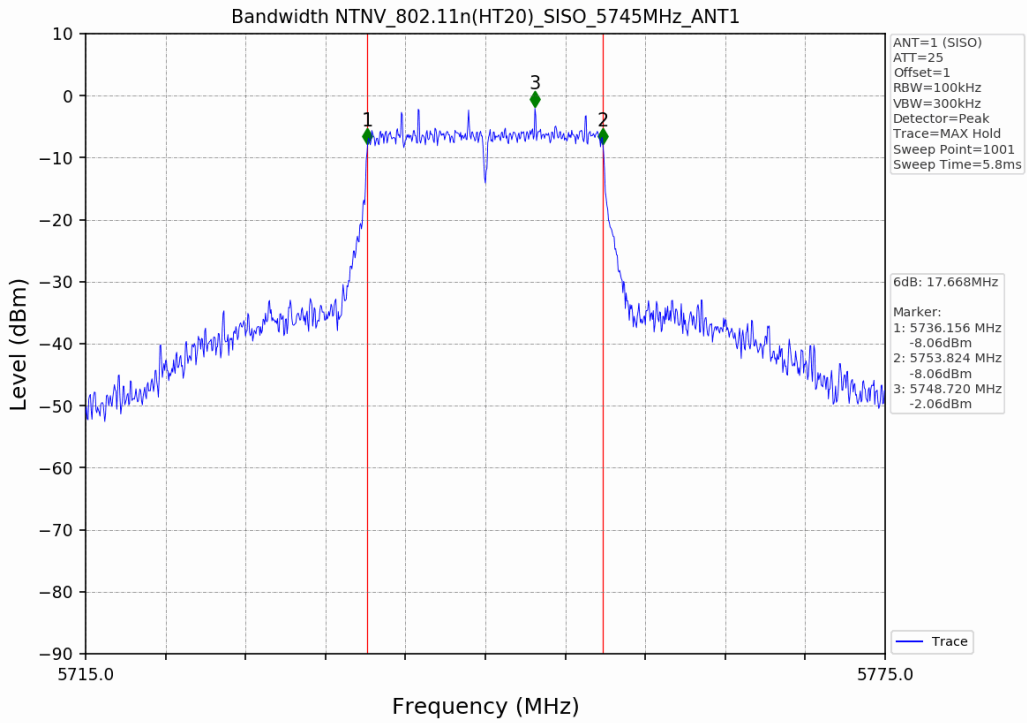
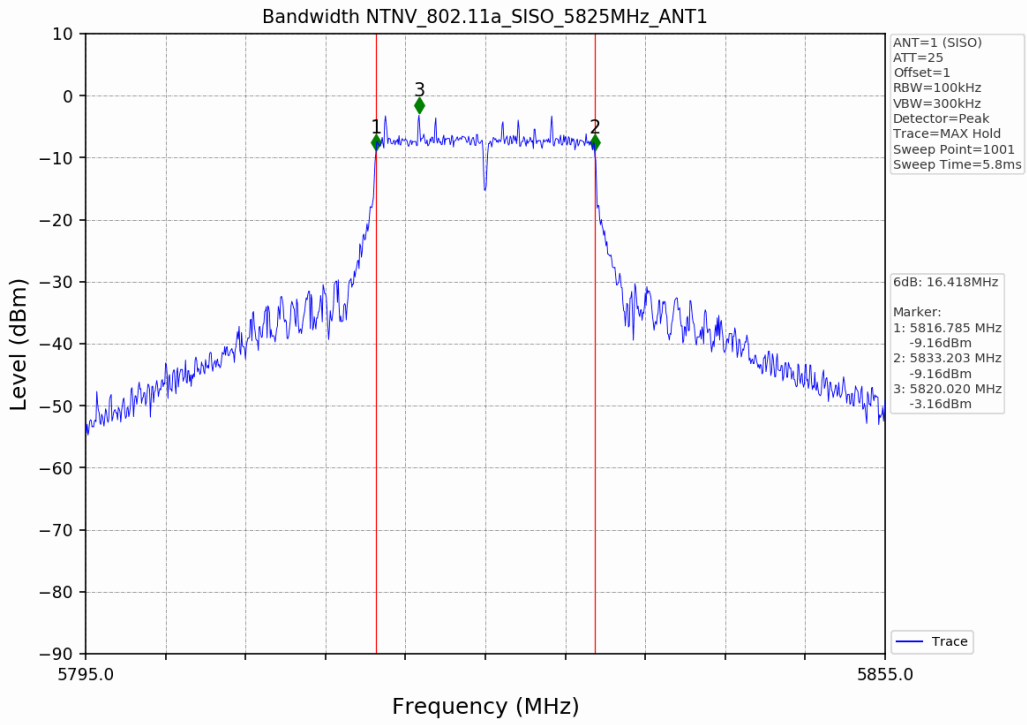


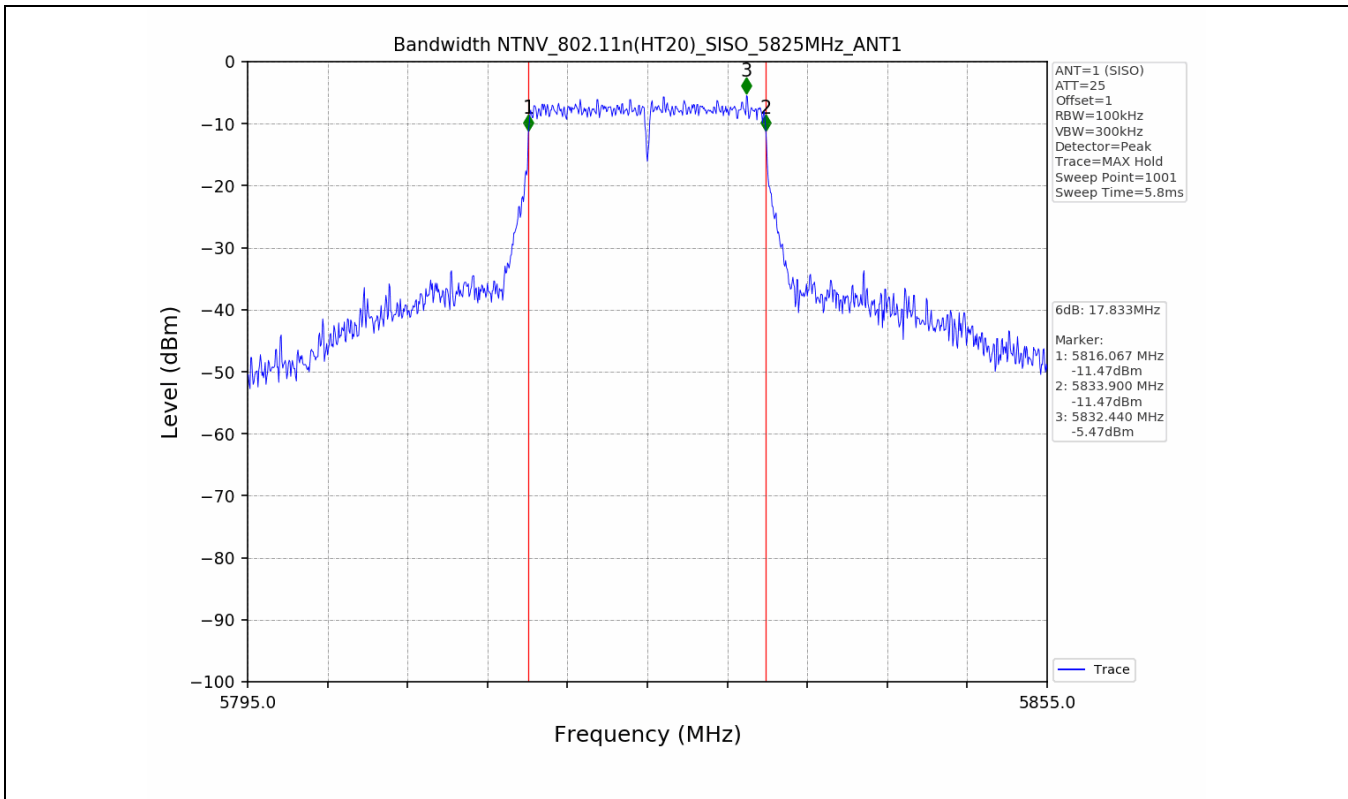
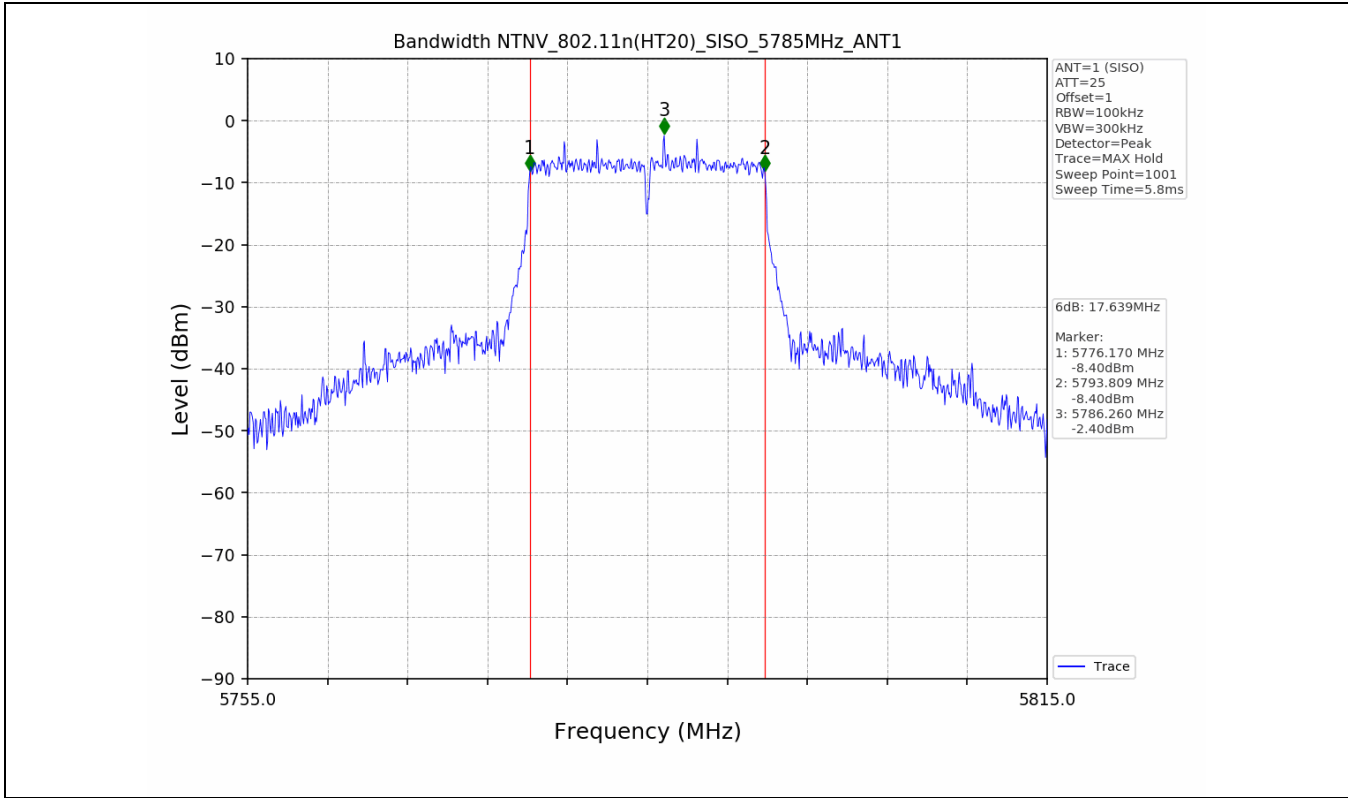


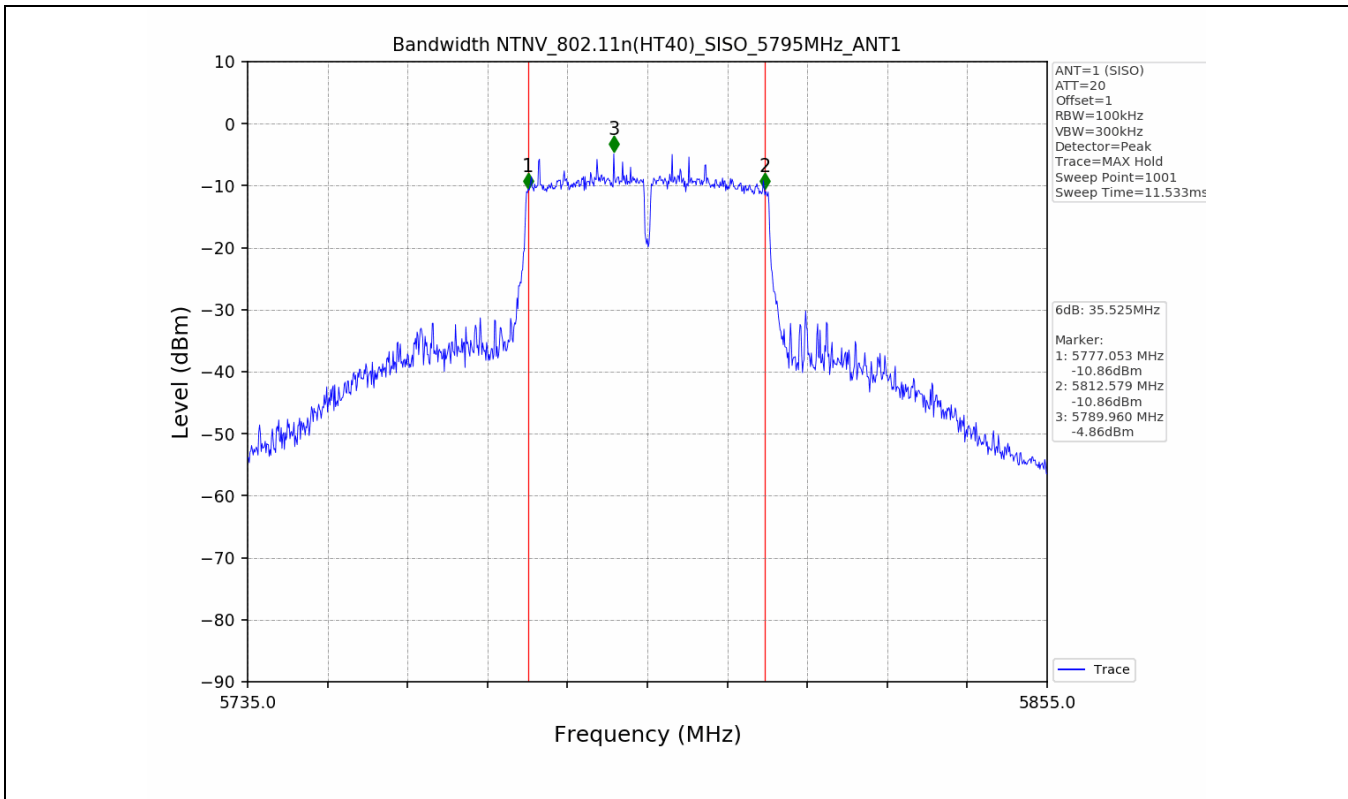
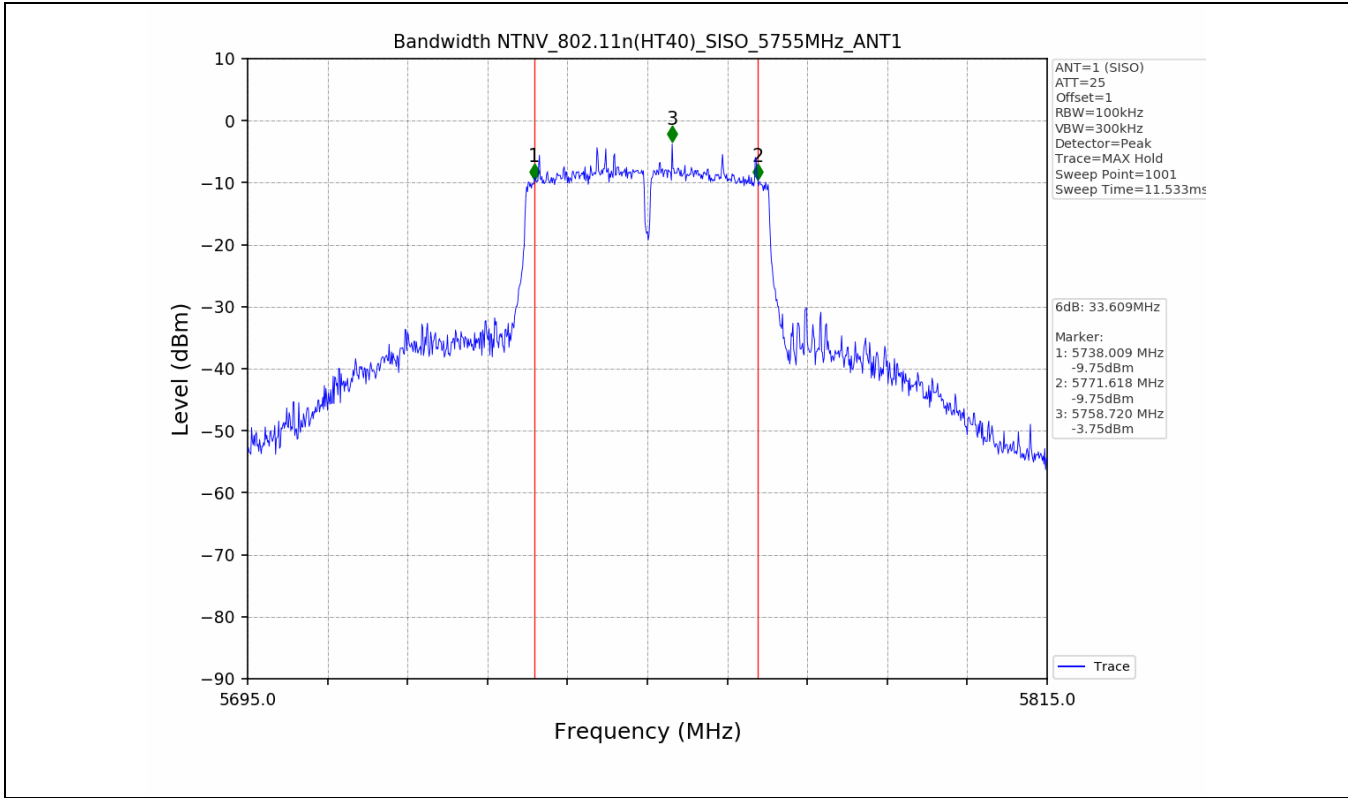




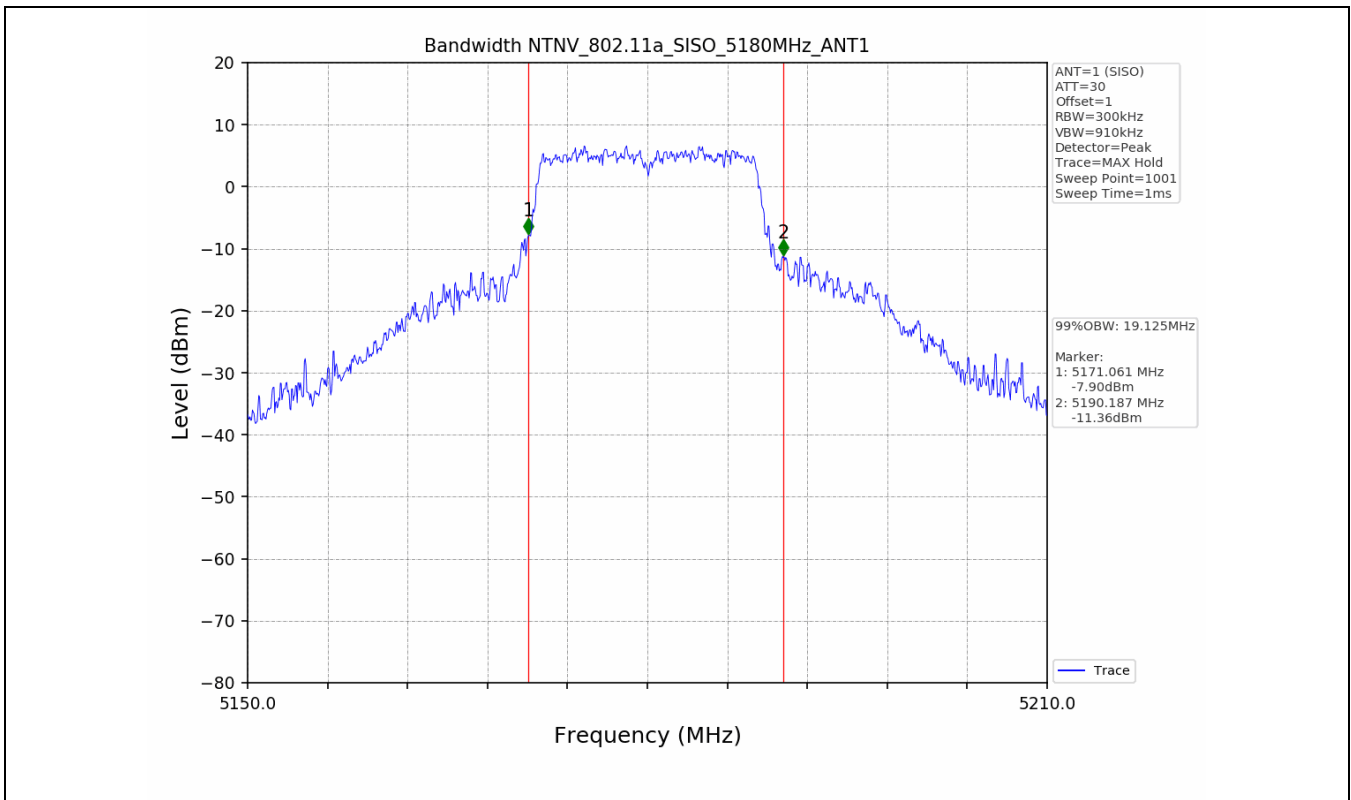


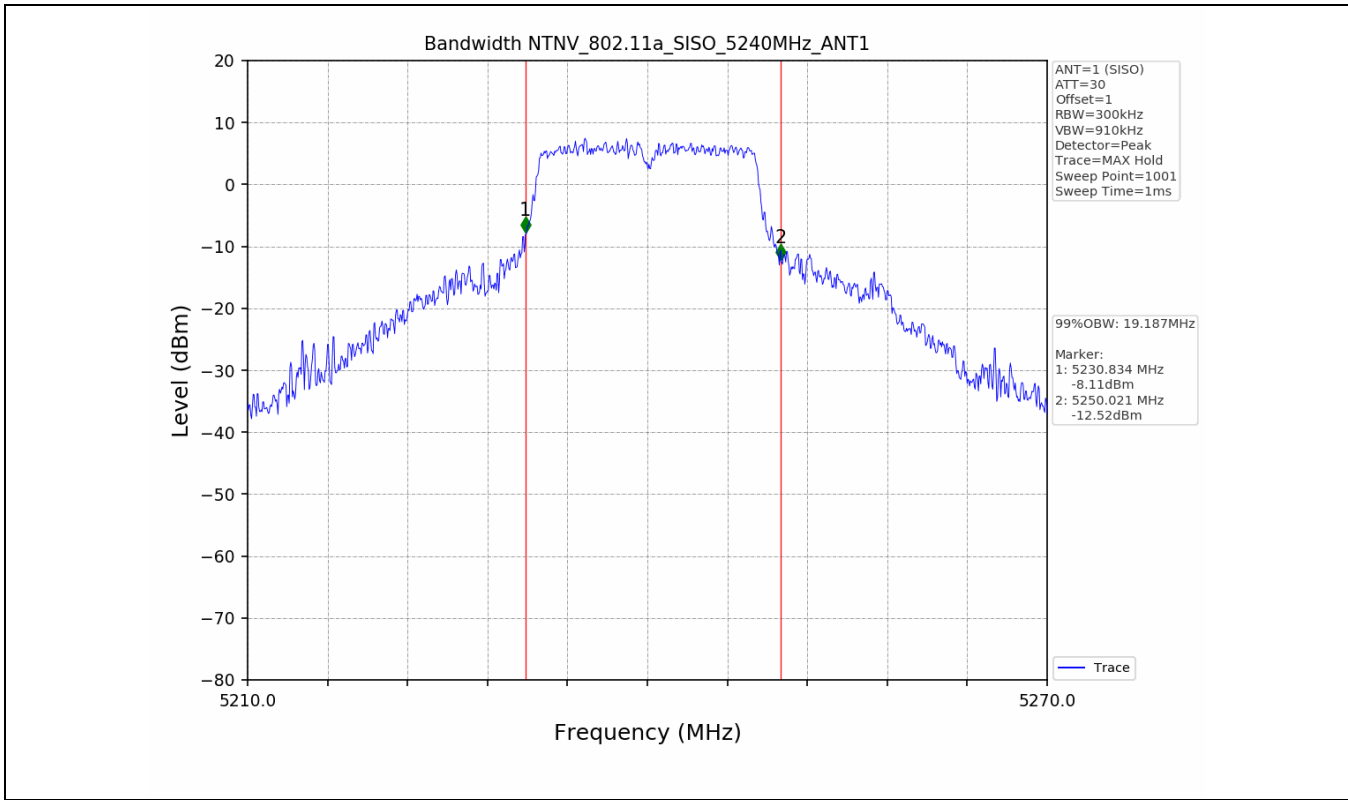
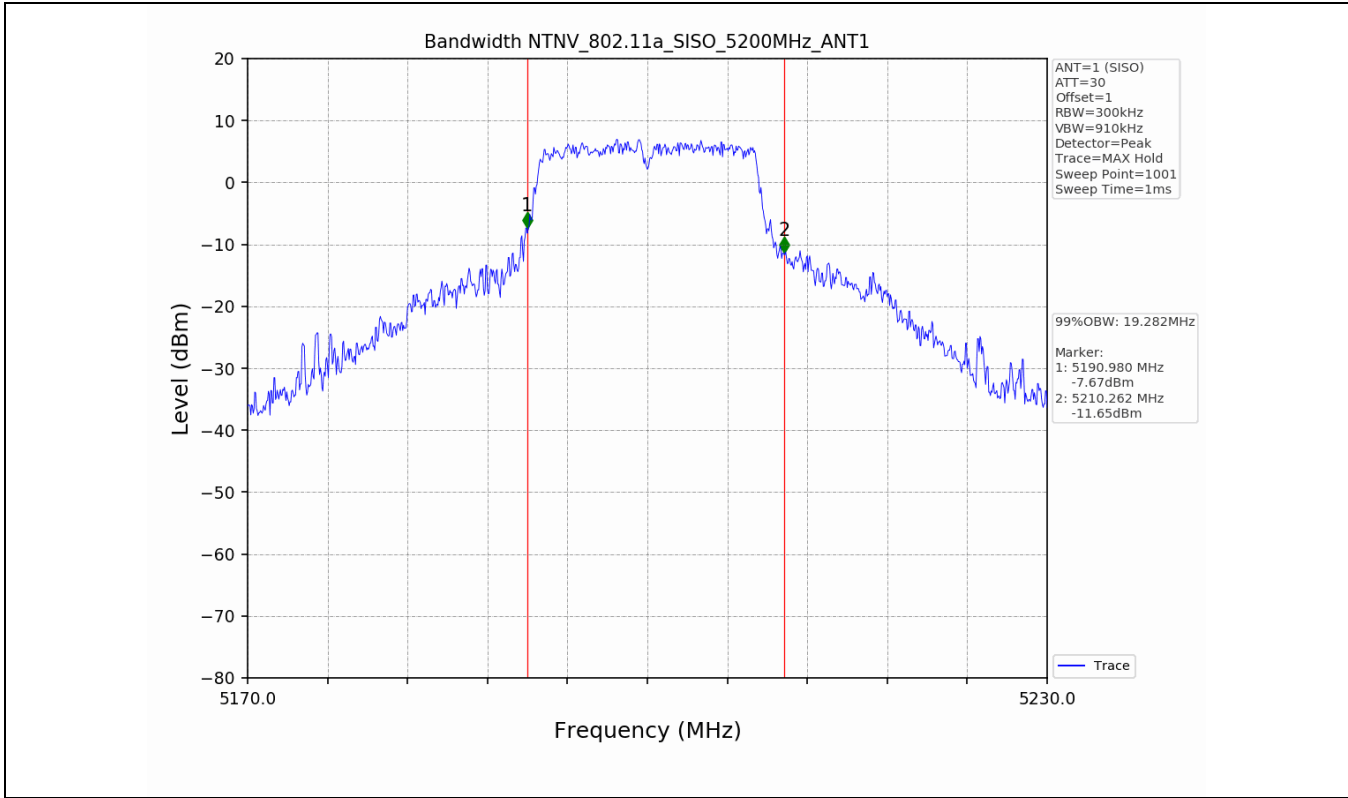


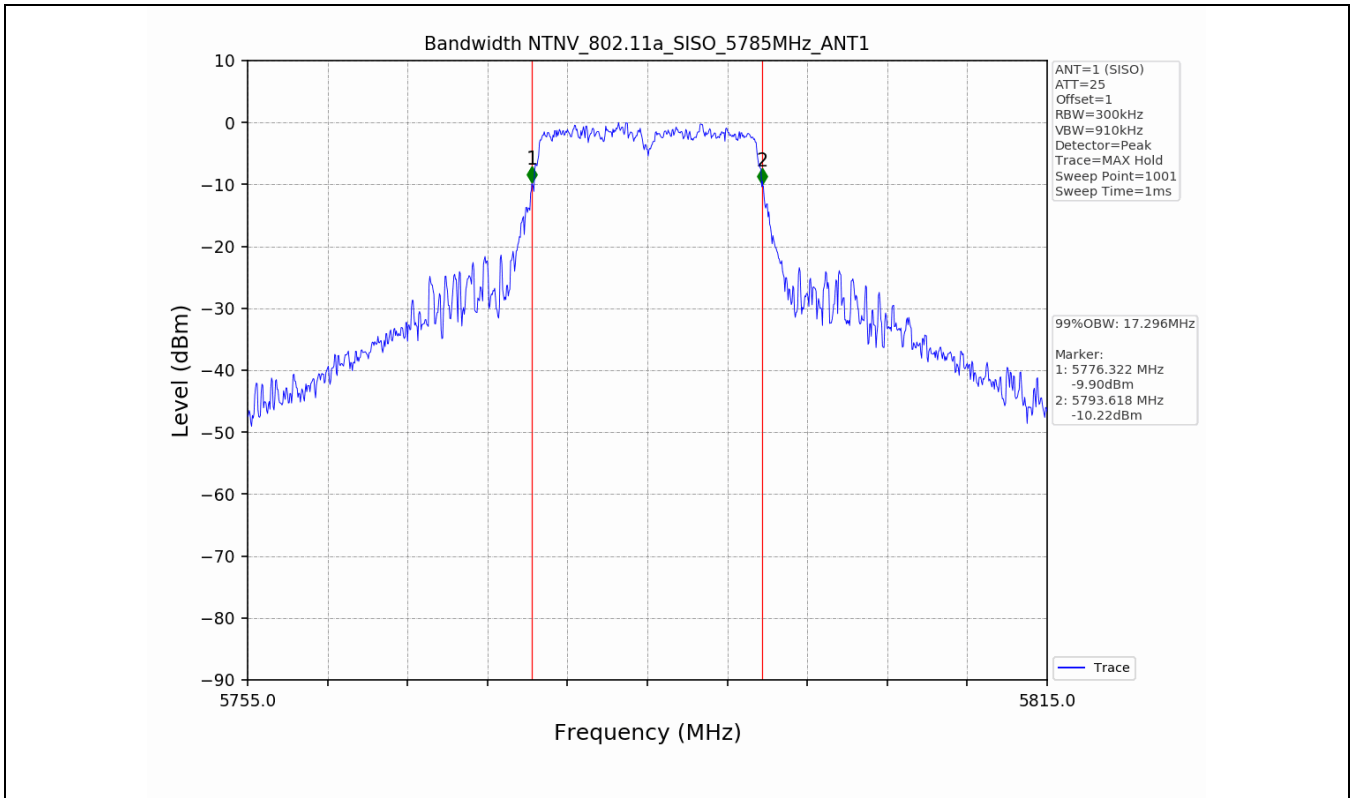
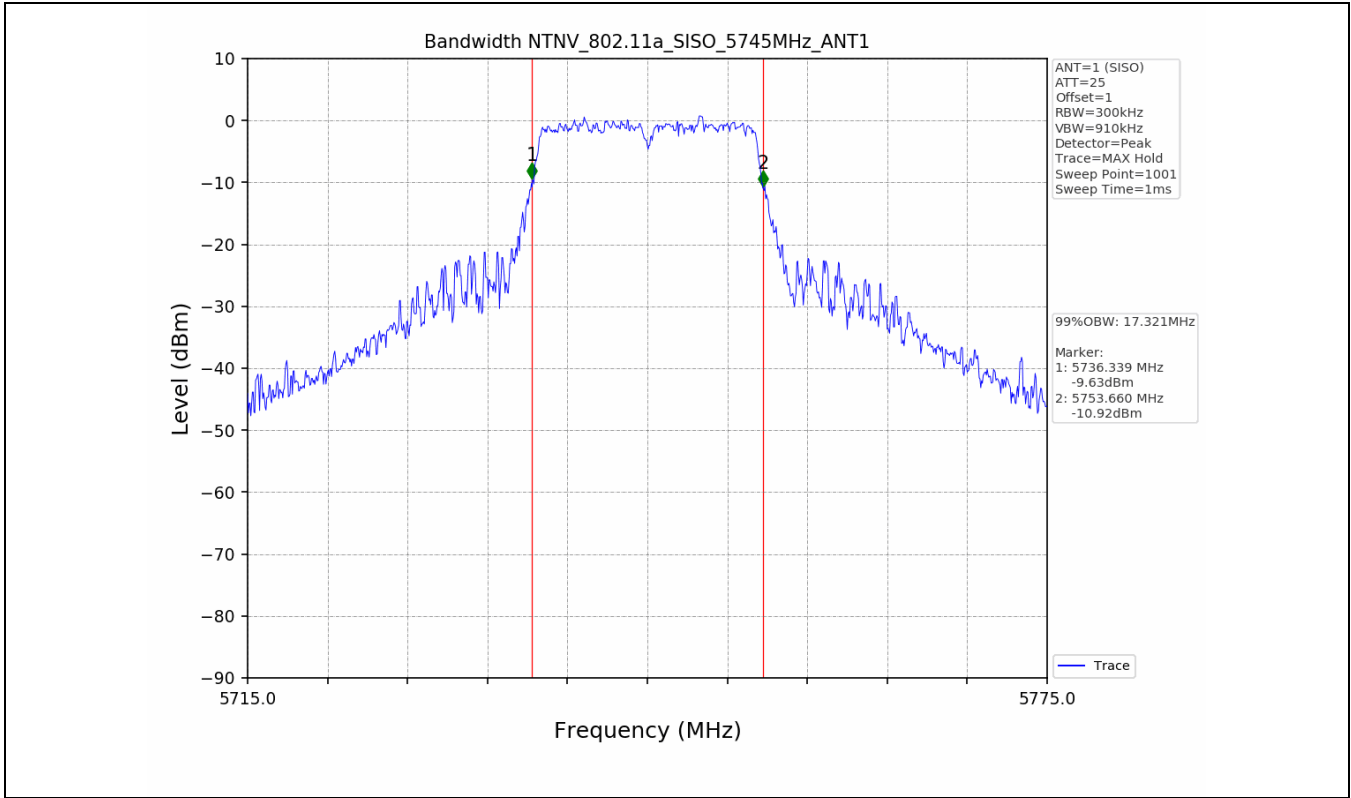


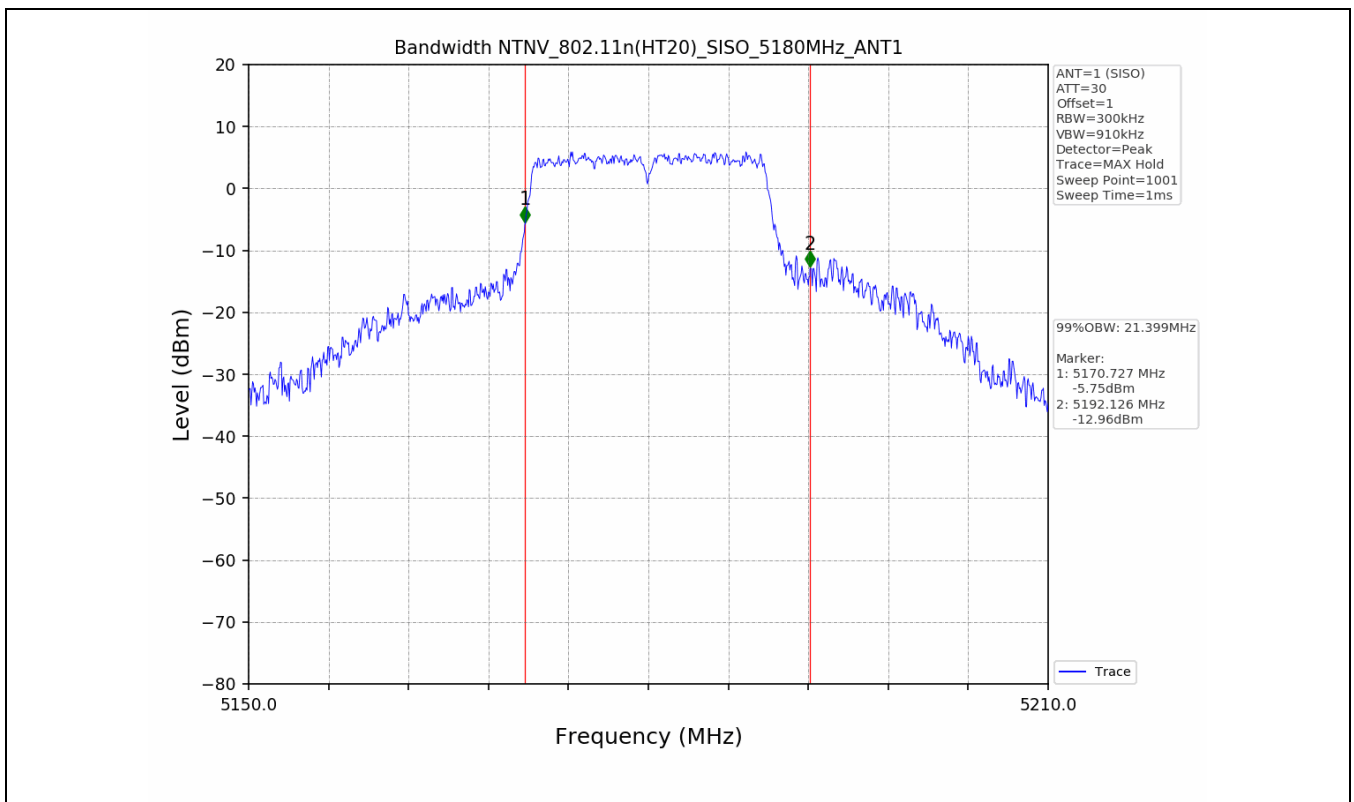
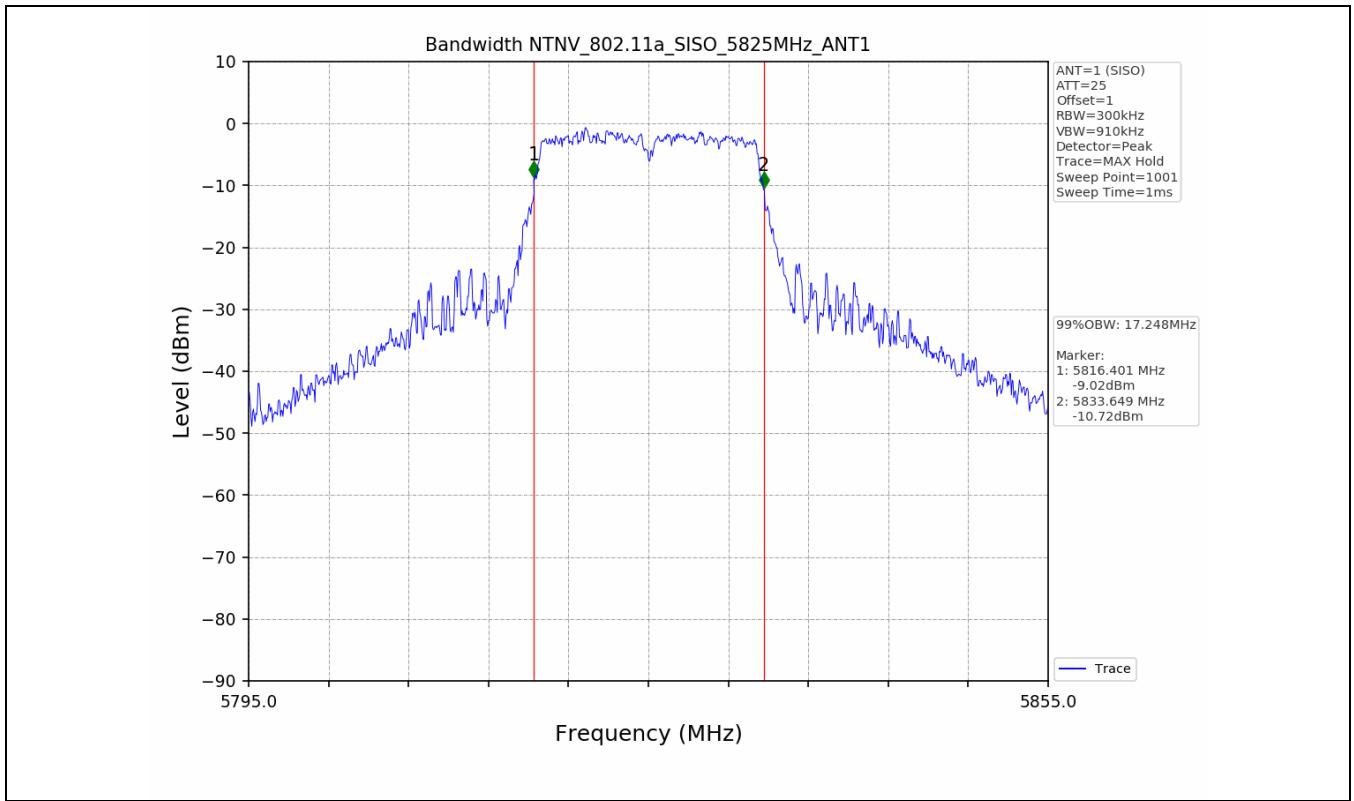


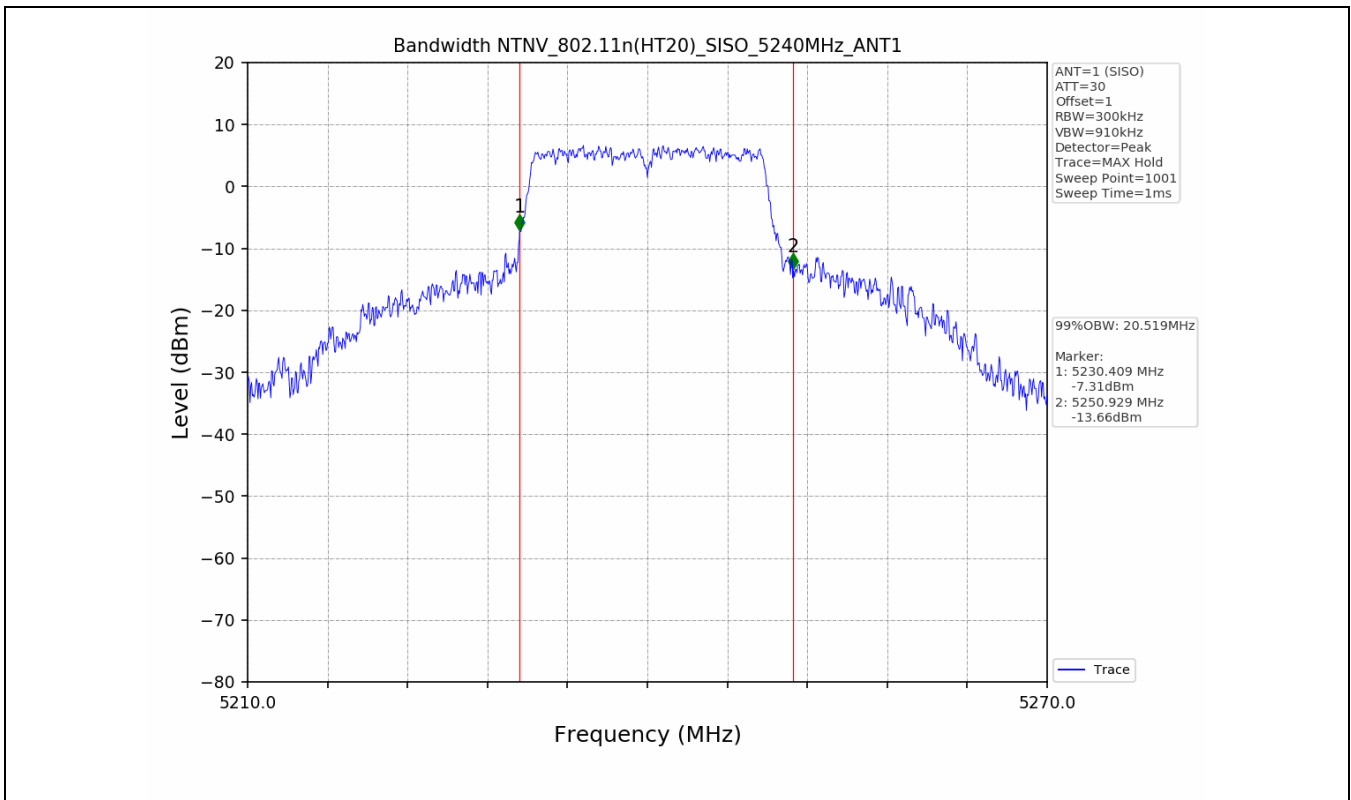
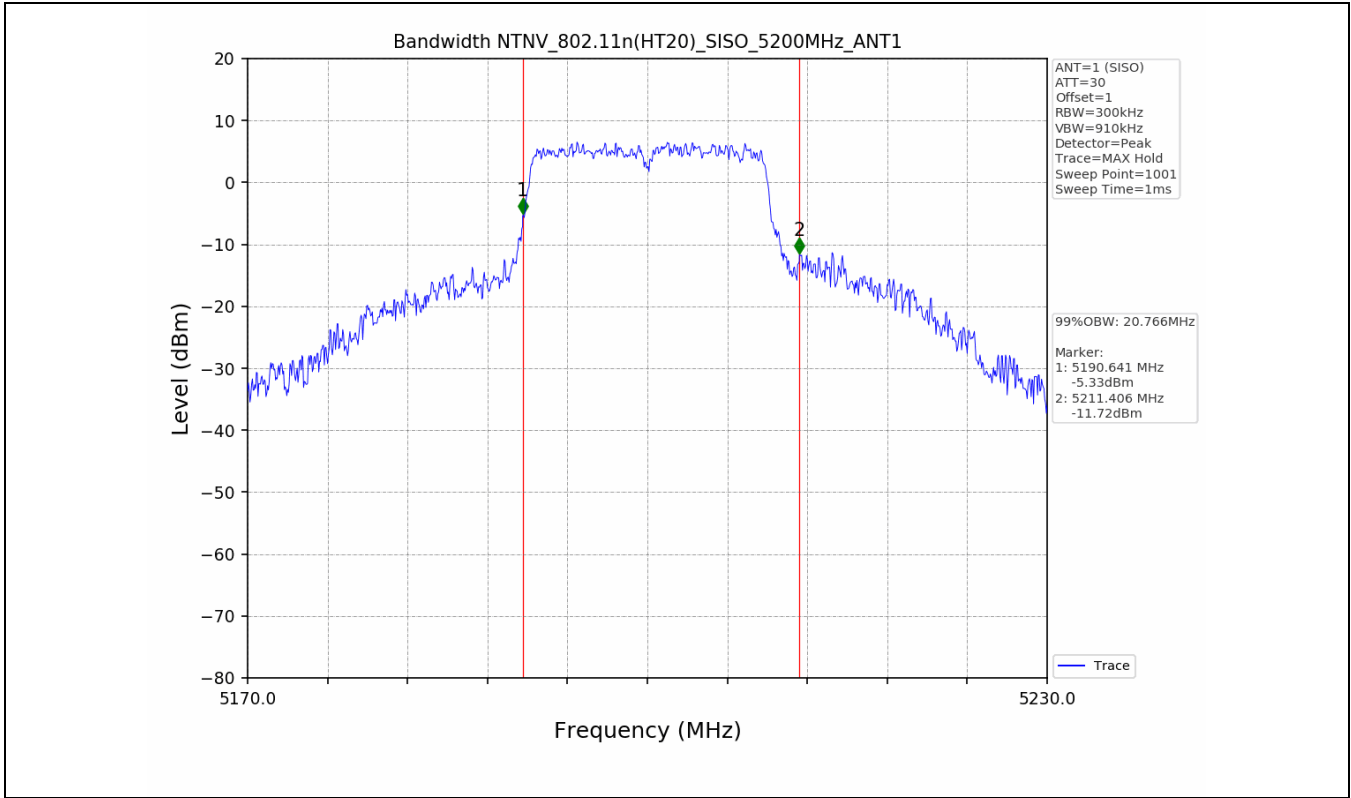
1.3 Test Graph - 99% Occupied Bandwidth

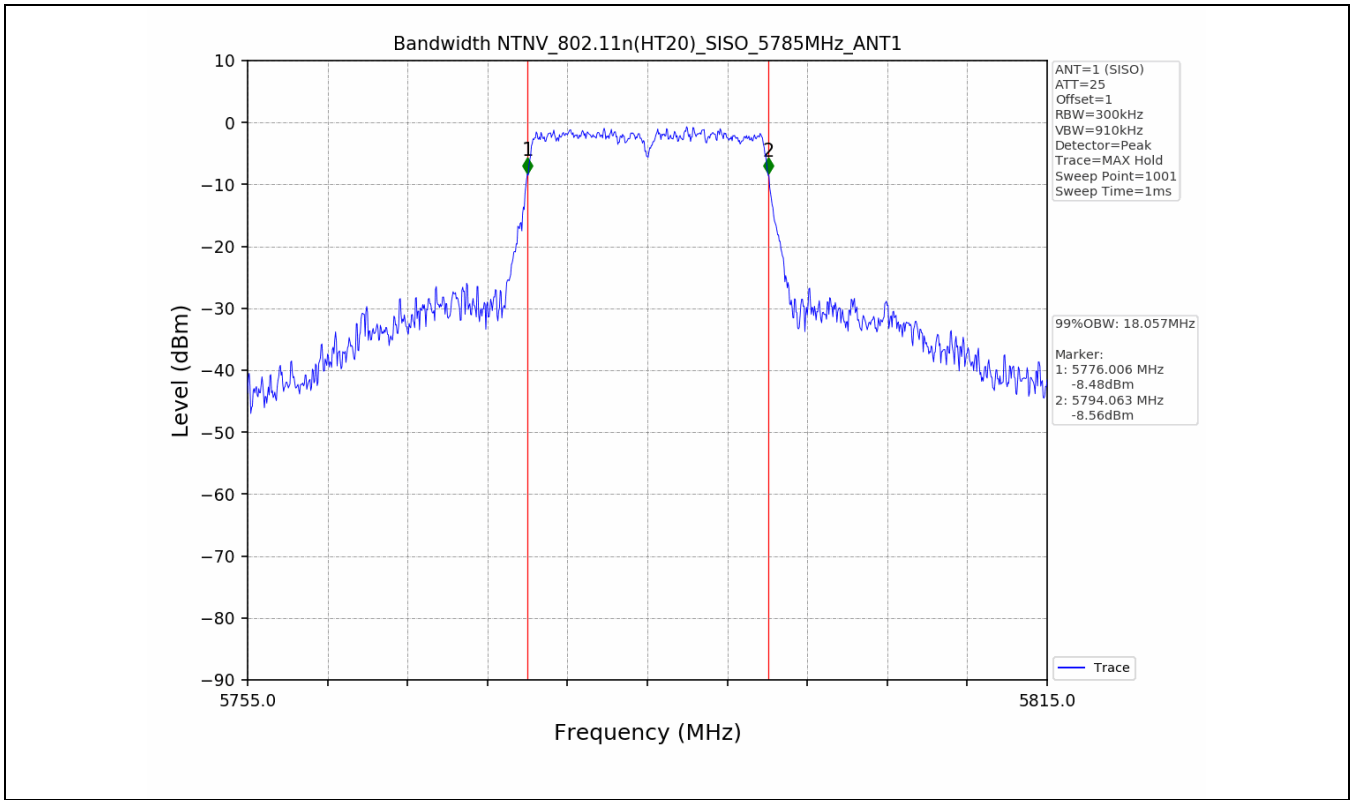
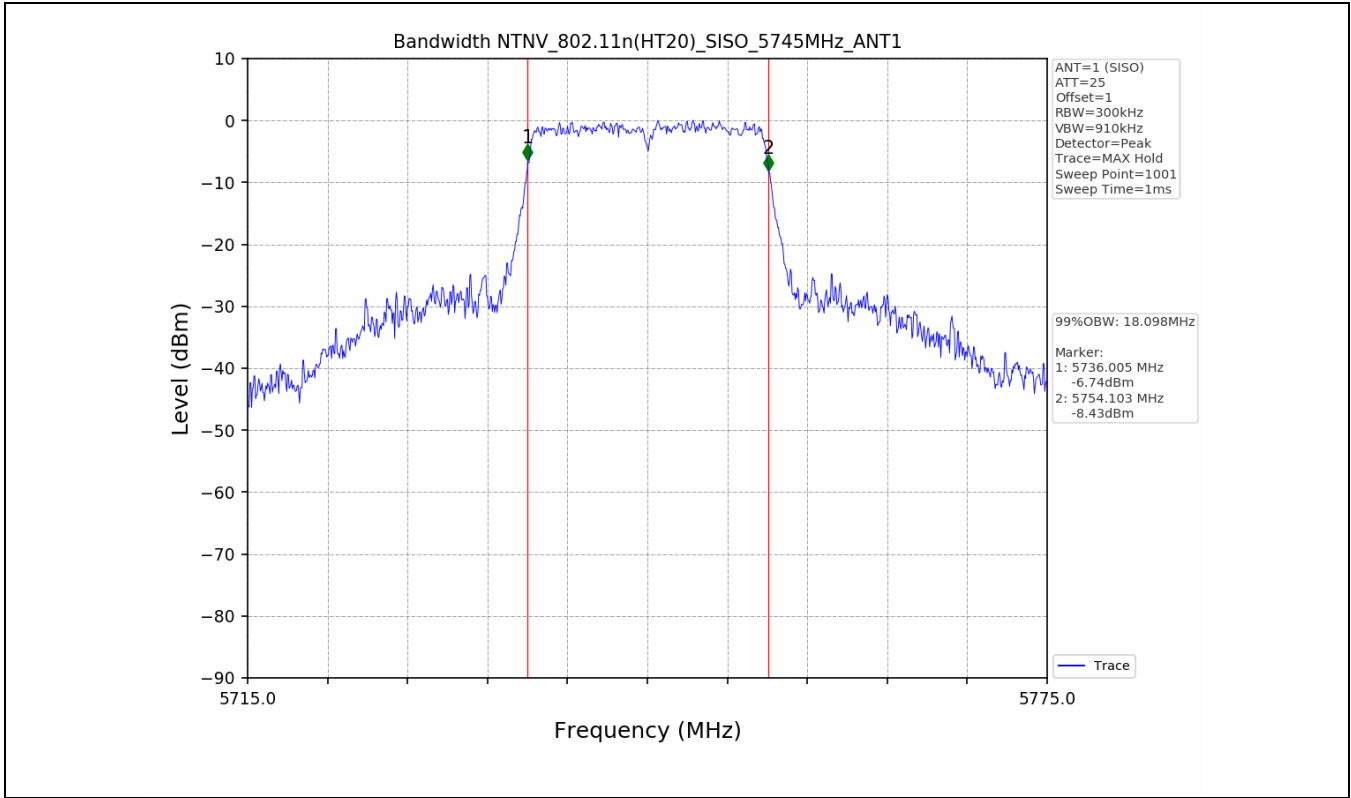


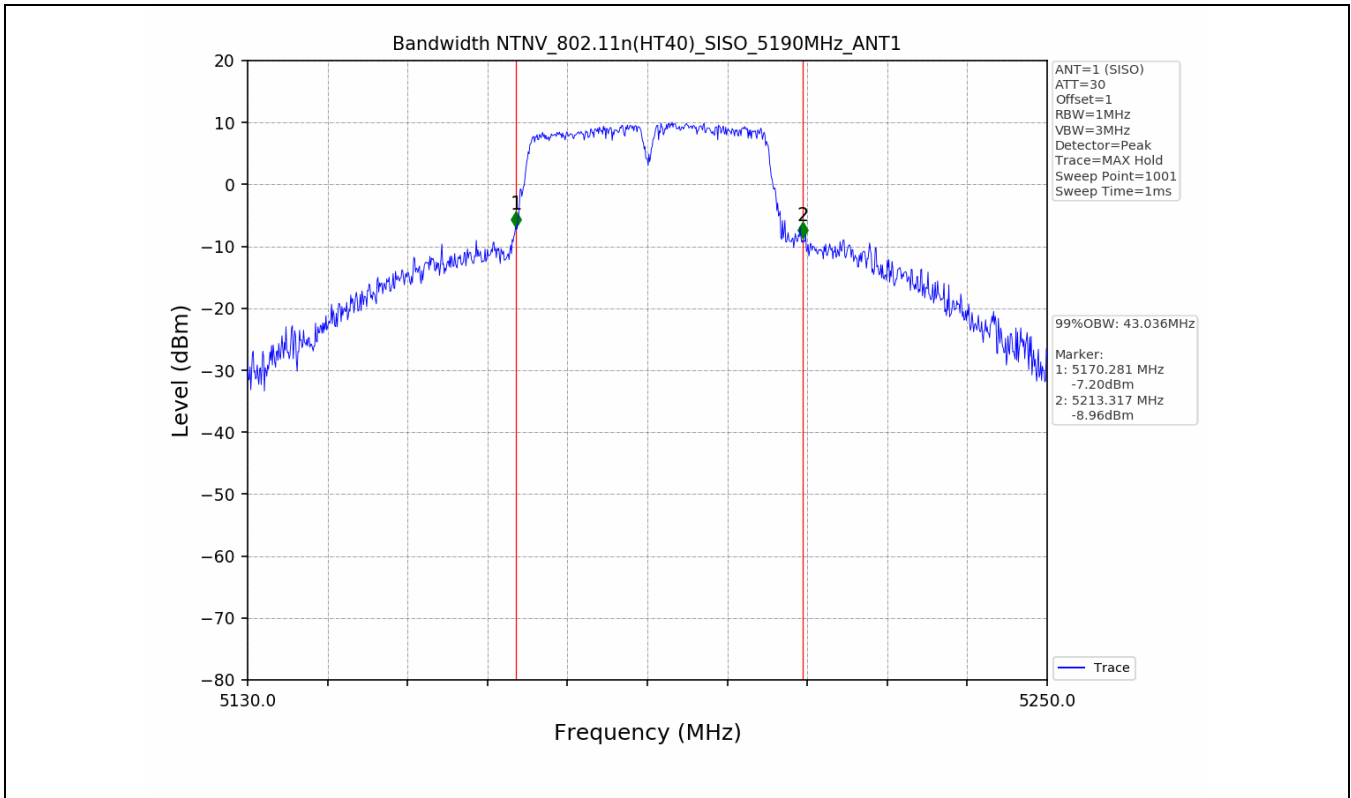
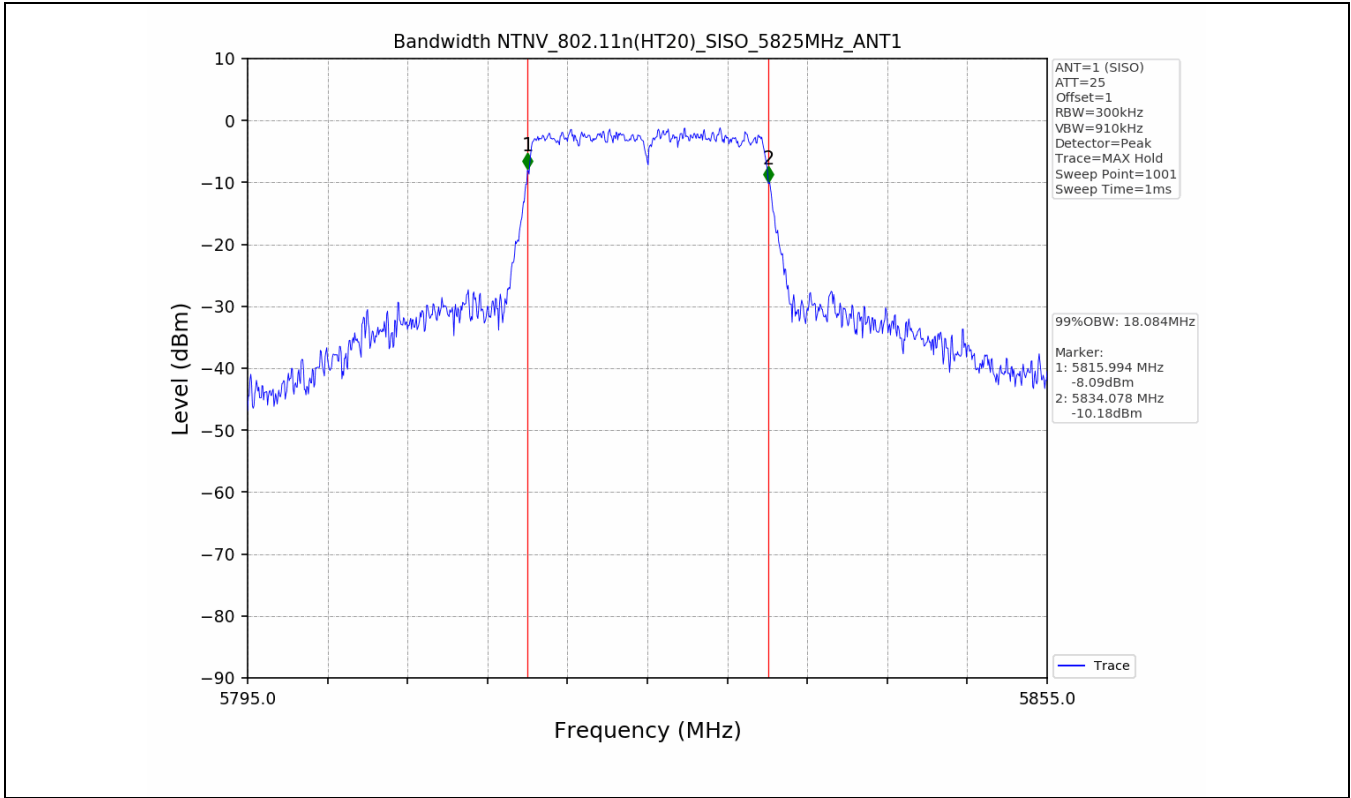


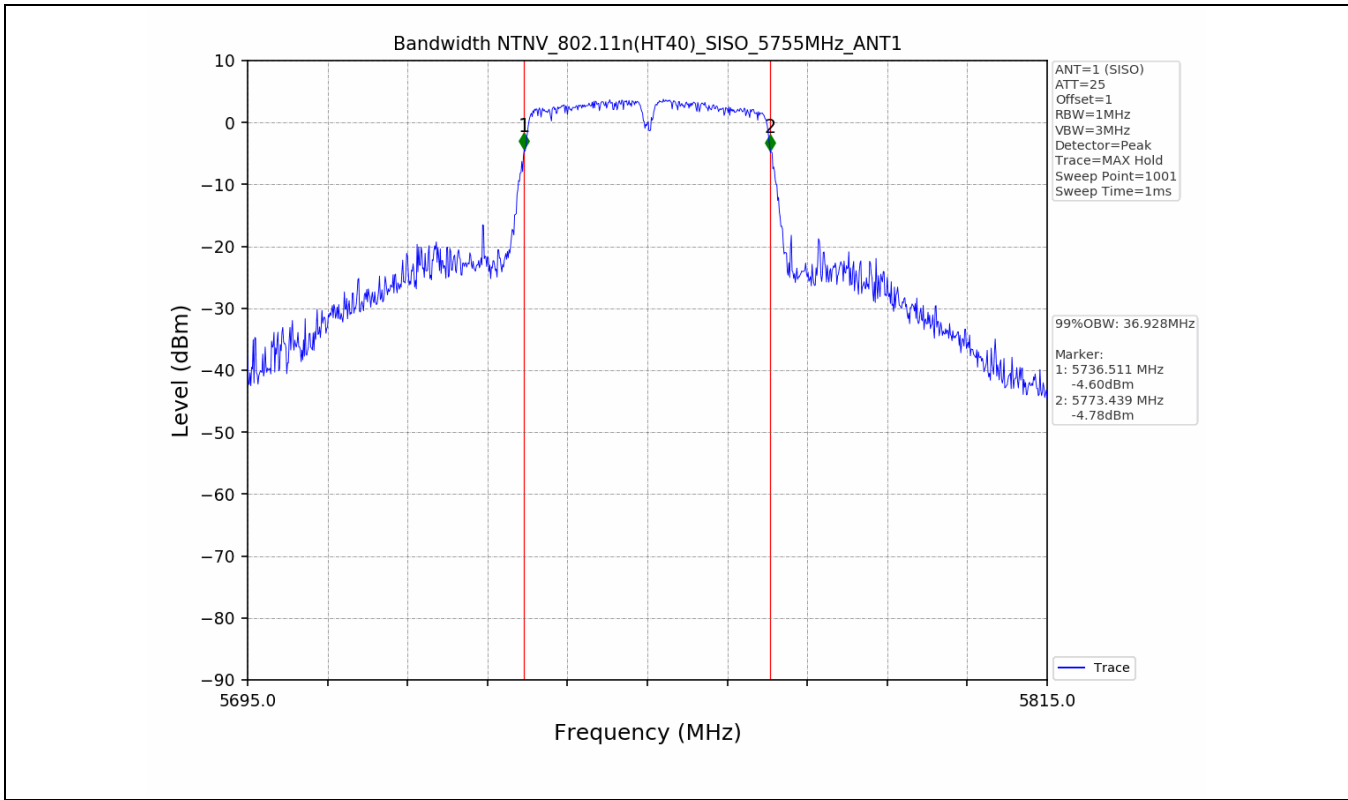
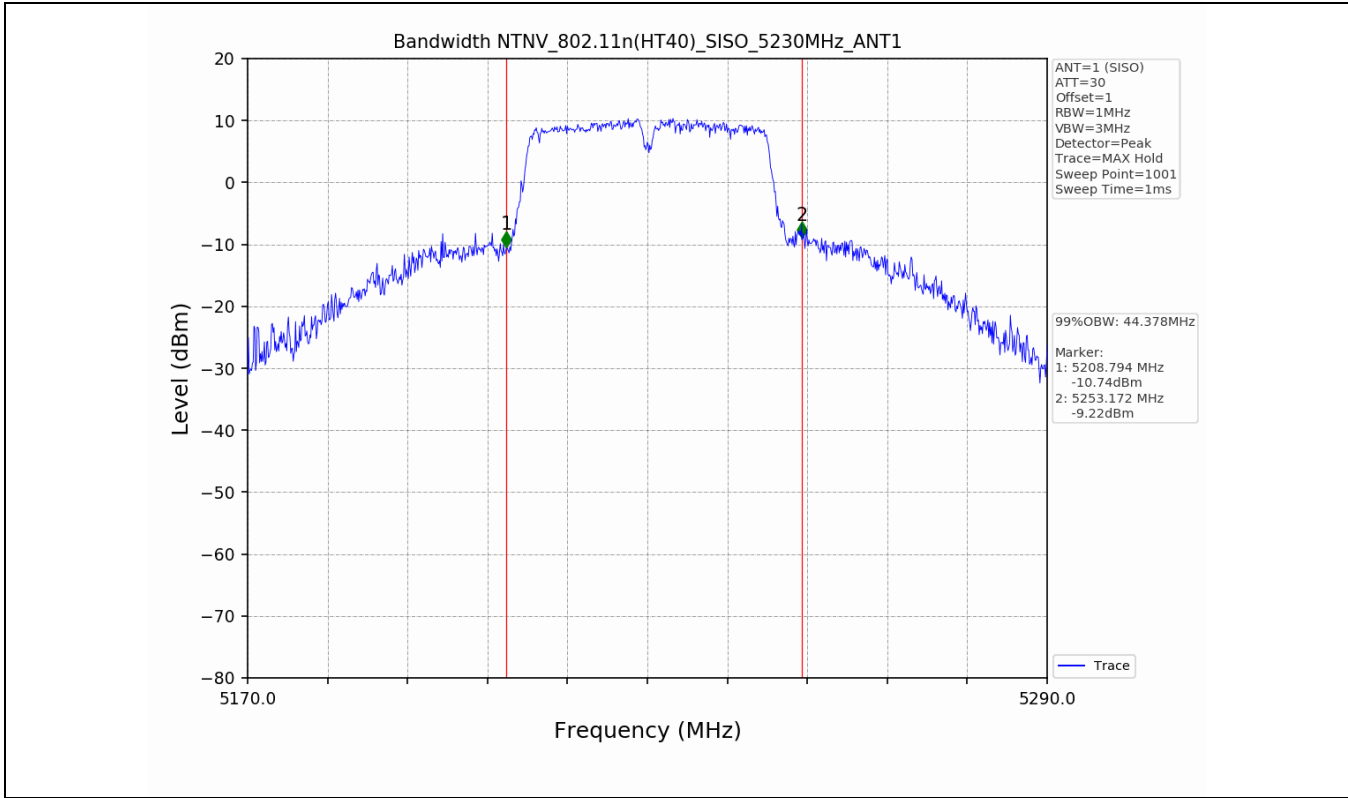


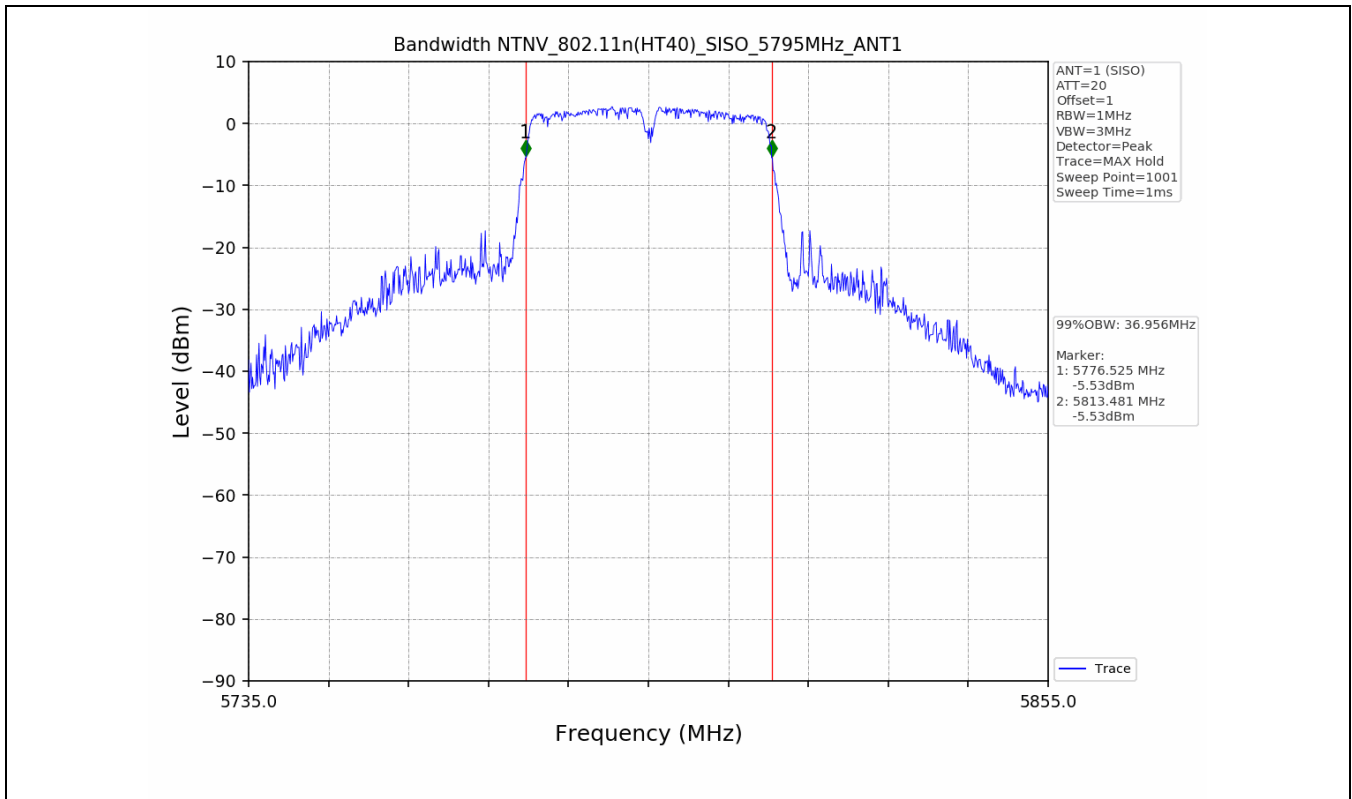










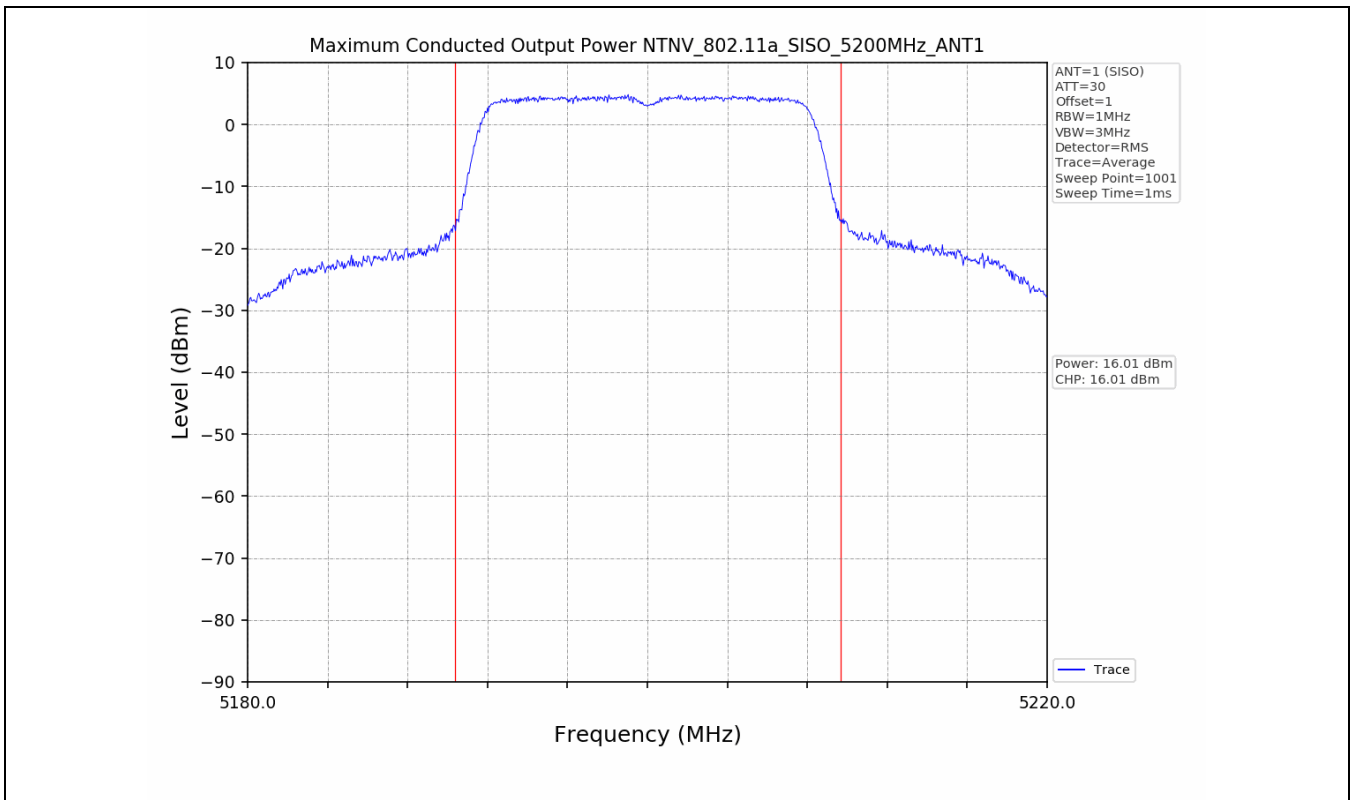
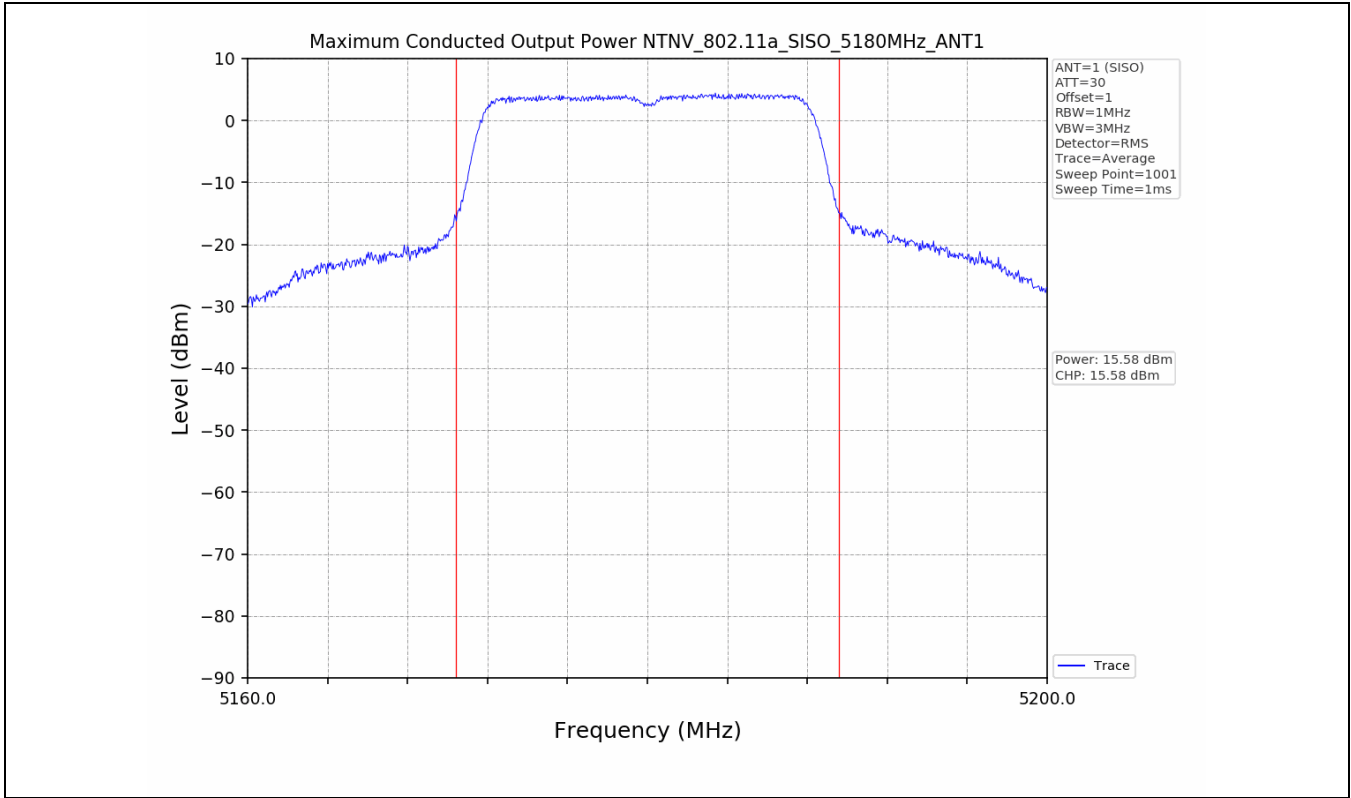


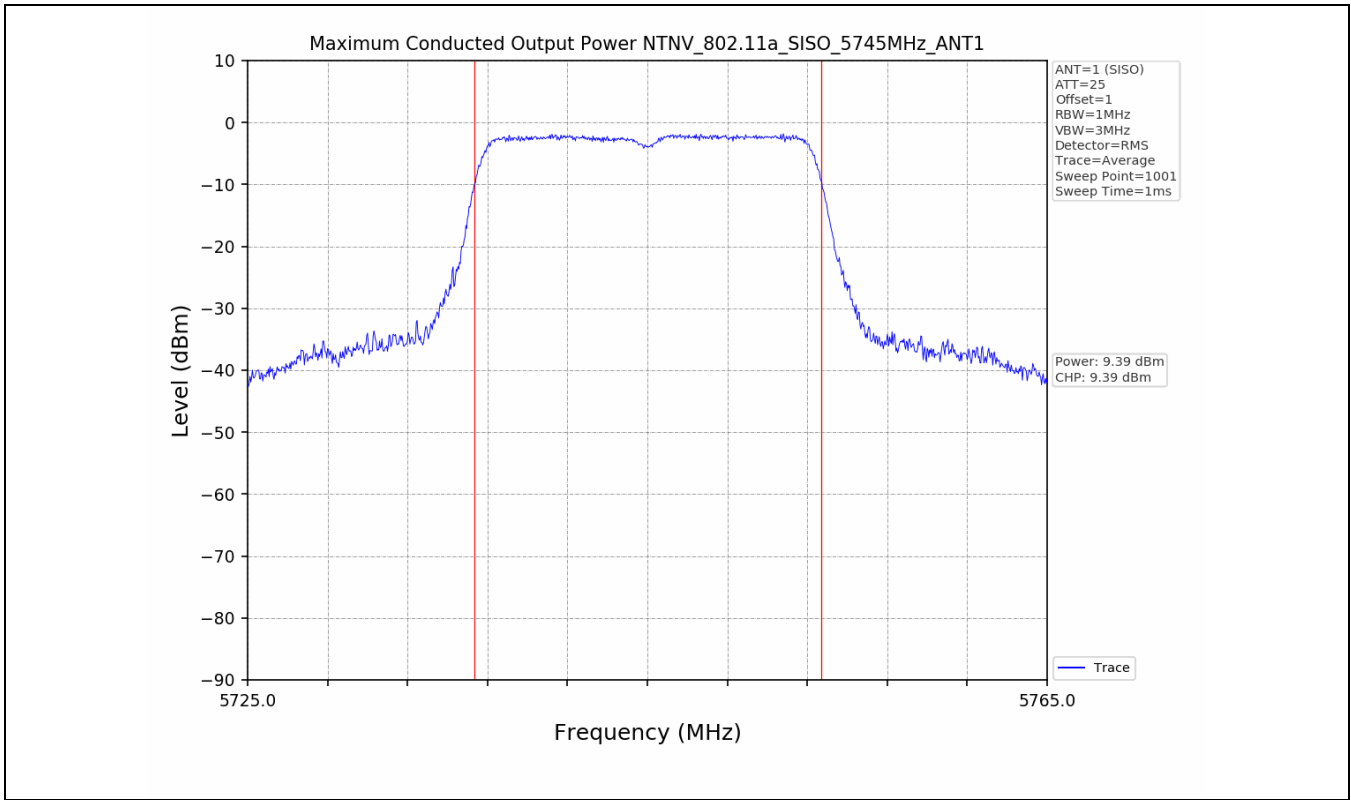
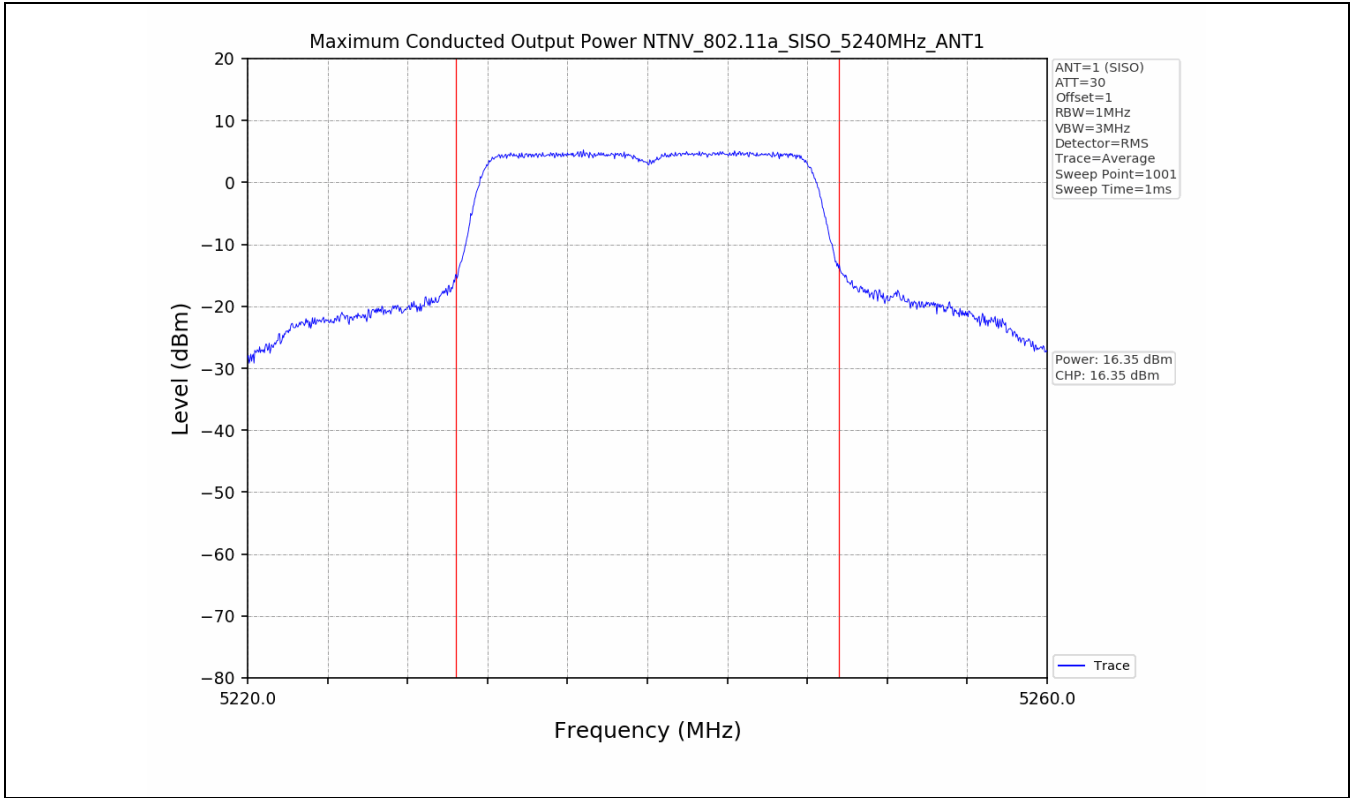
2. Maximum Conducted Output Power

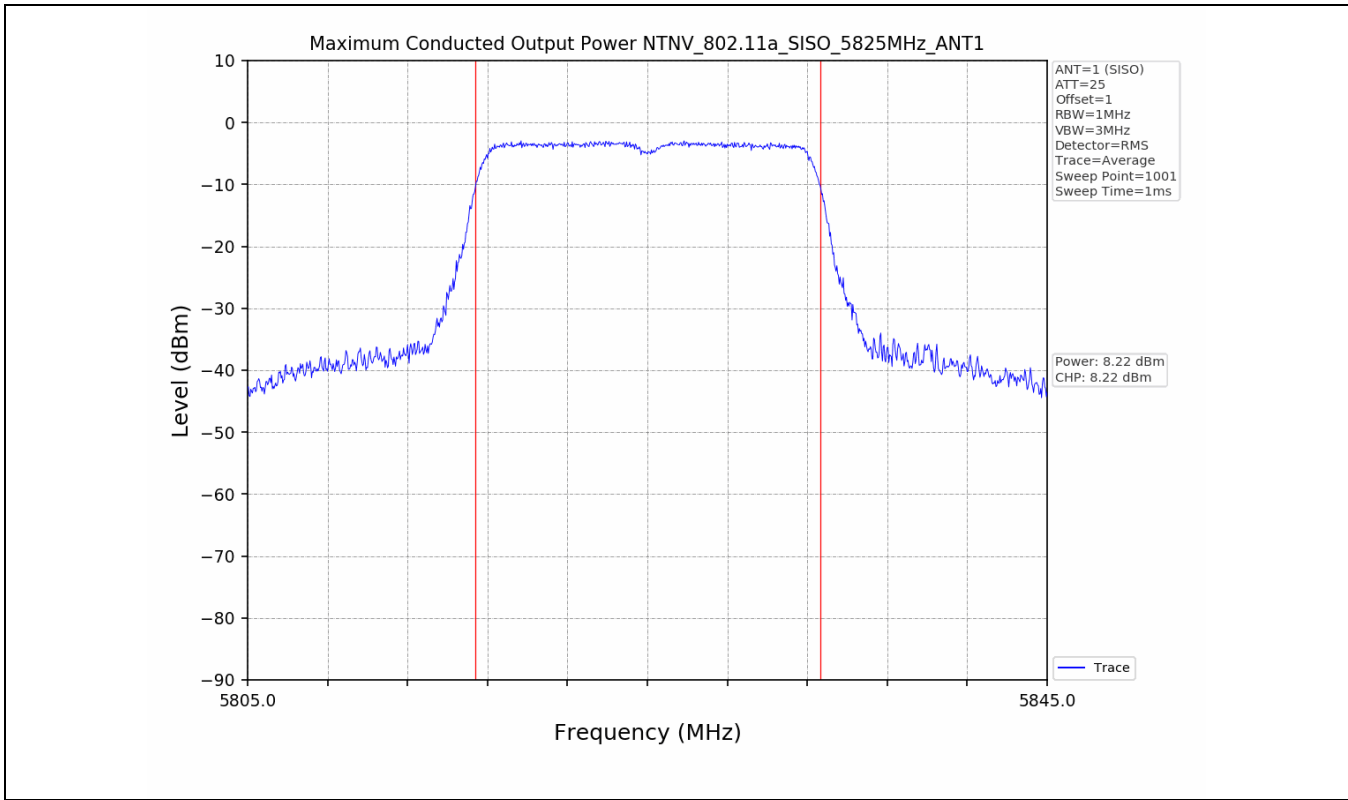
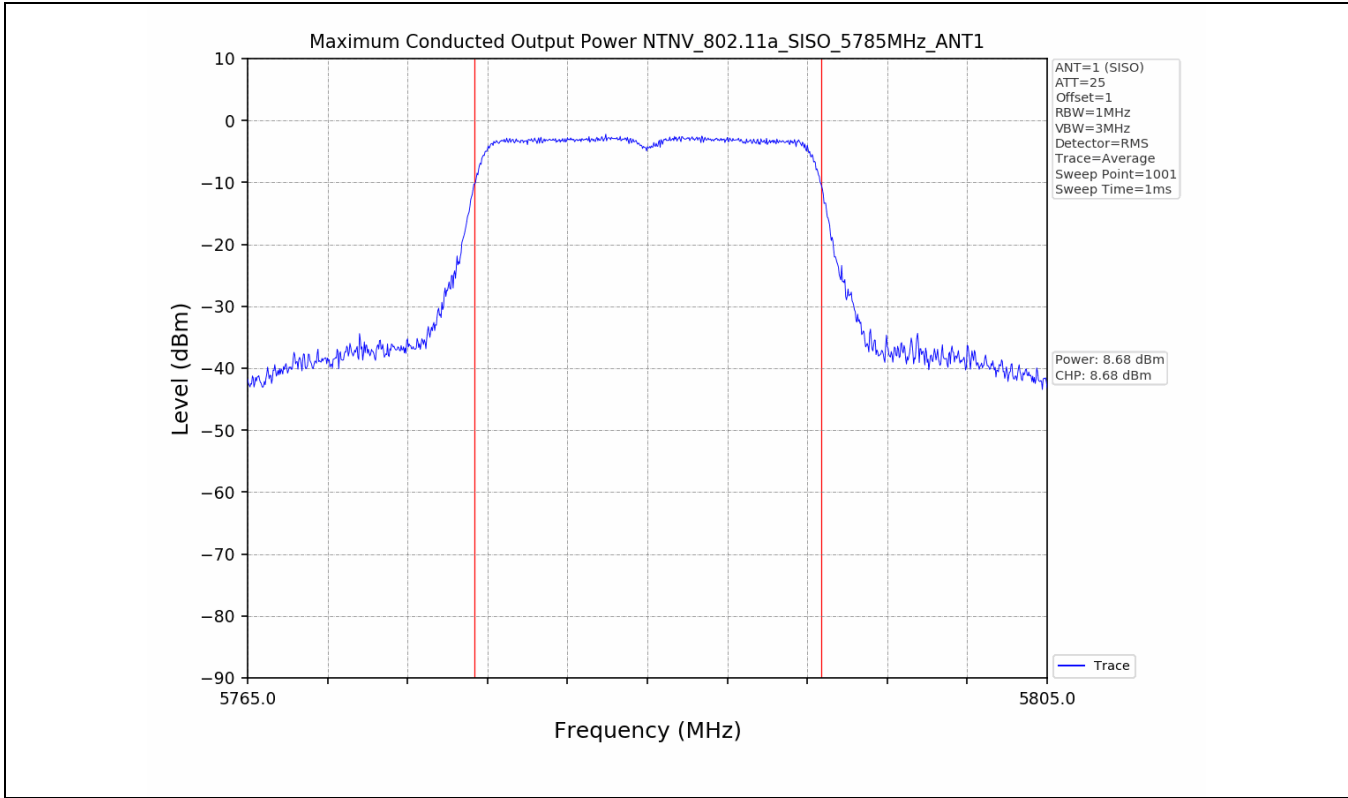
2.1 Test Result

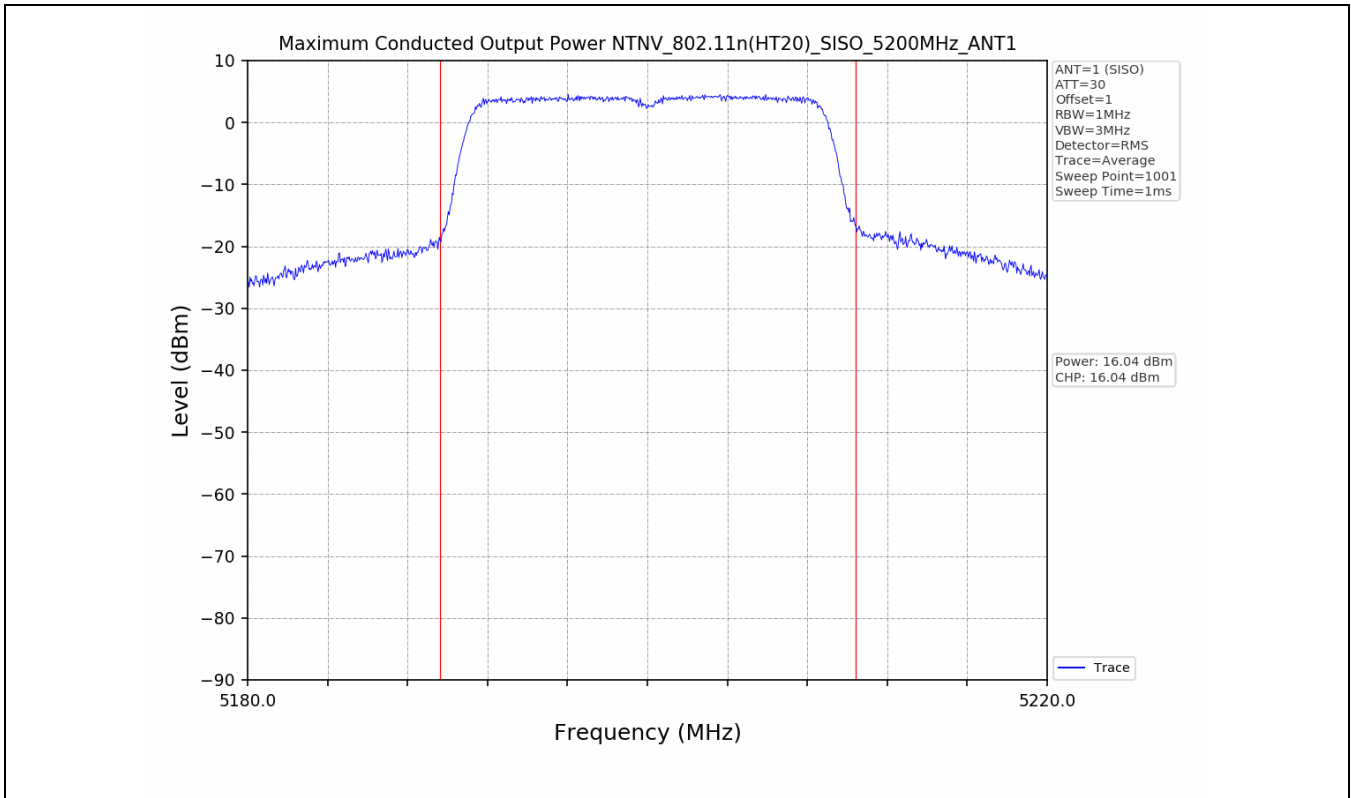
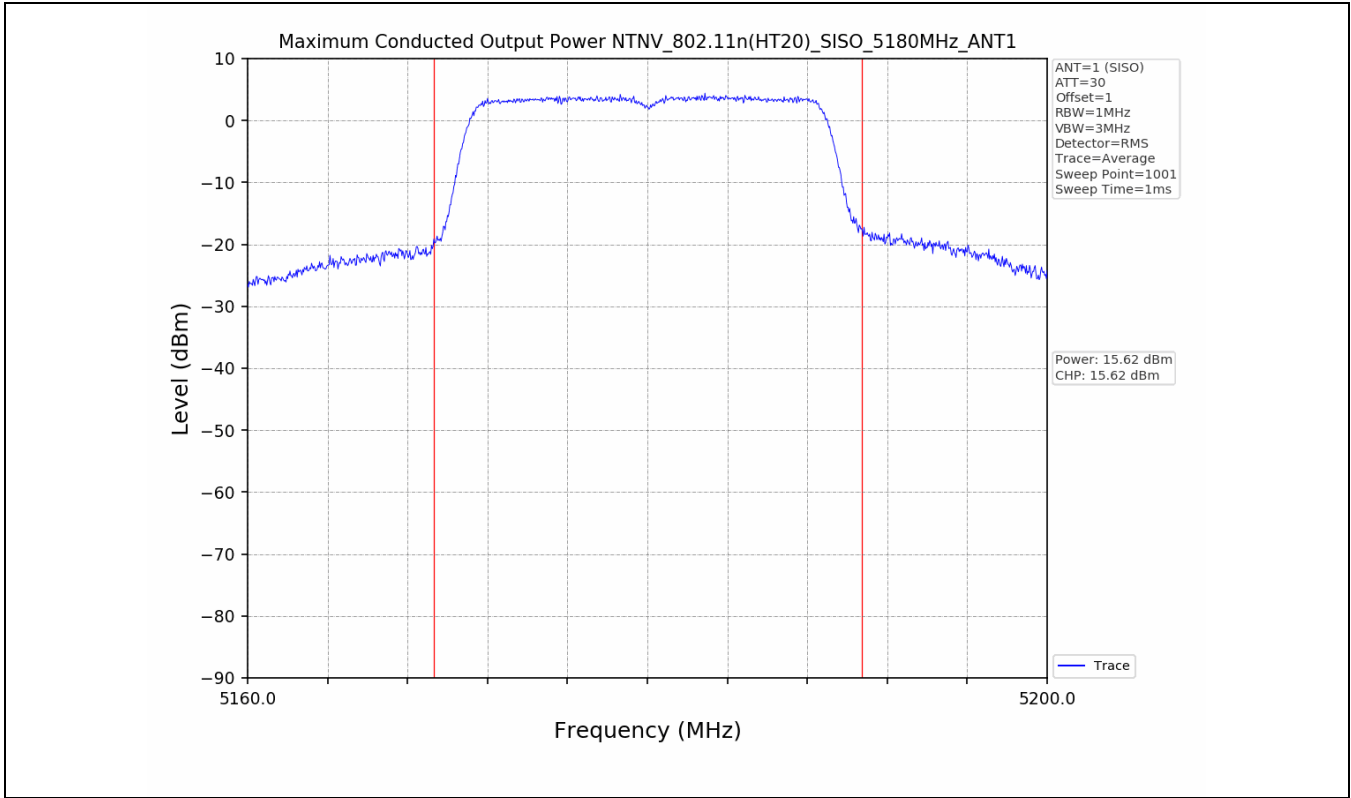
| Test Mode | Frequency (MHz) | Tx Type | Measured Output Power (dBm) | Limit (dBm) | Verdict |
|---------------|-----------------|---------|-----------------------------|-------------|---------|
| | | | Ant 1 | | |
| 802.11a | 5180 | SISO | 15.58 | ≤23.98 | PASS |
| | 5200 | SISO | 16.01 | ≤23.98 | PASS |
| | 5240 | SISO | 16.35 | ≤23.98 | PASS |
| | 5745 | SISO | 9.39 | ≤30.00 | PASS |
| | 5785 | SISO | 8.68 | ≤30.00 | PASS |
| | 5825 | SISO | 8.22 | ≤30.00 | PASS |
| 802.11n(HT20) | 5180 | SISO | 15.62 | ≤23.98 | PASS |
| | 5200 | SISO | 16.04 | ≤23.98 | PASS |
| | 5240 | SISO | 16.26 | ≤23.98 | PASS |
| | 5745 | SISO | 9.44 | ≤30.00 | PASS |
| | 5785 | SISO | 8.74 | ≤30.00 | PASS |
| 802.11n(HT40) | 5825 | SISO | 8.21 | ≤30.00 | PASS |
| | 5190 | SISO | 16.29 | ≤23.98 | PASS |
| | 5230 | SISO | 16.64 | ≤23.98 | PASS |
| | 5755 | SISO | 10.05 | ≤30.00 | PASS |
| | 5795 | SISO | 9.14 | ≤30.00 | PASS |

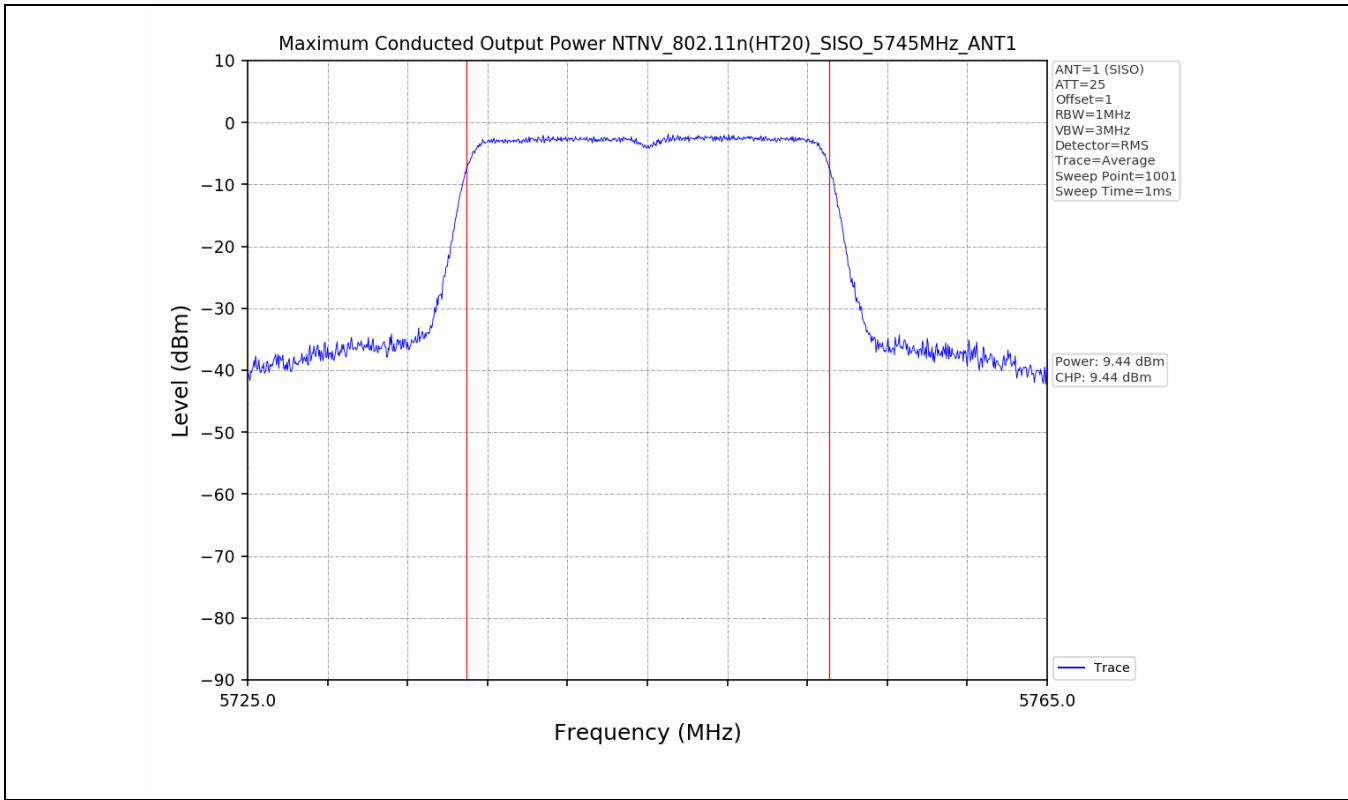
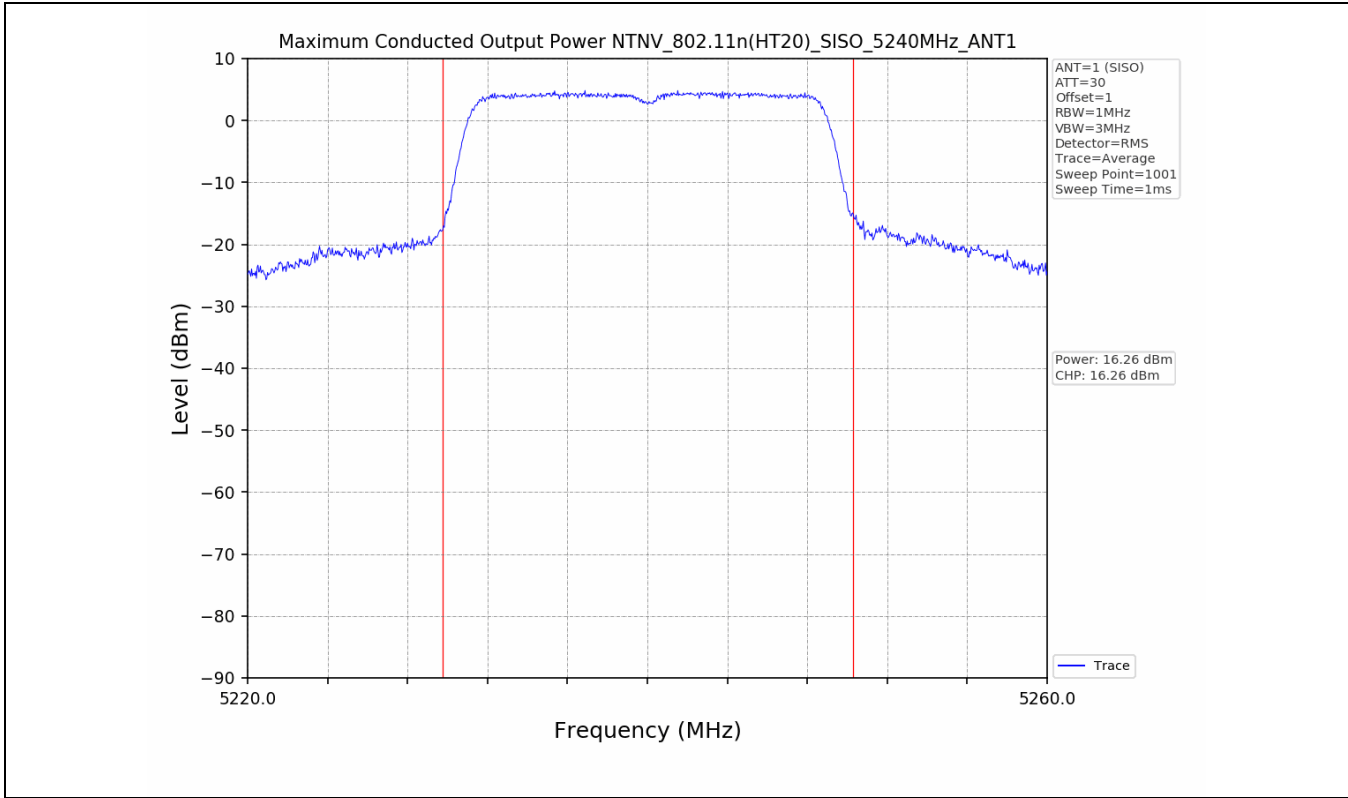
2.2 Test Graph

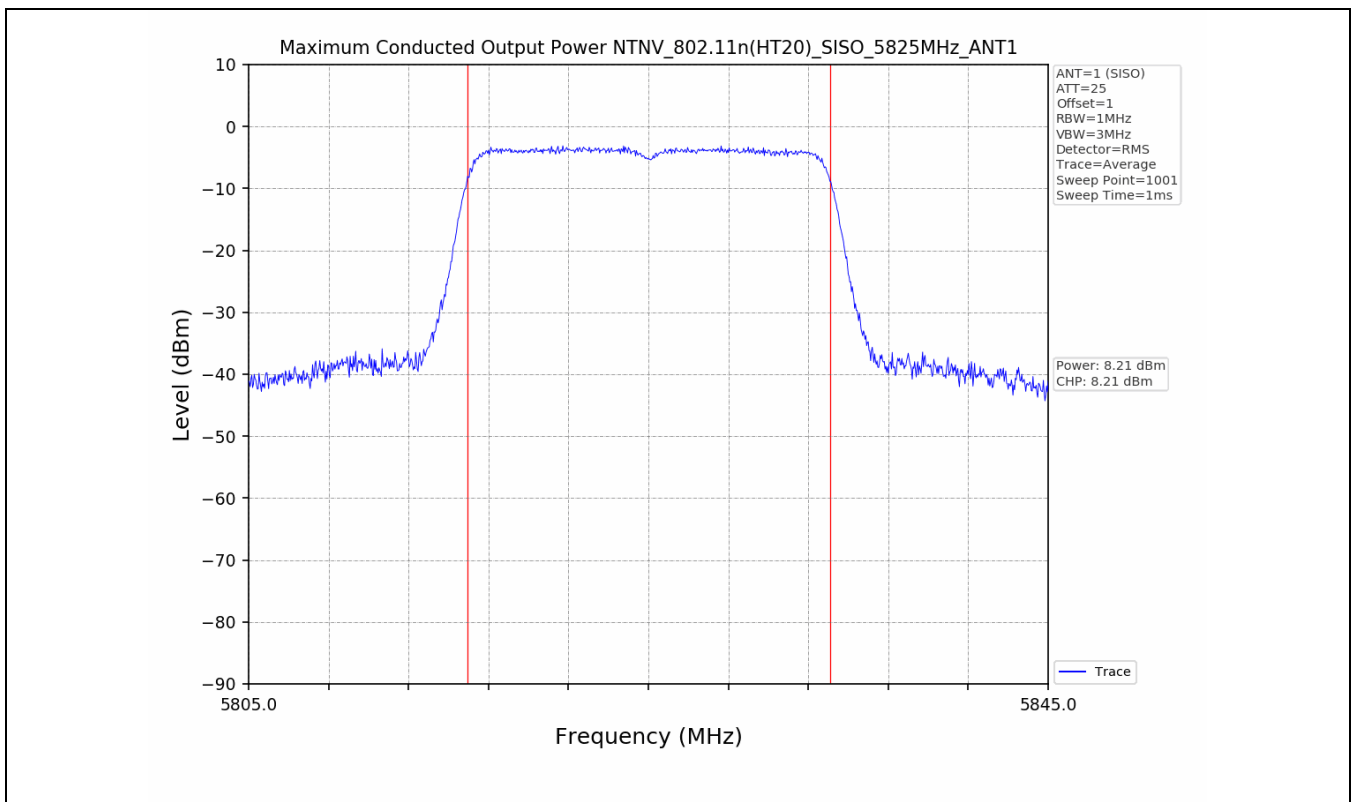
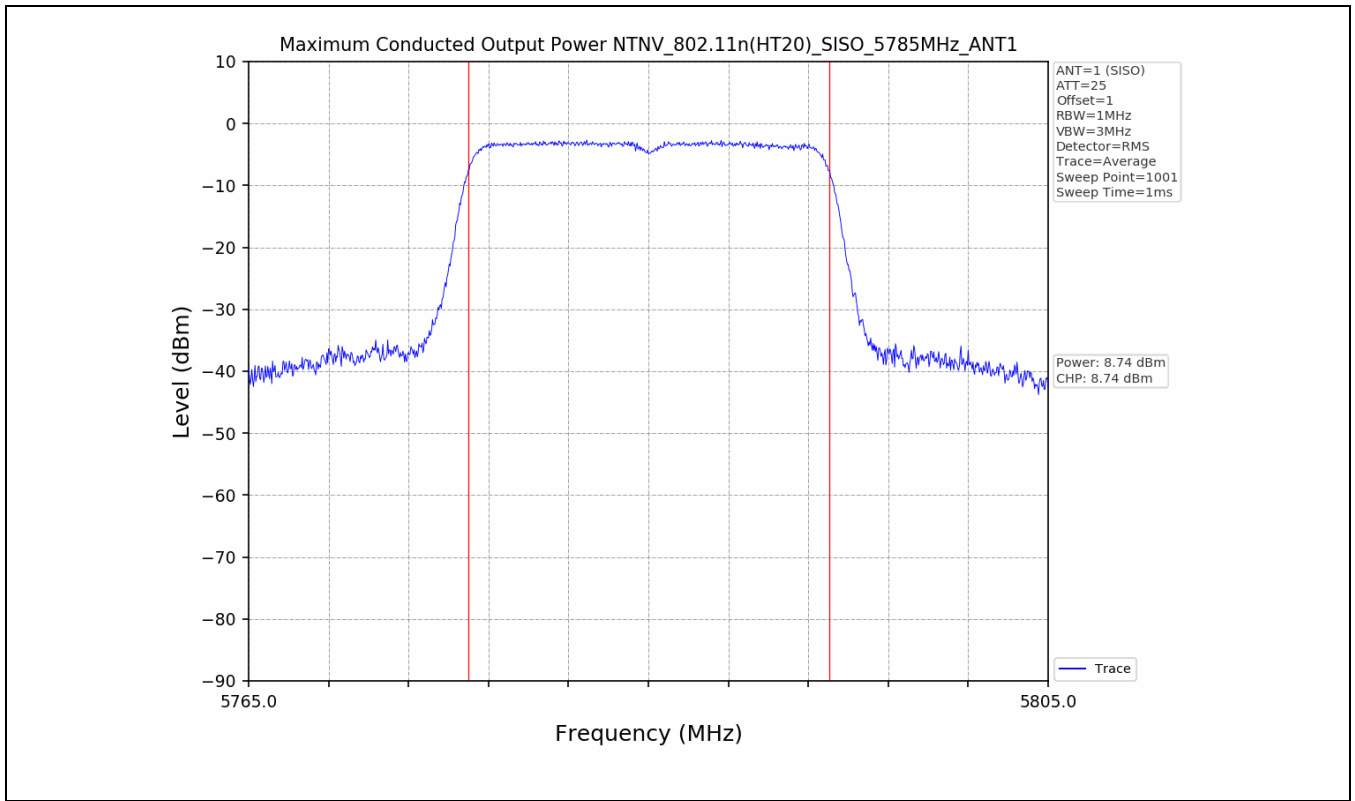


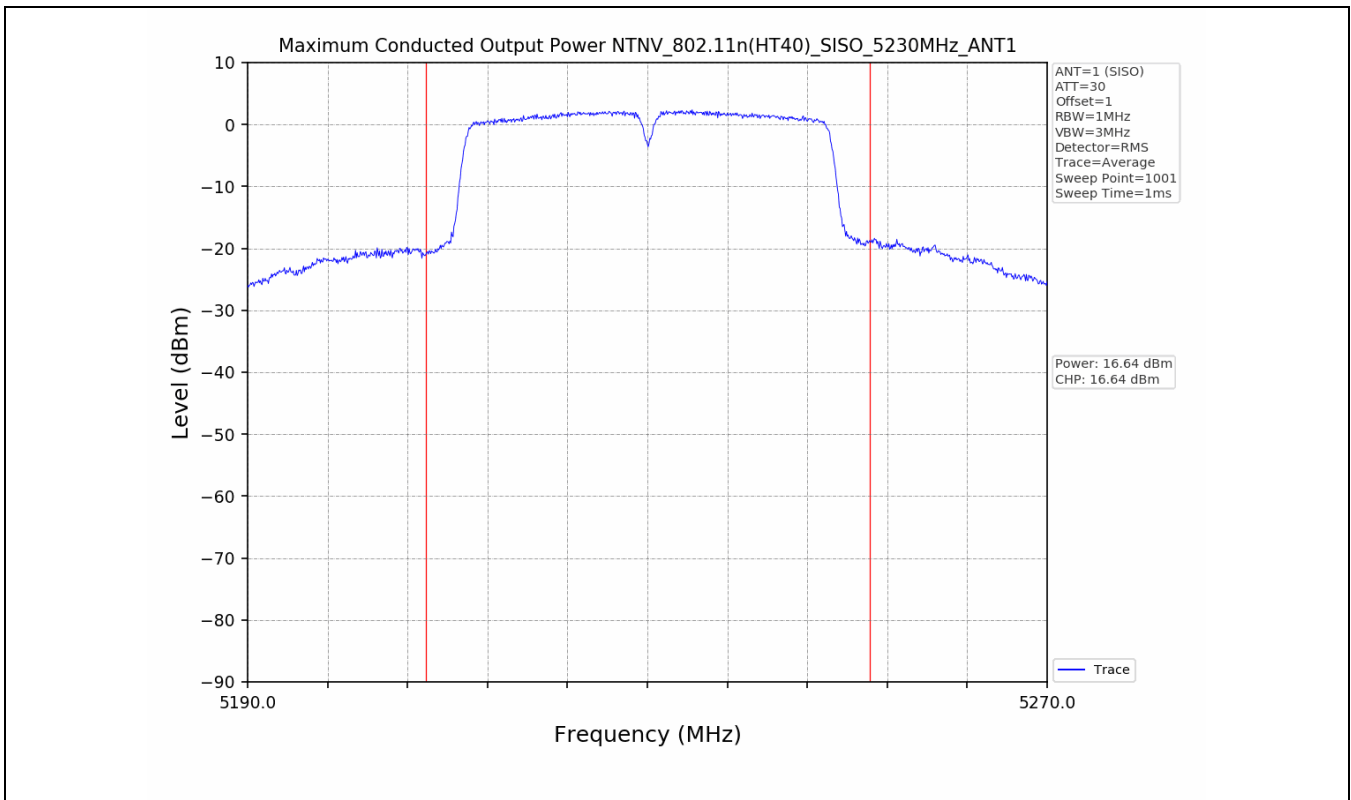
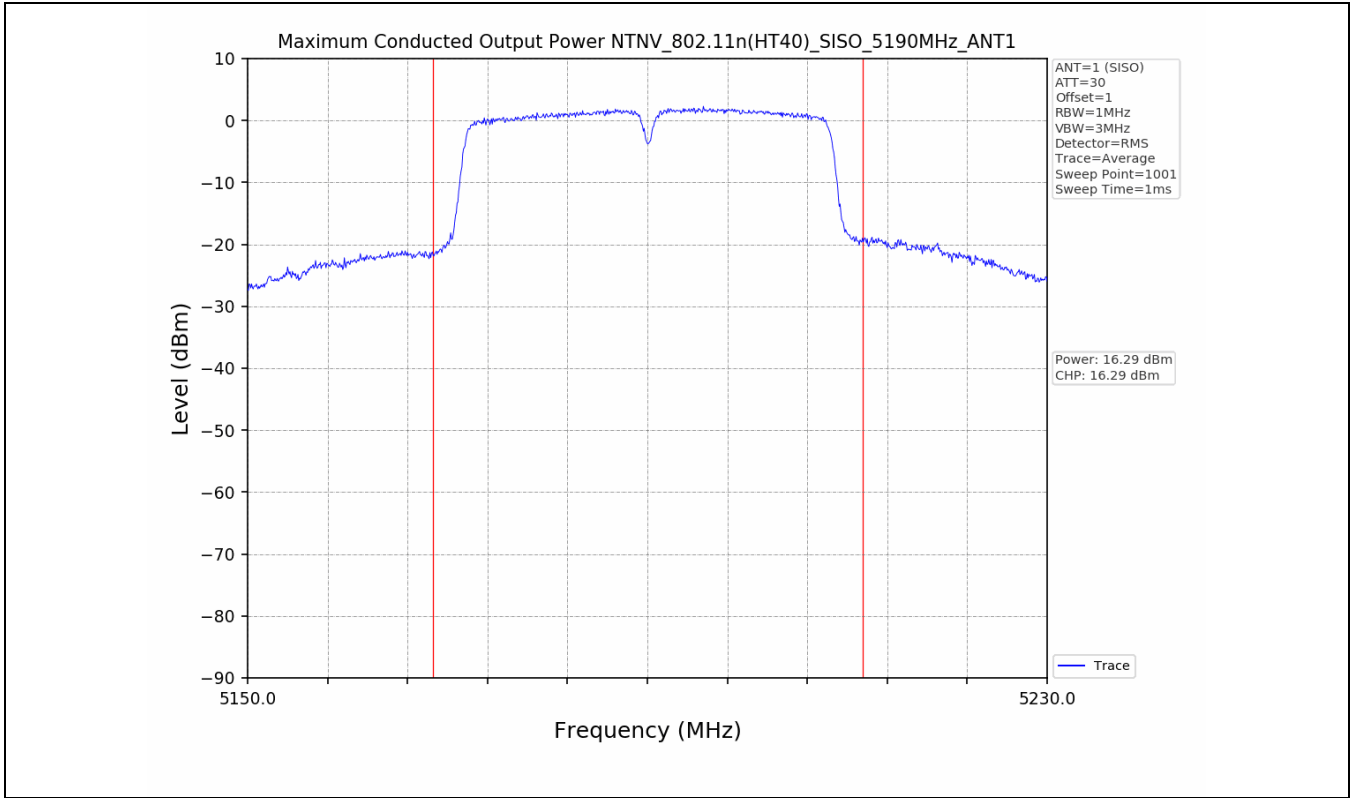


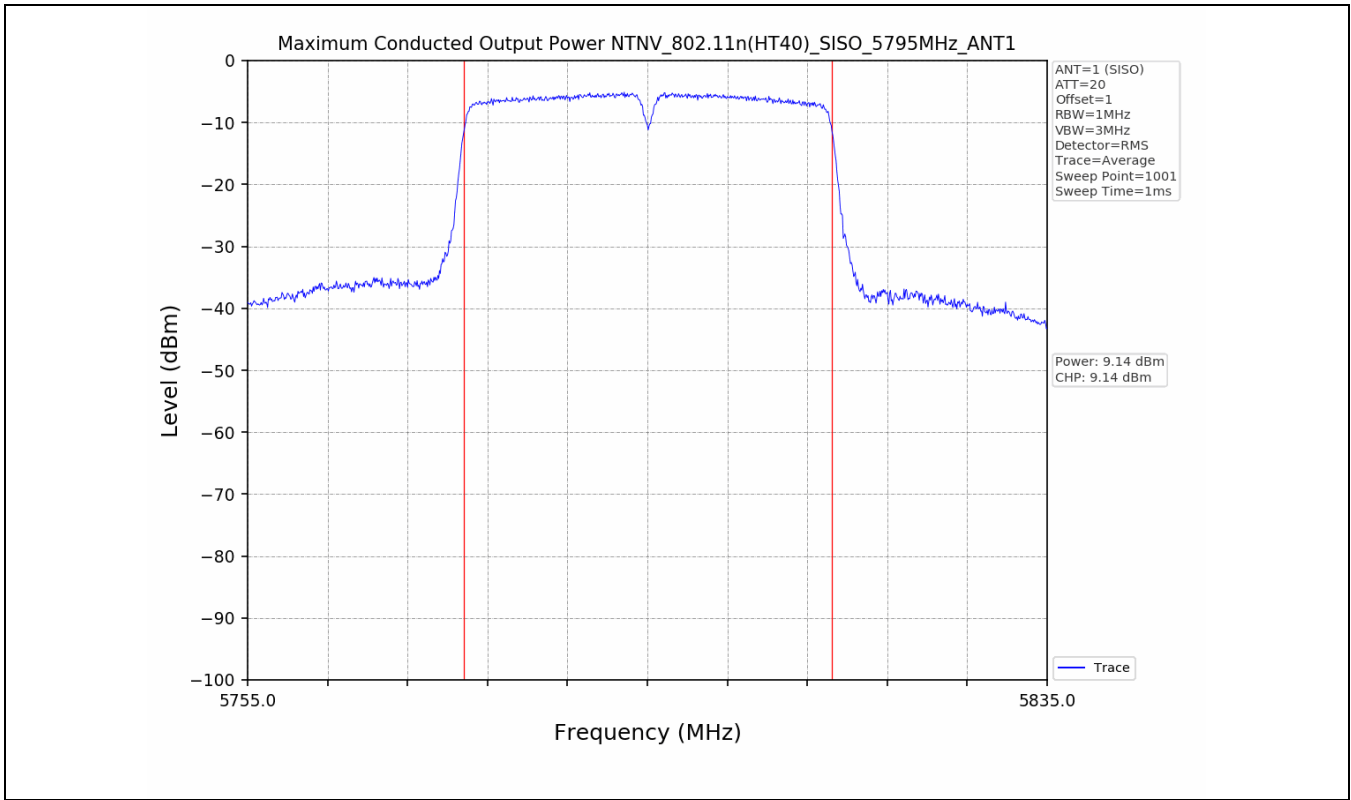
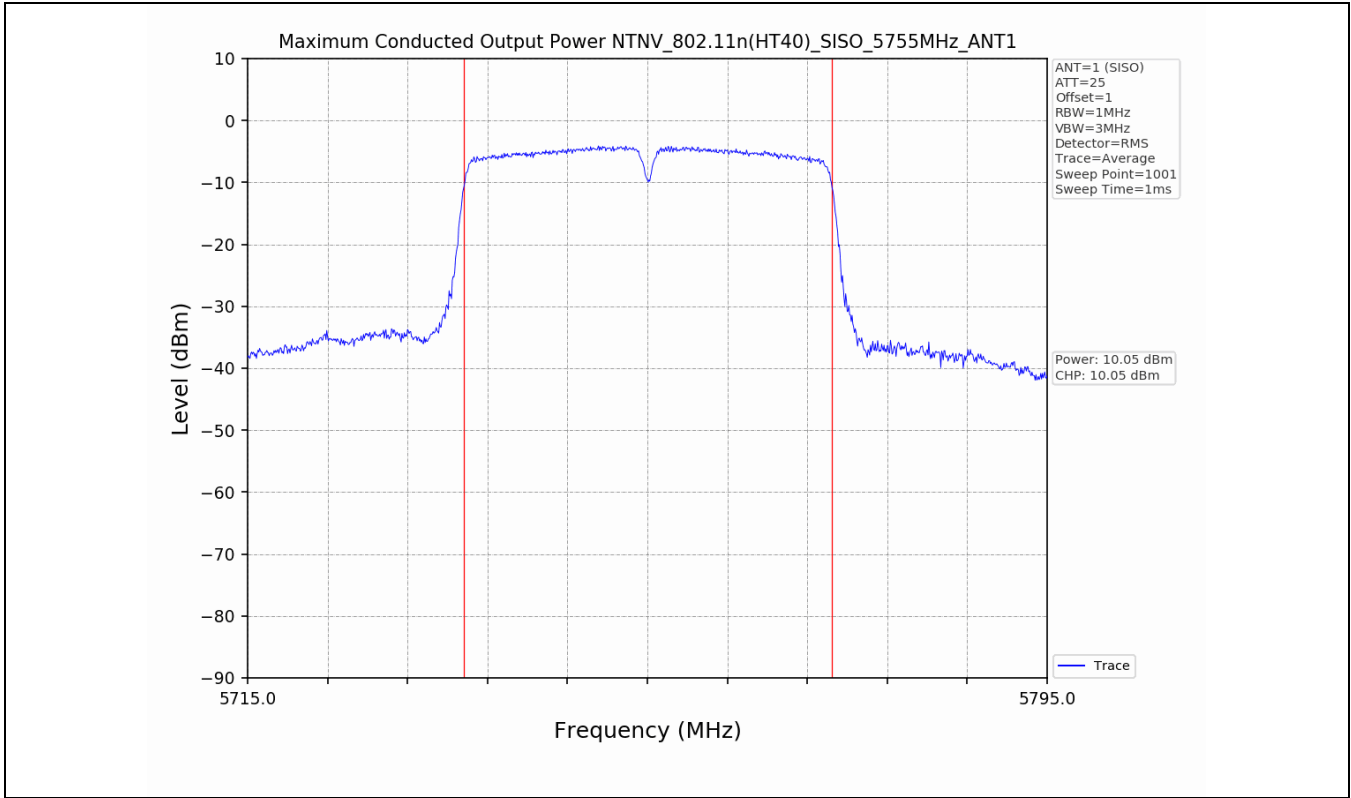












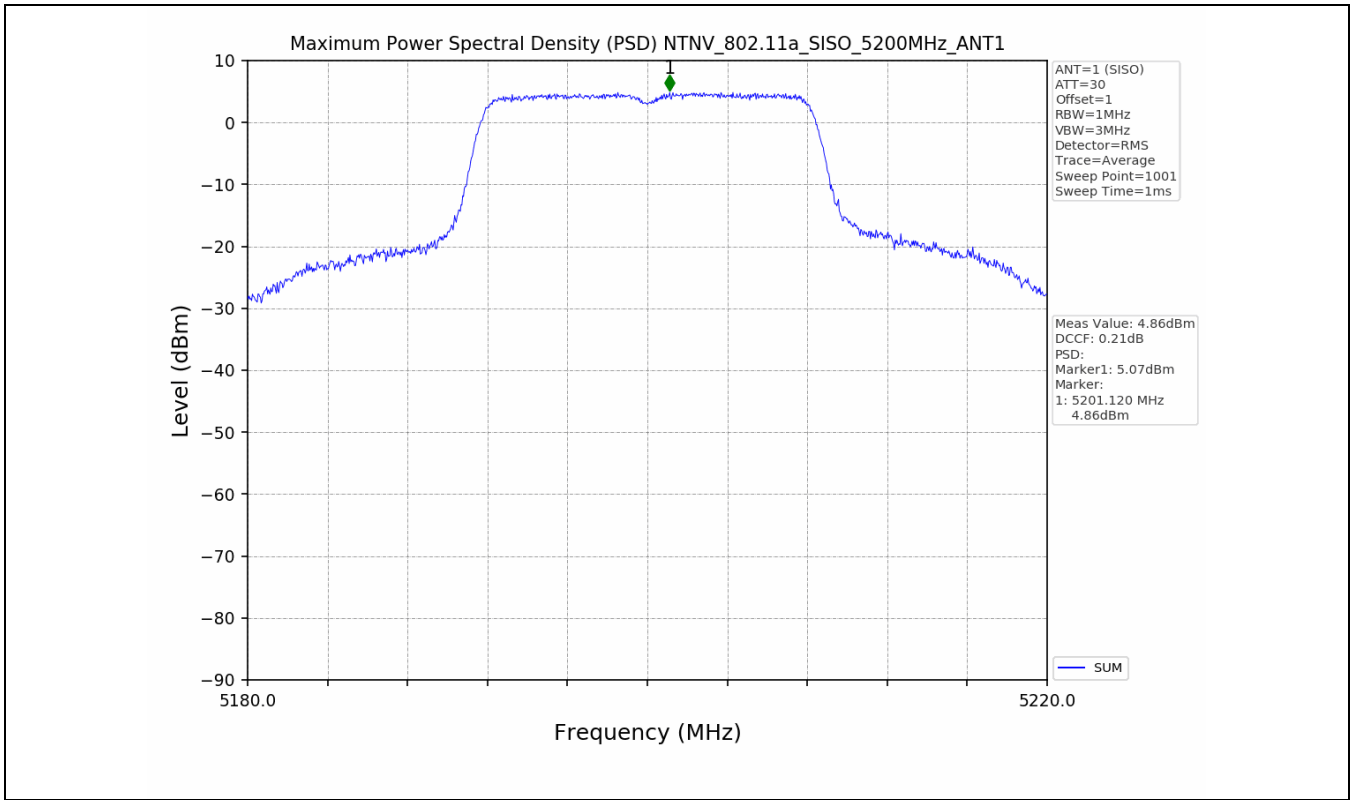
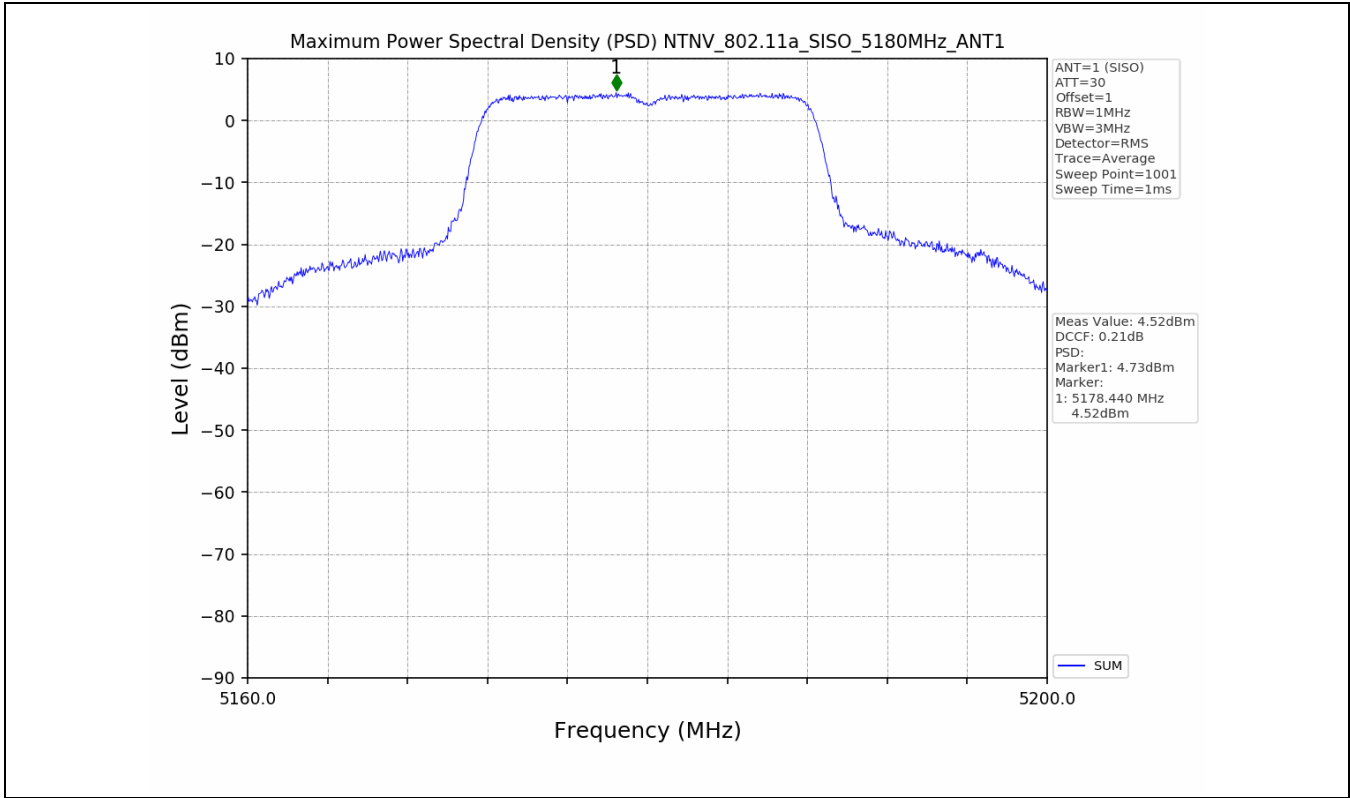
3. Maximum Power Spectral Density (PSD)

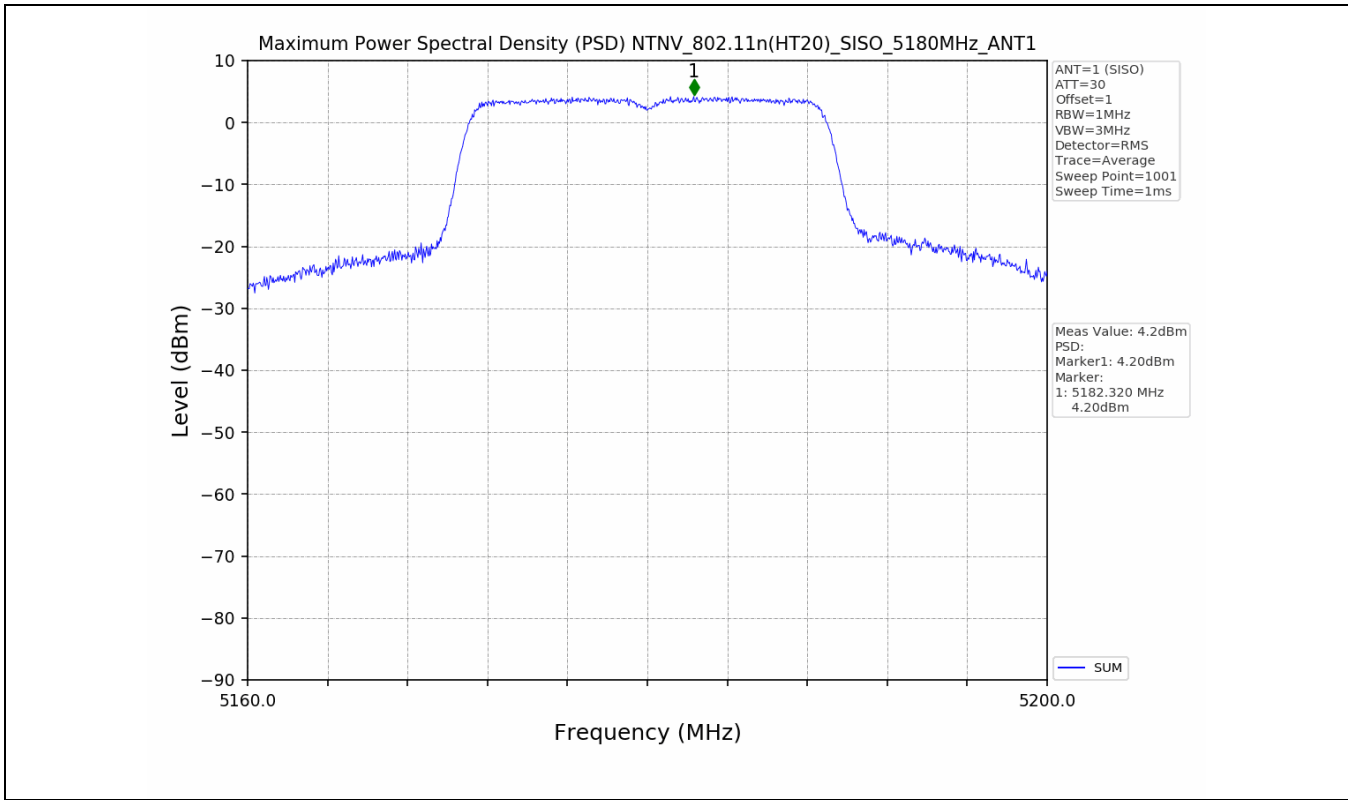
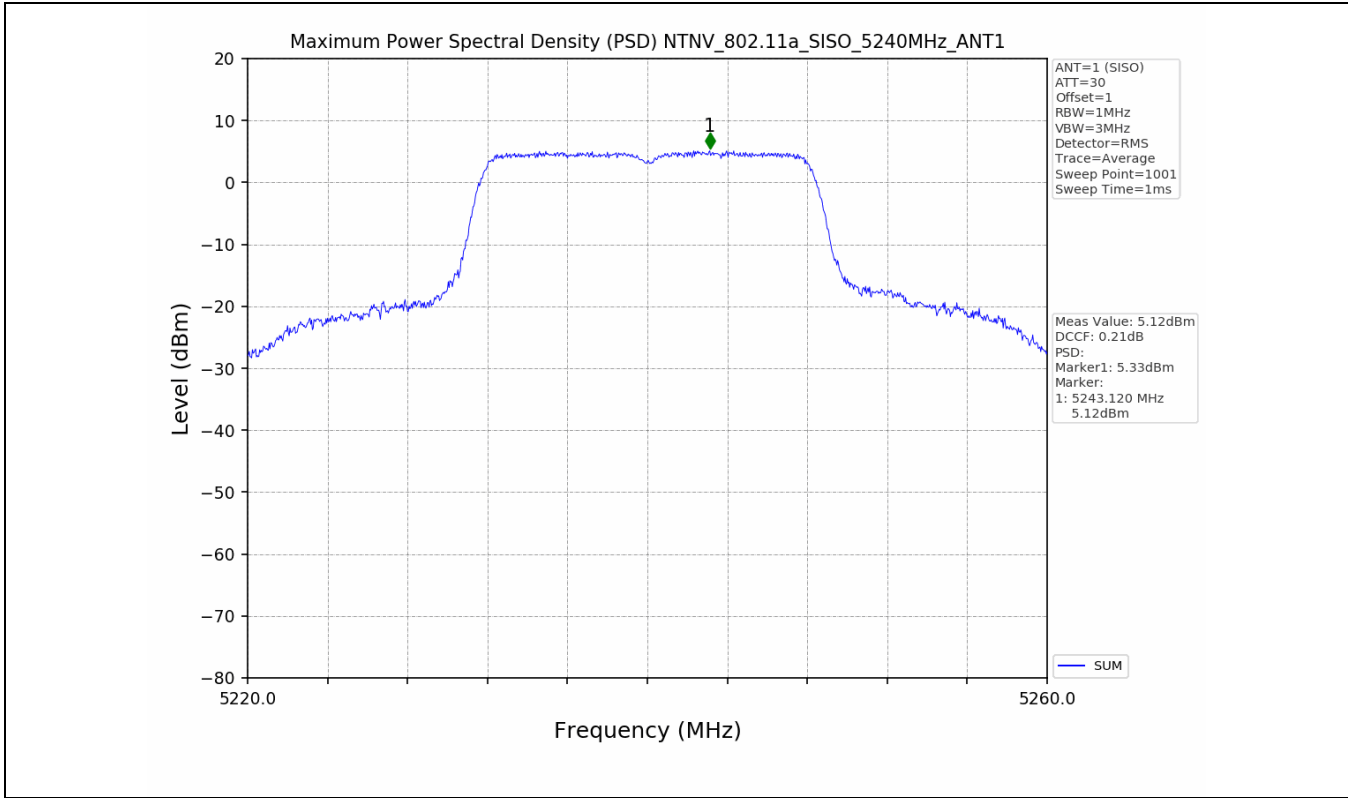
3.1 Test Result

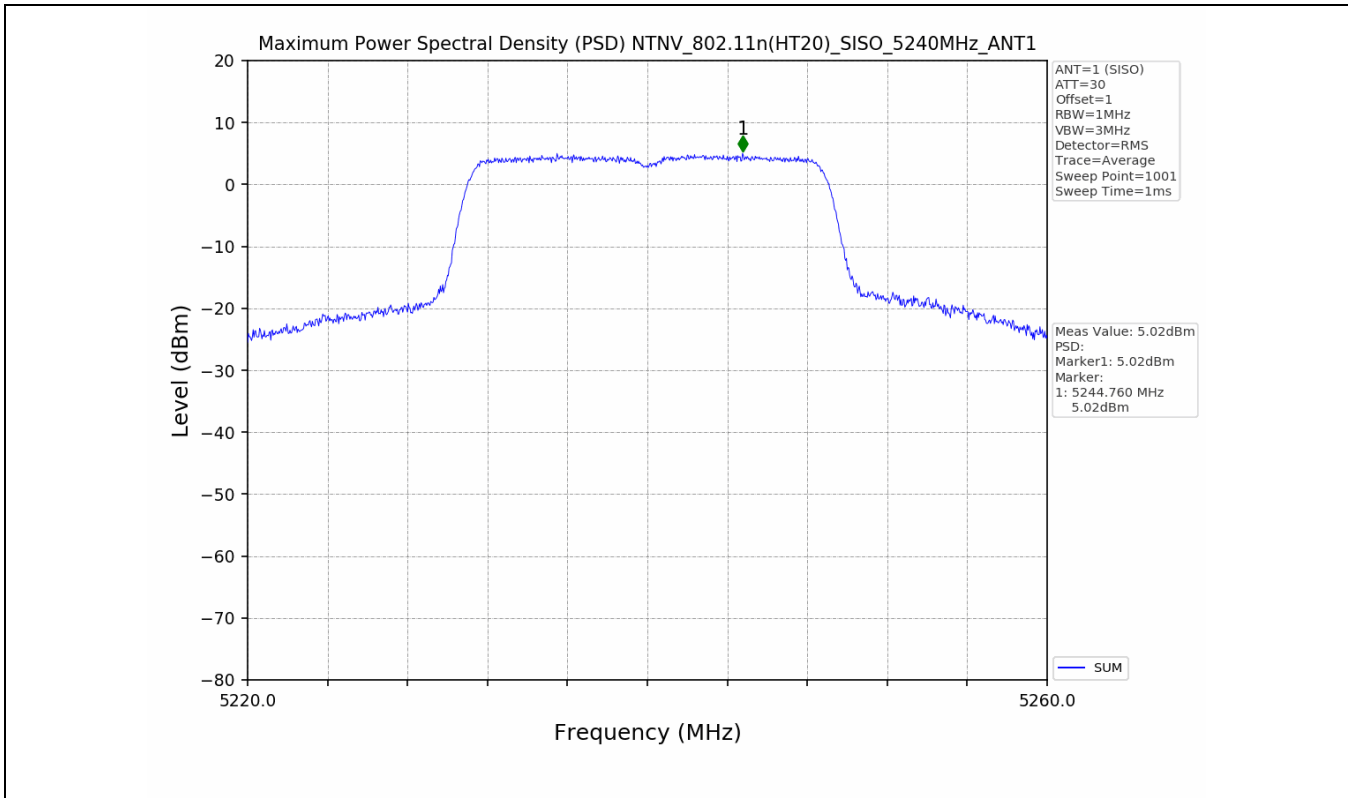
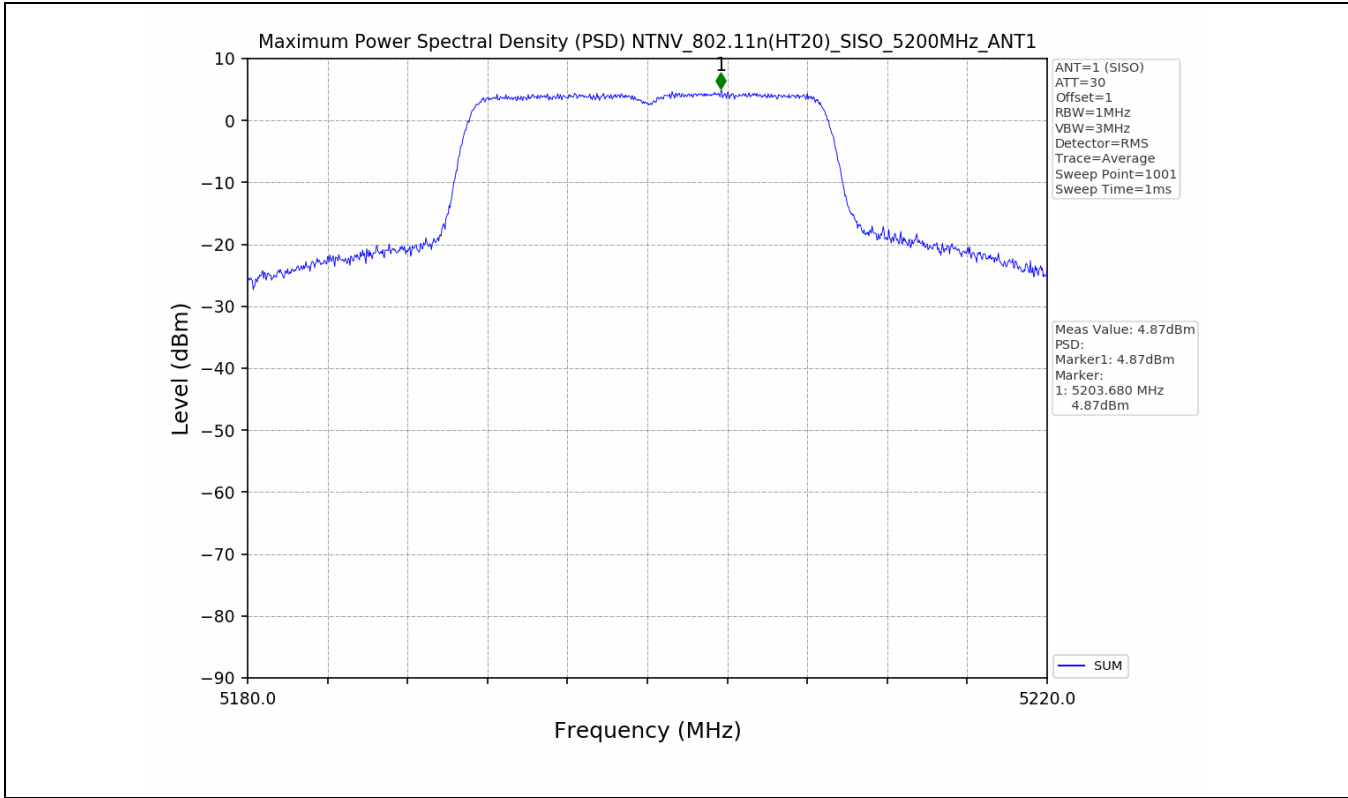
| Test Mode | Frequency (MHz) | Tx Type | Maximum Power Spectral Density (dBm/MHz) | Limits (dBm/MHz) | Verdict |
|---------------|-----------------|---------|--|------------------|---------|
| | | | Ant 1 | | |
| 802.11a | 5180 | SISO | 4.73 | ≤11 | PASS |
| | 5200 | SISO | 5.07 | ≤11 | PASS |
| | 5240 | SISO | 5.33 | ≤11 | PASS |
| 802.11n(HT20) | 5180 | SISO | 4.20 | ≤11 | PASS |
| | 5200 | SISO | 4.87 | ≤11 | PASS |
| | 5240 | SISO | 5.02 | ≤11 | PASS |
| 802.11n(HT40) | 5190 | SISO | 2.38 | ≤11 | PASS |
| | 5230 | SISO | 2.59 | ≤11 | PASS |

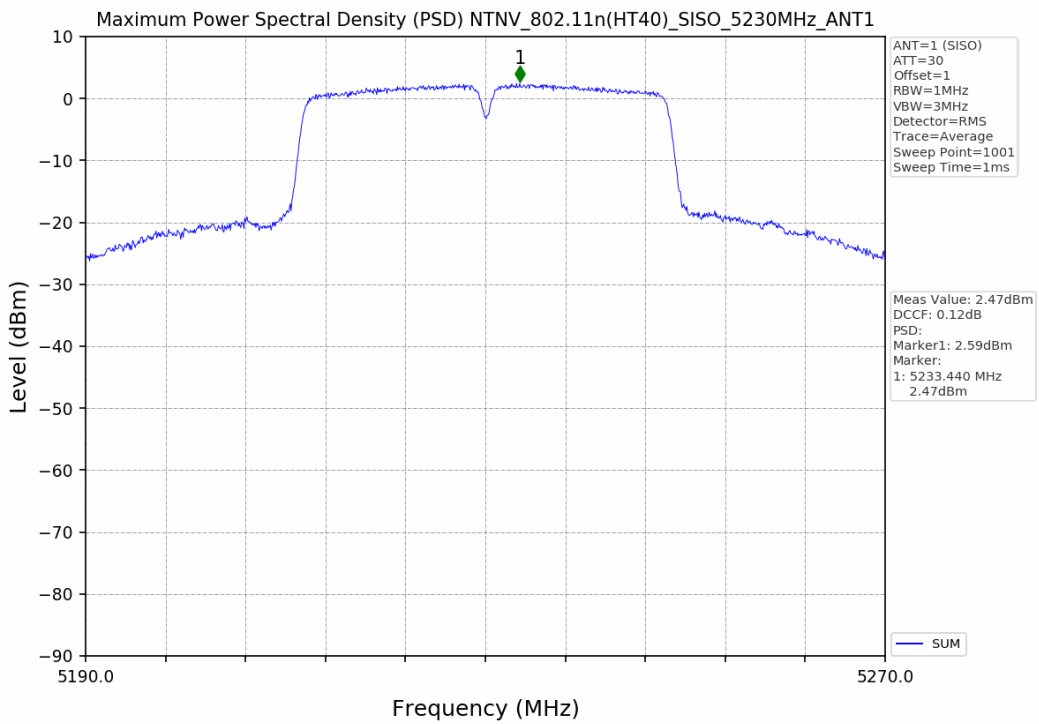
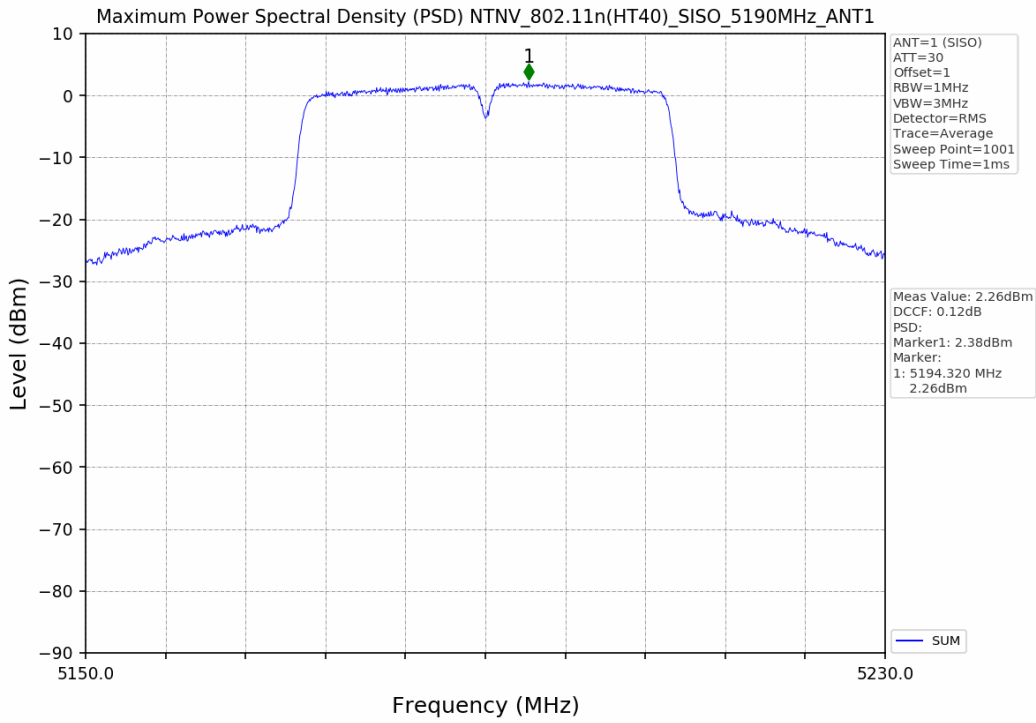
| Test Mode | Frequency (MHz) | Tx Type | Maximum Power Spectral Density (dBm/500kHz) | Limits (dBm/500kHz) | Verdict |
|---------------|-----------------|---------|---|---------------------|---------|
| | | | Ant 1 | | |
| 802.11a | 5745 | SISO | -4.44 | ≤30 | PASS |
| | 5785 | SISO | -5.12 | ≤30 | PASS |
| | 5825 | SISO | -5.70 | ≤30 | PASS |
| 802.11n(HT20) | 5745 | SISO | -4.96 | ≤30 | PASS |
| | 5785 | SISO | -5.55 | ≤30 | PASS |
| | 5825 | SISO | -6.15 | ≤30 | PASS |
| 802.11n(HT40) | 5755 | SISO | -6.74 | ≤30 | PASS |
| | 5795 | SISO | -7.89 | ≤30 | PASS |

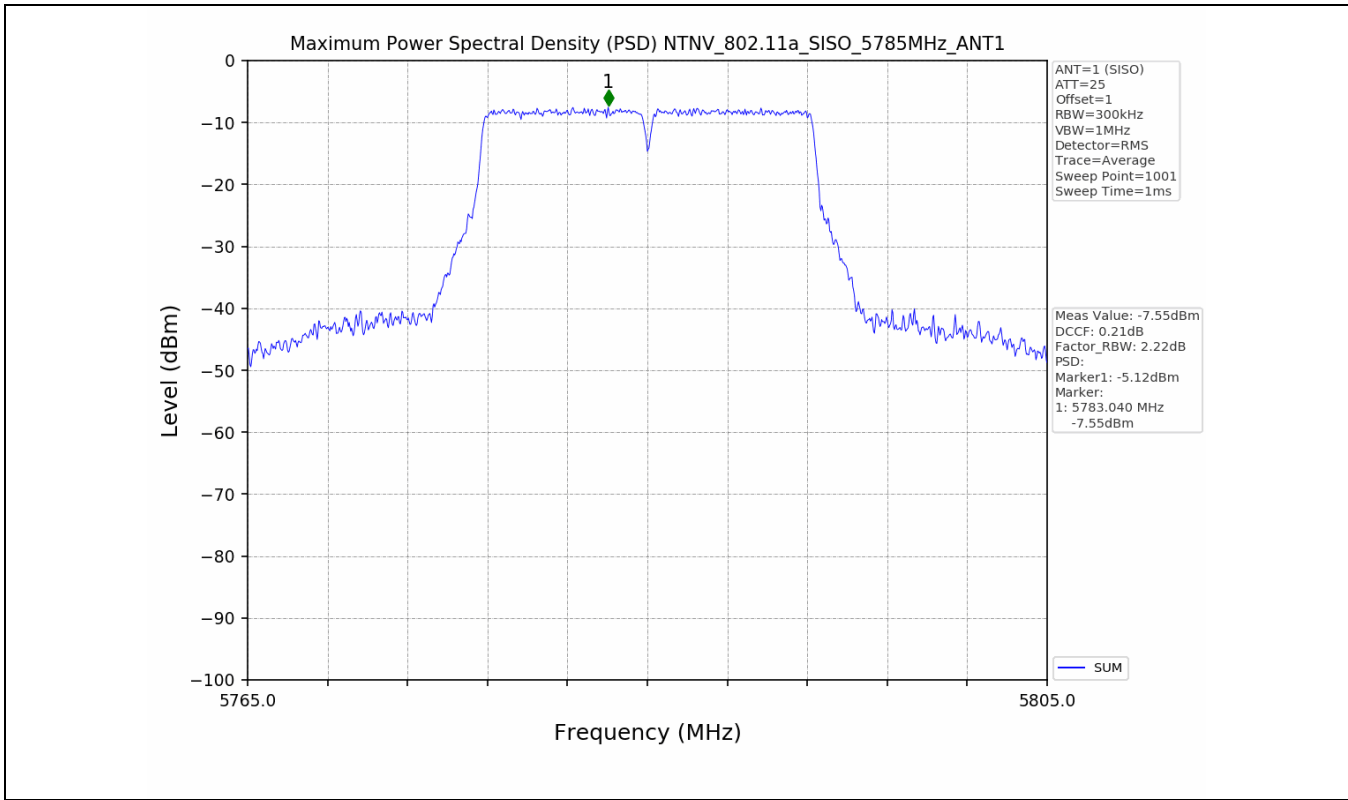
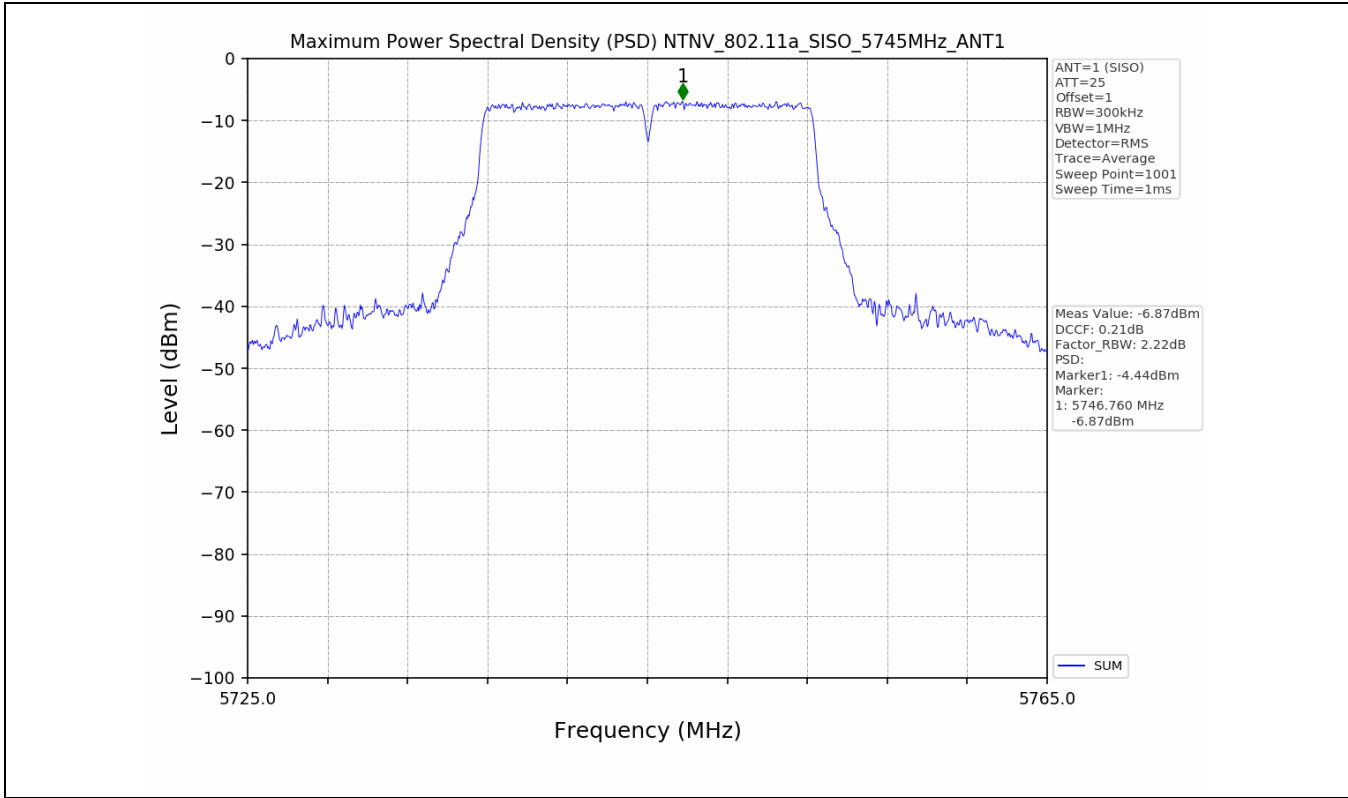
3.2 Test Graph

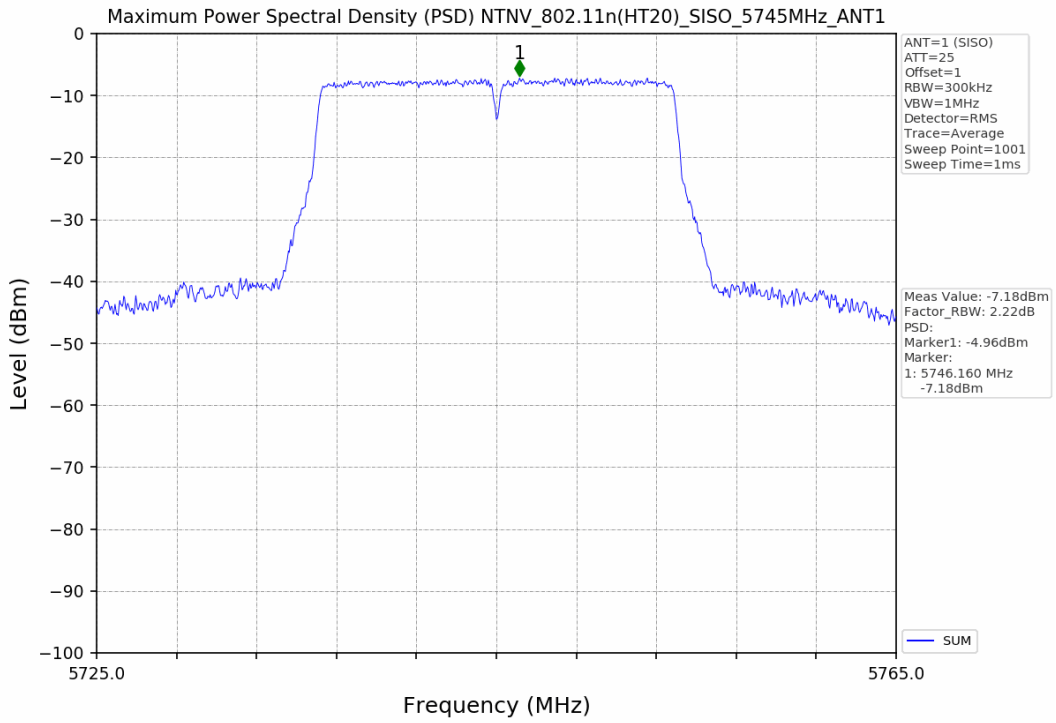
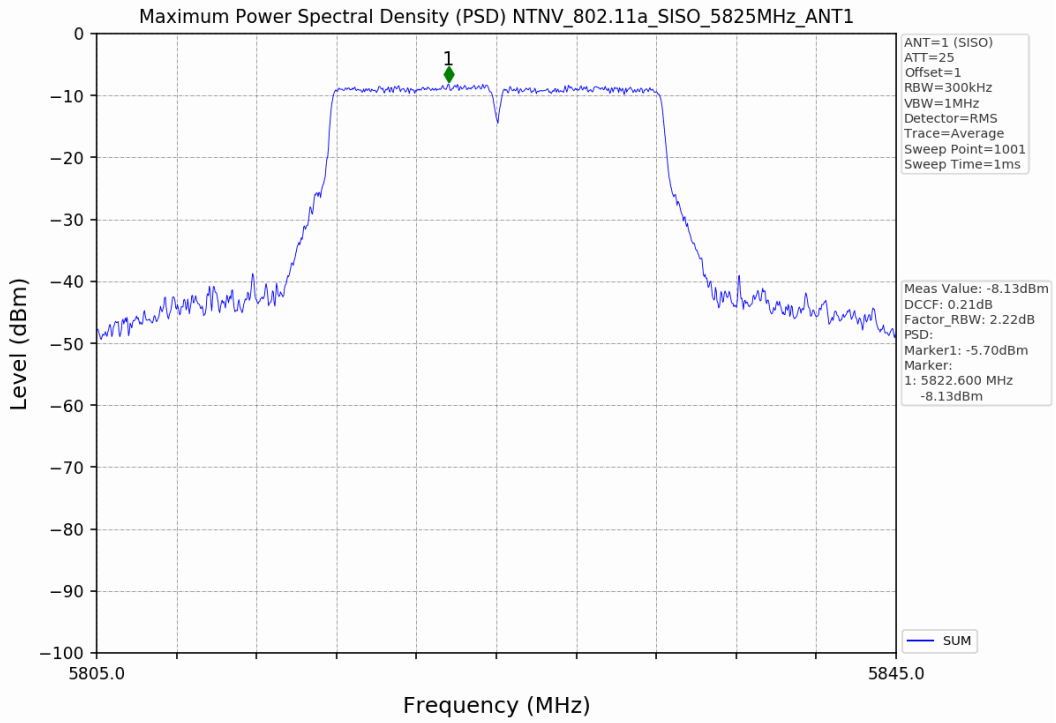


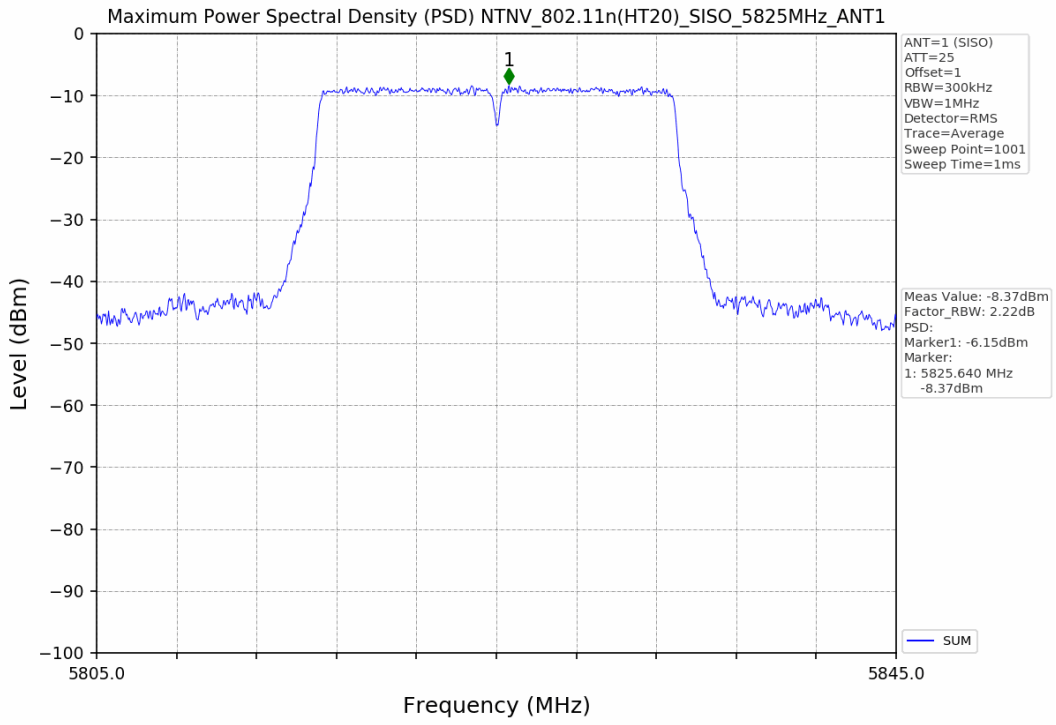
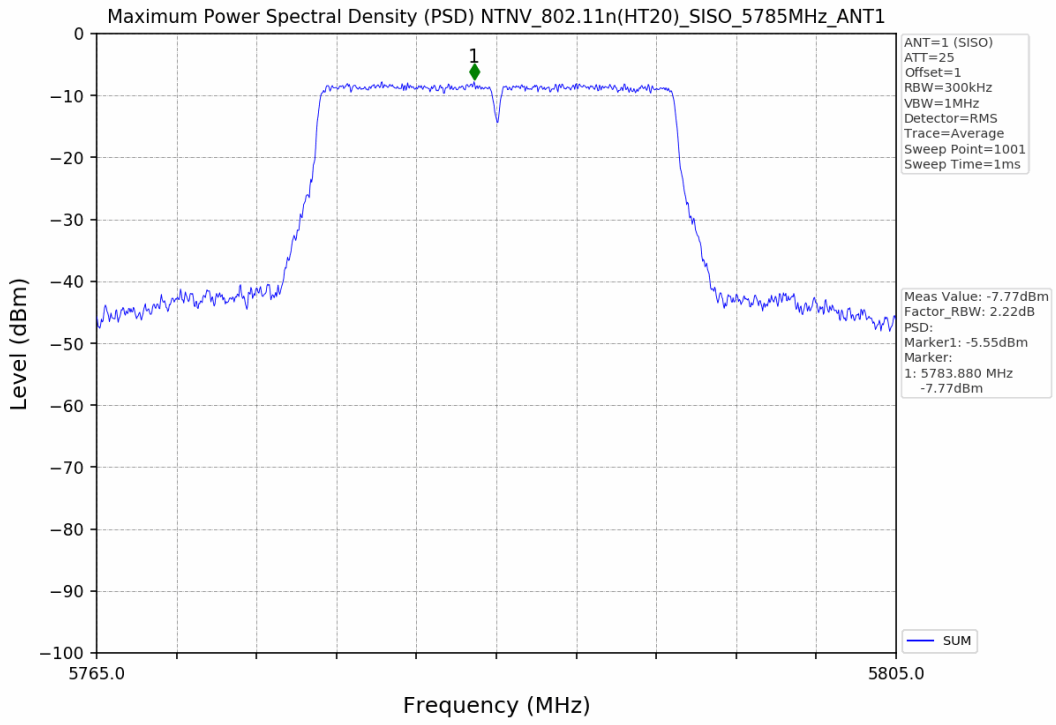


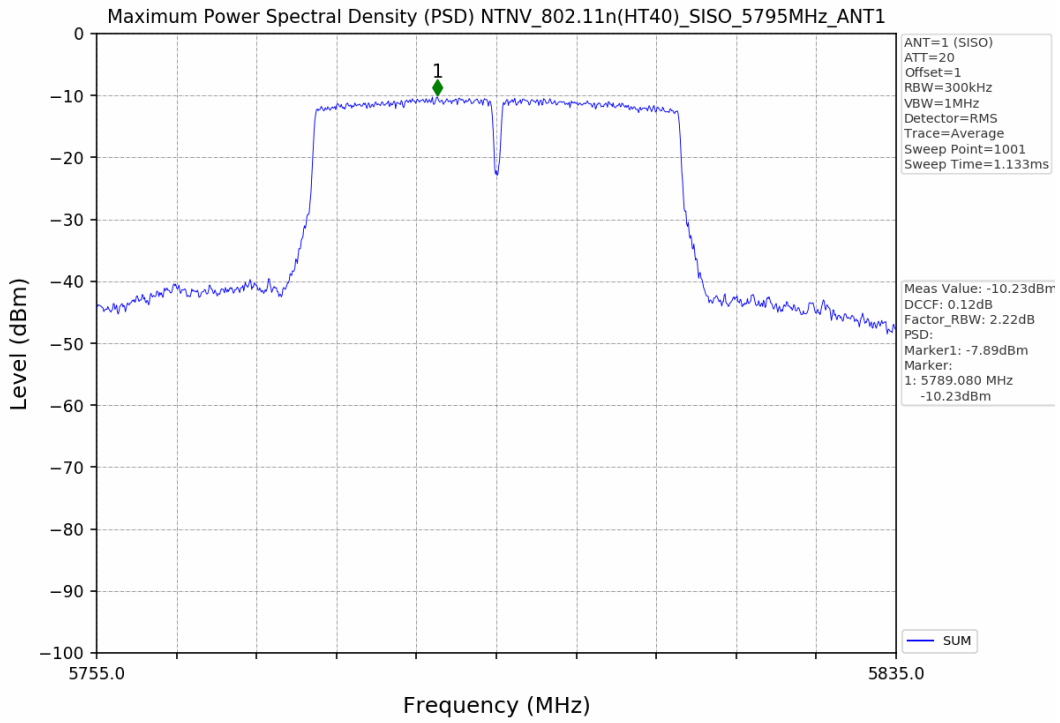
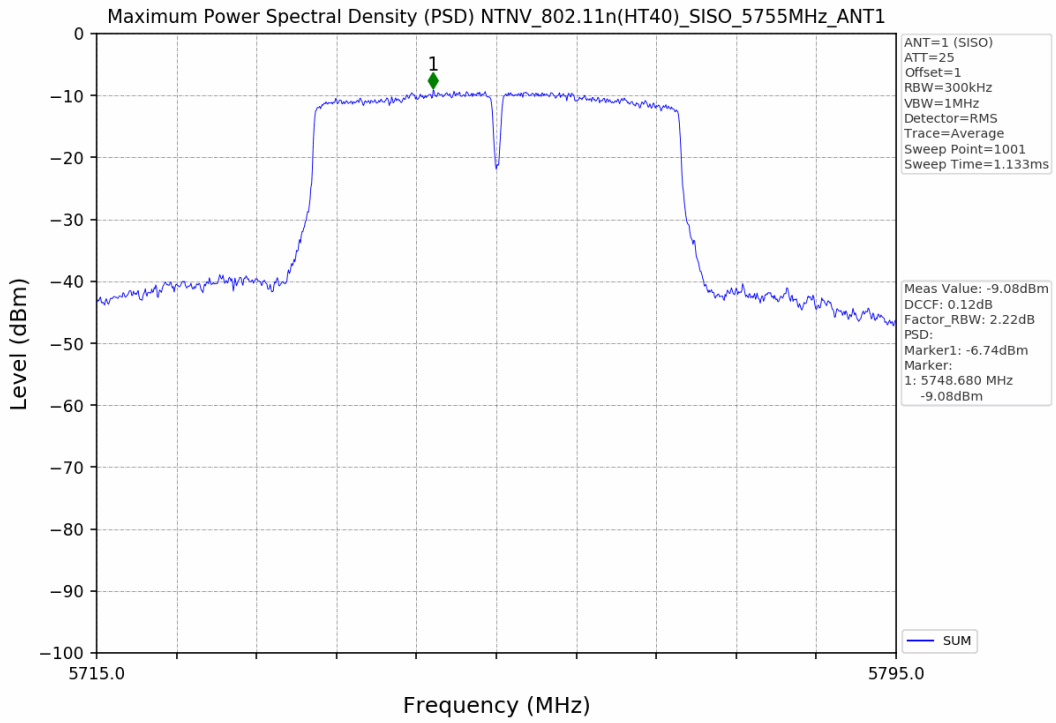












4. Frequency Stability

4.1 Test Result

| Reference Frequency: 802.11a channel=36 frequency=5180MHz | | | | | |
|---|------------------|-----------------|-------|------------------------------|--------|
| Voltage (V) | Temperature (°C) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 5.00 | -30 | 45.6 | 8.80 | Within the band of operation | Pass |
| | -20 | 66.7 | 12.88 | | |
| | -10 | 79.4 | 15.33 | | |
| | 0 | 83.2 | 16.06 | | |
| | 10 | 83.7 | 16.16 | | |
| | 20 | 65.7 | 12.68 | | |
| | 30 | 52.8 | 10.19 | | |
| | 40 | 56.8 | 10.97 | | |
| 5.50 | 25 | 90.6 | 17.49 | | |
| 4.50 | 25 | 45.6 | 8.80 | | |

| Reference Frequency: 802.11a channel=149 frequency=5745MHz | | | | | |
|--|------------------|-----------------|-------|------------------------------|--------|
| Voltage (V) | Temperature (°C) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 5.00 | -30 | 69.8 | 13.47 | Within the band of operation | Pass |
| | -20 | 61.0 | 11.78 | | |
| | -10 | 76.6 | 14.79 | | |
| | 0 | 83.2 | 16.06 | | |
| | 10 | 72.3 | 13.96 | | |
| | 20 | 71.1 | 13.73 | | |
| | 30 | 81.6 | 15.75 | | |
| | 40 | 99.5 | 19.21 | | |
| 5.50 | 25 | 68.0 | 13.13 | | |
| 4.50 | 25 | 93.7 | 18.09 | | |

5. Duty Cycle

5.1 Test Result

| Test Mode | Channel Frequency (MHz) | TX Type | ANT No. | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) |
|---------------|-------------------------|---------|---------|-----------|-------------|----------------|-----------------------------------|
| 802.11a | 5180 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5200 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5240 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5745 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5785 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5825 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| 802.11n(HT20) | 5180 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5200 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5240 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5745 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5785 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5825 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| 802.11n(HT40) | 5190 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5230 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5755 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |
| | 5795 | SISO | 1 | 100.000 | 100.000 | 100.00 | 0.00 |

5.2 Test Graph

