

Appendix for 15.247

1. Bandwidth

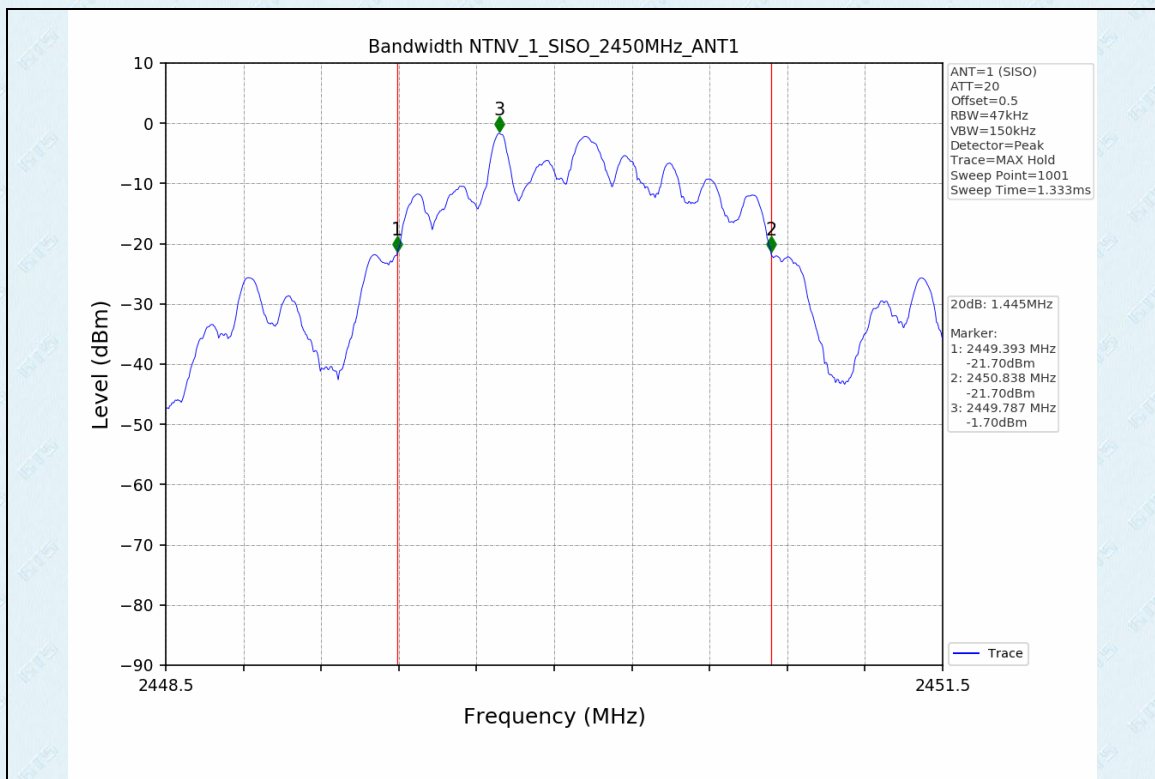
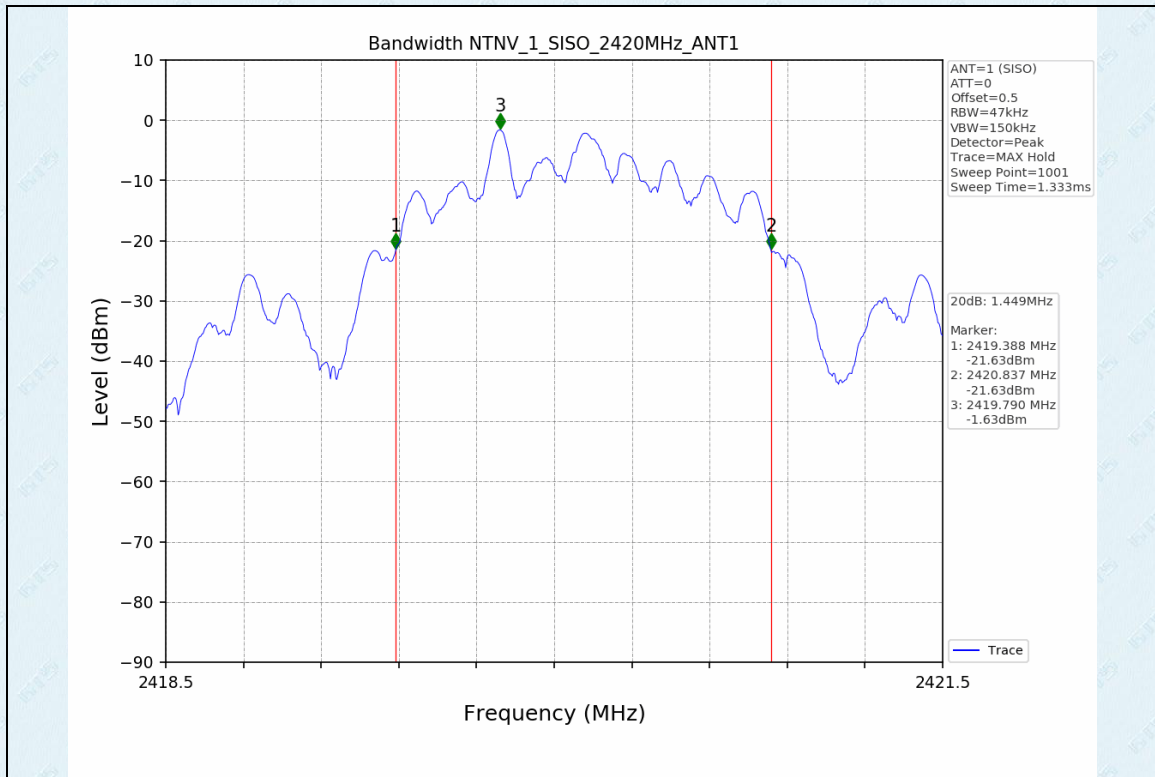
1.1 Test Result

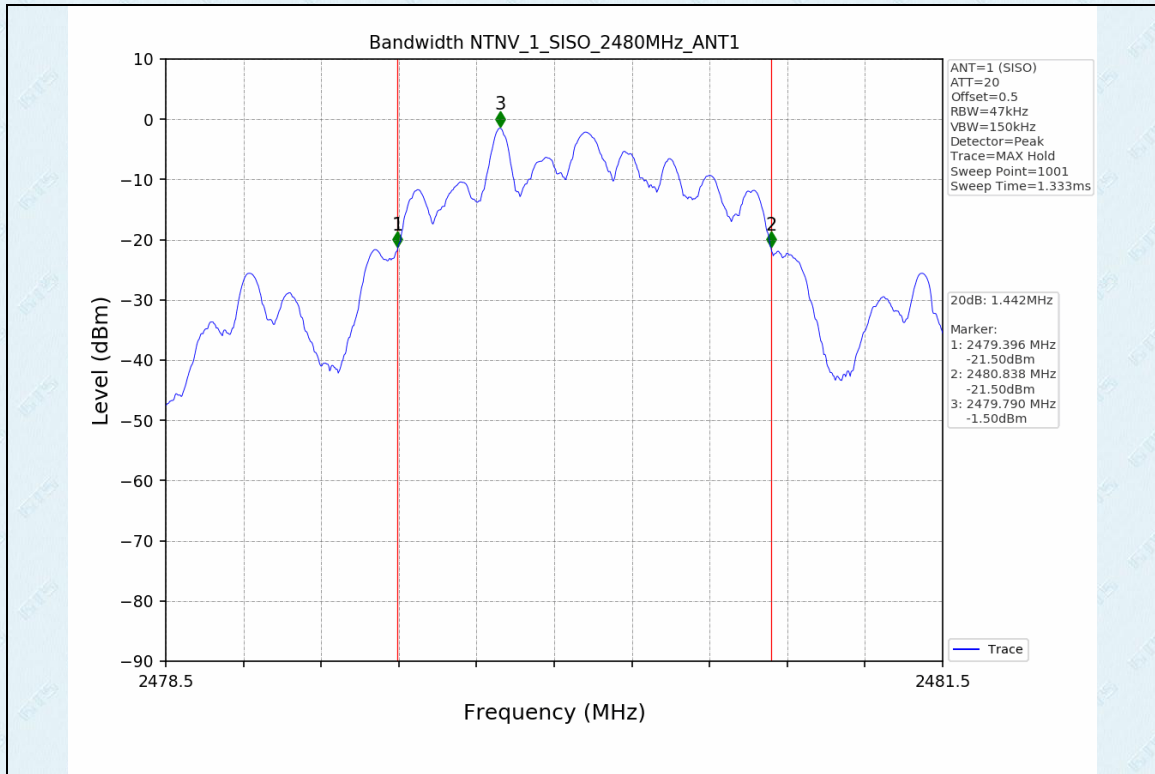
| Test Mode | Frequency (MHz) | TX Type | ANT No. | 20dB Bandwidth | Verdict |
|-----------|-----------------|---------|---------|-------------------|---------|
| | | | | Test Result (MHz) | |
| 1 | 2420 | SISO | 1 | 1.449 | PASS |
| | 2450 | SISO | 1 | 1.445 | PASS |
| | 2480 | SISO | 1 | 1.442 | PASS |
| 2 | 2420 | SISO | 2 | 1.454 | PASS |
| | 2450 | SISO | 2 | 1.457 | PASS |
| | 2480 | SISO | 2 | 1.452 | PASS |

| Test Mode | Frequency (MHz) | TX Type | ANT No. | 99% Occupied Bandwidth | |
|-----------|-----------------|---------|---------|------------------------|---------------------|
| | | | | Test Result (MHz) | |
| 1 | 2420 | SISO | 1 | 1.449 | Only for Report Use |
| | 2450 | SISO | 1 | 1.447 | Only for Report Use |
| | 2480 | SISO | 1 | 1.451 | Only for Report Use |
| 2 | 2420 | SISO | 2 | 1.451 | Only for Report Use |
| | 2450 | SISO | 2 | 1.452 | Only for Report Use |
| | 2480 | SISO | 2 | 1.450 | Only for Report Use |

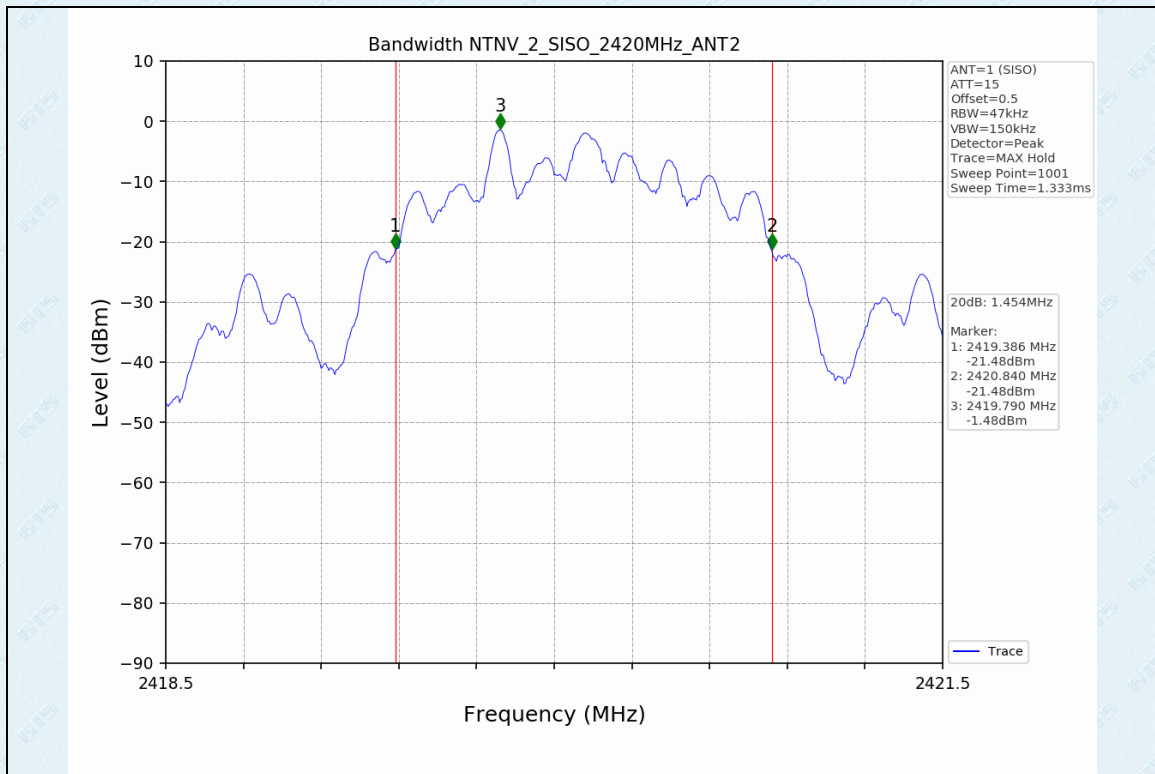
1.2 Test Graph - 20dB Bandwidth

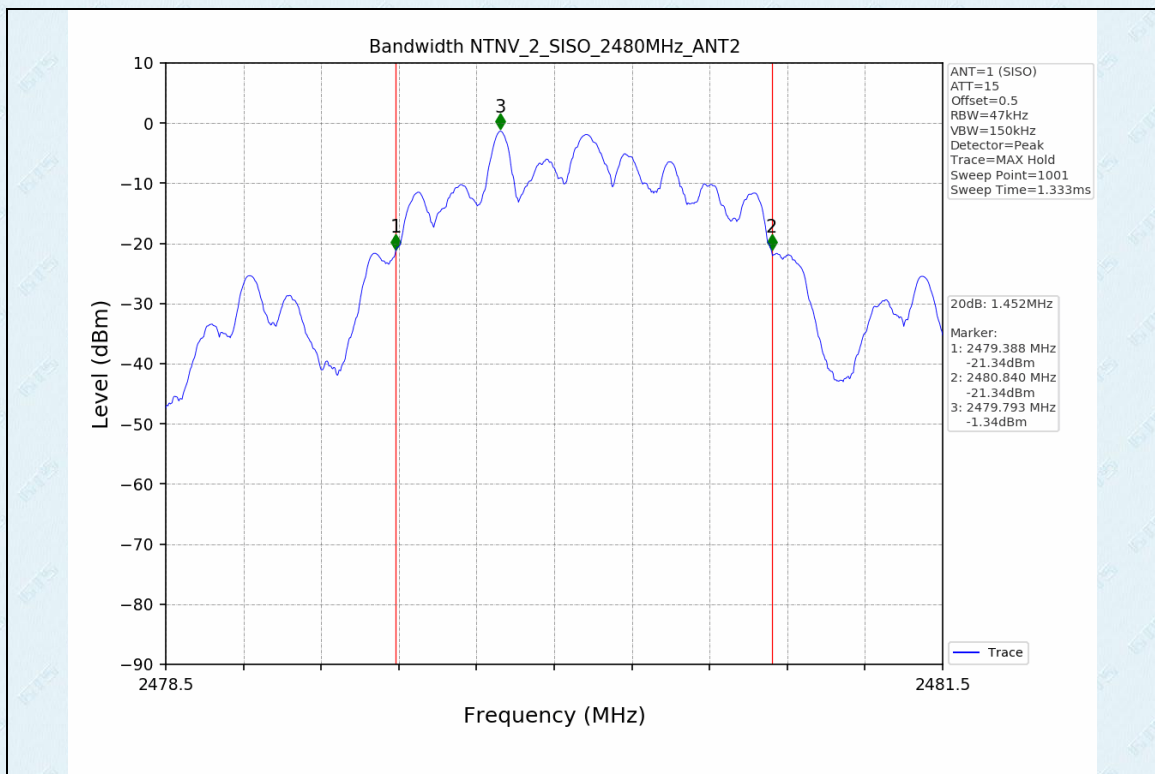
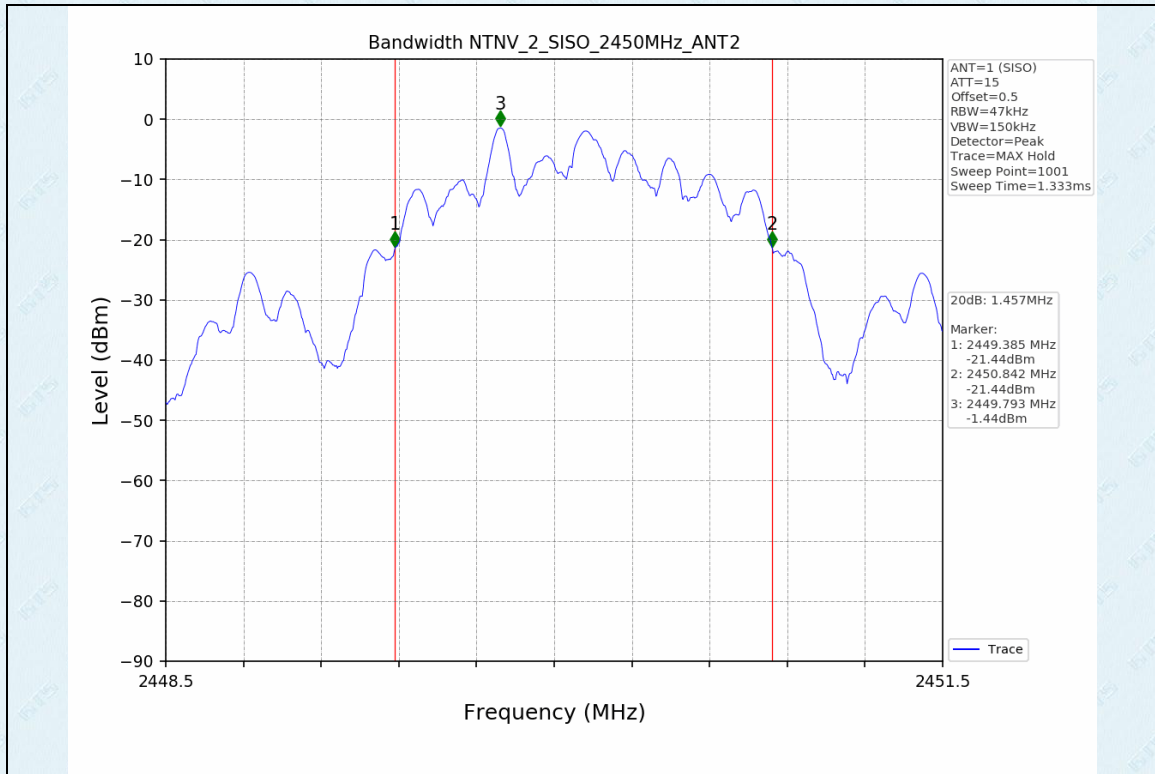
ANT 1:





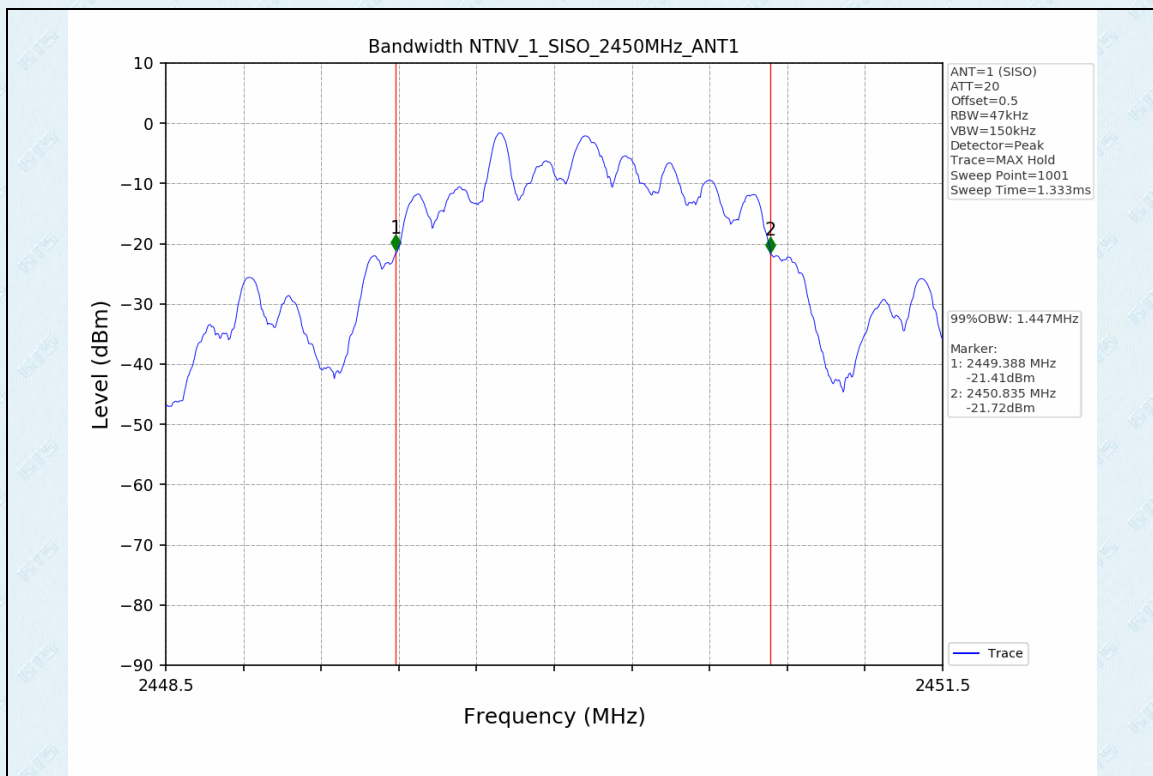
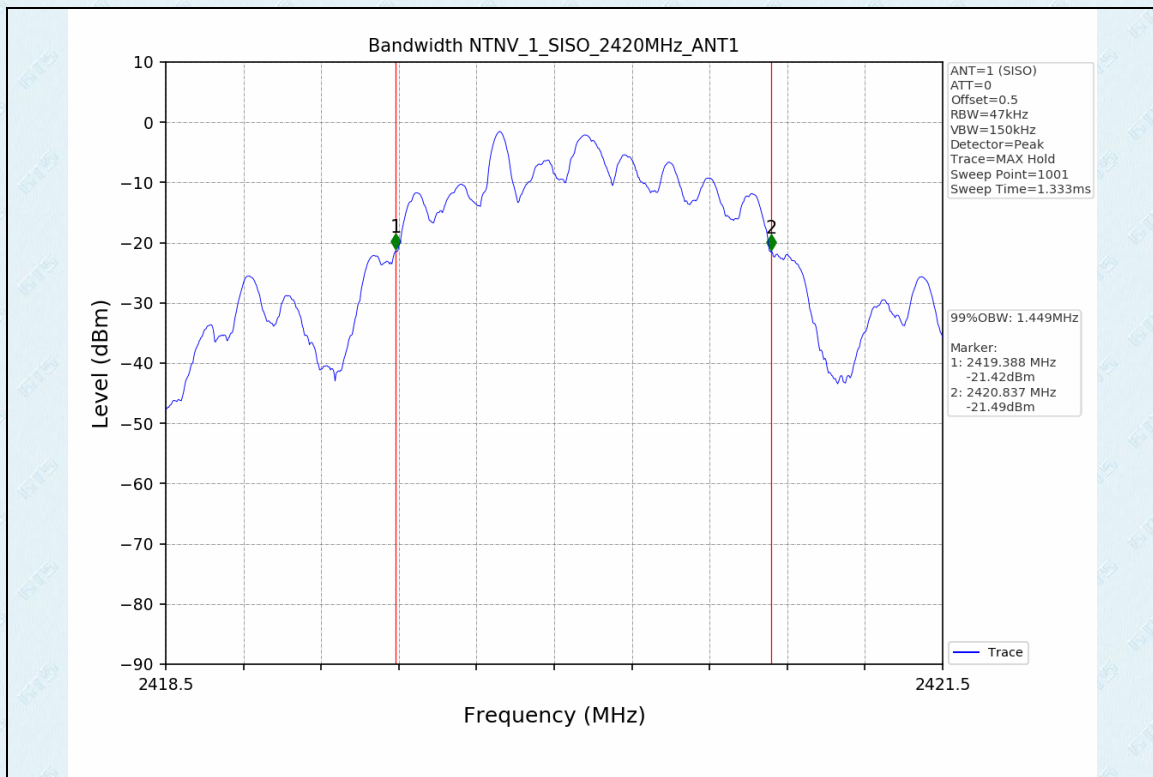
ANT 2:

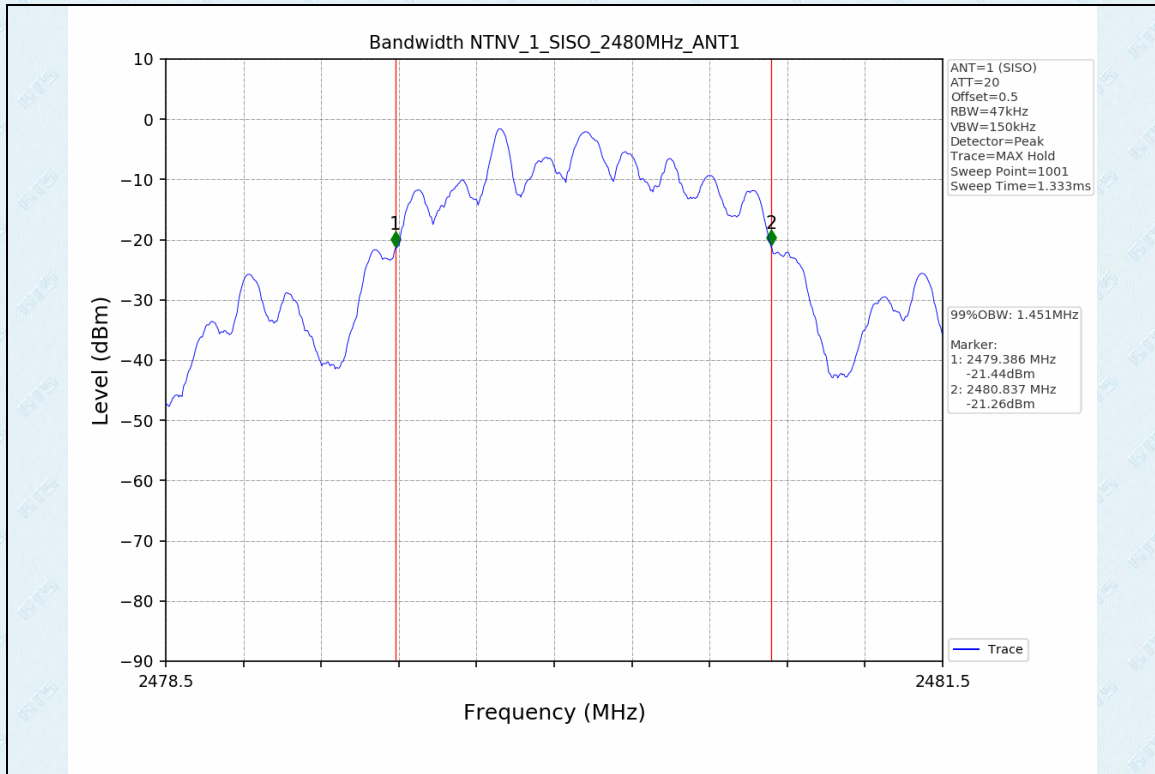




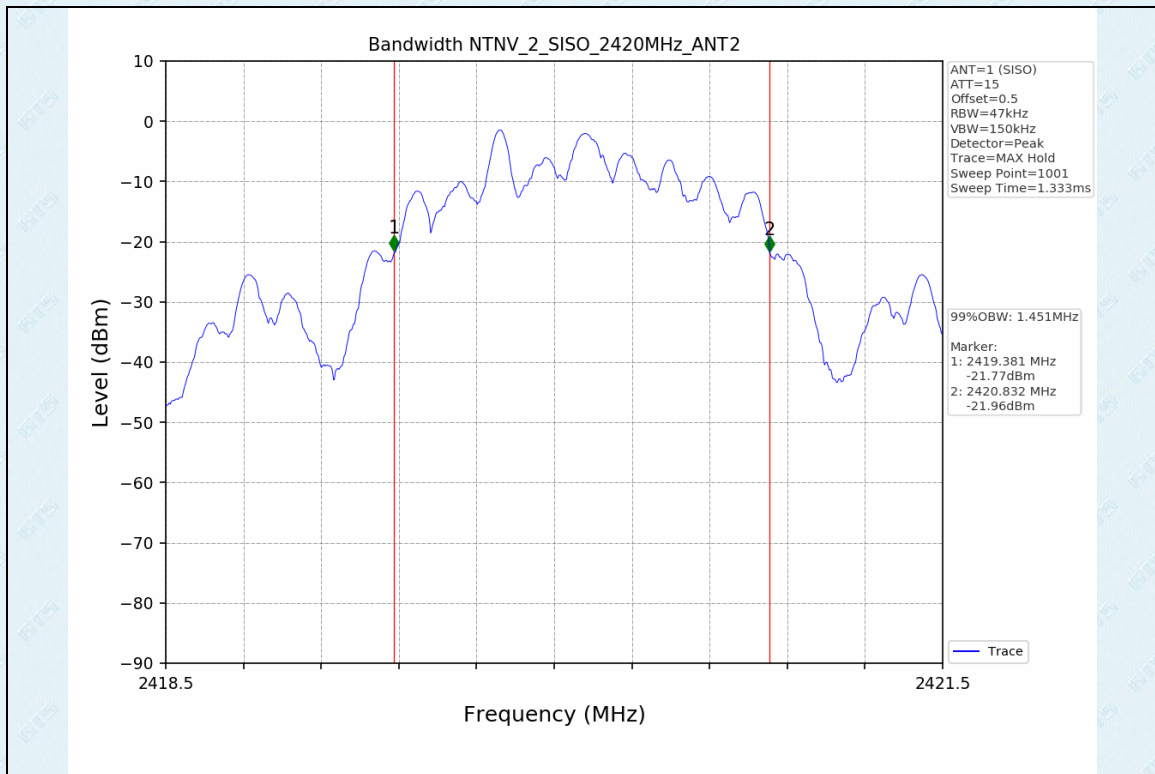
1.3 Test Graph - 99% Occupied Bandwidth

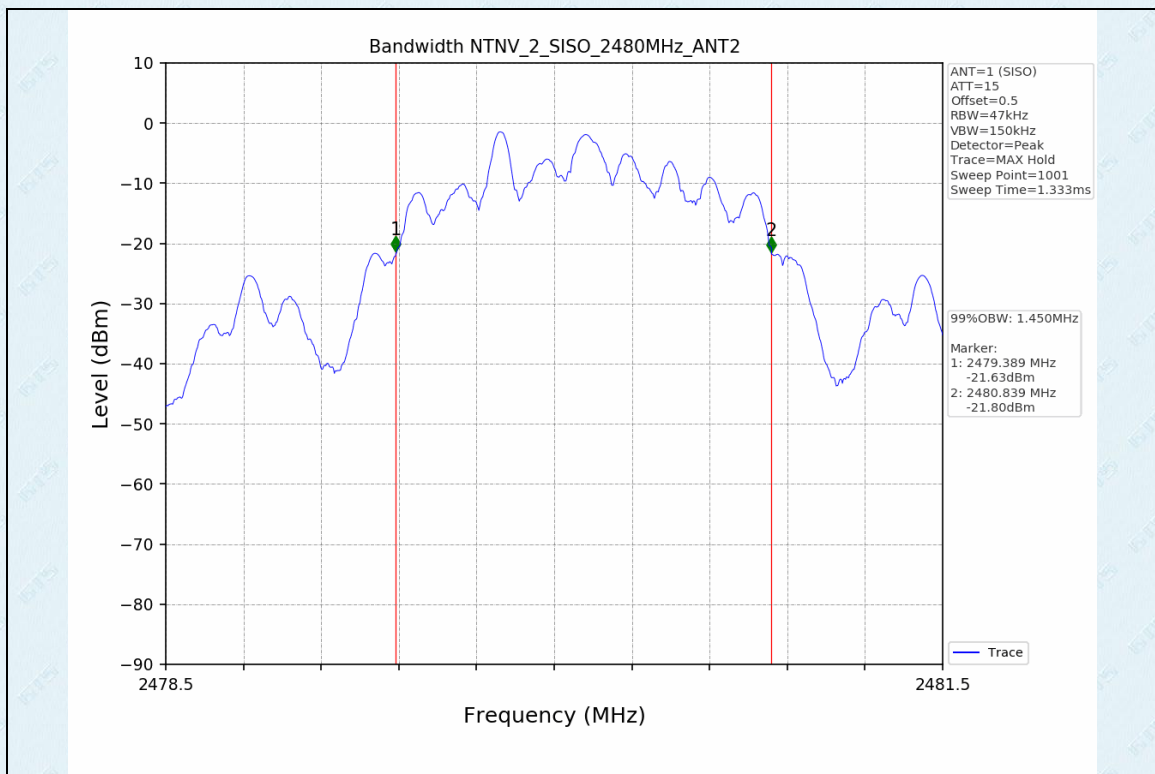
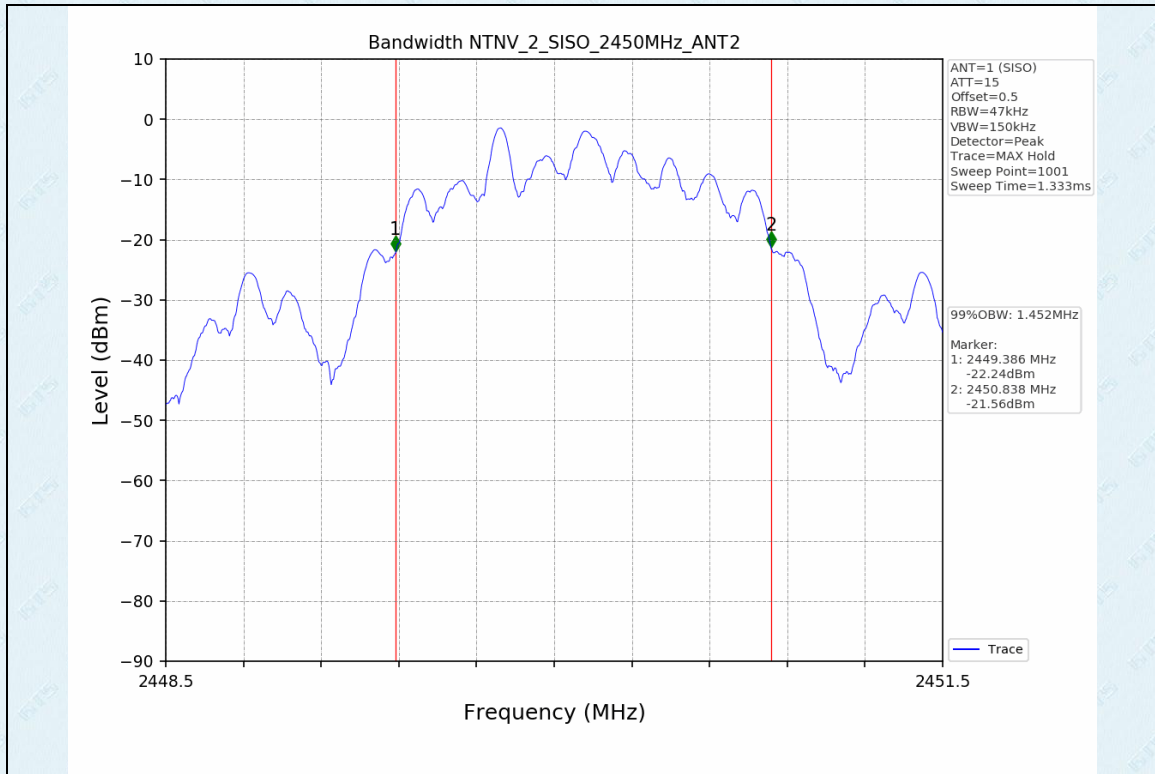
ANT 1:





ANT 2:





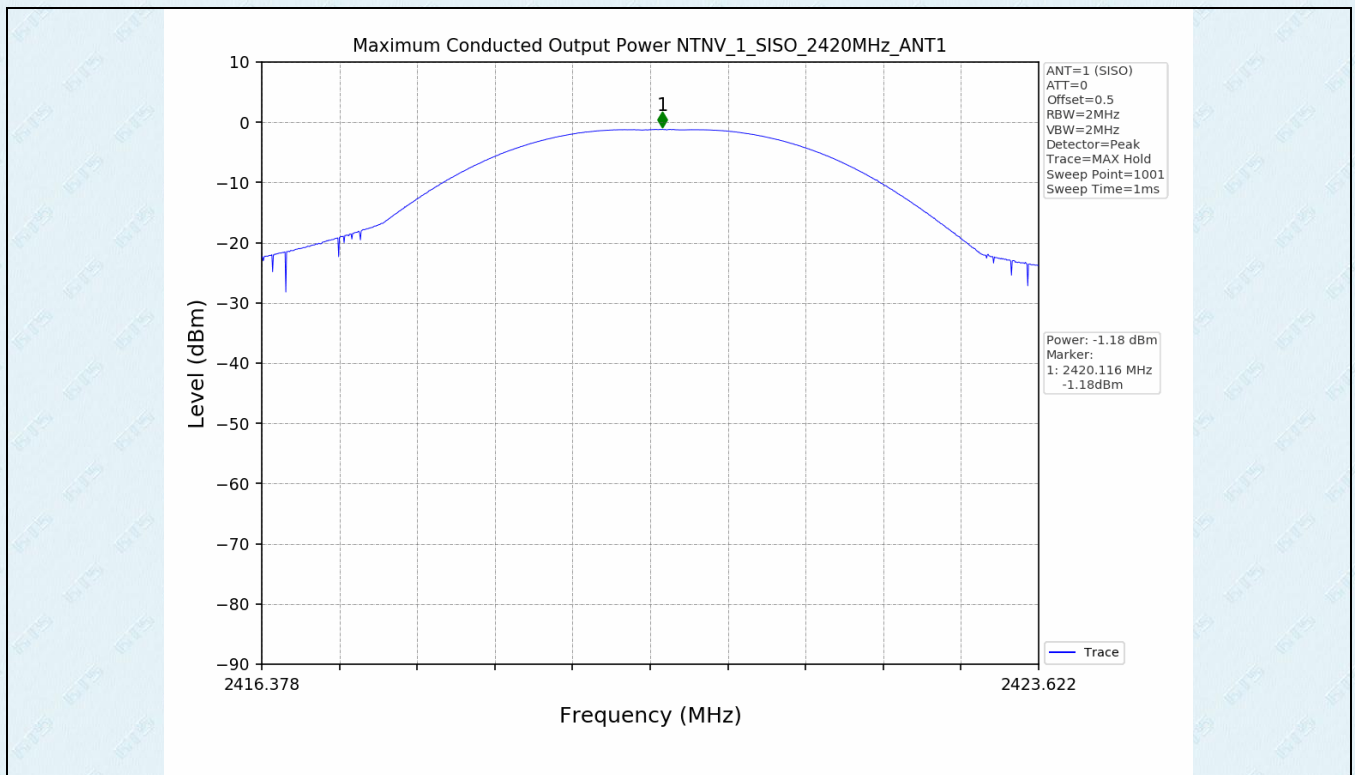
2. Maximum Conducted Output Power

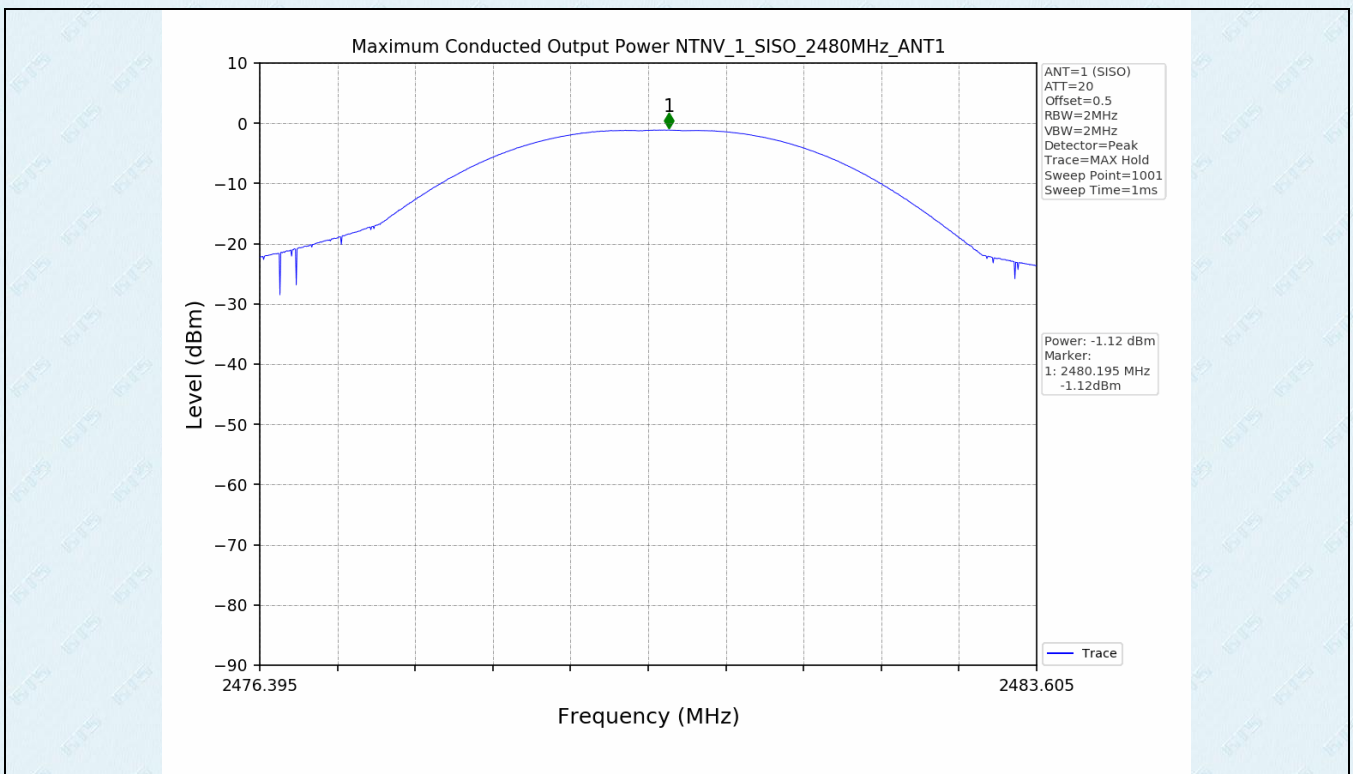
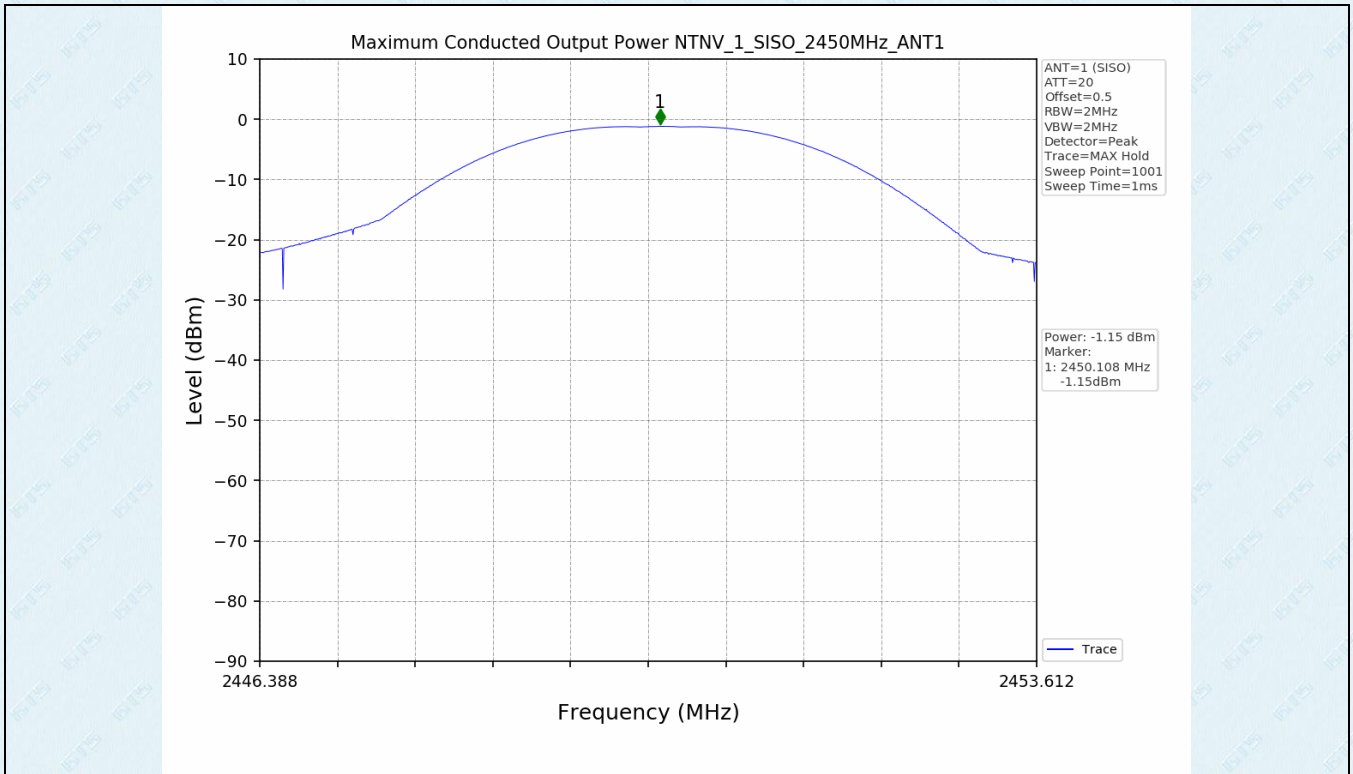
2.1 Test Result

| Test Mode | Frequency (MHz) | Tx Type | Measured Peak Output Power (dBm) | Limits (dBm) | Verdict |
|-----------|-----------------|---------|----------------------------------|--------------|---------|
| | | | Ant 1 | | |
| 1 | 2420 | SISO | -1.18 | 20.97 | PASS |
| | 2450 | SISO | -1.15 | 20.97 | PASS |
| | 2480 | SISO | -1.12 | 20.97 | PASS |
| 2 | 2420 | SISO | -1.03 | 20.97 | PASS |
| | 2450 | SISO | -0.99 | 20.97 | PASS |
| | 2480 | SISO | -0.93 | 20.97 | PASS |

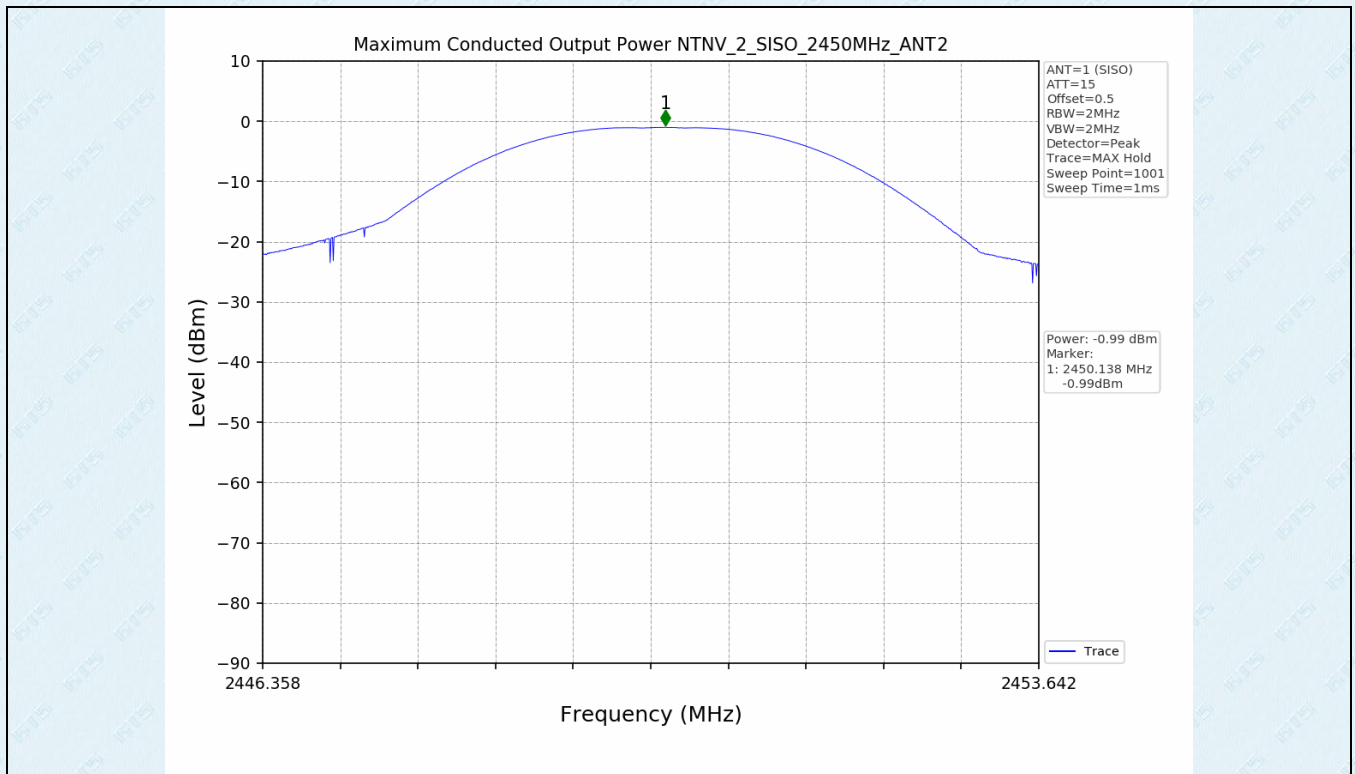
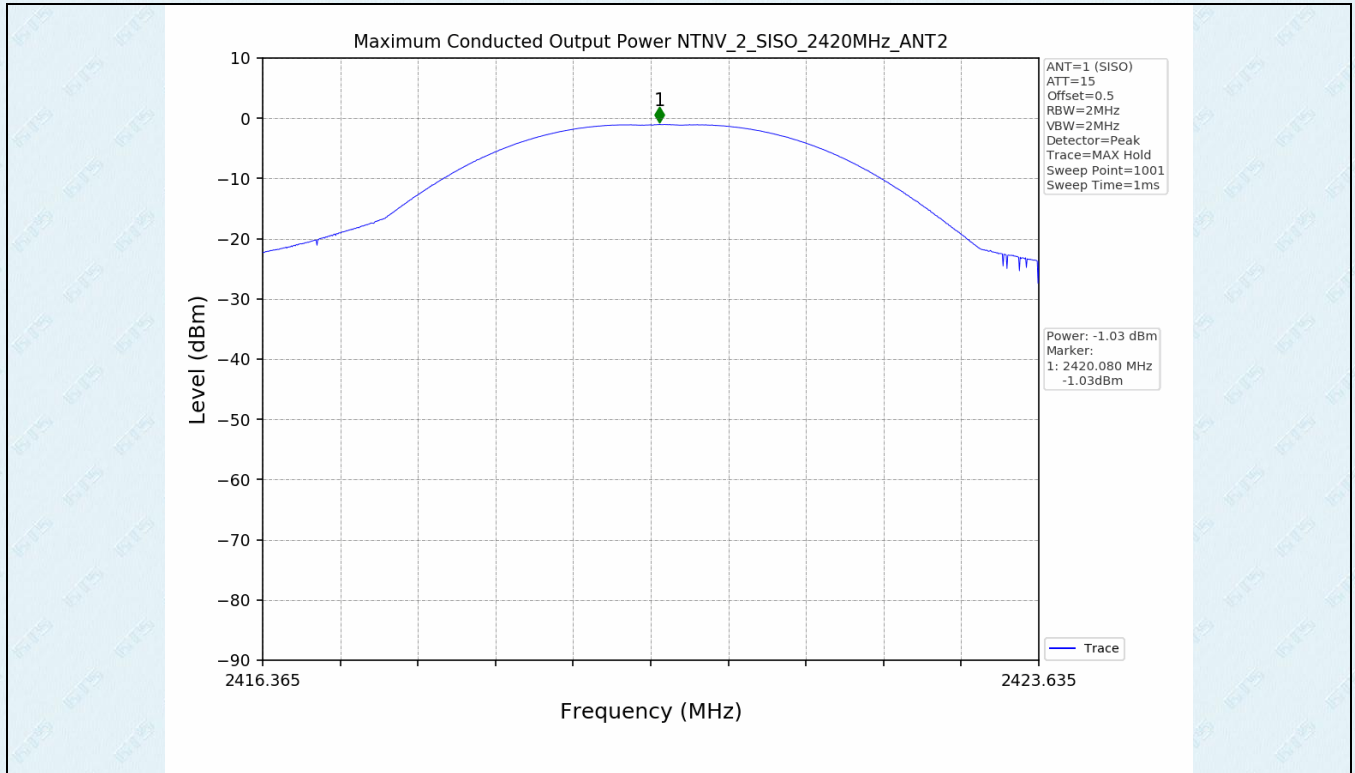
2.2 Test Graph

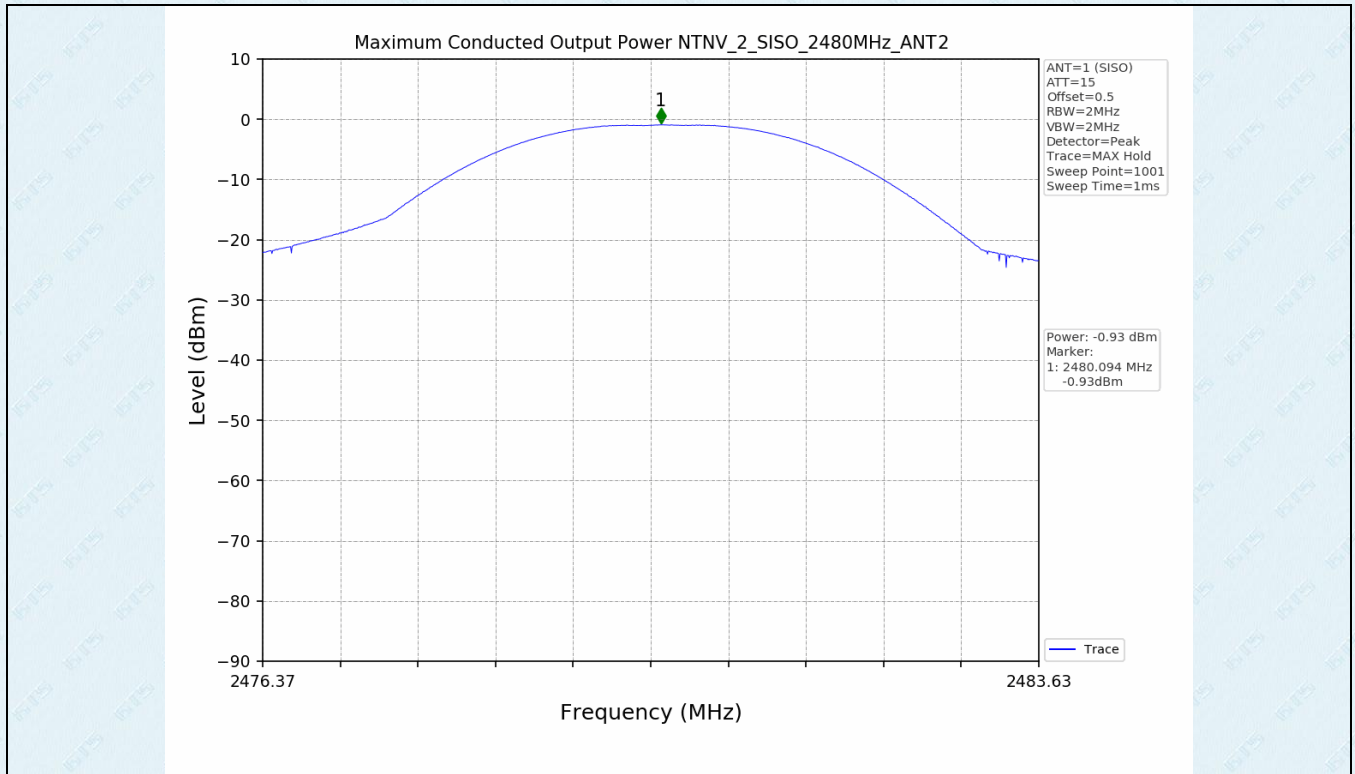
ANT 1:





ANT 2:





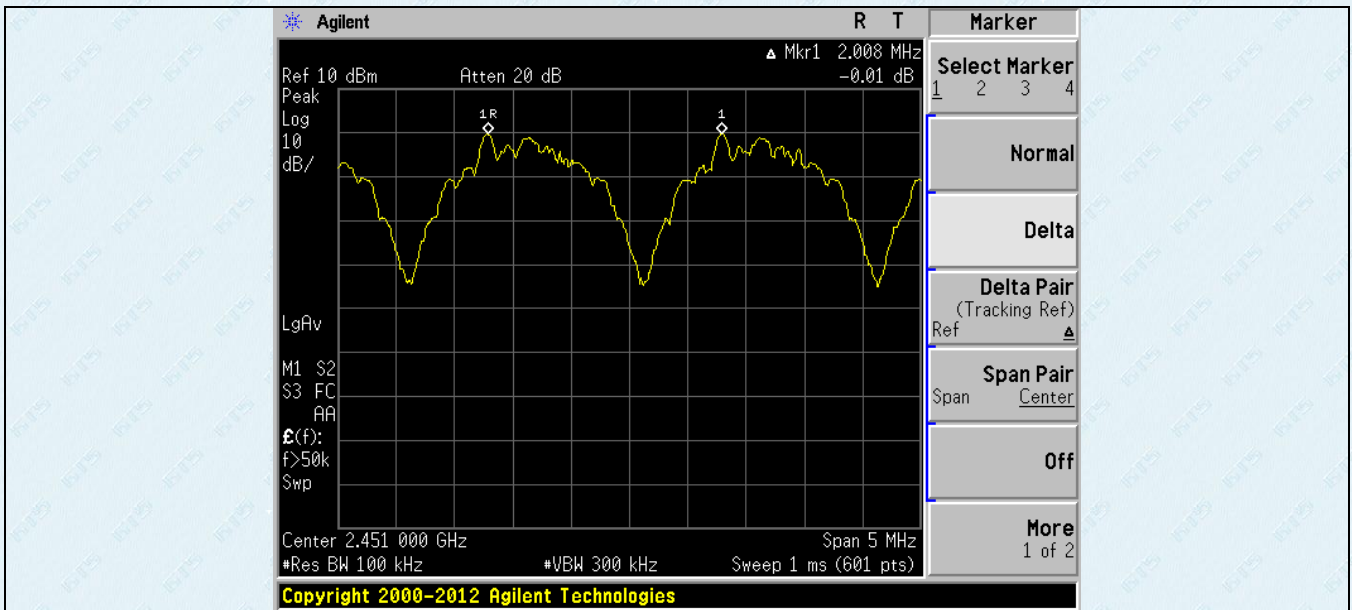
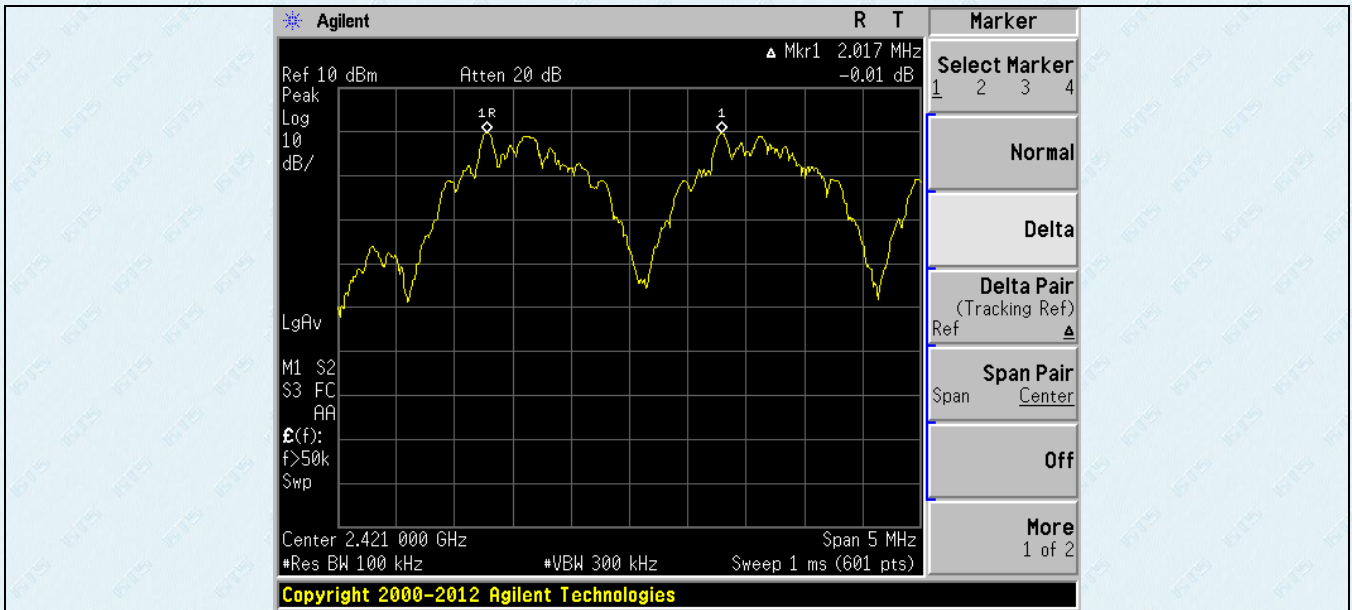
3. Carrier frequency separation

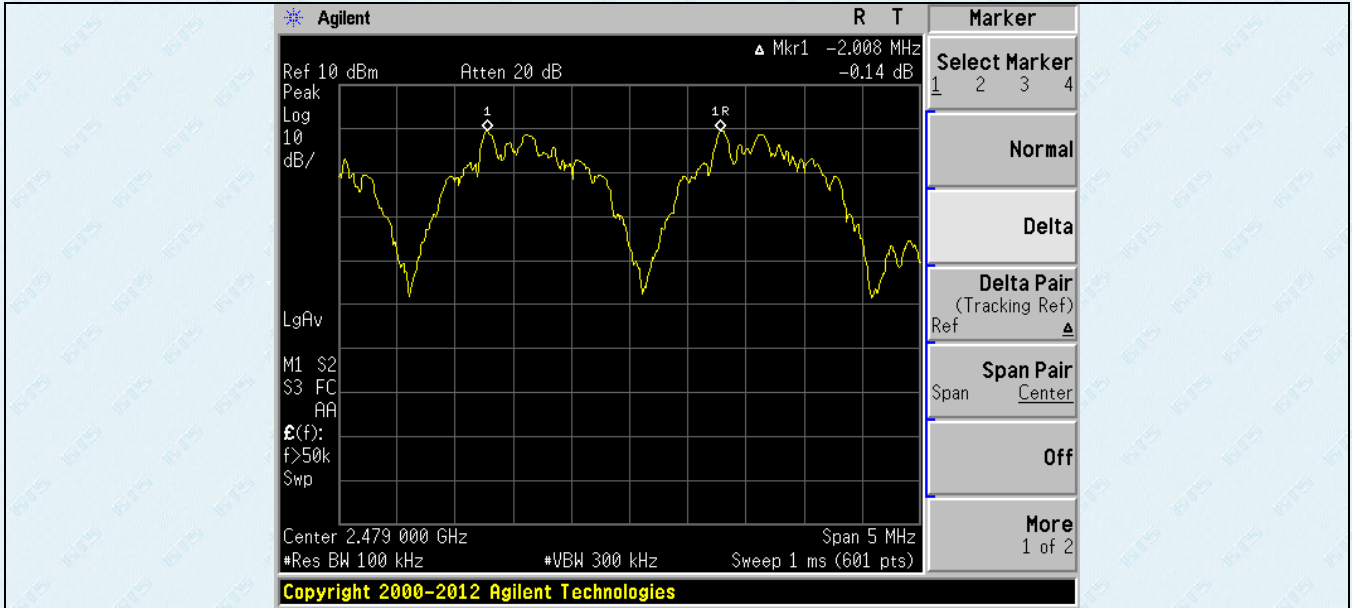
3.1 Test Result

| ANT No. | Test channel | Carrier Frequencies Separation (kHz) | Limit (kHz) | Result |
|---------|--------------|--------------------------------------|-------------|--------|
| 1 | Lowest | 2017 | 967.33 | Pass |
| | Middle | 2008 | 965.33 | Pass |
| | Highest | 2008 | 970.00 | Pass |
| 2 | Lowest | 2008 | 967.33 | Pass |
| | Middle | 2017 | 966.67 | Pass |
| | Highest | 2008 | 969.33 | Pass |

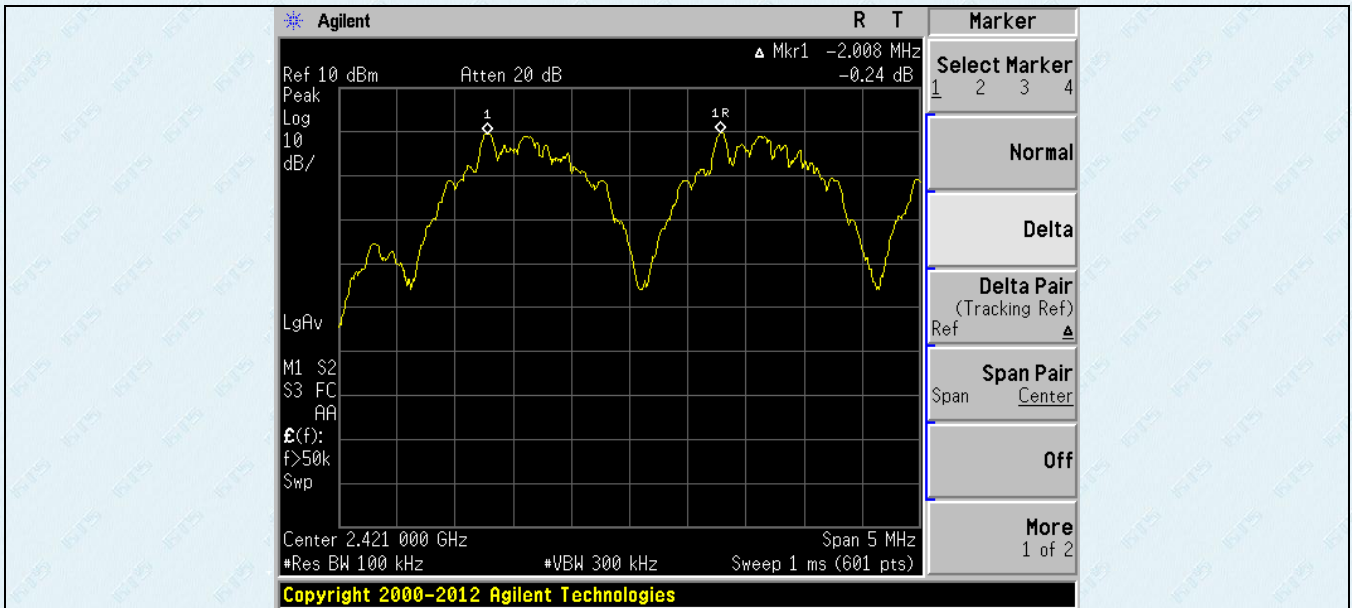
3.2 Test Graph

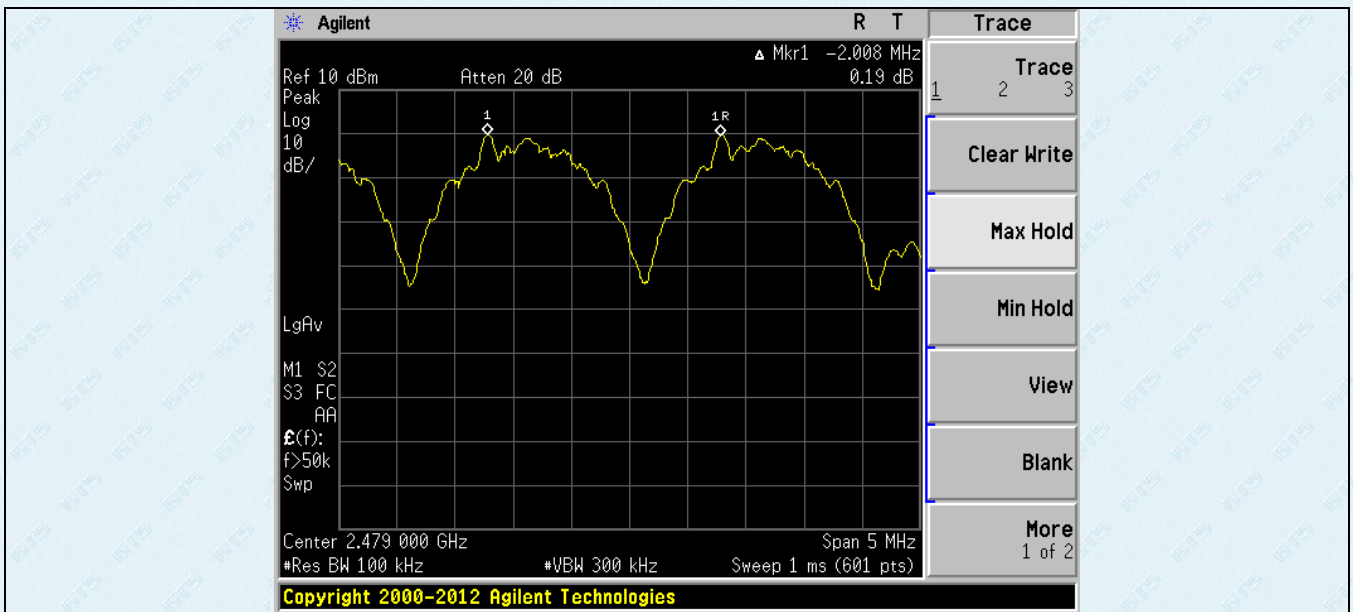
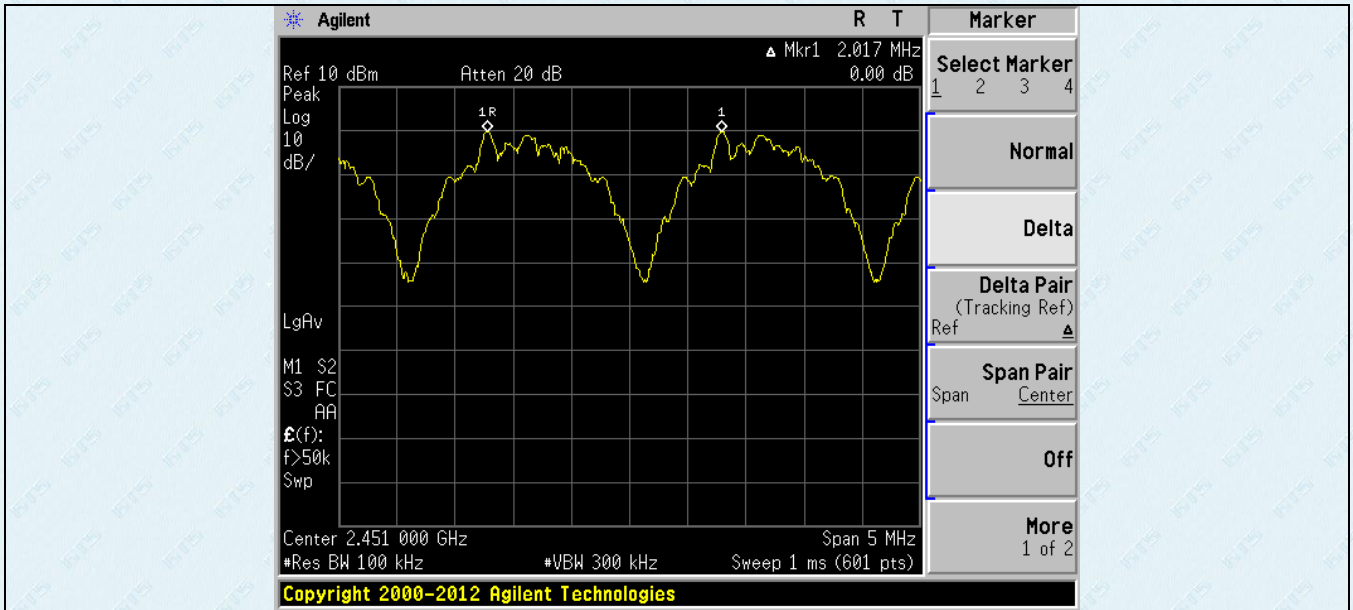
ANT 1:





ANT 2:





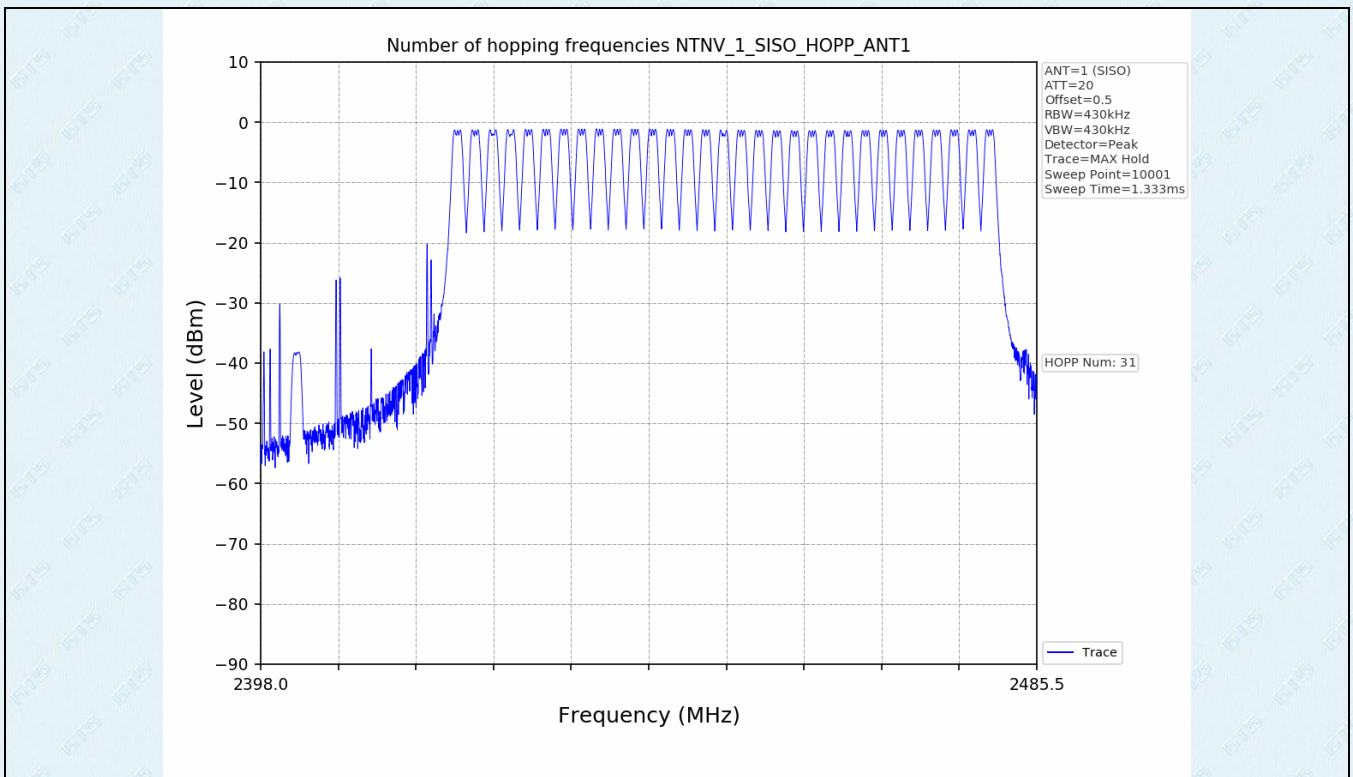
4. Number of hopping frequencies

4.1 Test Result

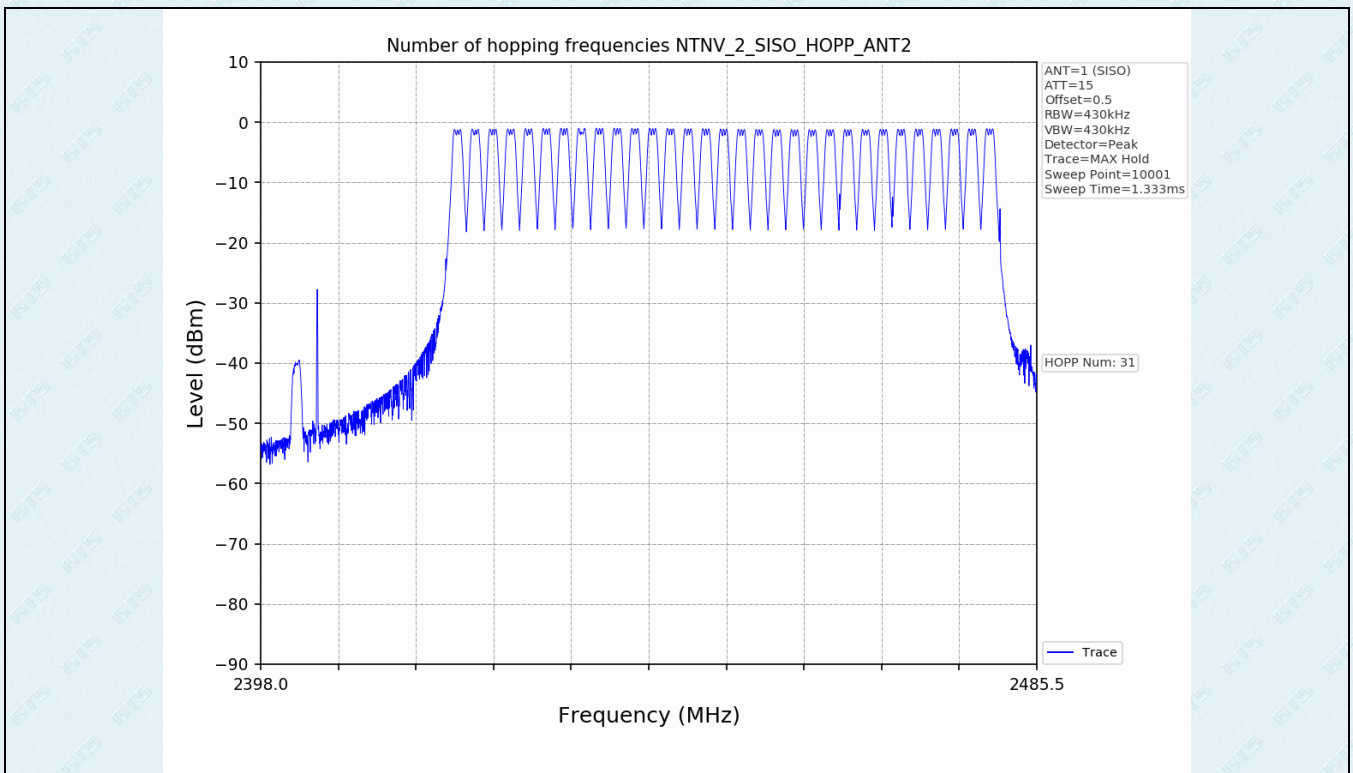
| Test Mode | TX Type | ANT No. | Num of Hopping Frequencies | Limits | Verdict |
|-----------|---------|---------|----------------------------|--------|---------|
| 1 | SISO | 1 | 31 | ≥15 | PASS |
| 2 | SISO | 1 | 31 | ≥15 | PASS |

4.2 Test Graph

ANT 1:



ANT 2:



5. Time of occupancy (dwell time)

5.1 Test Result

| ANT No. | Test channel | Ton (ms) | Dwell time(ms) | Limit(ms) | Result |
|---------|--------------|----------|----------------|-----------|--------|
| 1 | Lowest | 0.3333 | 256.24 | 400 | Pass |
| | Middle | 0.3333 | 256.24 | 400 | Pass |
| | Highest | 0.3417 | 262.70 | 400 | Pass |
| 2 | Lowest | 0.3500 | 269.08 | 400 | Pass |
| | Middle | 0.3333 | 256.24 | 400 | Pass |
| | Highest | 0.3333 | 256.24 | 400 | Pass |

The formula as below:

ANT 1:

Lowest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=0.3333ms*62*0.4*31=256.24ms

Middle: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=0.3333ms*62*0.4*31=256.24ms

Highest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=0.3417ms*62*0.4*31=262.70ms

ANT 2:

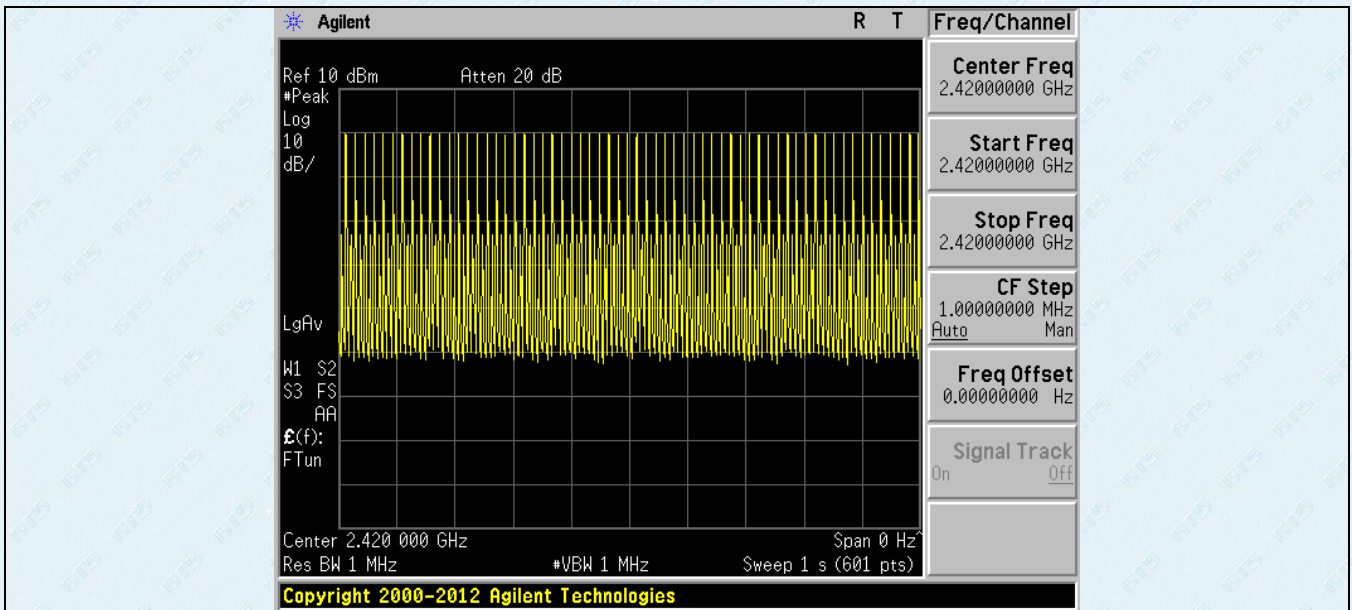
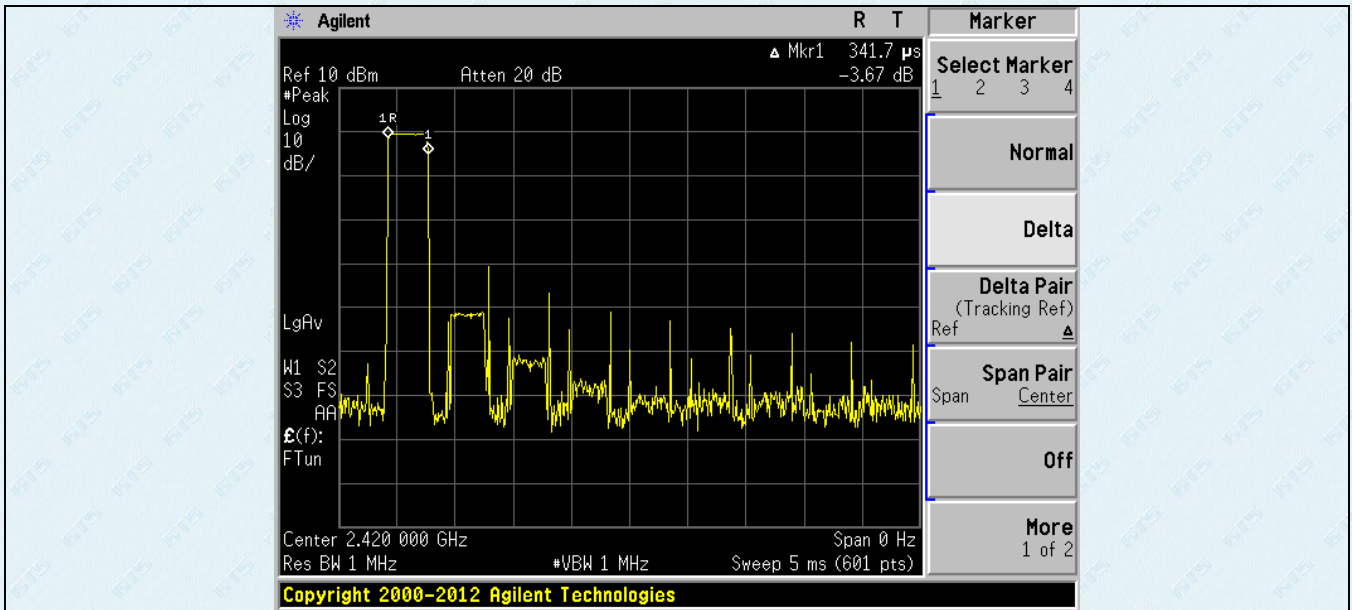
Lowest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=0.3500ms*62*0.4*31=269.08ms

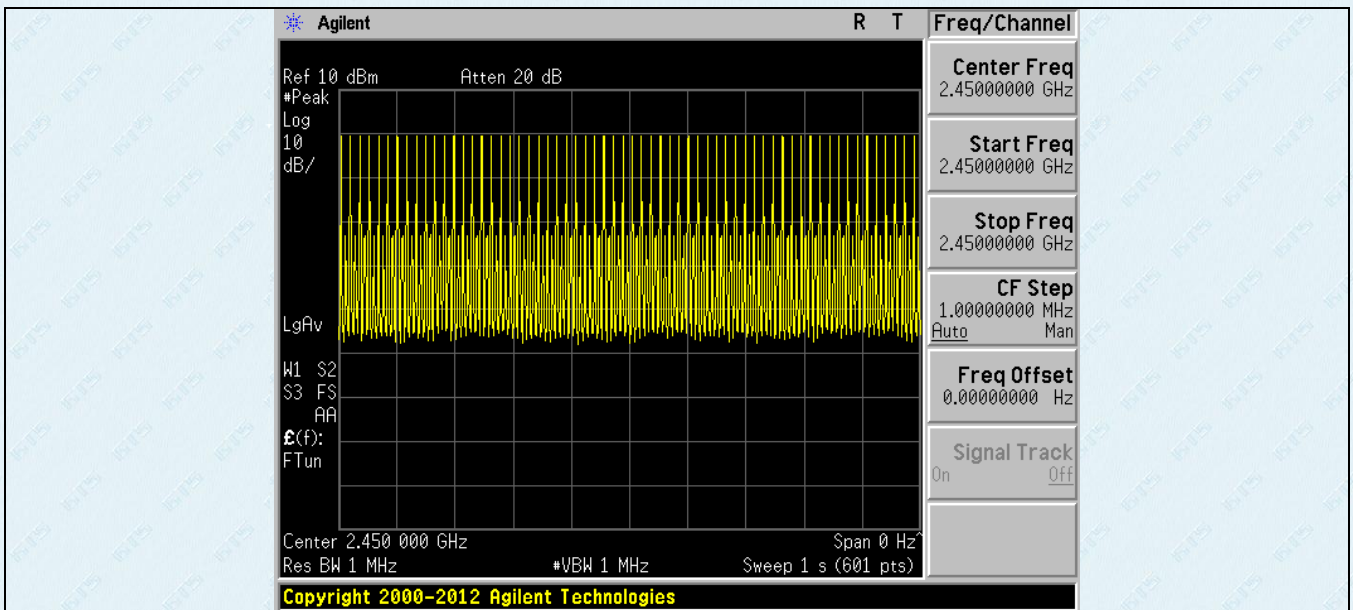
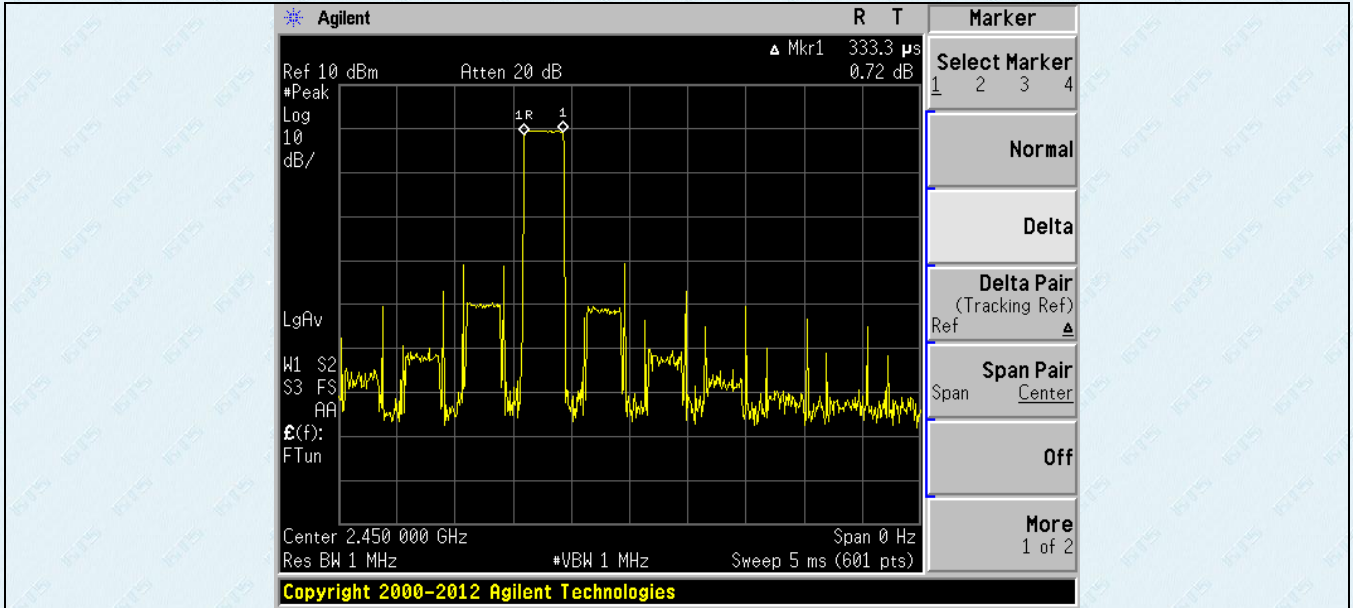
Middle: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=0.3333ms*62*0.4*31=256.24ms

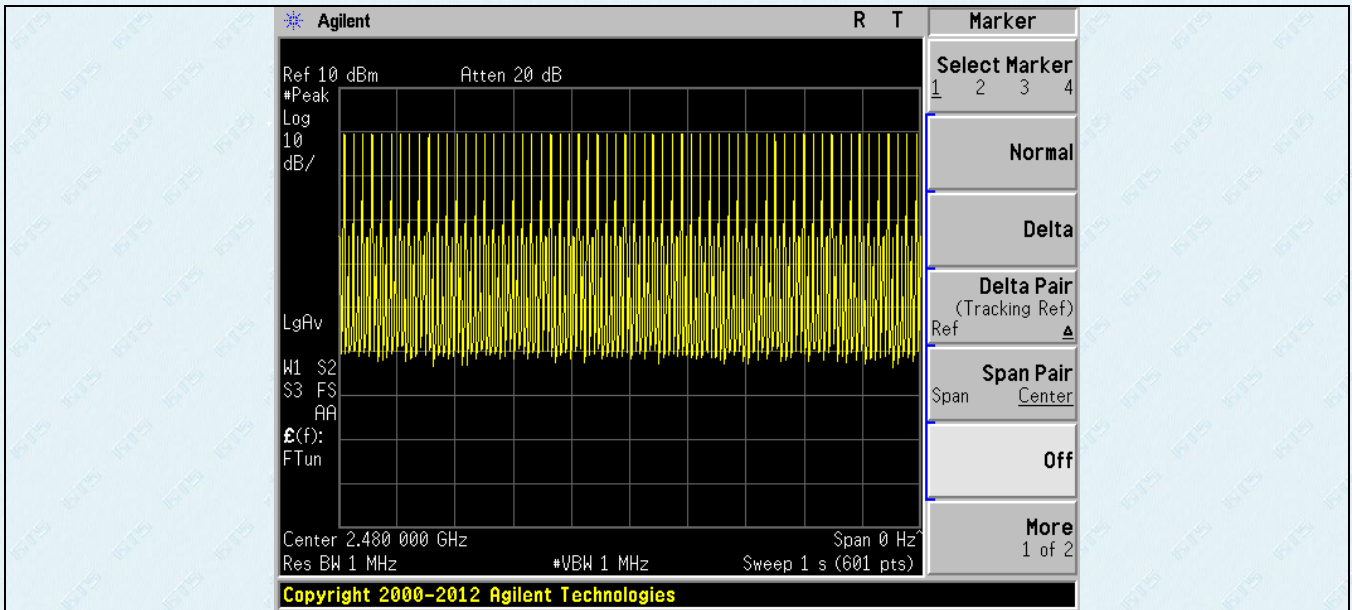
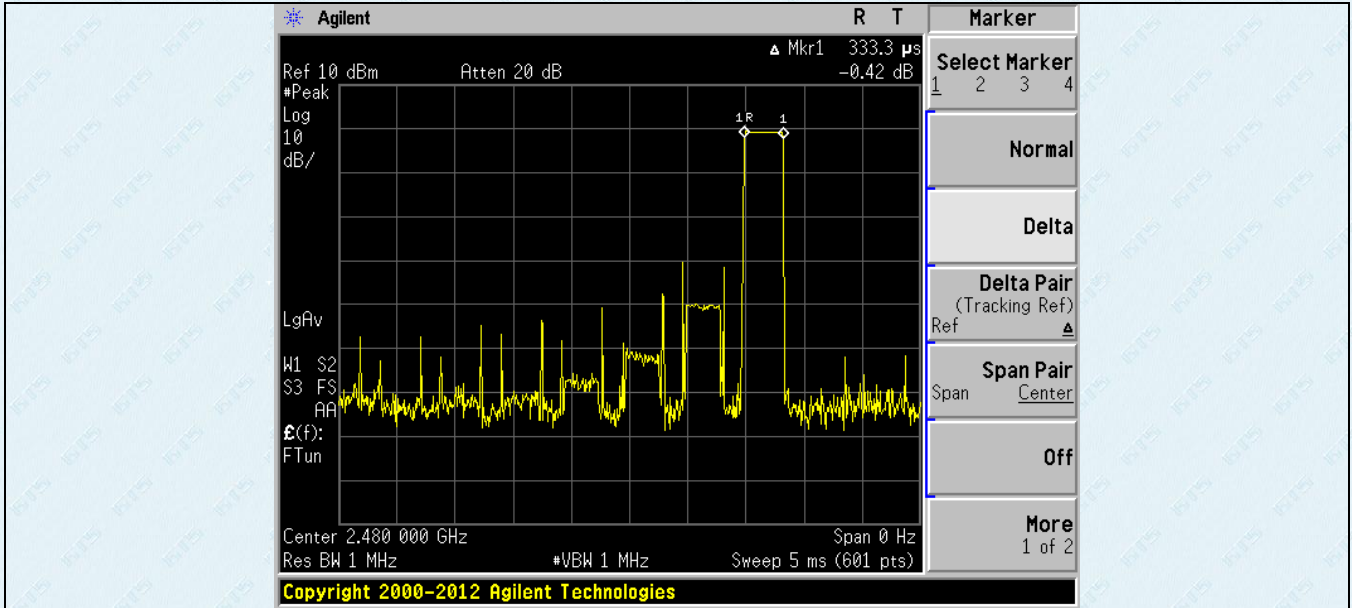
Highest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=0.3333ms*62*0.4*31=256.24ms

5.2 Test Graph

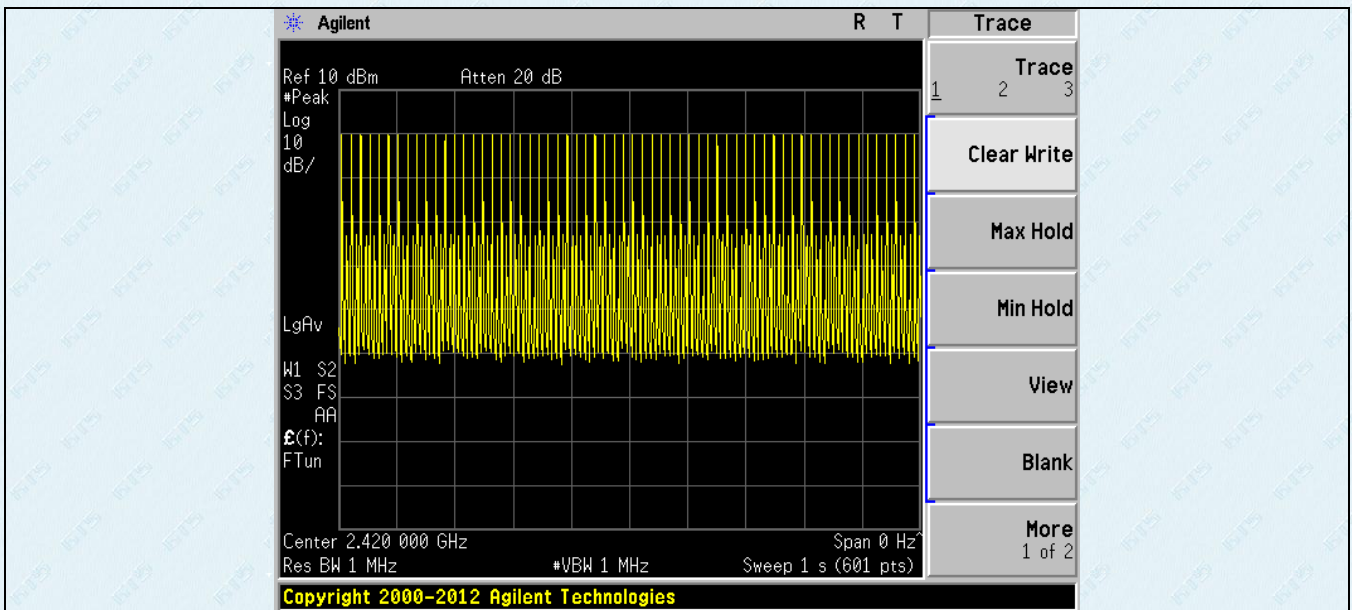
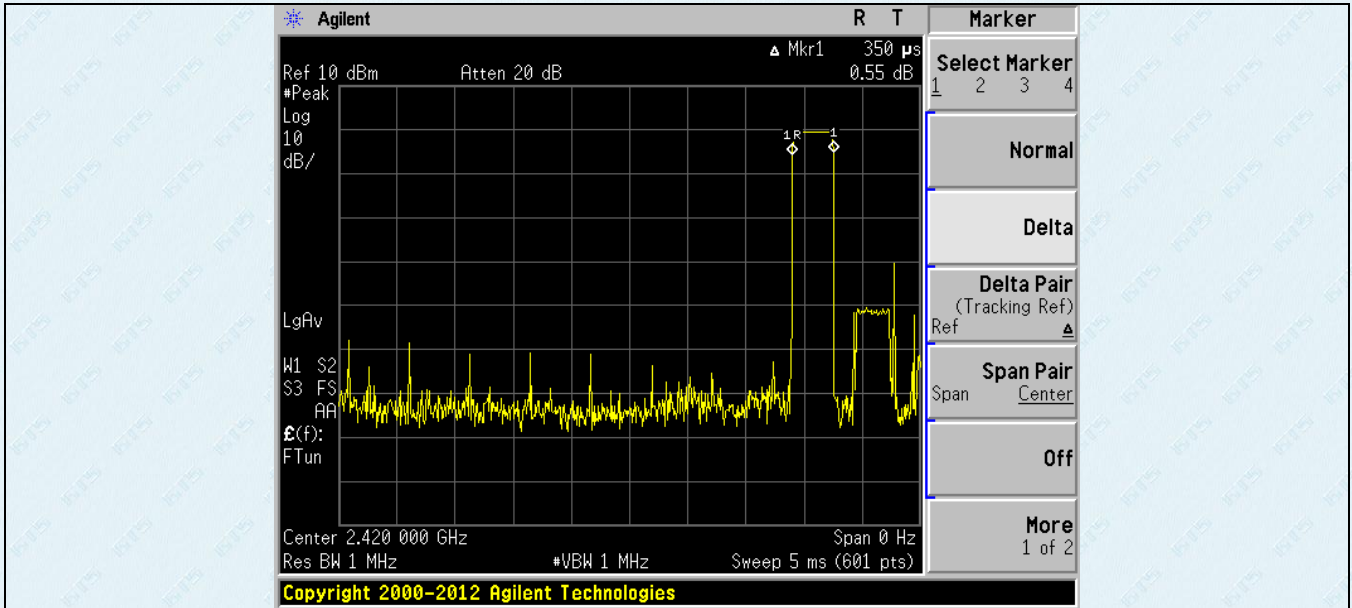
ANT 1:

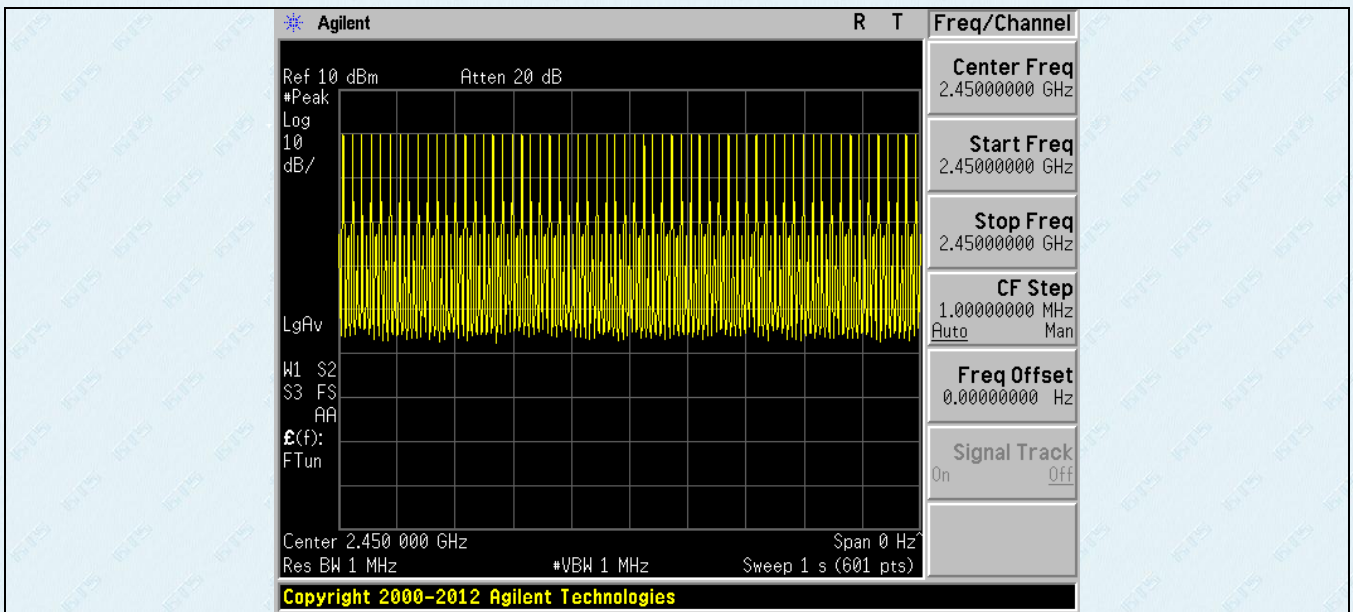
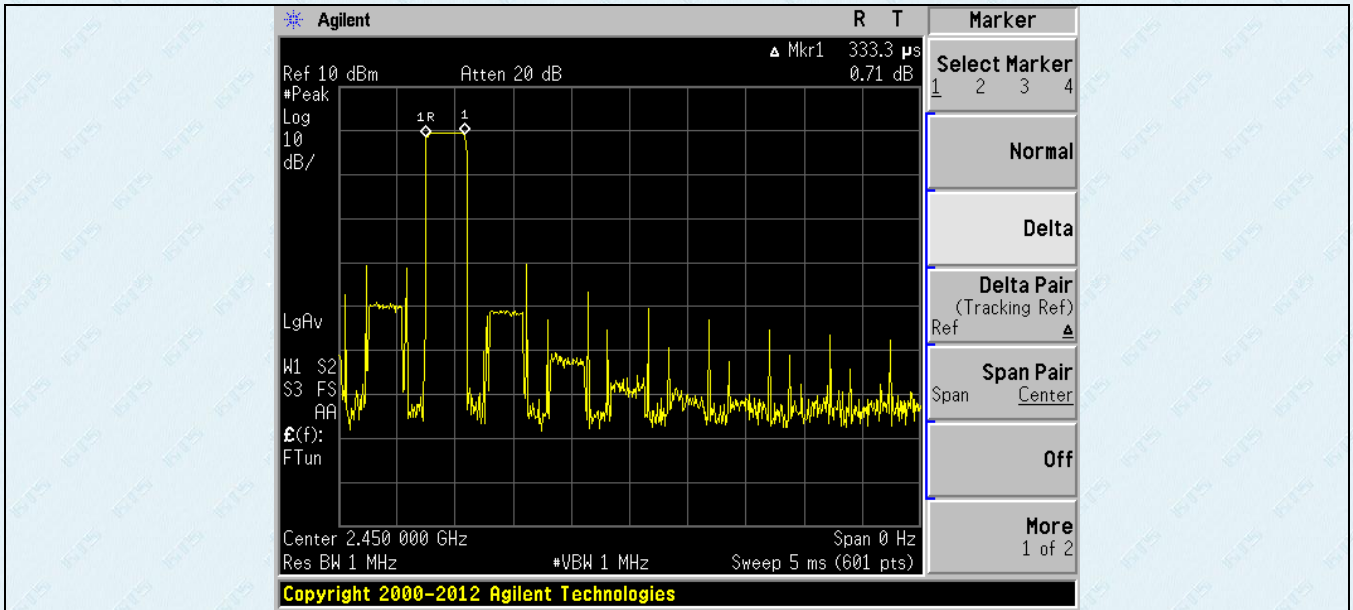


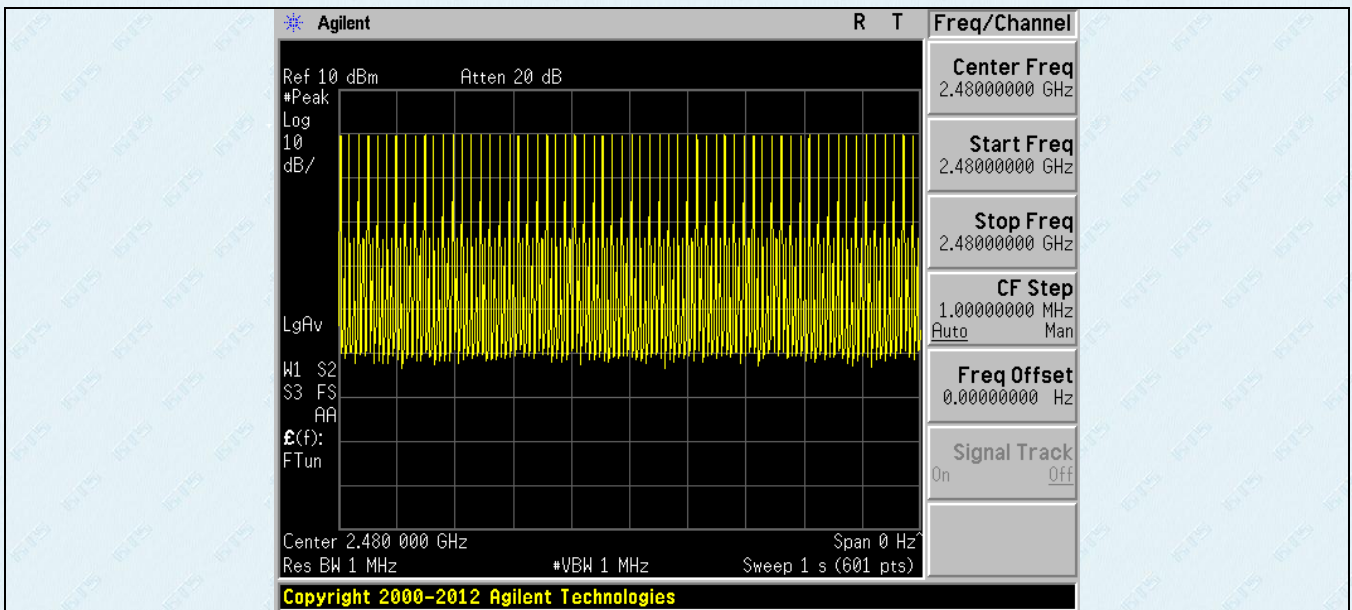
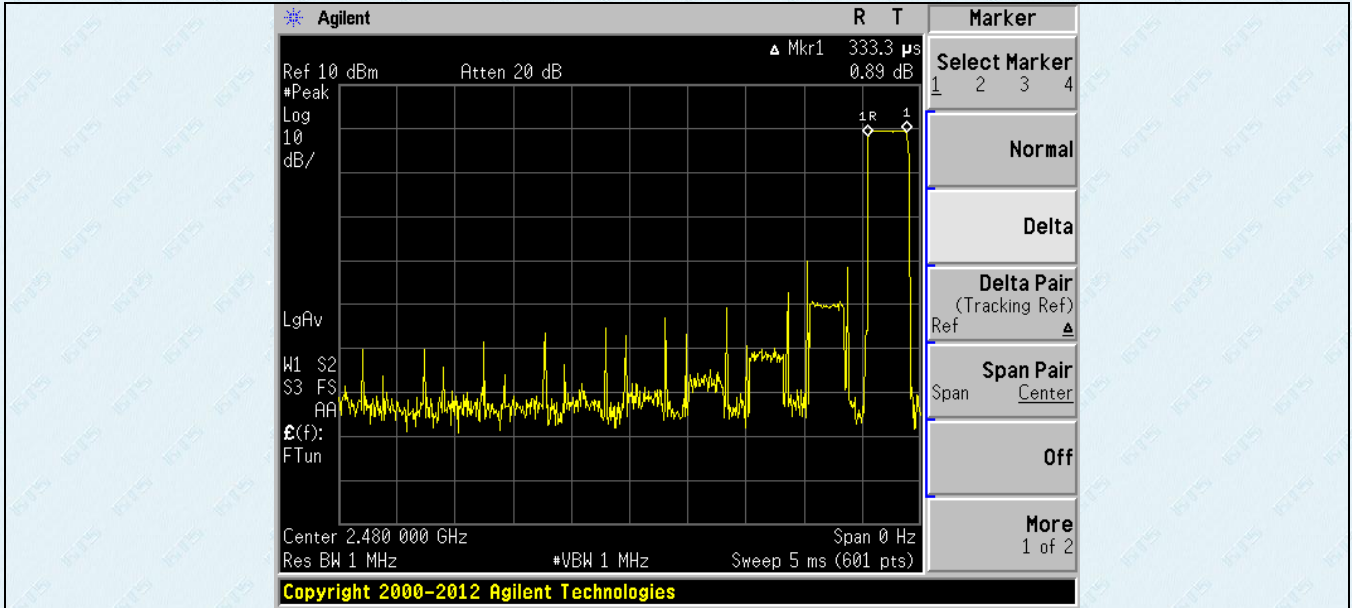




ANT 2:







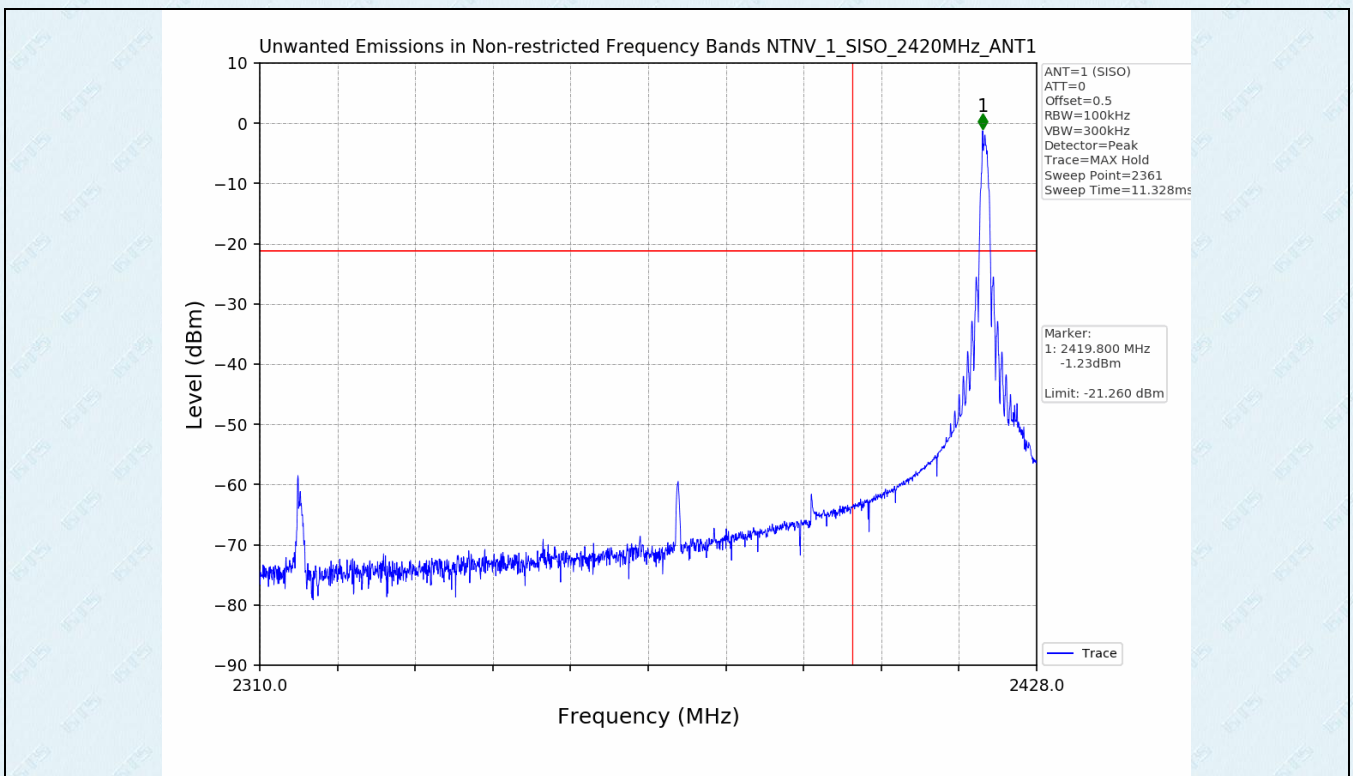
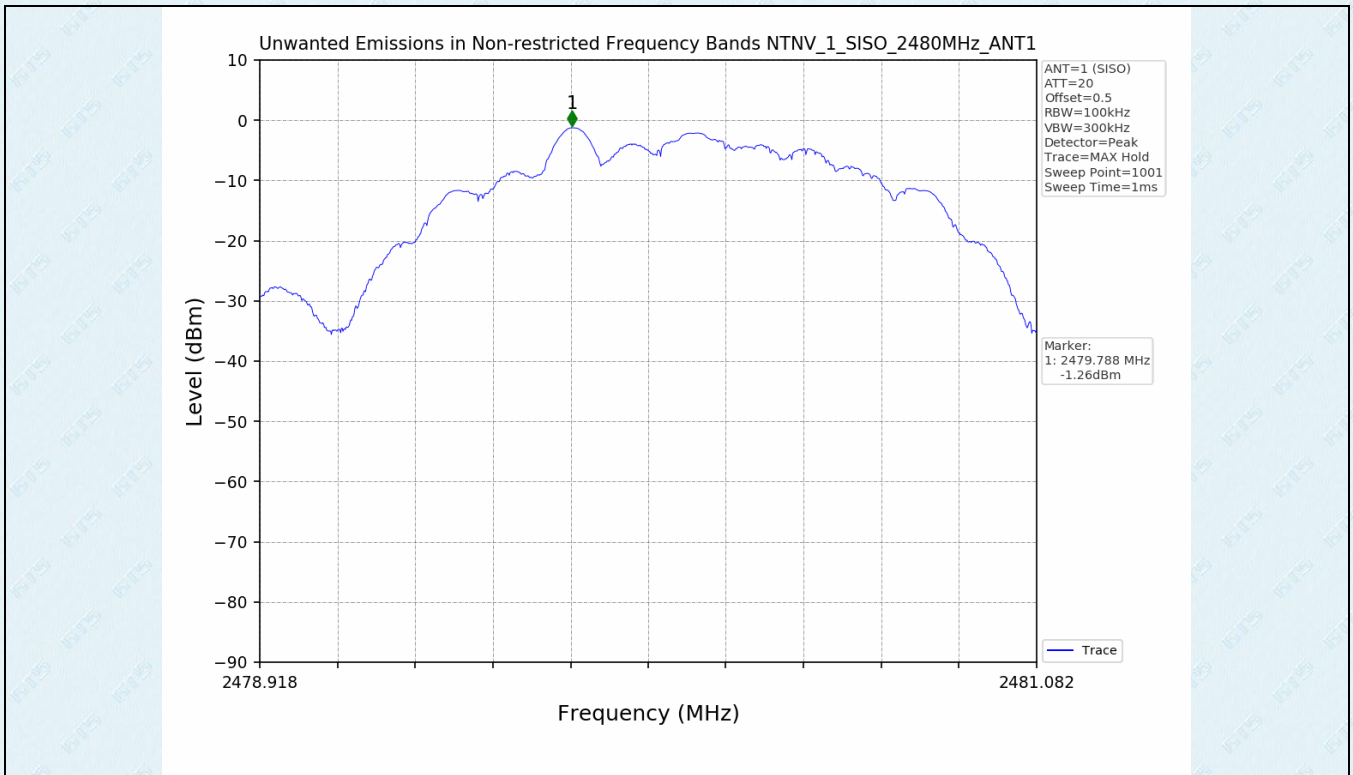
6. Unwanted Emissions in Non-restricted Frequency Bands

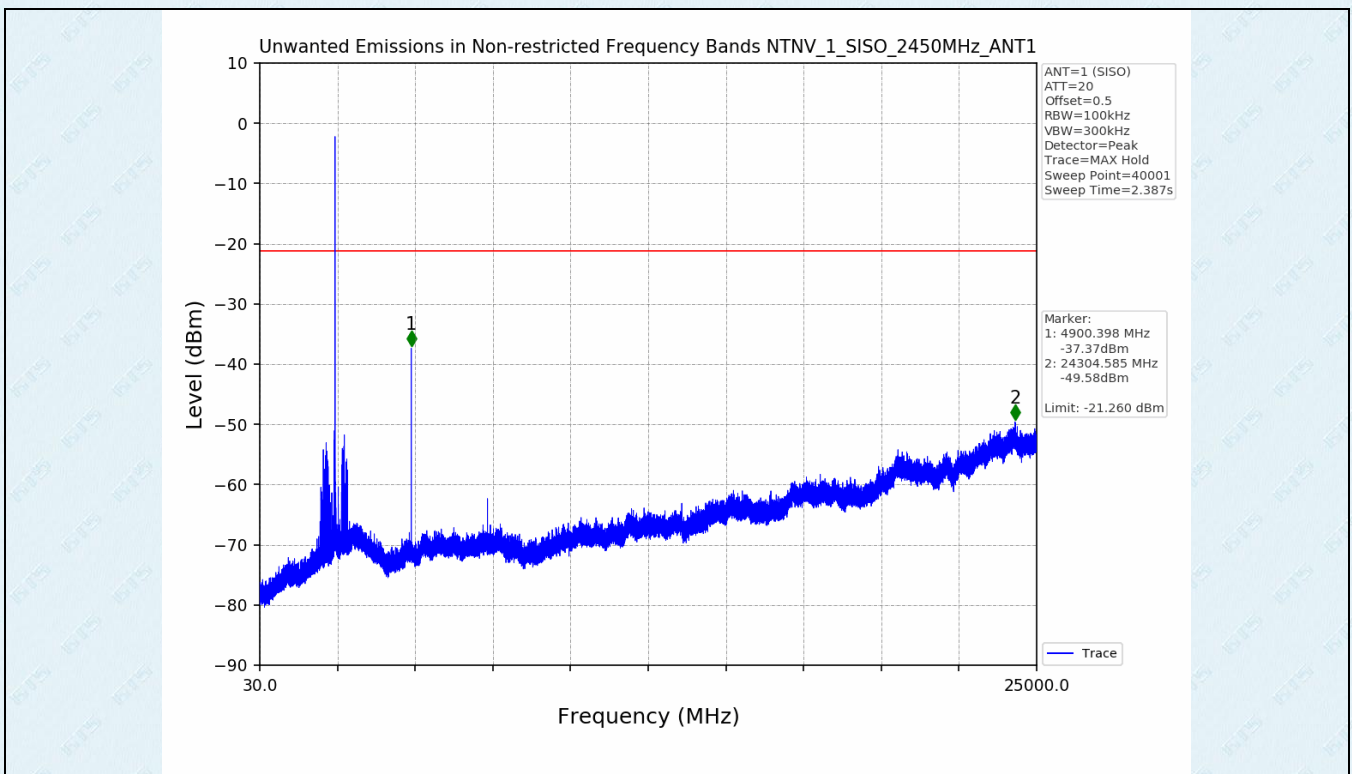
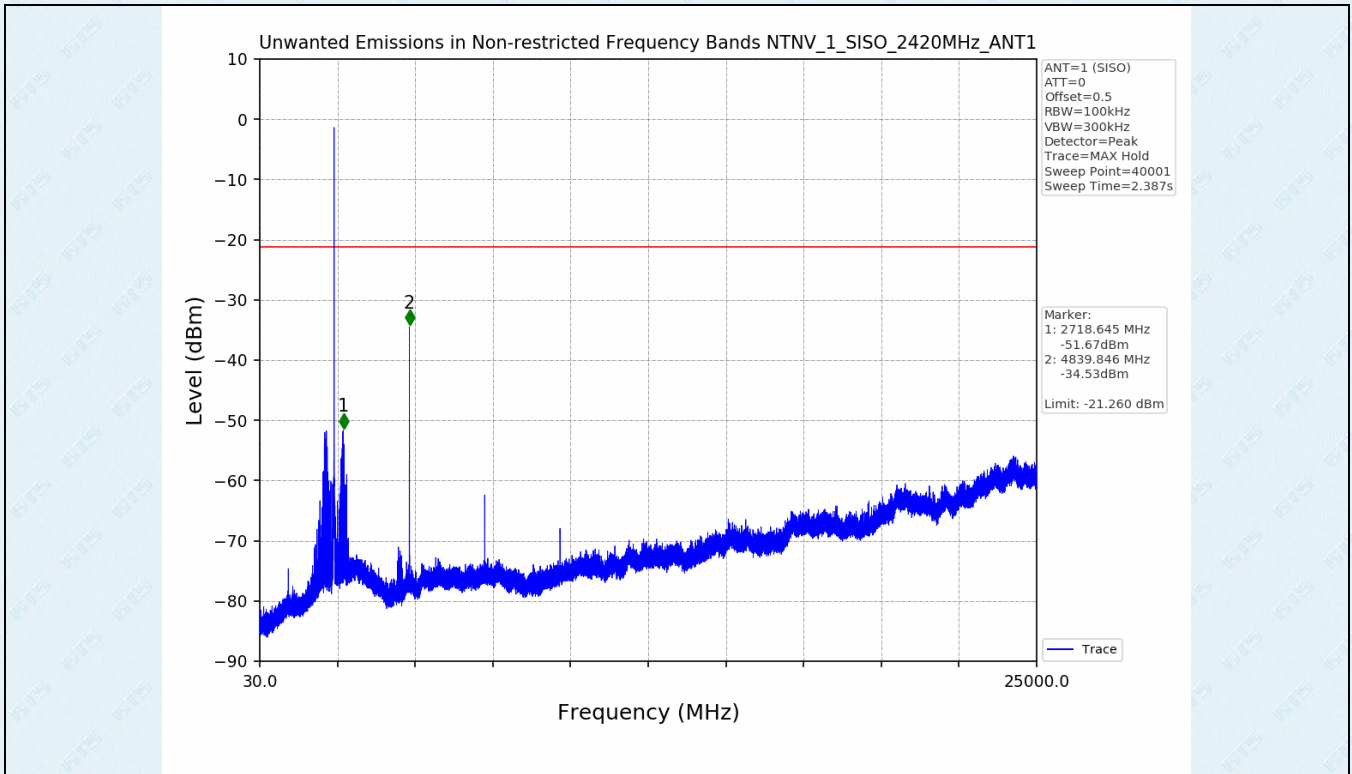
6.1 Test Result

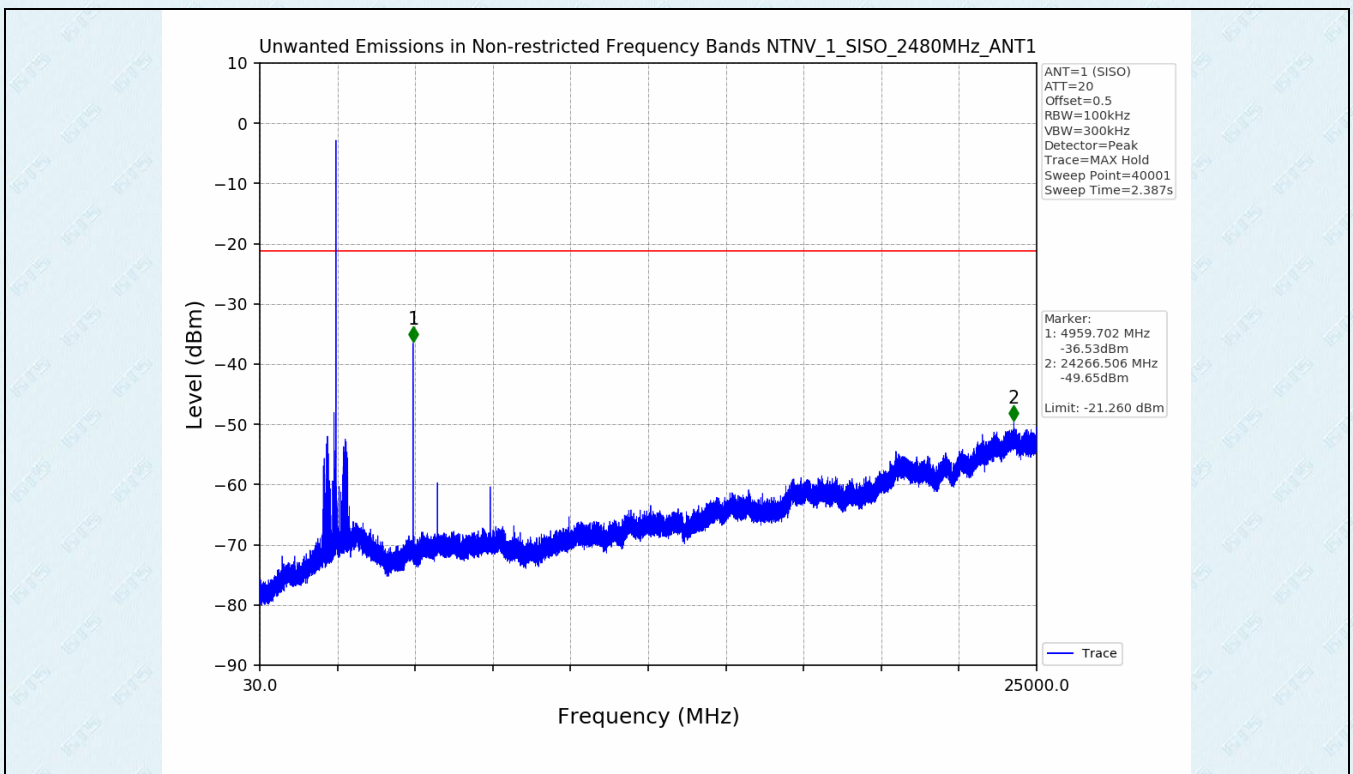
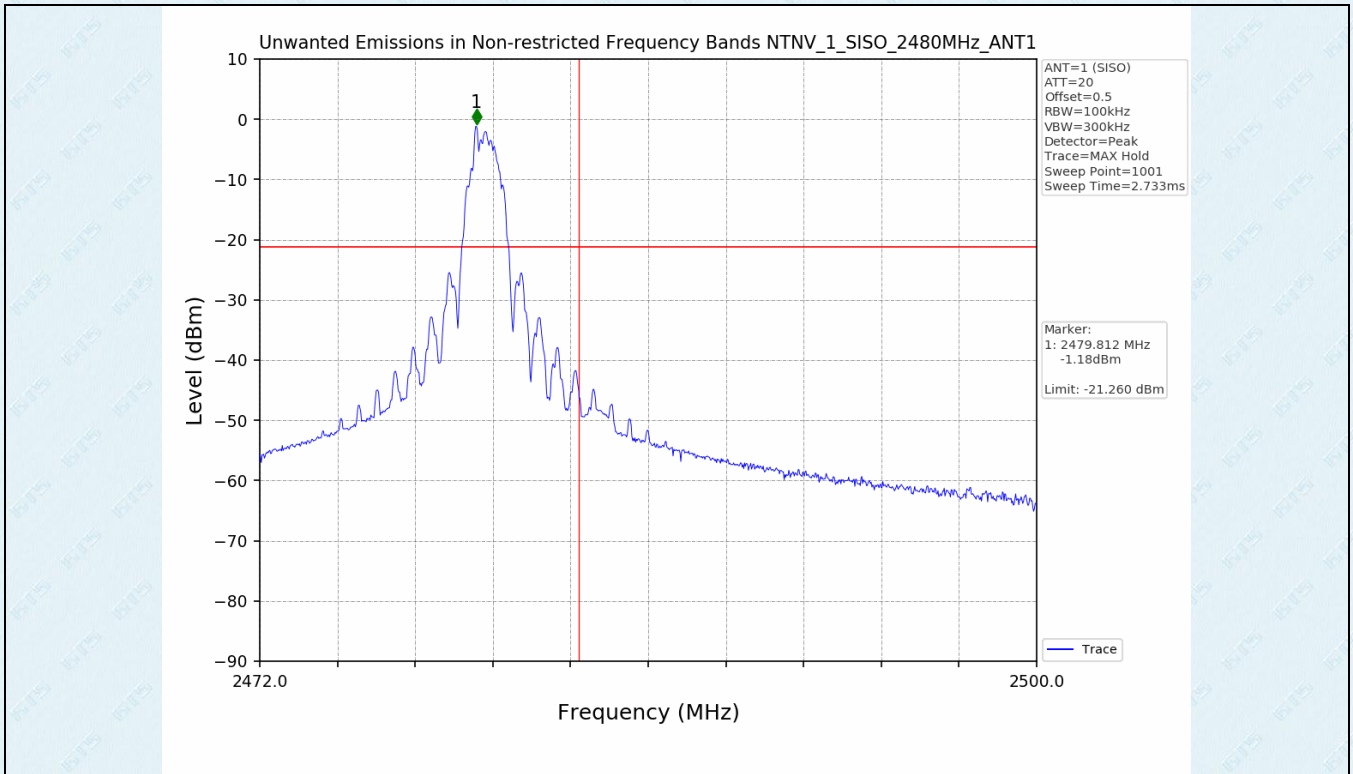
| Test Mode | Frequency (MHz) | TX Type | ANT No. | Spurious Conducted Emission (dBm) | Limits (dBm) | Verdict |
|-----------|-----------------|---------|---------|-----------------------------------|--------------|---------|
| 1 | 2420 | SISO | 1 | Refer to test graph | -21.26 | PASS |
| | 2450 | SISO | 1 | Refer to test graph | -21.26 | PASS |
| | 2480 | SISO | 1 | Refer to test graph | -21.26 | PASS |
| | Hopping | SISO | 1 | Refer to test graph | -21.26 | PASS |
| 2 | 2420 | SISO | 1 | Refer to test graph | -21.06 | PASS |
| | 2450 | SISO | 1 | Refer to test graph | -21.06 | PASS |
| | 2480 | SISO | 1 | Refer to test graph | -21.06 | PASS |
| | Hopping | SISO | 1 | Refer to test graph | -21.06 | PASS |

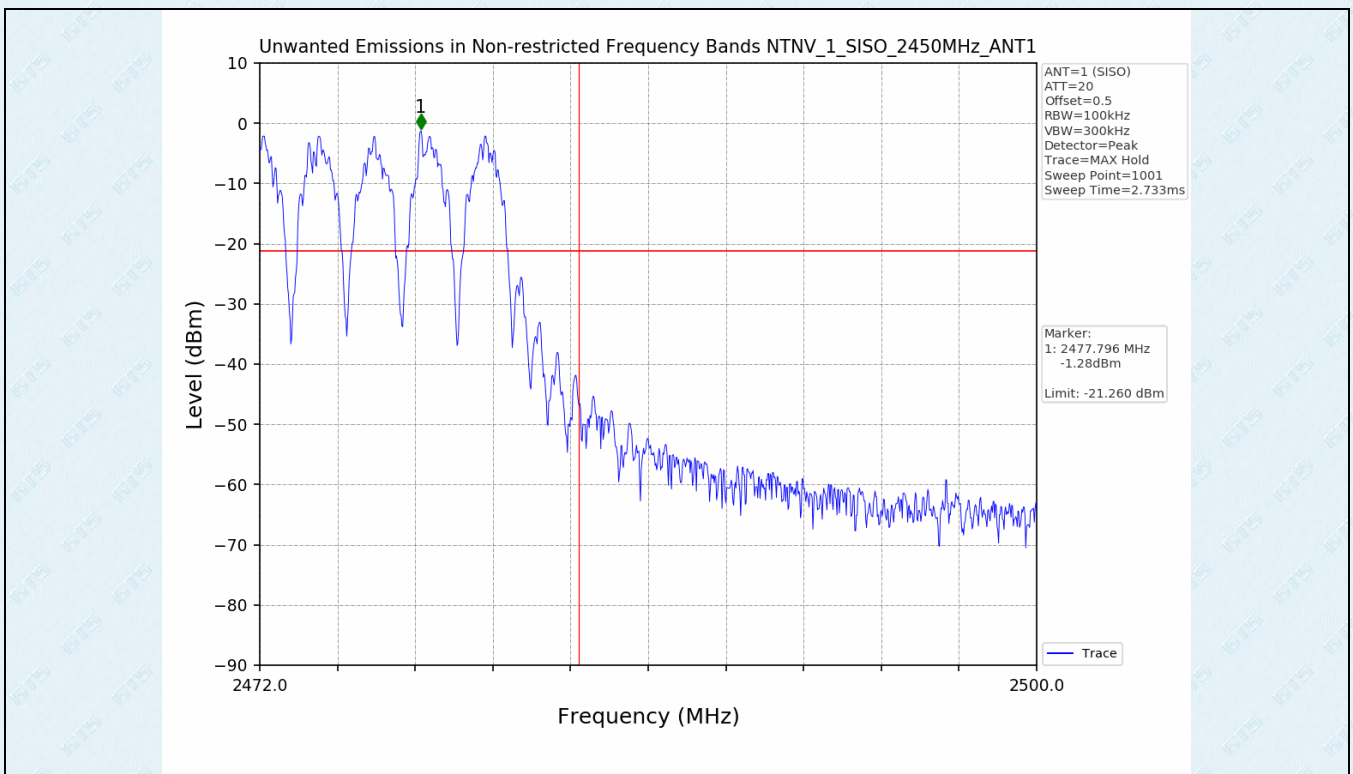
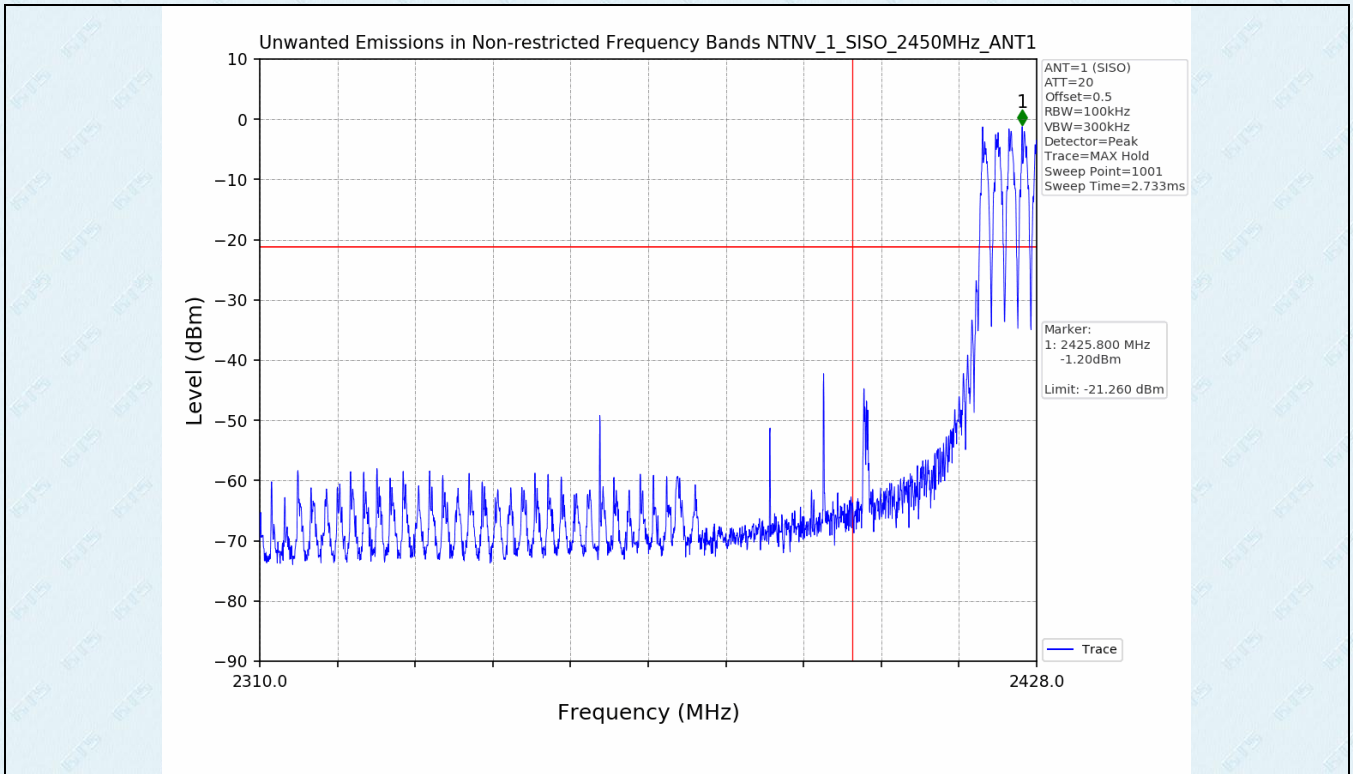
6.2 Test Graph

ANT 1:

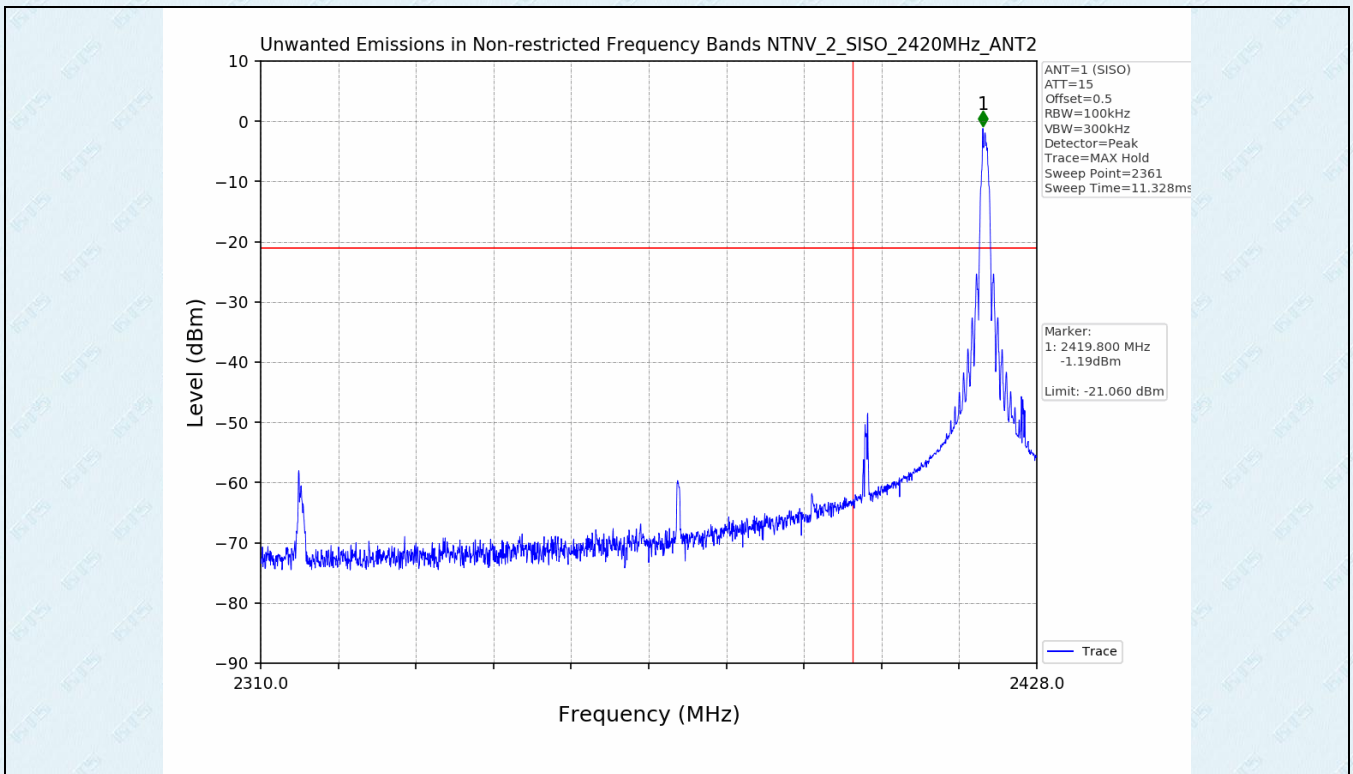
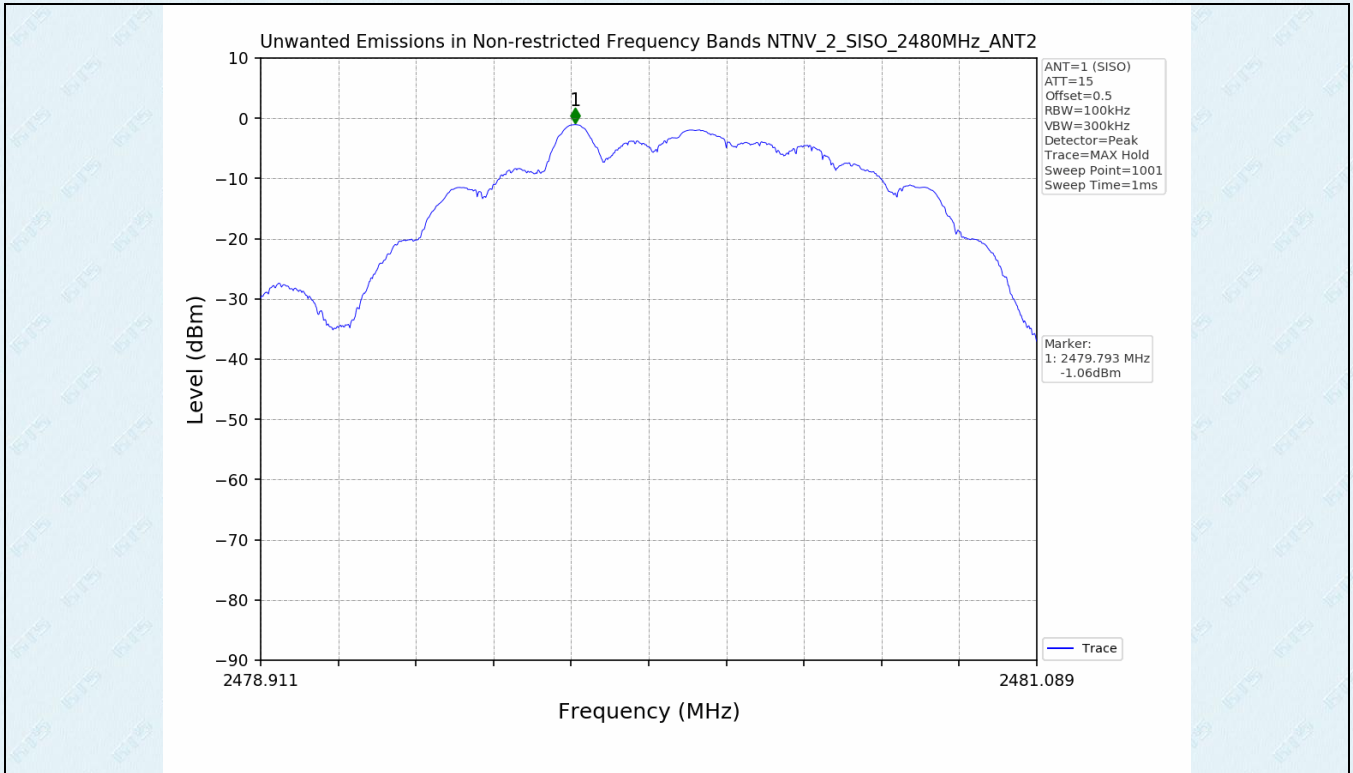


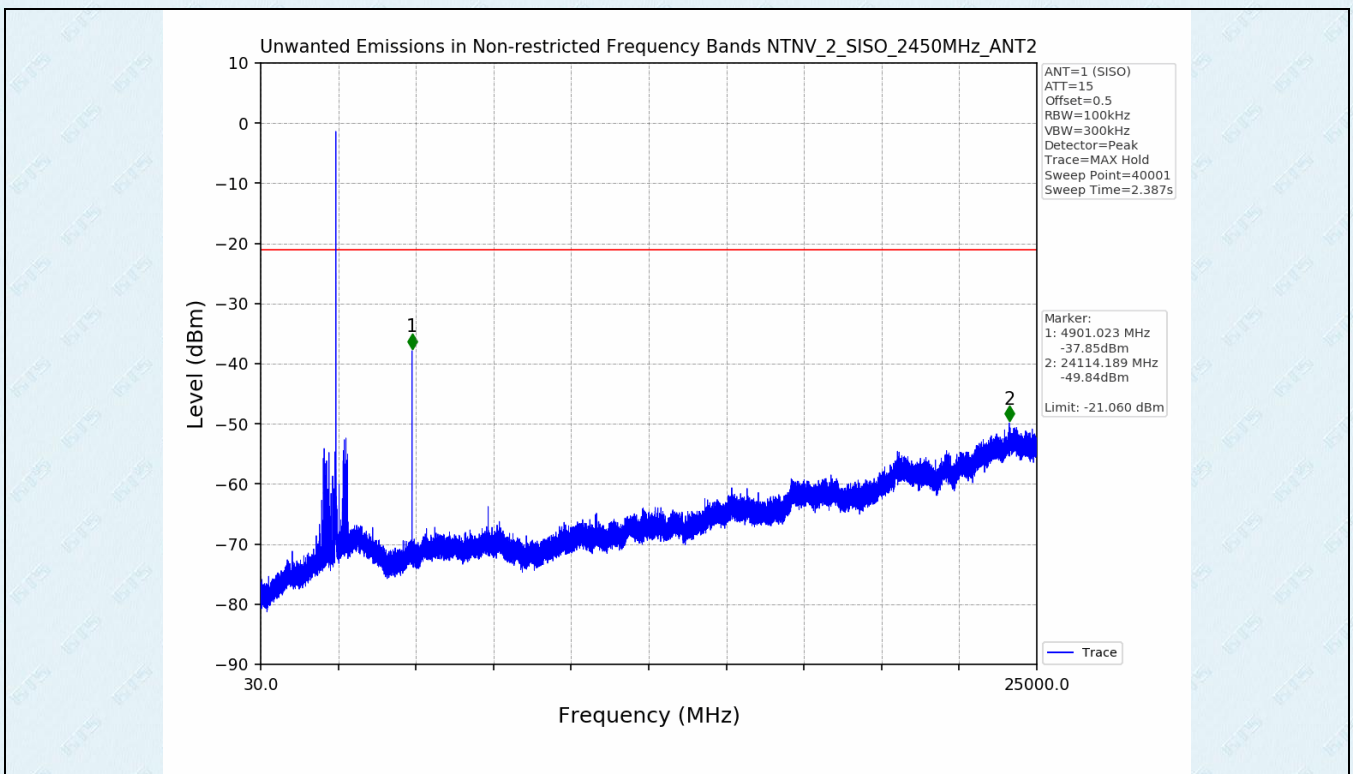
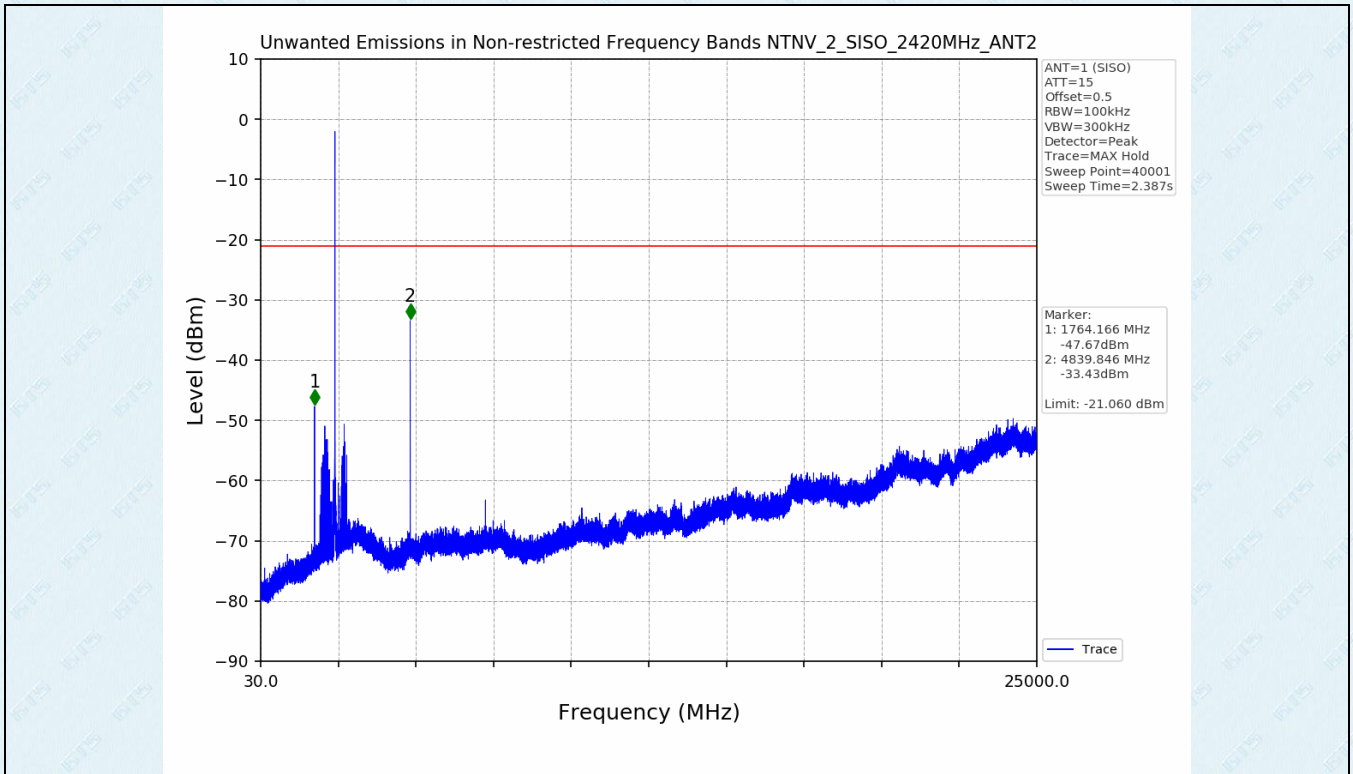


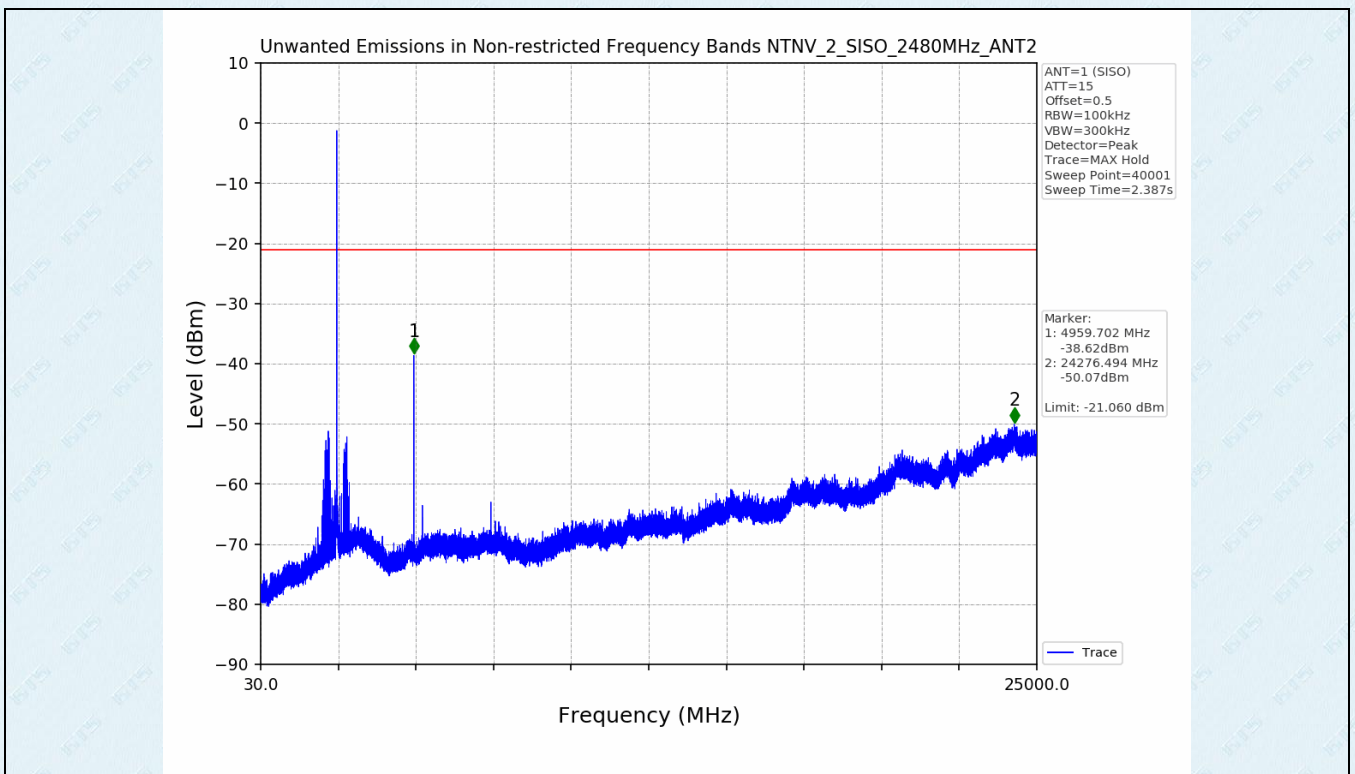
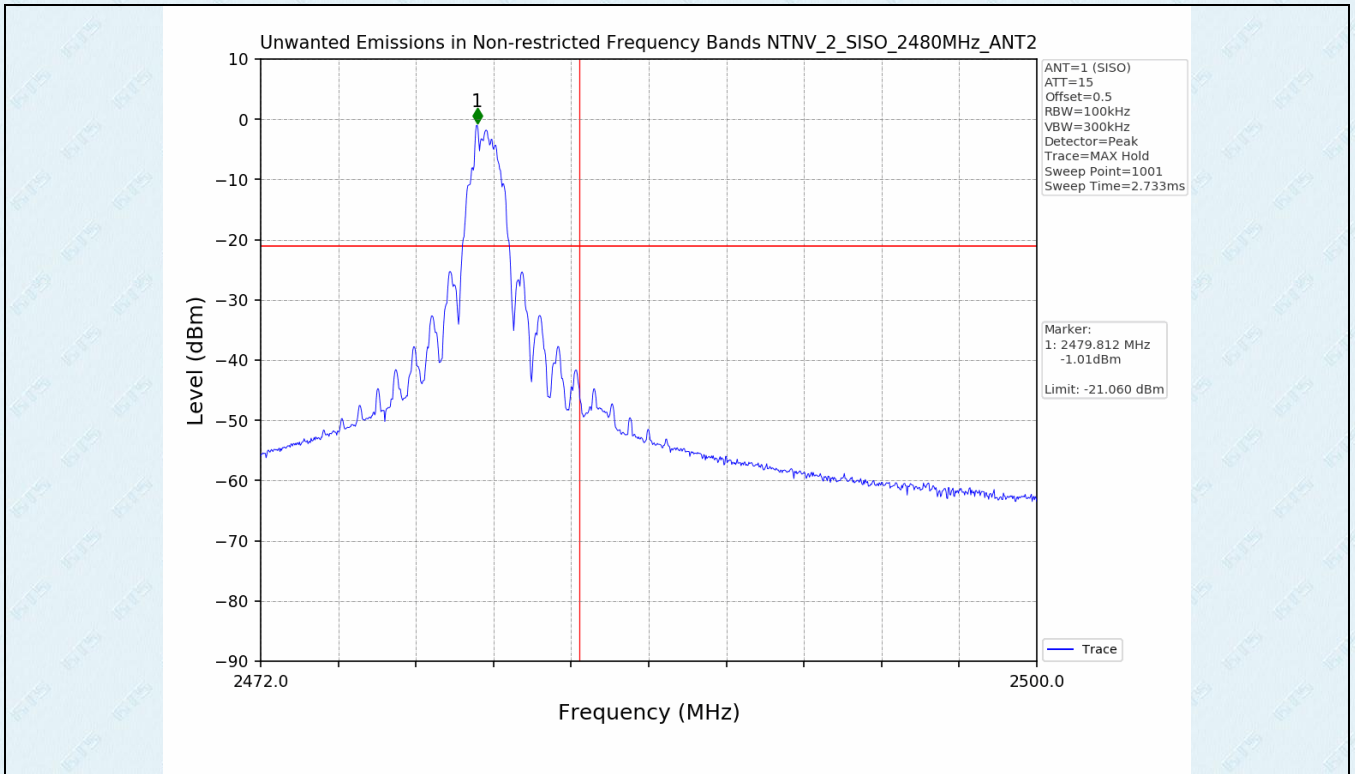


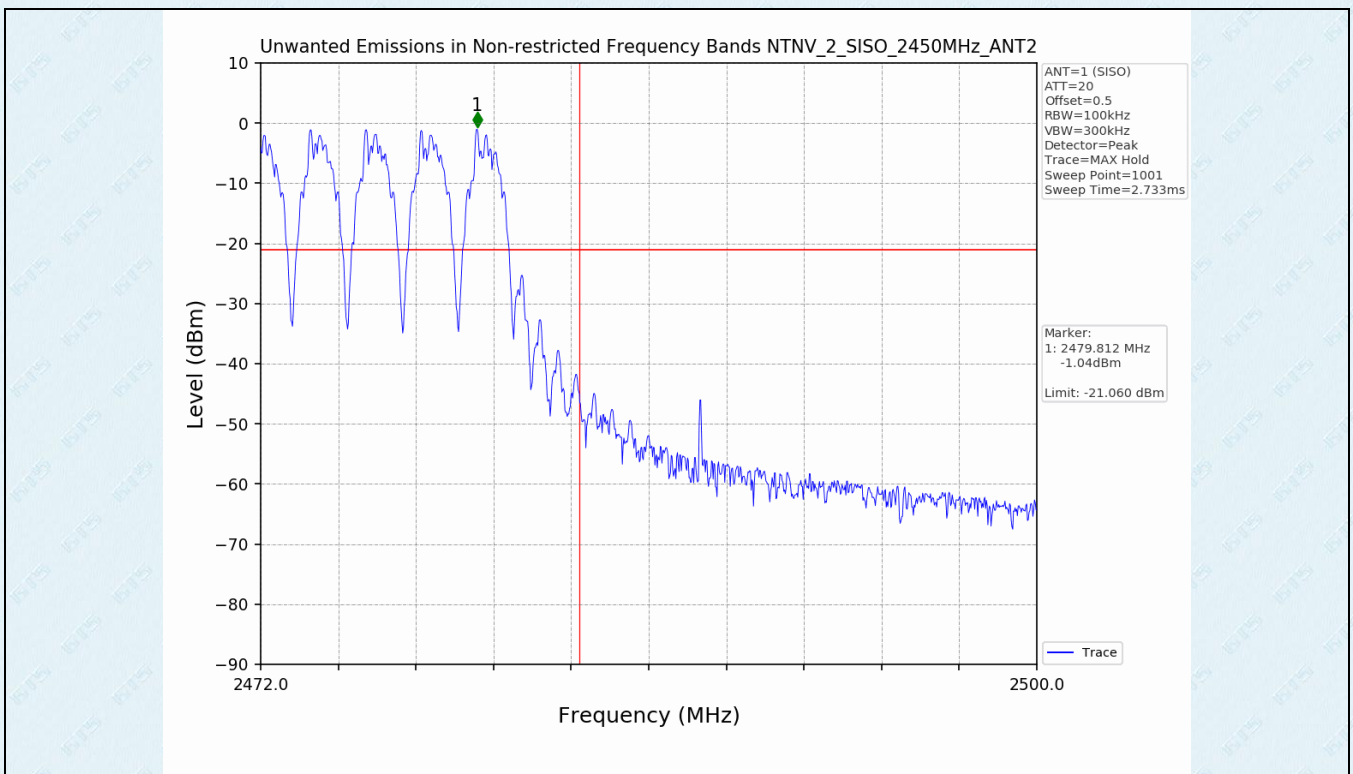
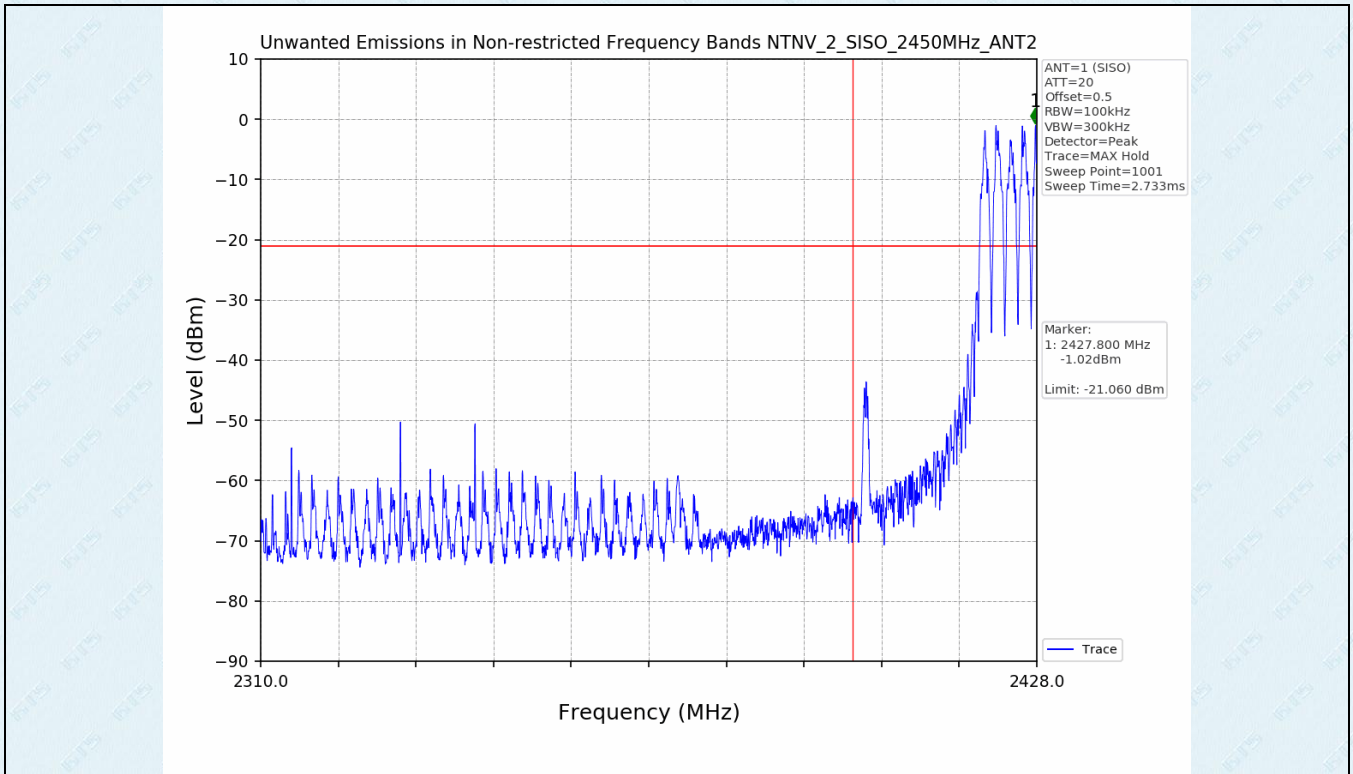


ANT 2:









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