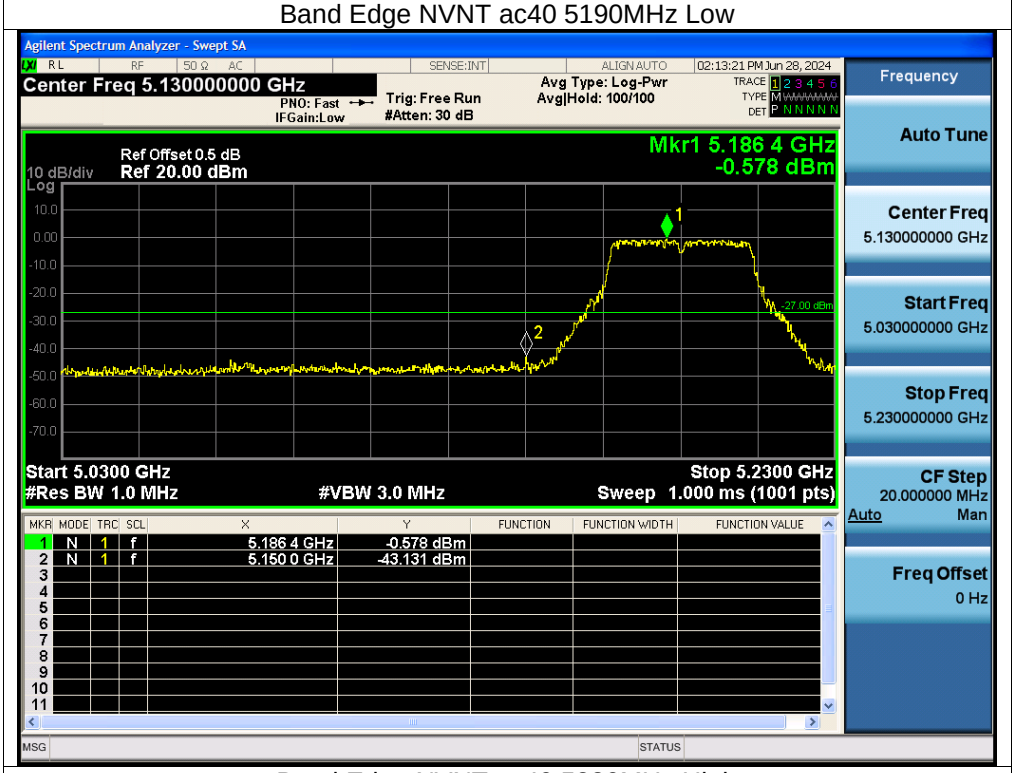
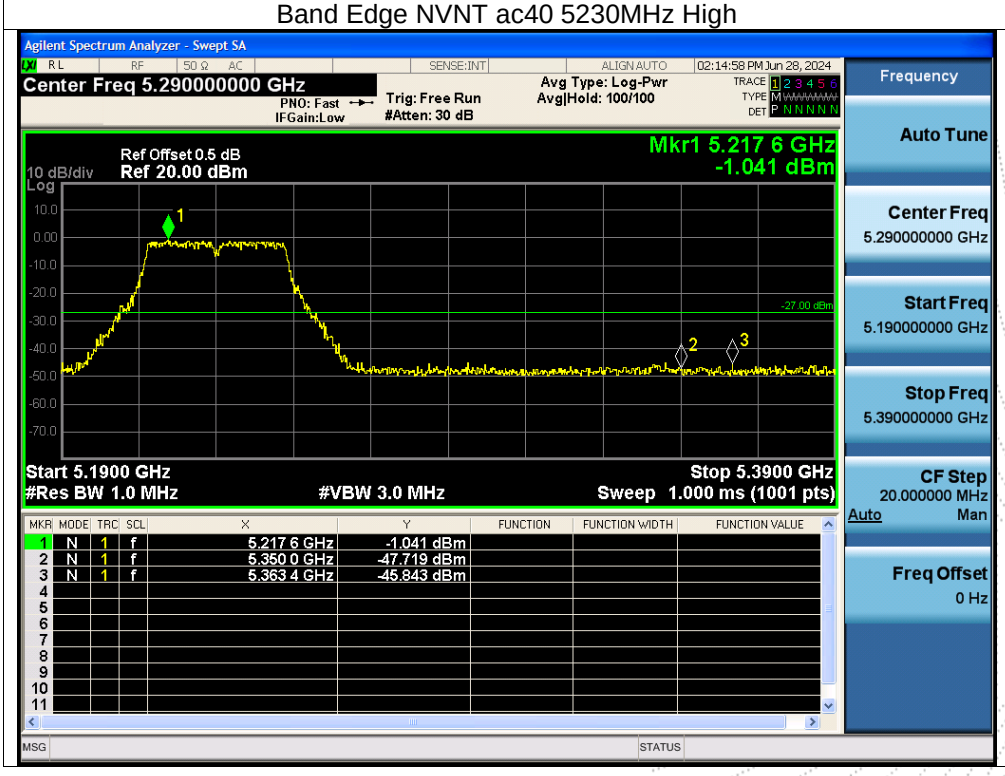
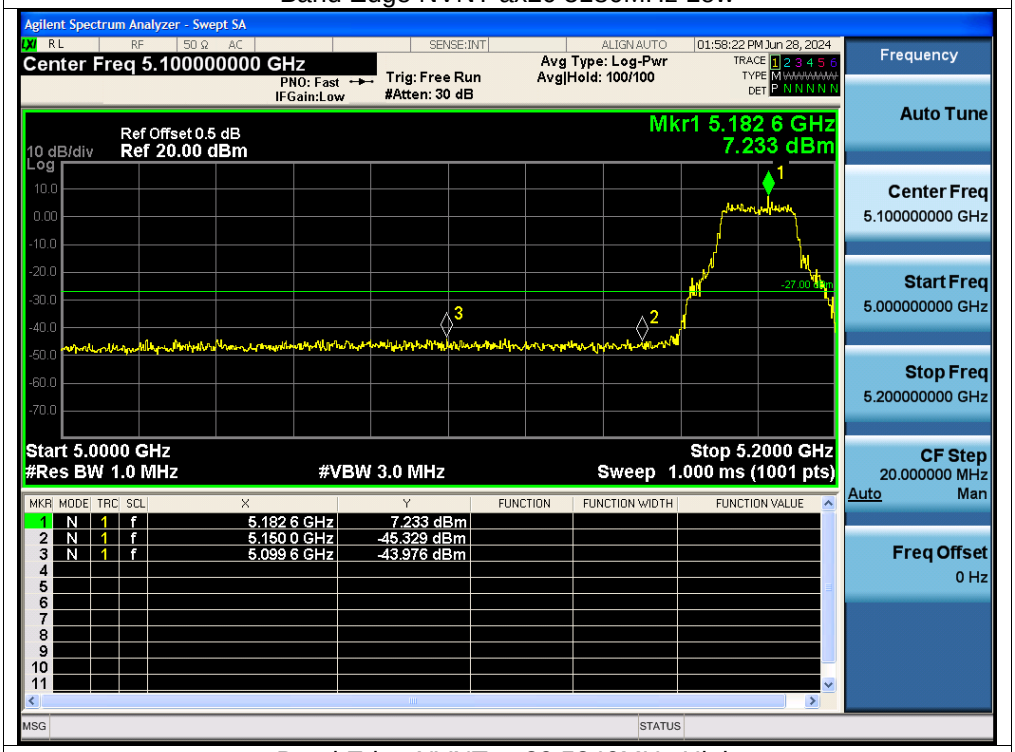
Band Edge NVNT ac40 5190MHz Low



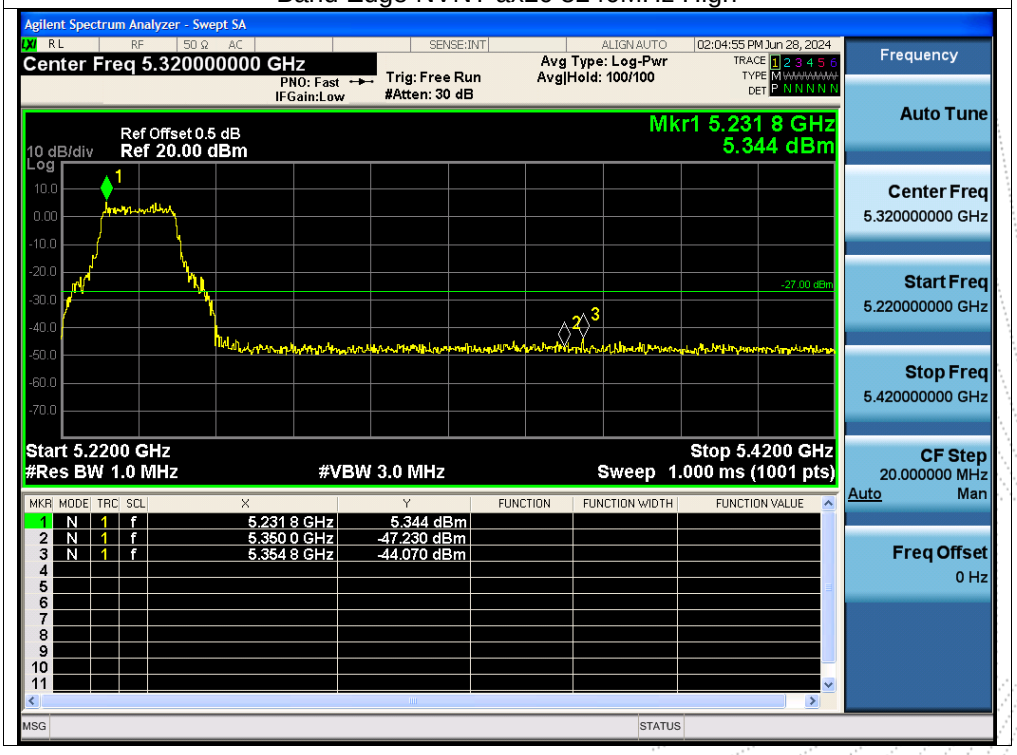

Band Edge NVNT ac40 5230MHz High



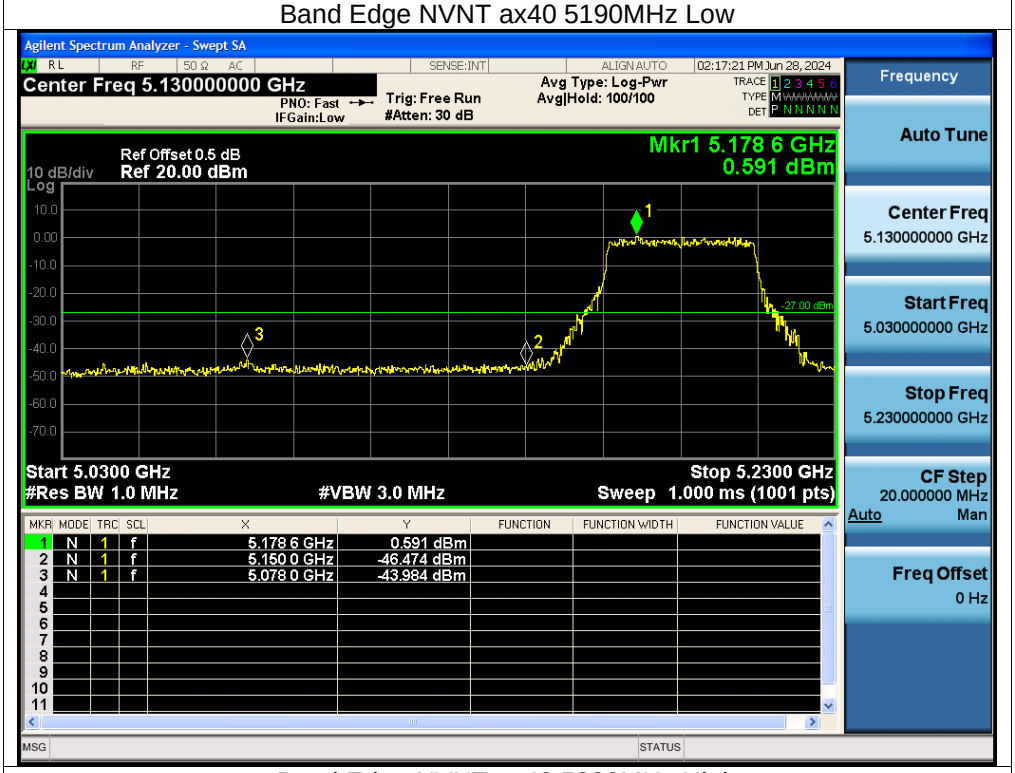
Band Edge NVNT ax20 5180MHz Low



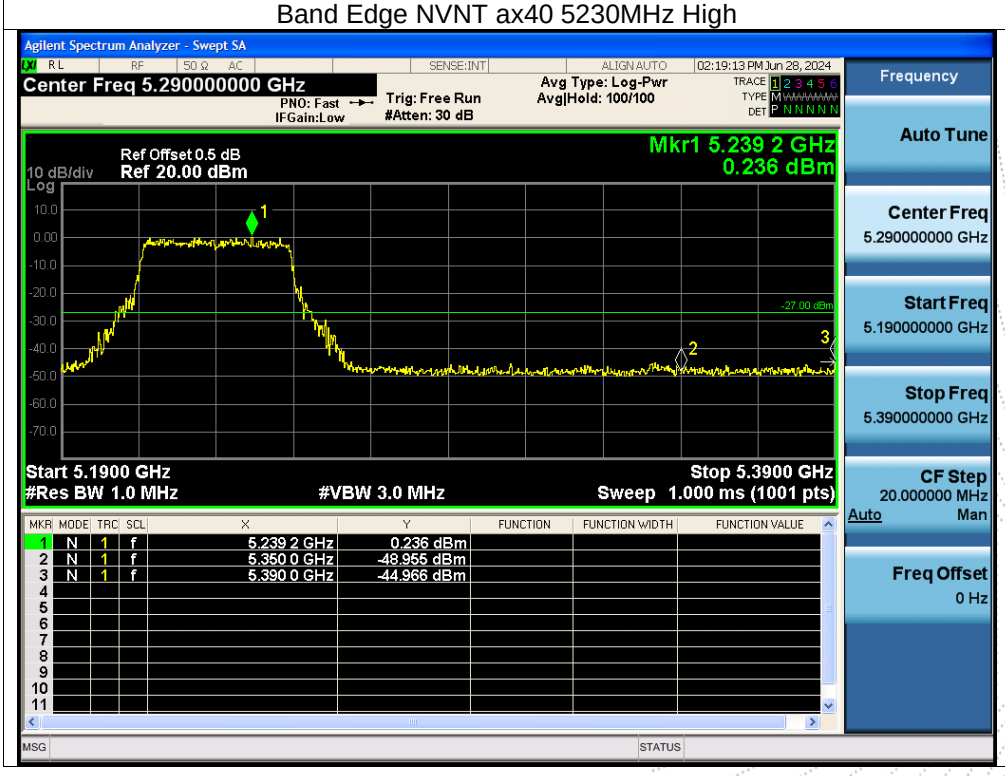

Band Edge NVNT ax20 5240MHz High



Band Edge NVNT ax40 5190MHz Low

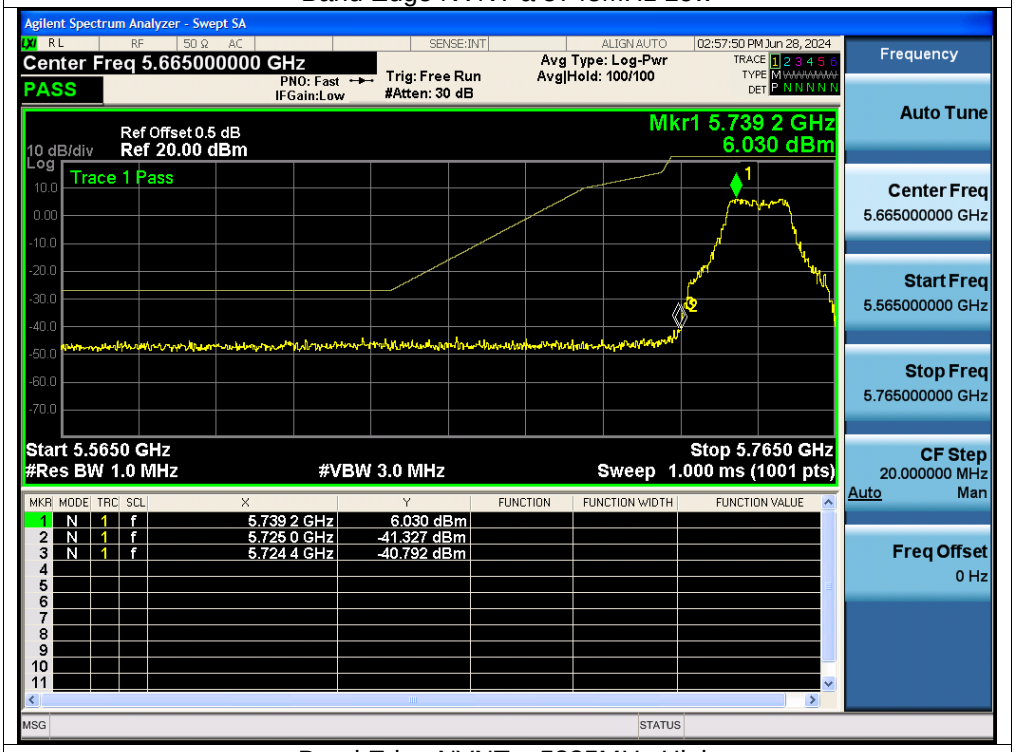



Band Edge NVNT ax40 5230MHz High

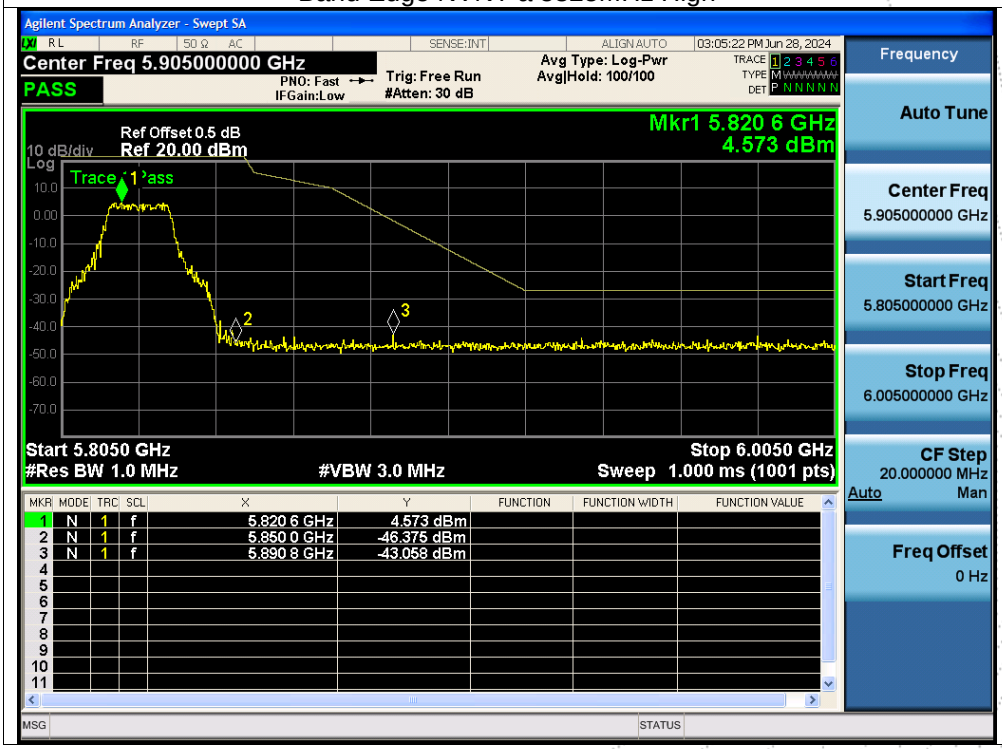


## Test Graphs

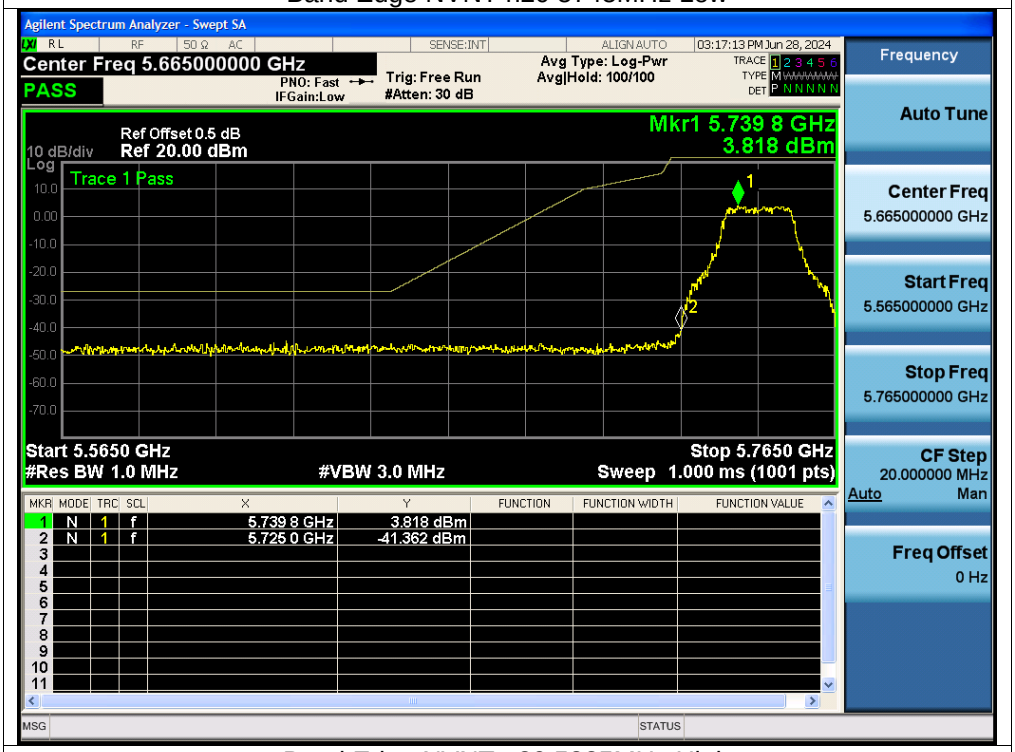
Band Edge NVNT a 5745MHz Low



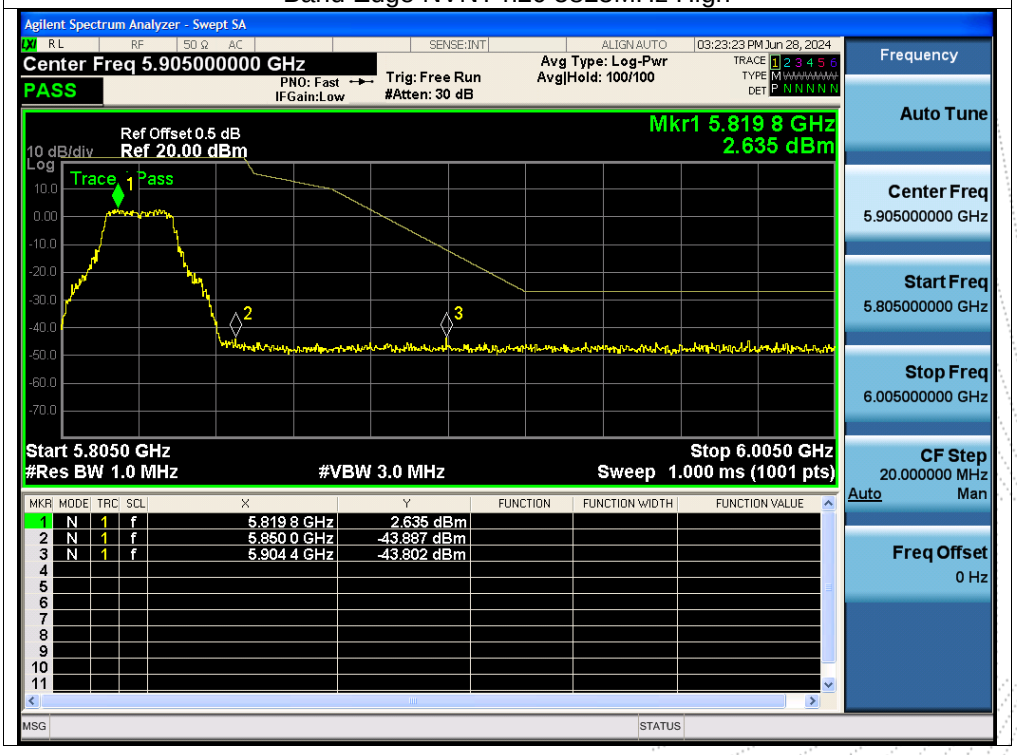

Band Edge NVNT a 5825MHz High



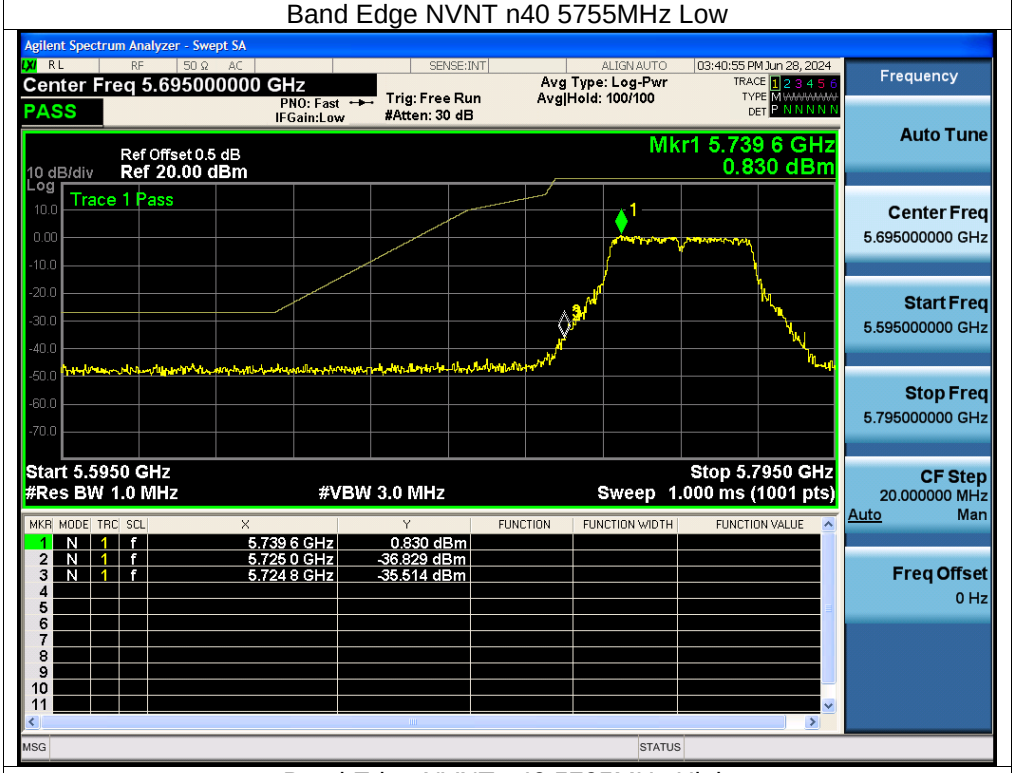
Band Edge NVNT n20 5745MHz Low



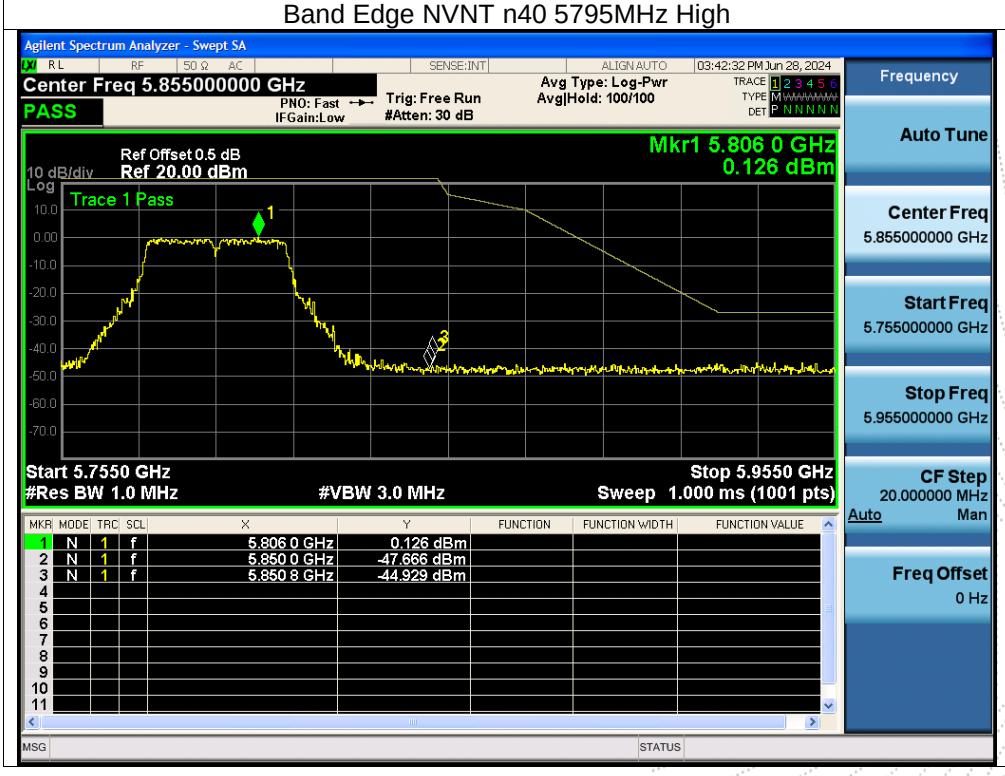

Band Edge NVNT n20 5825MHz High



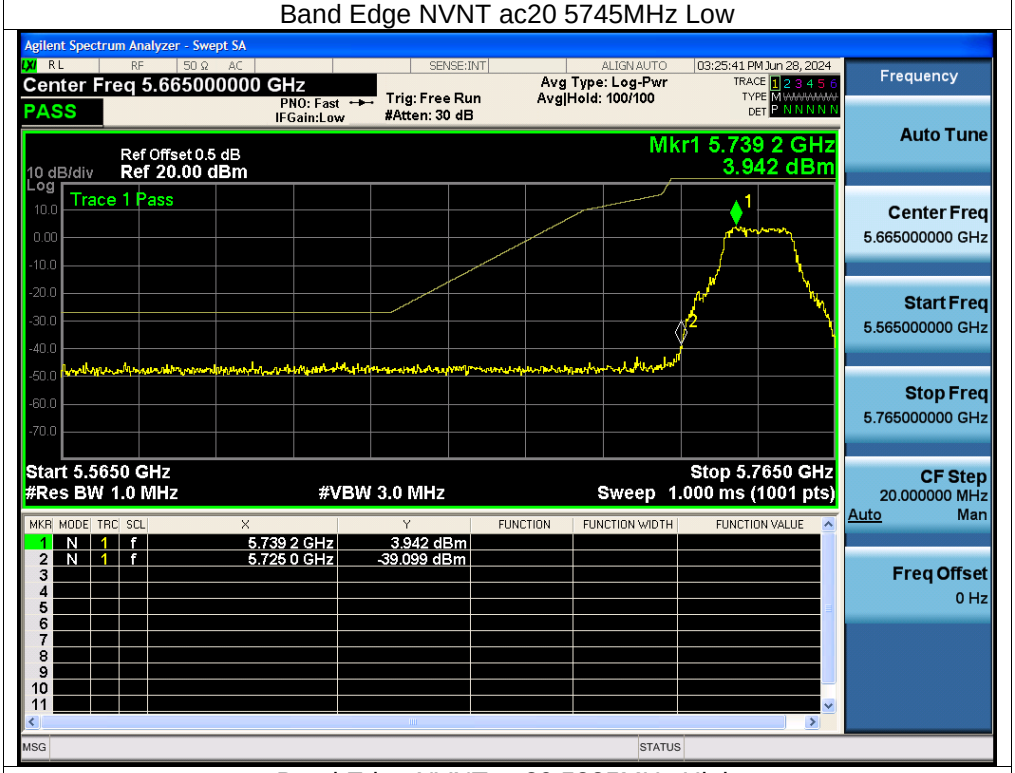
Band Edge NVNT n40 5755MHz Low



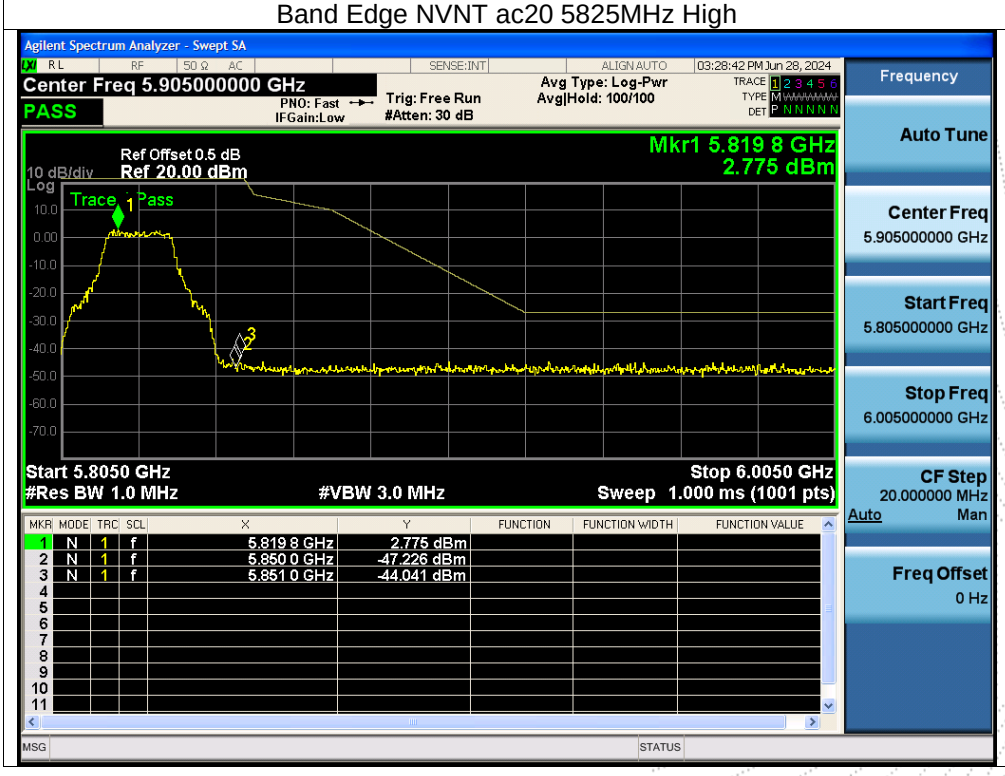

Band Edge NVNT n40 5795MHz High



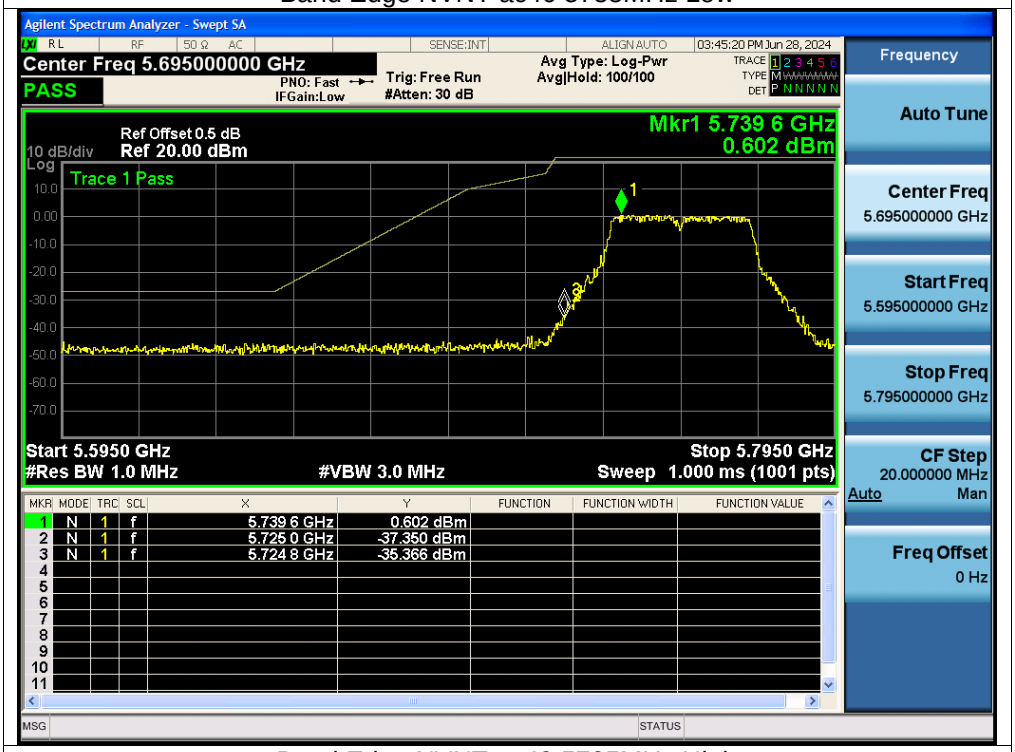
Band Edge NVNT ac20 5745MHz Low



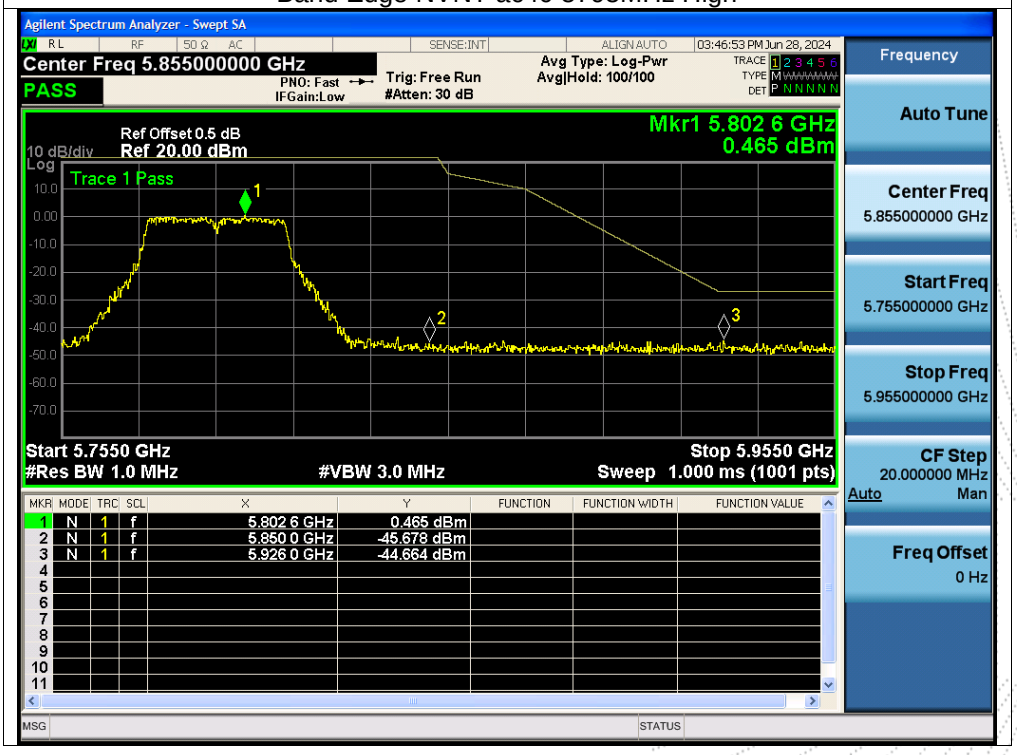

Band Edge NVNT ac20 5825MHz High



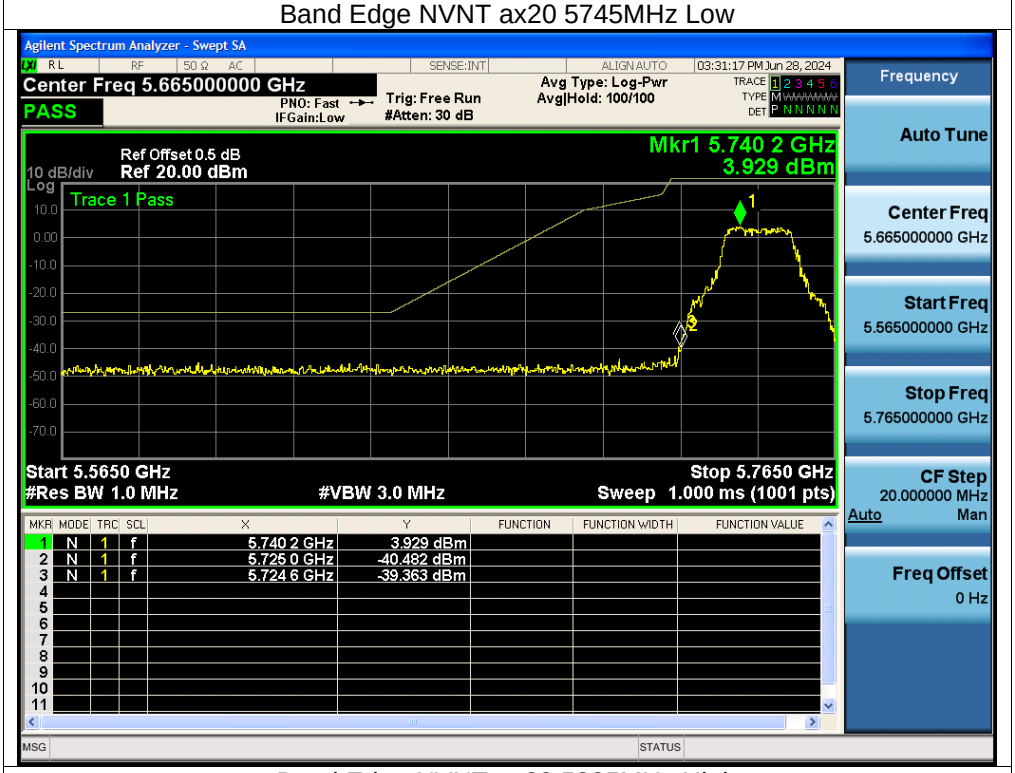
Band Edge NVNT ac40 5755MHz Low



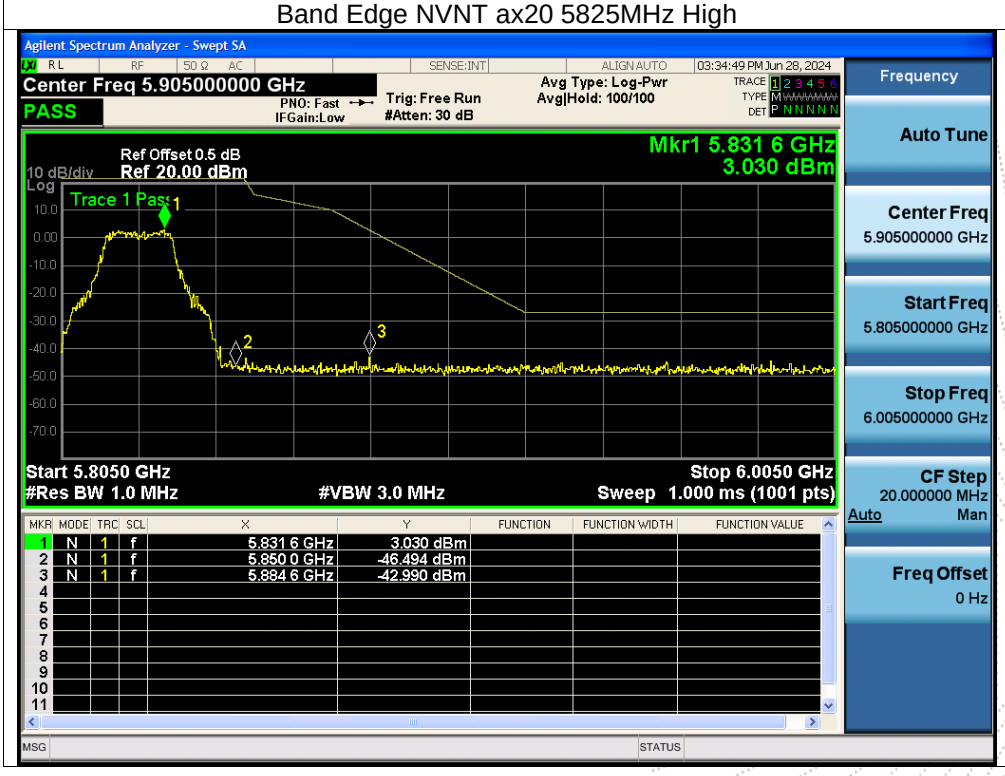

Band Edge NVNT ac40 5795MHz High



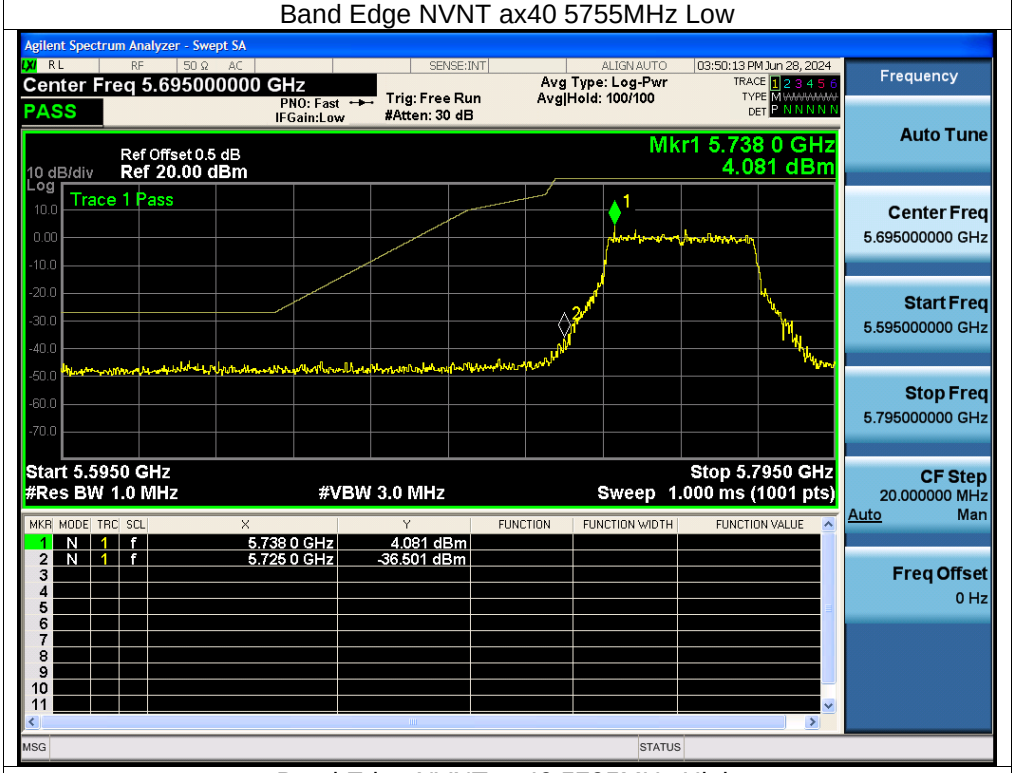
Band Edge NVNT ax20 5745MHz Low



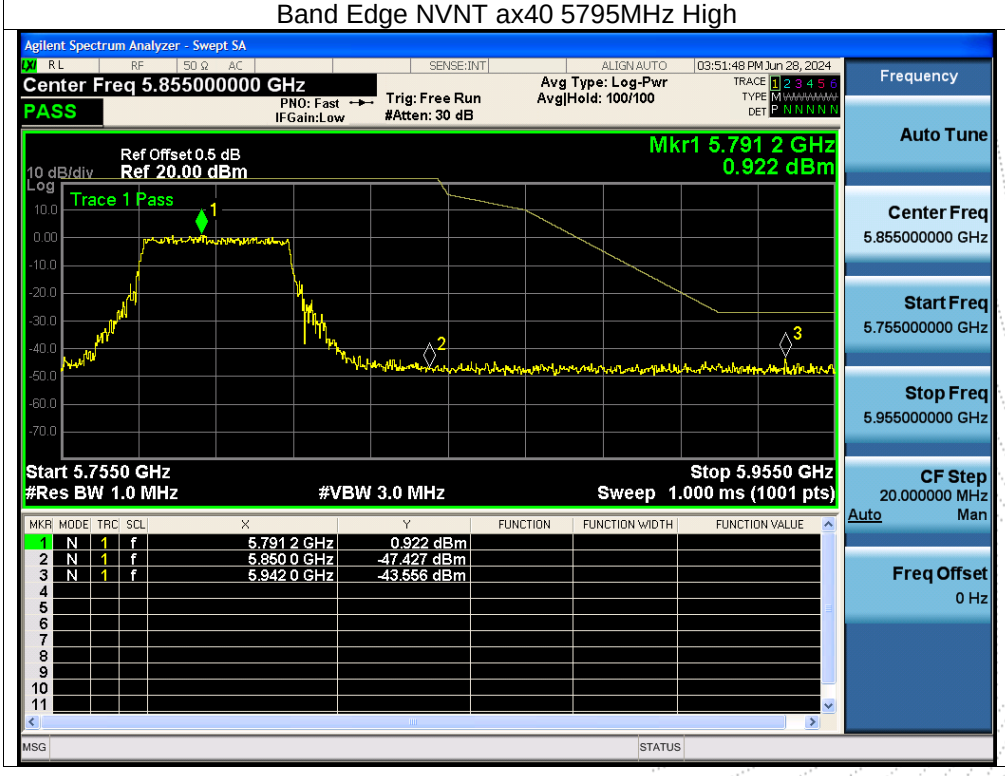

Band Edge NVNT ax20 5825MHz High



Band Edge NVNT ax40 5755MHz Low

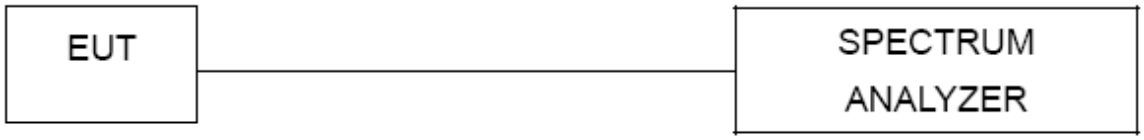



Band Edge NVNT ax40 5795MHz High



# 12. Spurious RF Conducted Emissions

## 12.1 Block Diagram Of Test Setup




## 12.2 Limit

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1)For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(2)For transmitters operating in the 5.725-5.85 GHz band(i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge..

## 12.3 Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

## 12.4 Test Result

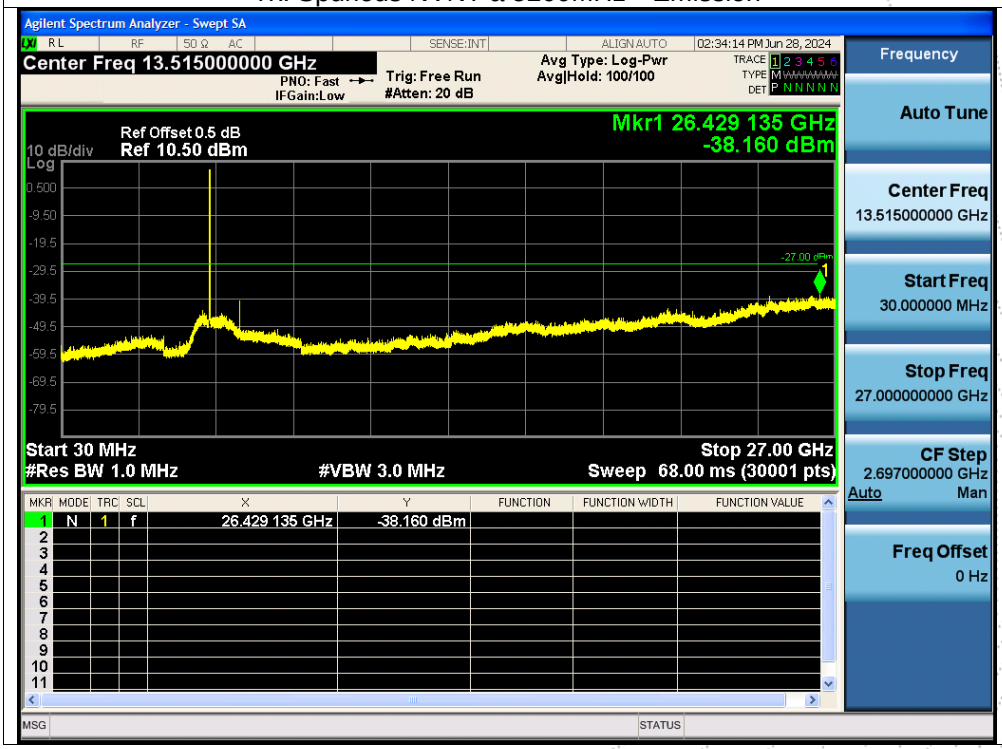
Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data.

About:26.5GHz-40GHz, The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

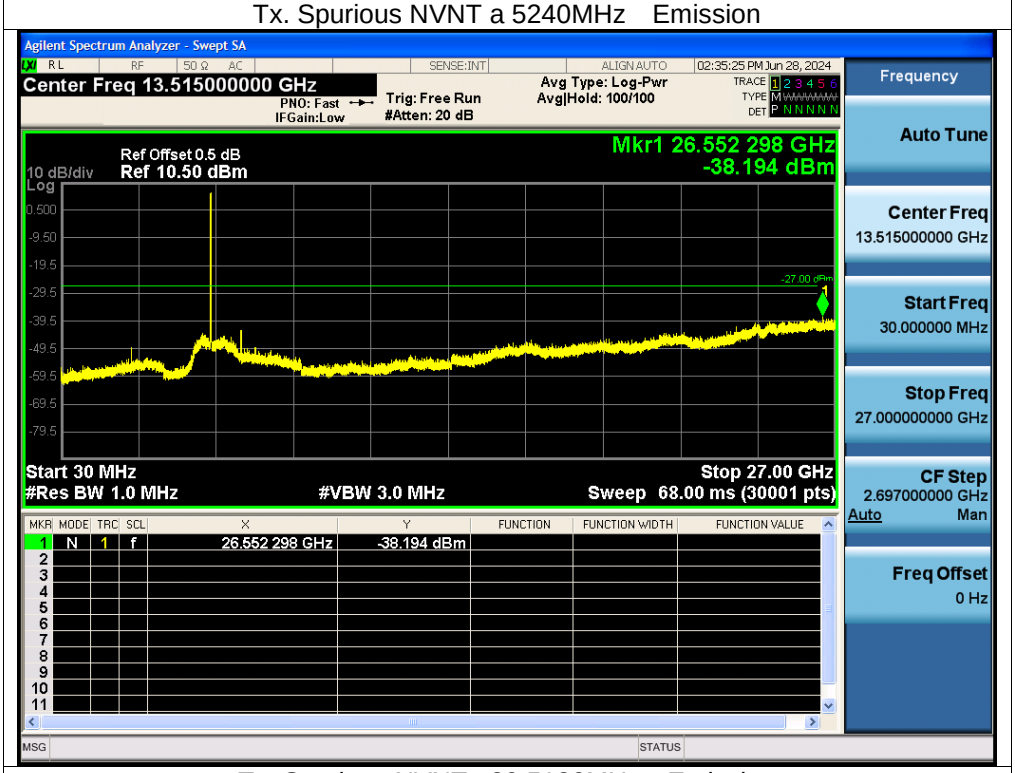
## Test Graphs

Tx. Spurious NVNT a 5180MHz Emission

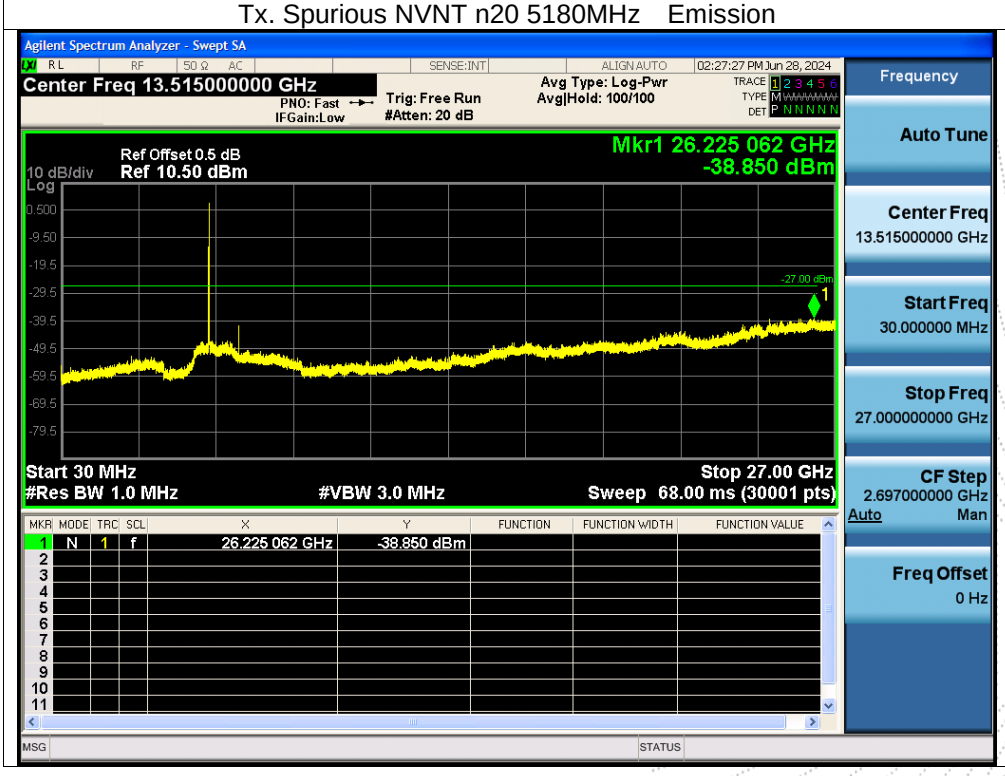

Tx. Spurious NVNT a 5200MHz Emission



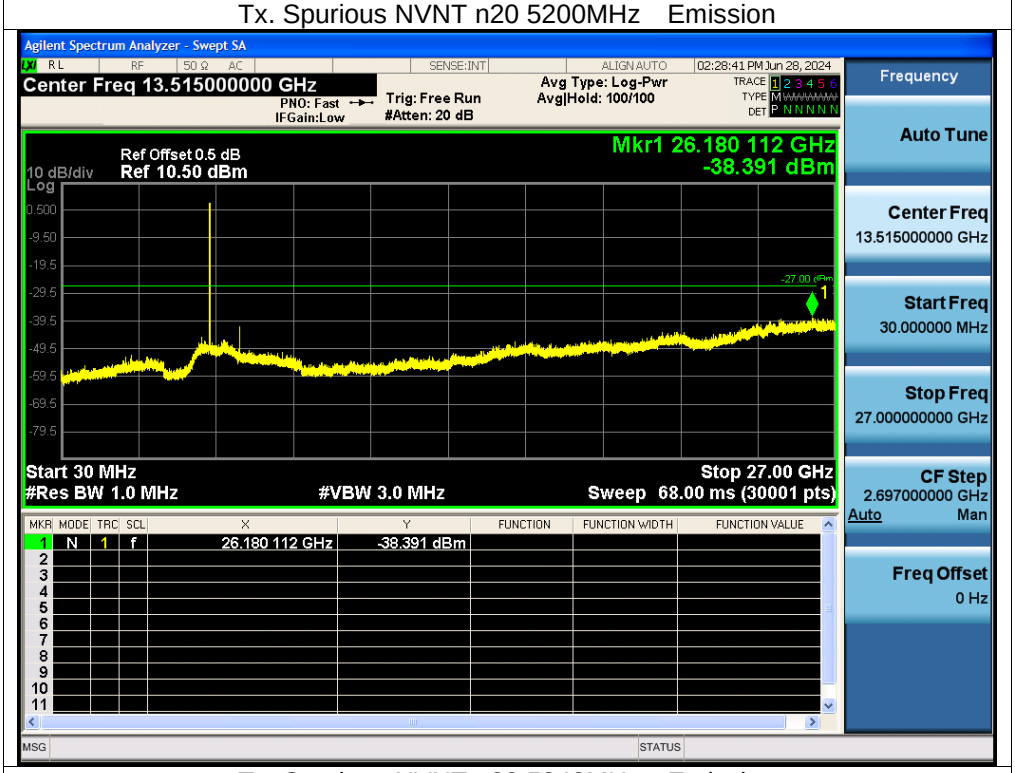
Tx. Spurious NVNT a 5240MHz Emission



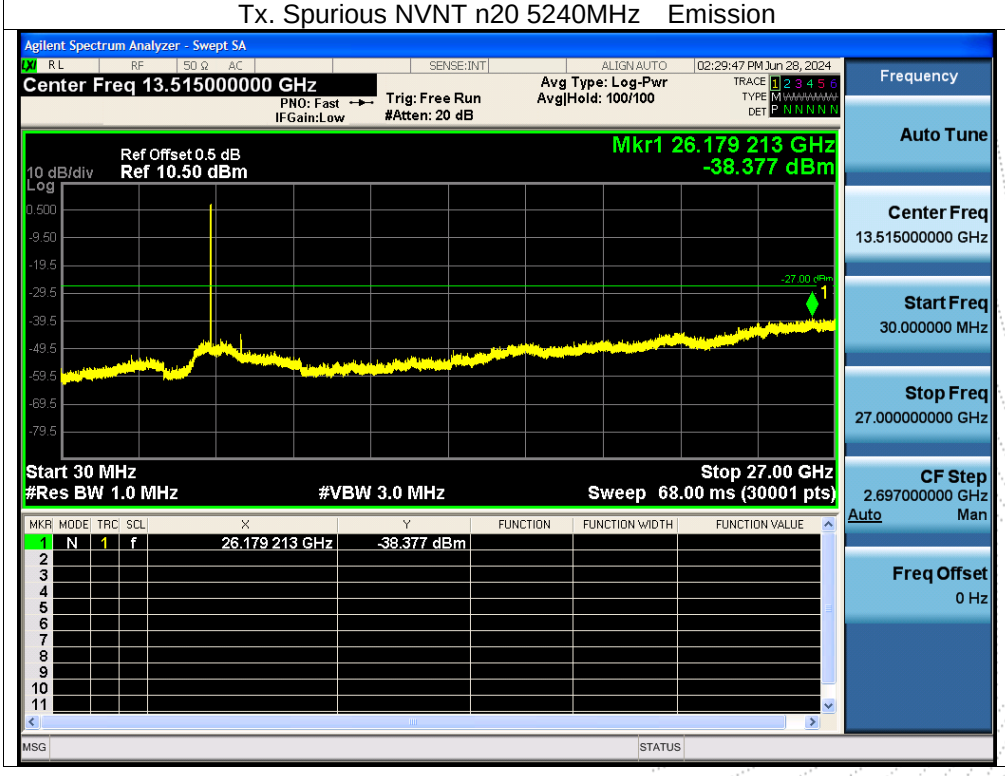

Tx. Spurious NVNT n20 5180MHz Emission



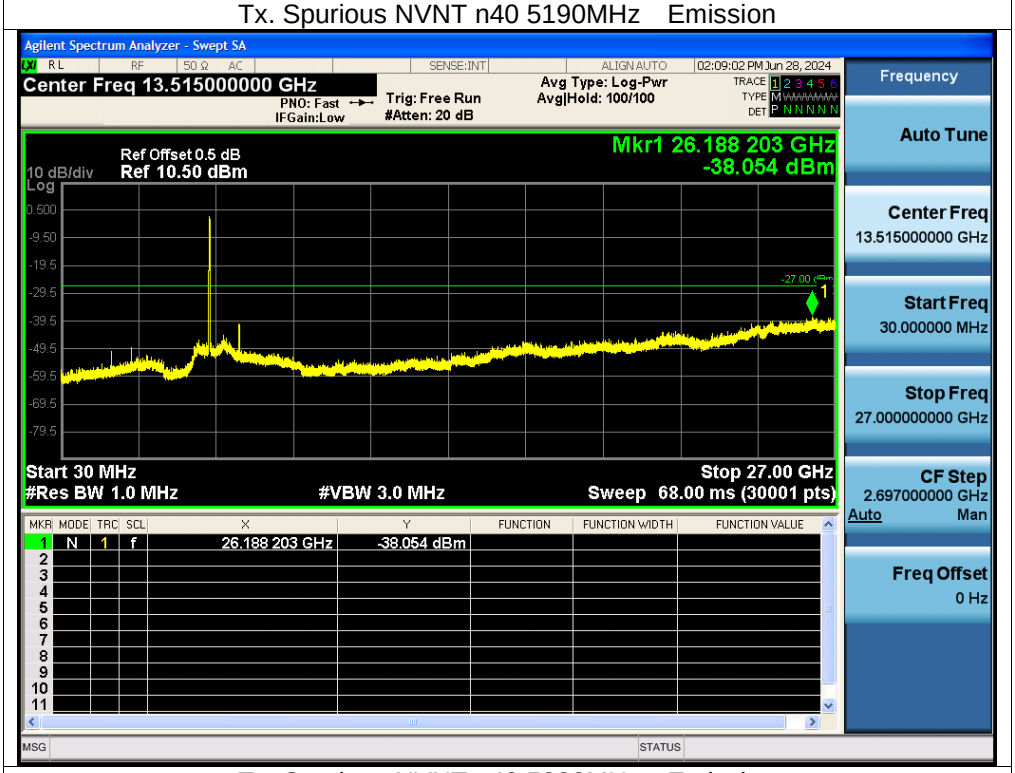
Tx. Spurious NVNT n20 5200MHz Emission



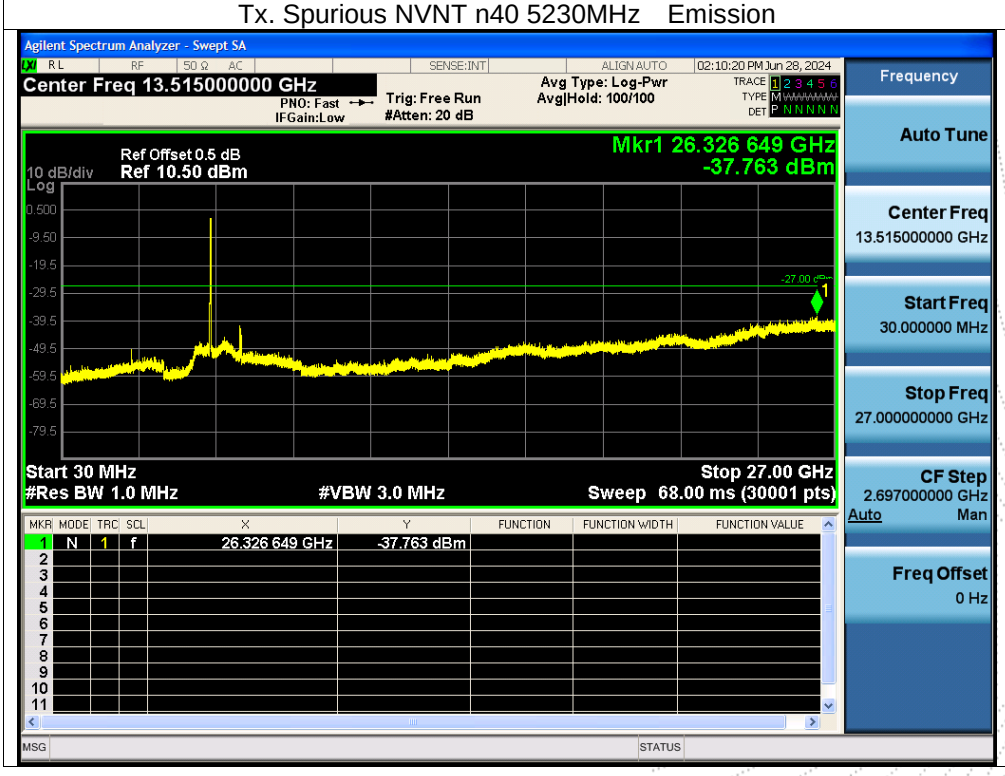

Tx. Spurious NVNT n20 5240MHz Emission



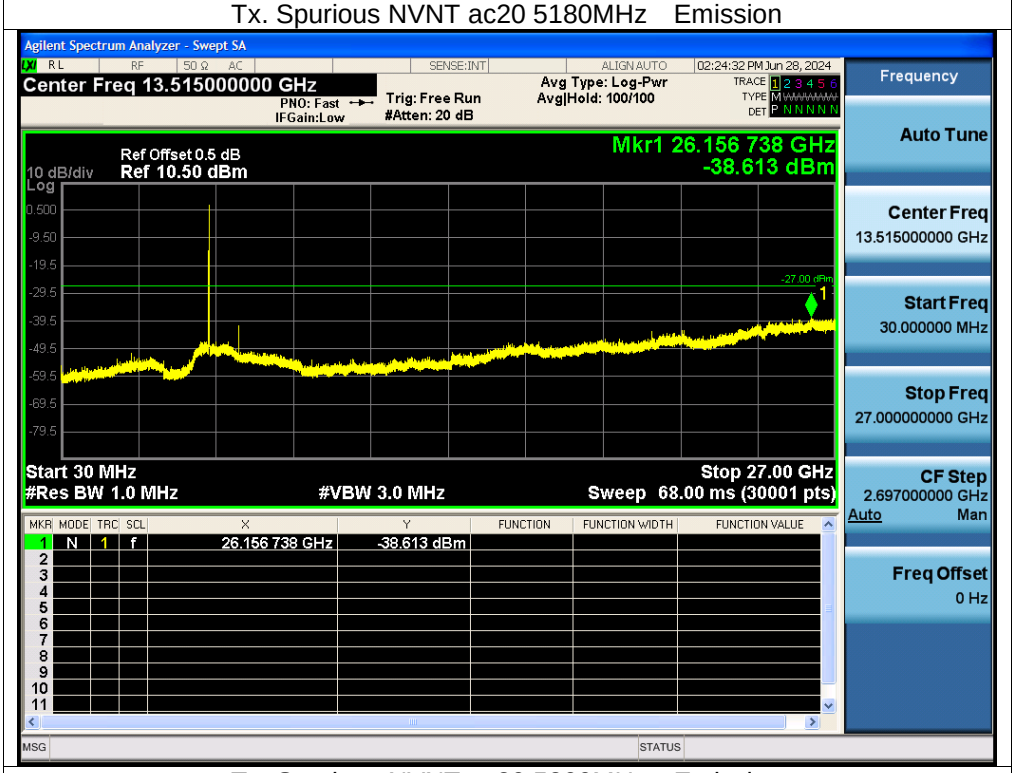
Tx. Spurious NVNT n40 5190MHz Emission



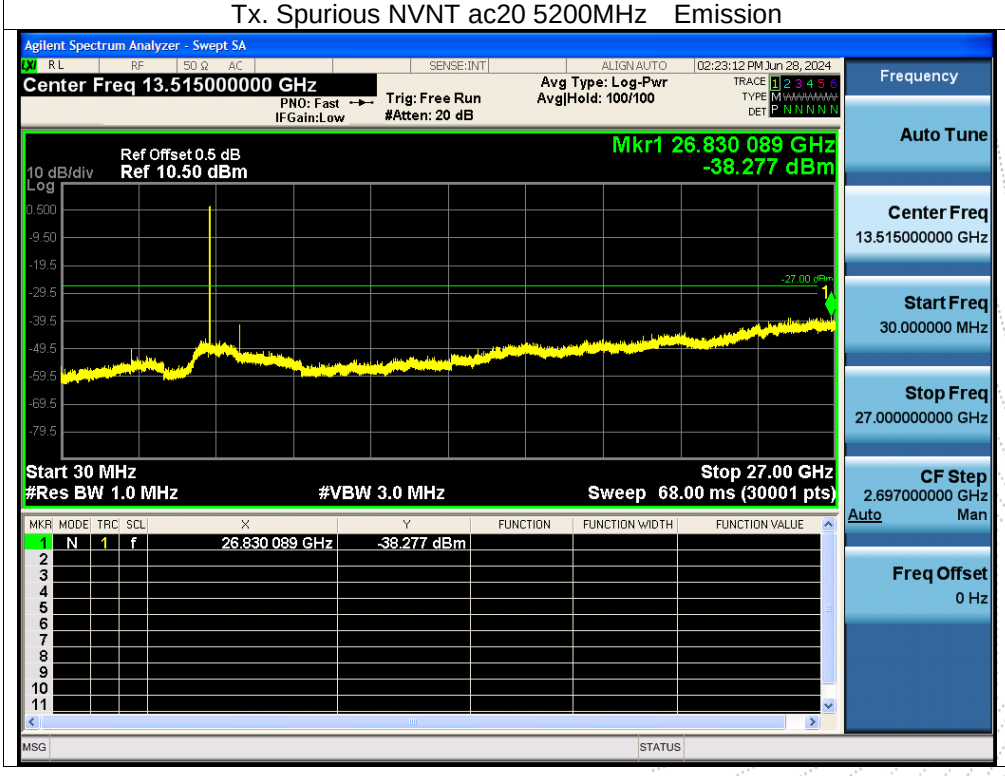

Tx. Spurious NVNT n40 5230MHz Emission



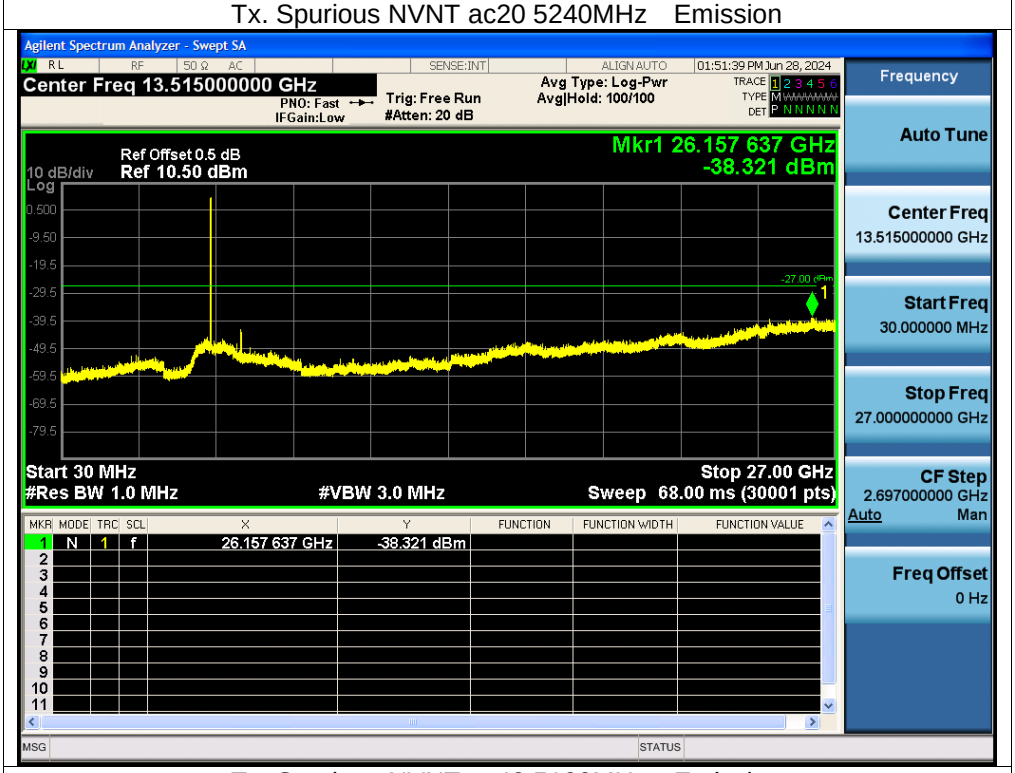
Tx. Spurious NVNT ac20 5180MHz Emission



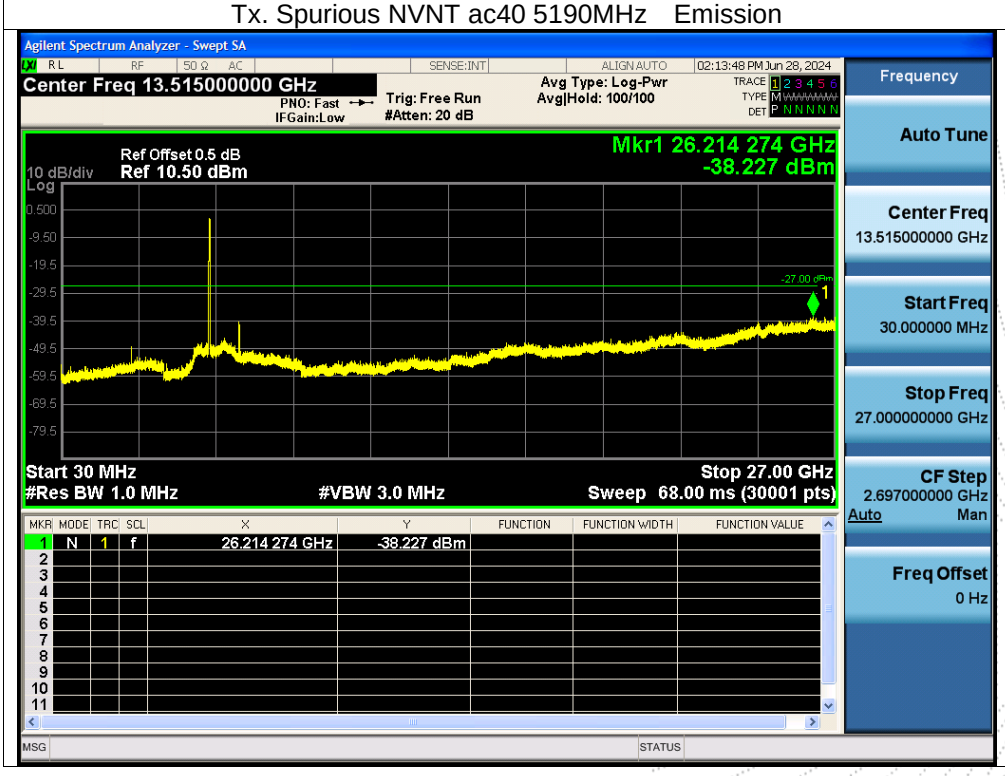

Tx. Spurious NVNT ac20 5200MHz Emission



Tx. Spurious NVNT ac20 5240MHz Emission



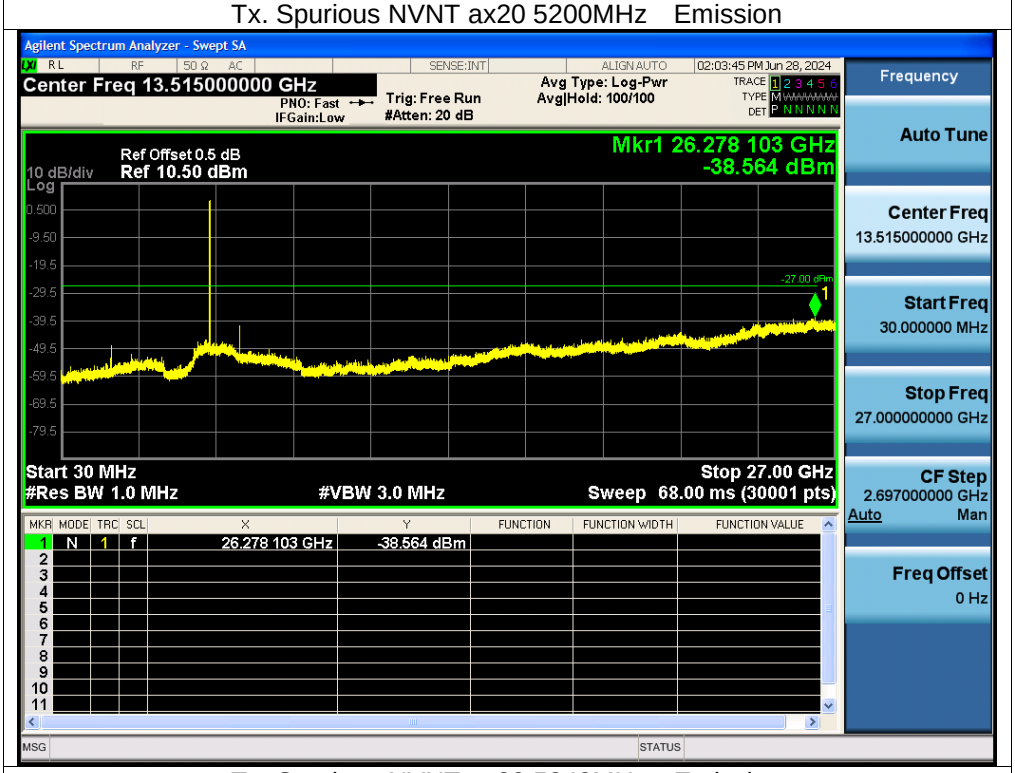

Tx. Spurious NVNT ac40 5190MHz Emission



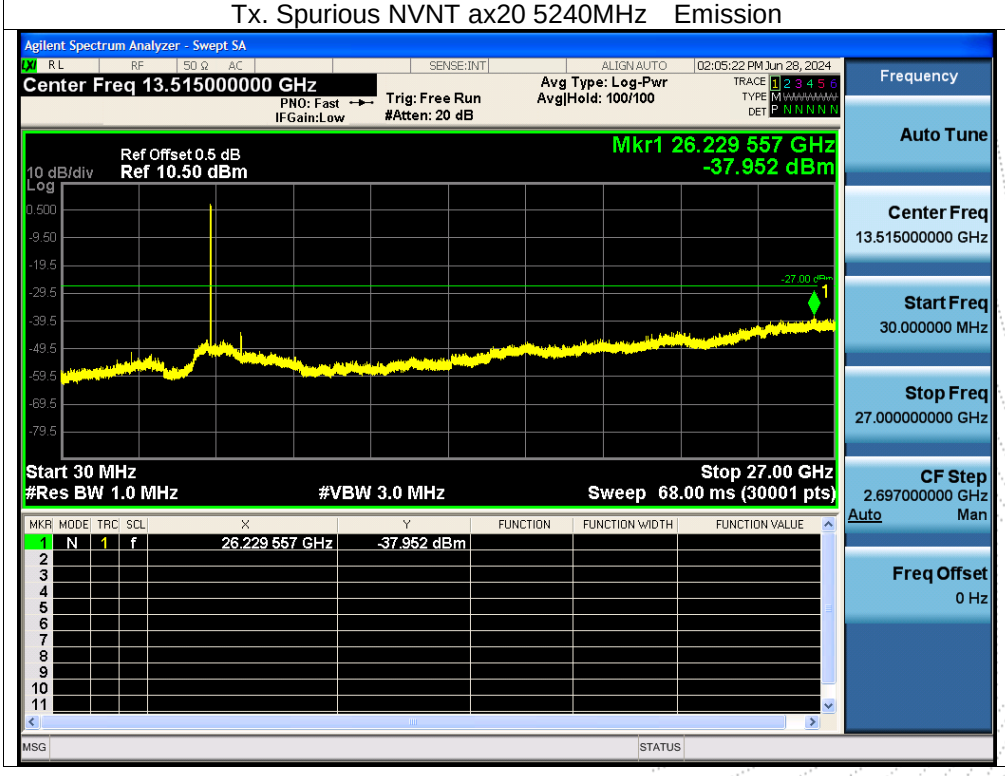
Tx. Spurious NVNT ac40 5230MHz Emission


Tx. Spurious NVNT ax20 5180MHz Emission

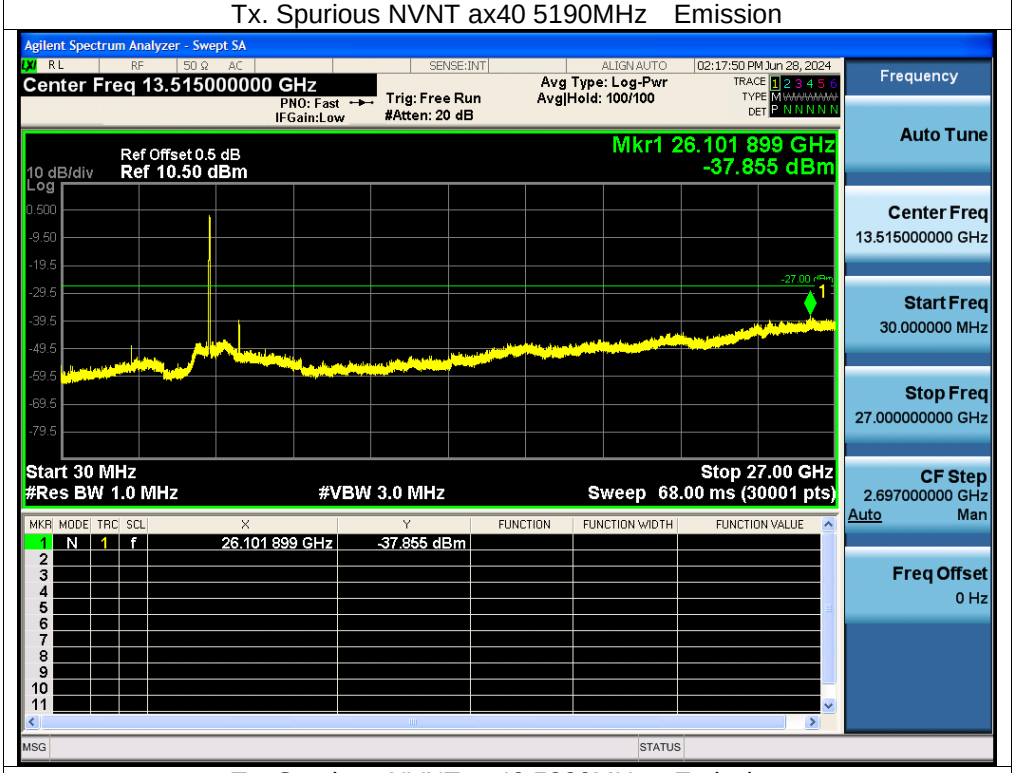
Tx. Spurious NVNT ax20 5200MHz Emission



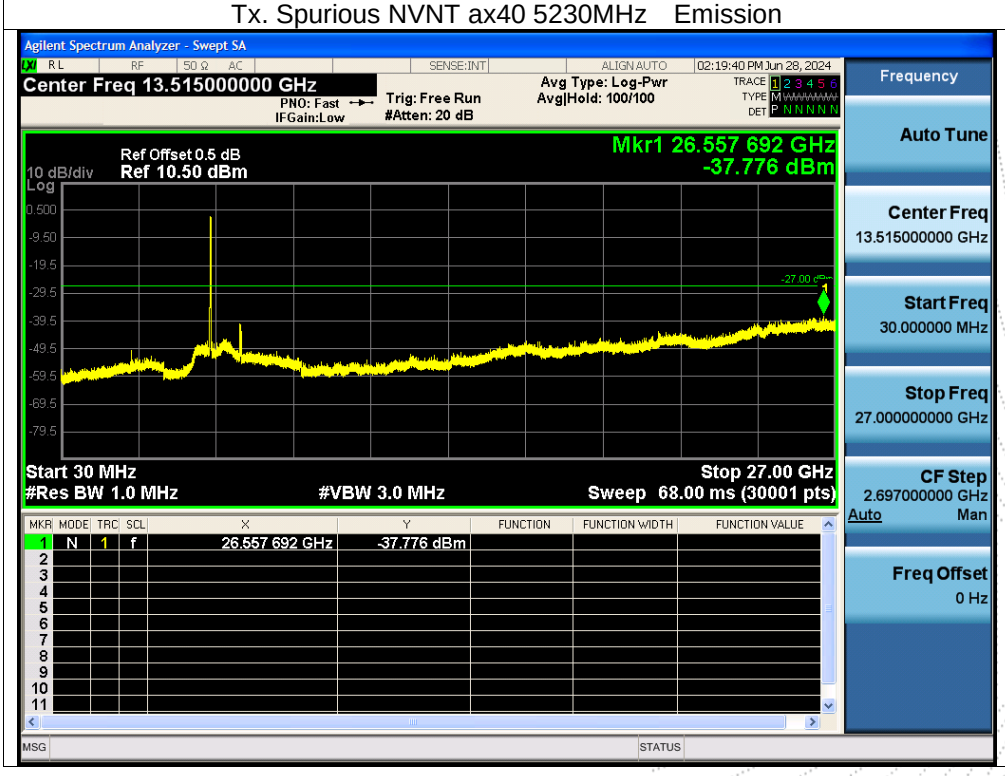

Tx. Spurious NVNT ax20 5240MHz Emission



Tx. Spurious NVNT ax40 5190MHz Emission



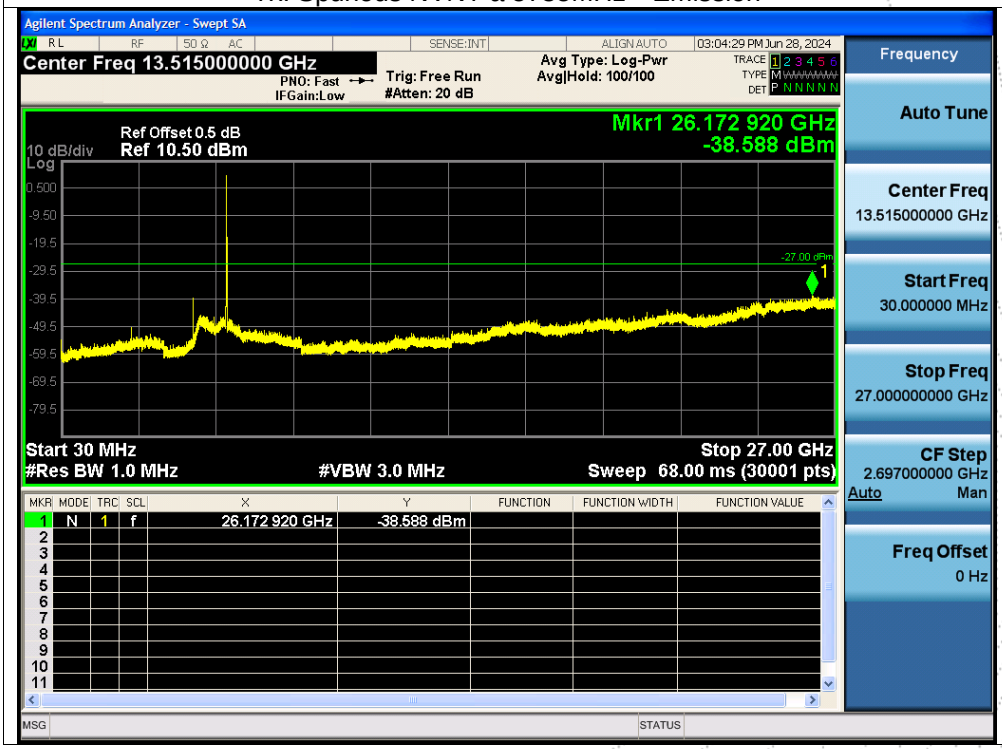

Tx. Spurious NVNT ax40 5230MHz Emission



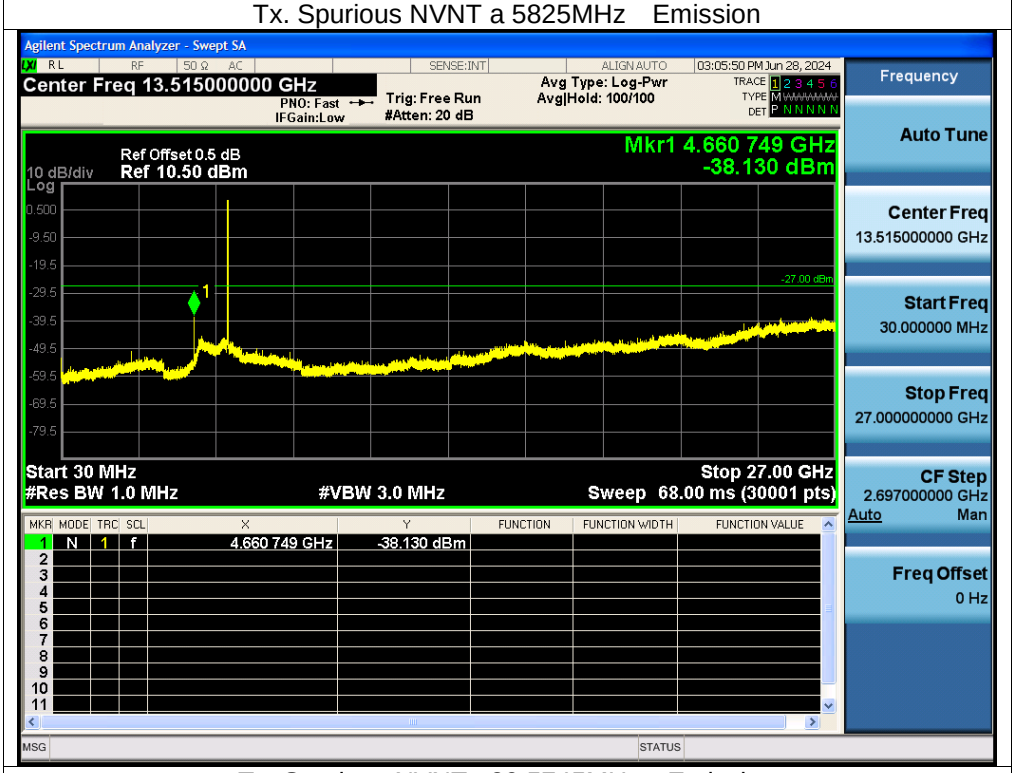
## Test Graphs

Tx. Spurious NVNT a 5745MHz Emission

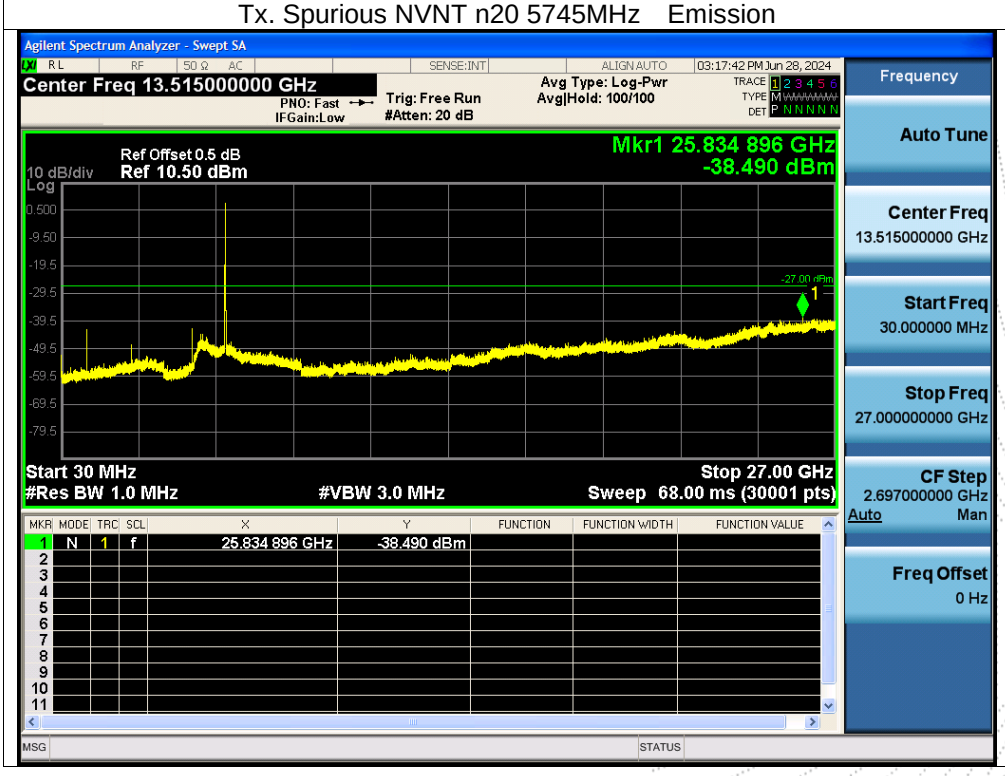

Tx. Spurious NVNT a 5785MHz Emission



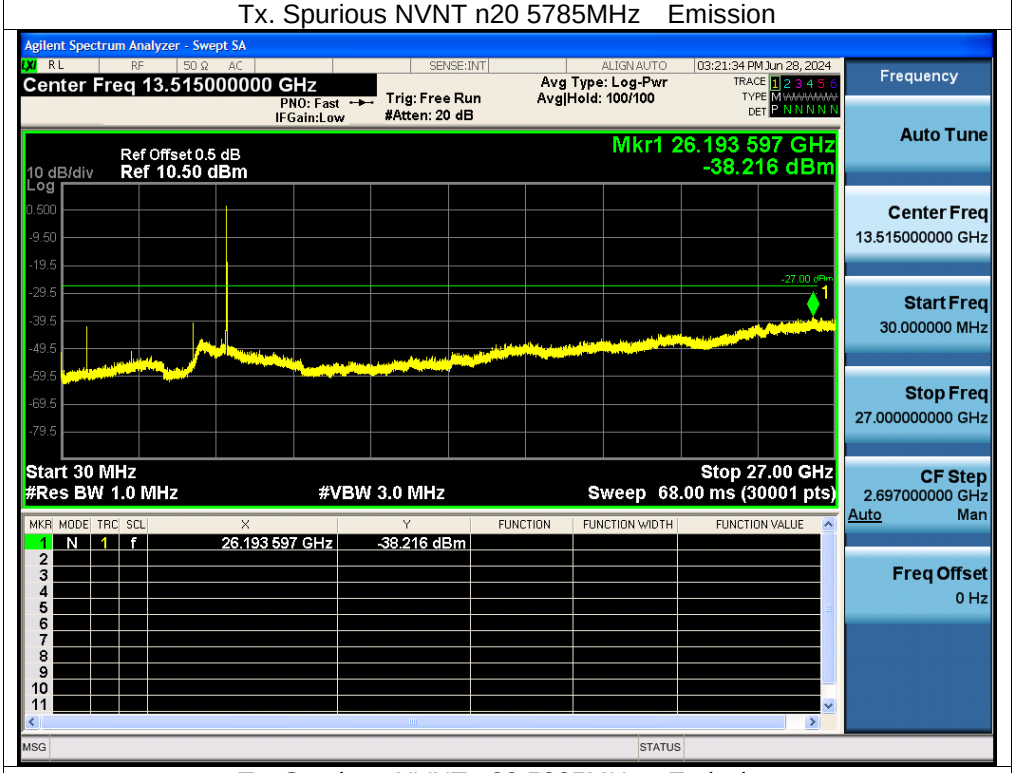
Tx. Spurious NVNT a 5825MHz Emission



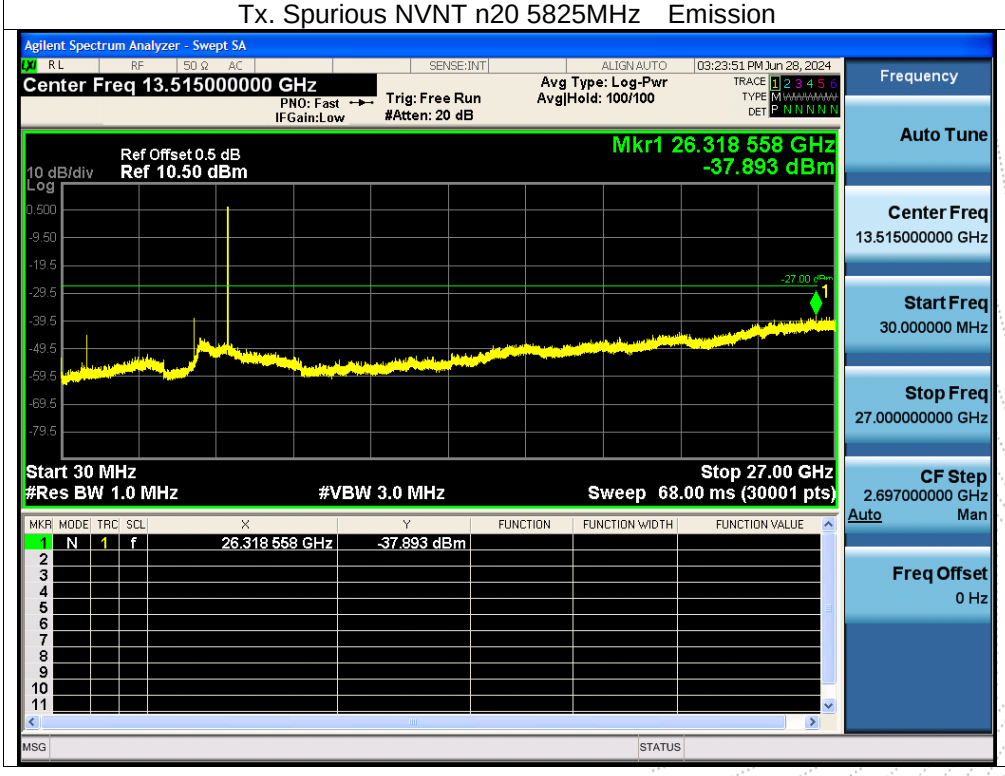

Tx. Spurious NVNT n20 5745MHz Emission



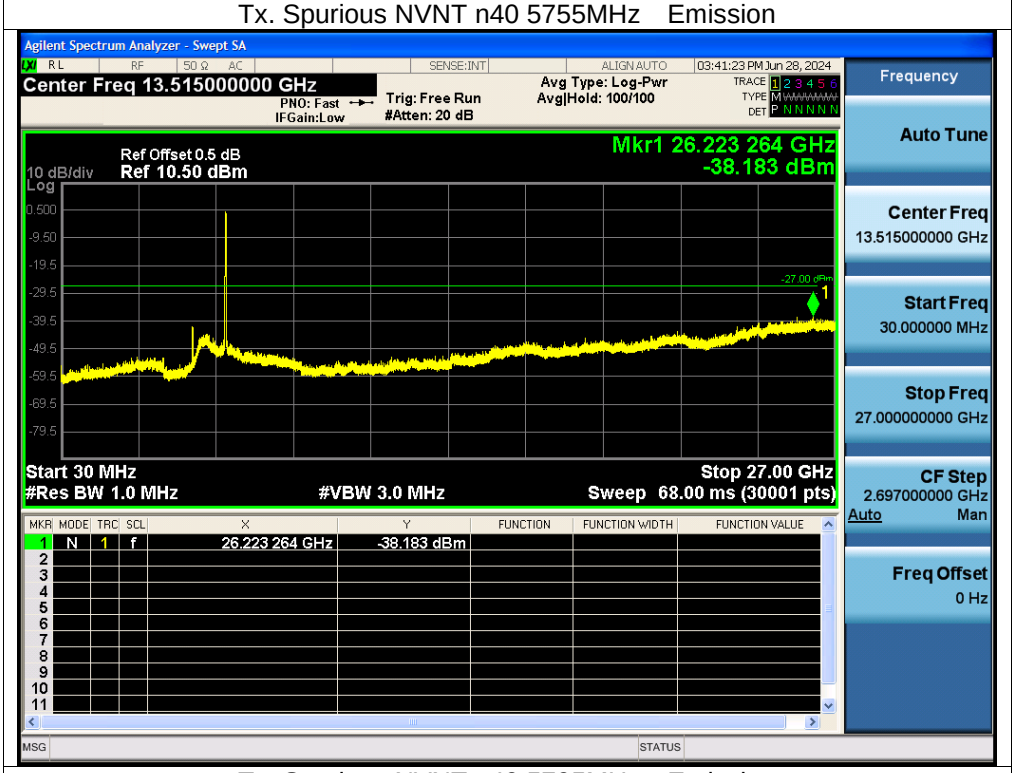
Tx. Spurious NVNT n20 5785MHz Emission



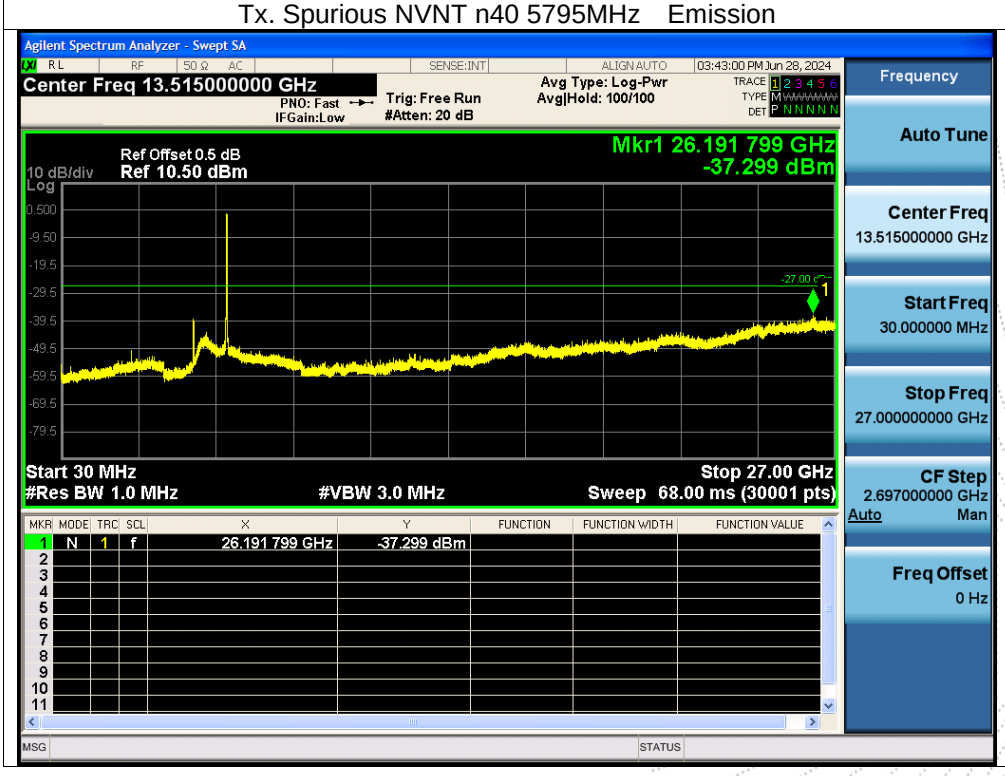

Tx. Spurious NVNT n20 5825MHz Emission



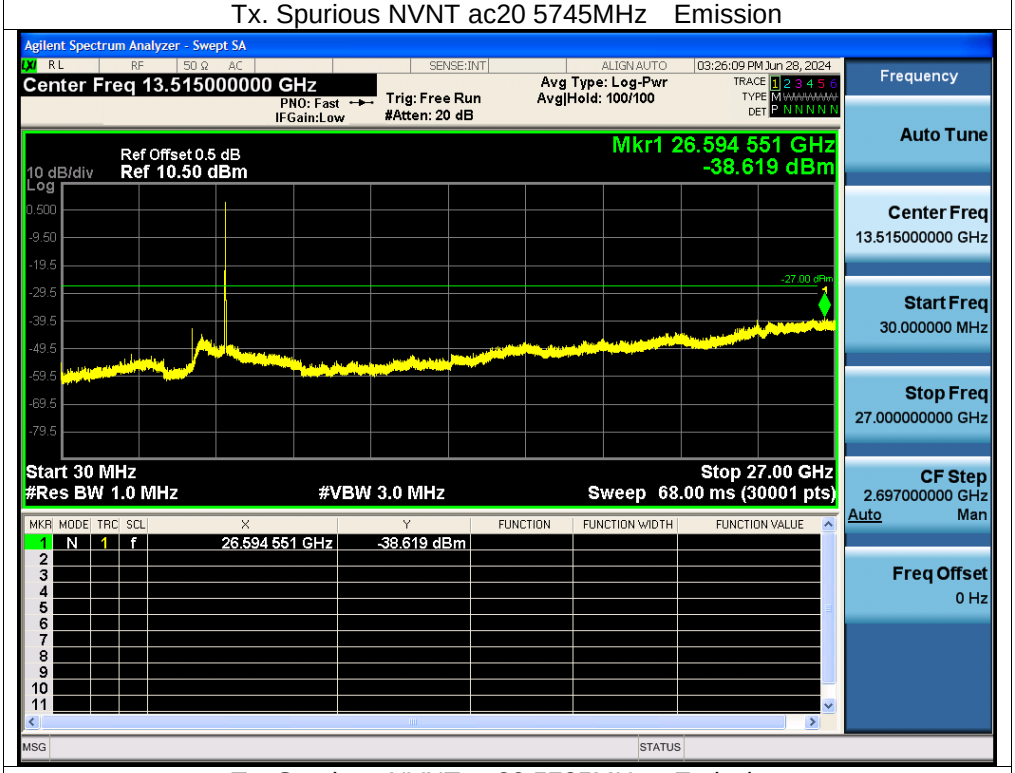
Tx. Spurious NVNT n40 5755MHz Emission



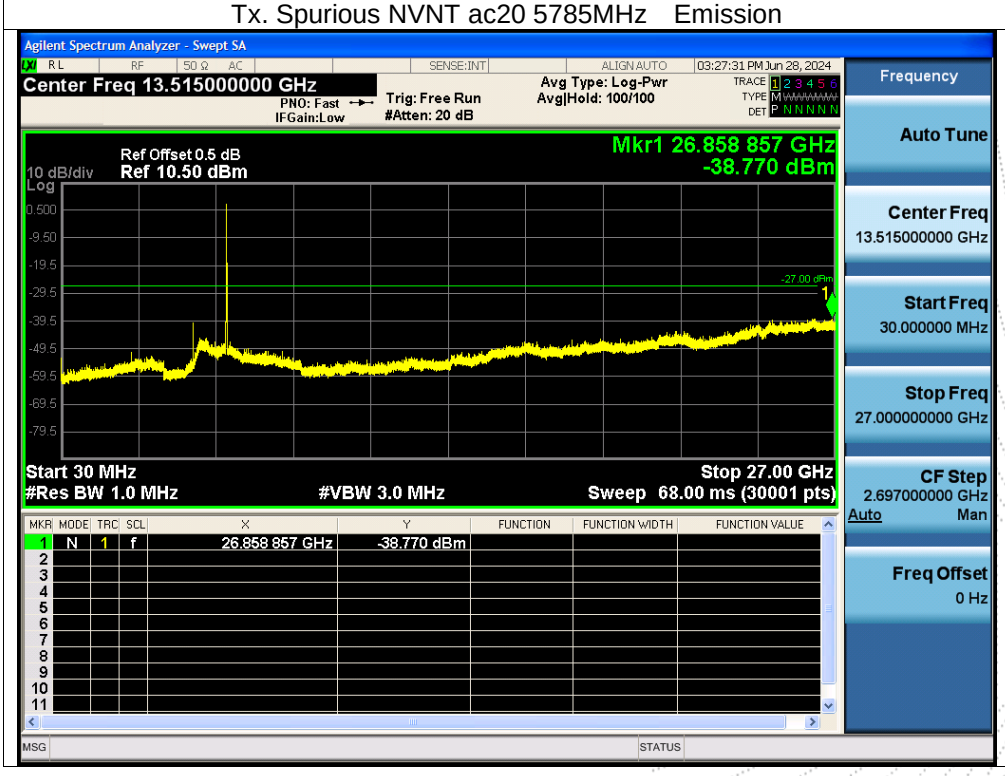

Tx. Spurious NVNT n40 5795MHz Emission



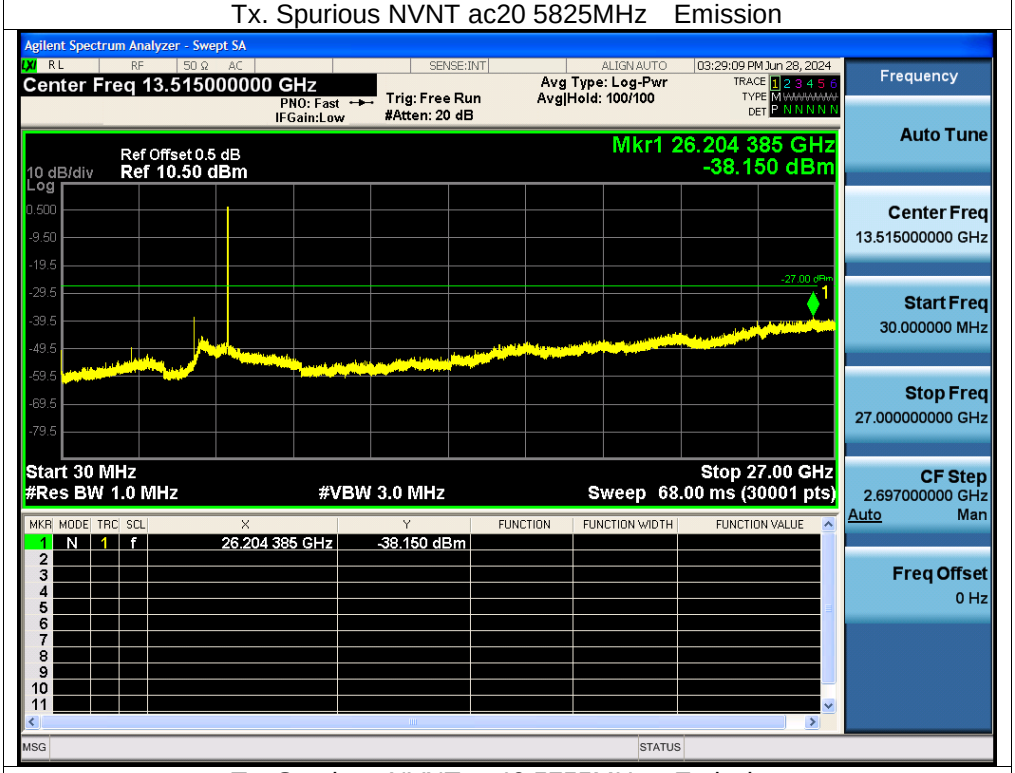
Tx. Spurious NVNT ac20 5745MHz Emission




Tx. Spurious NVNT ac20 5785MHz Emission



Tx. Spurious NVNT ac20 5825MHz Emission

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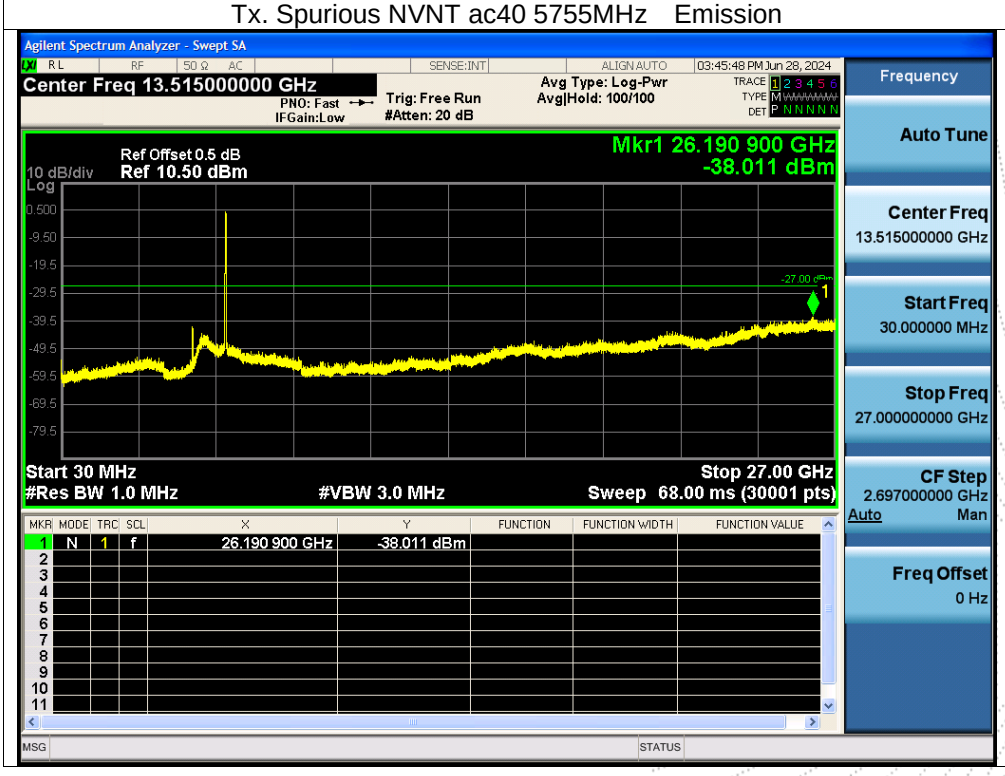
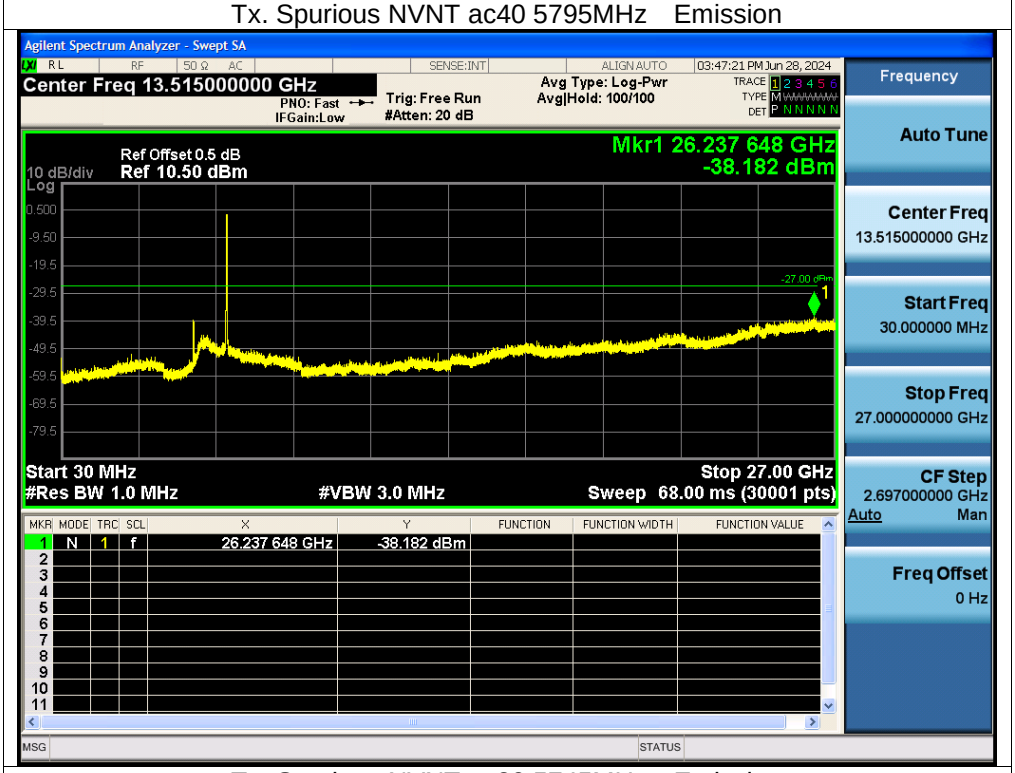
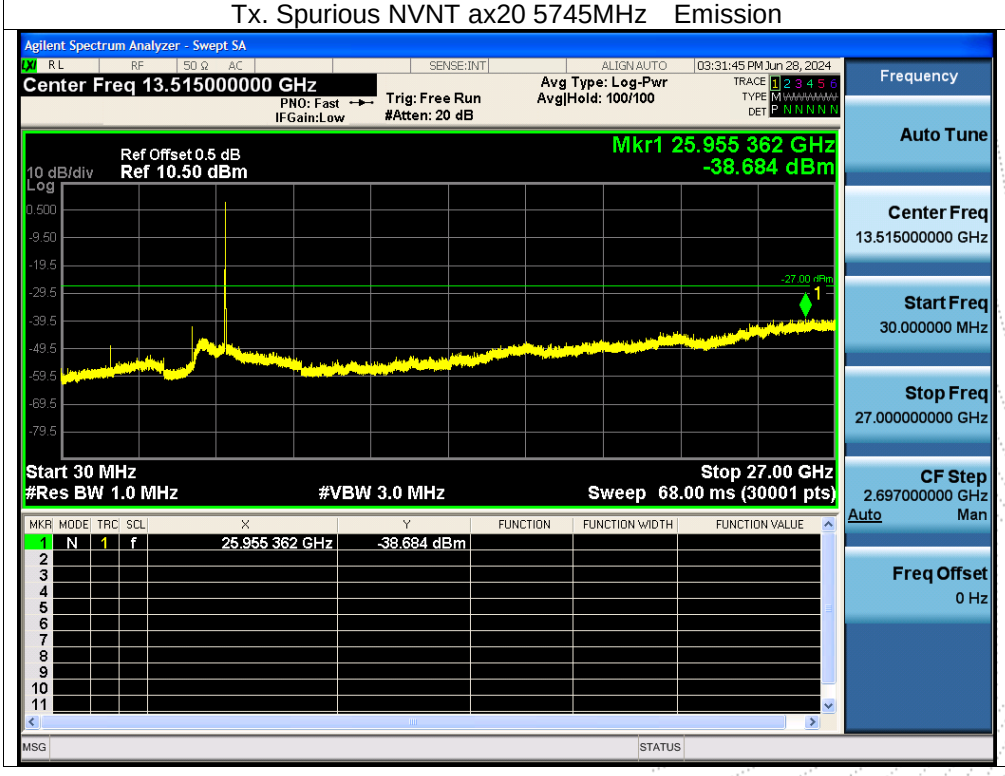


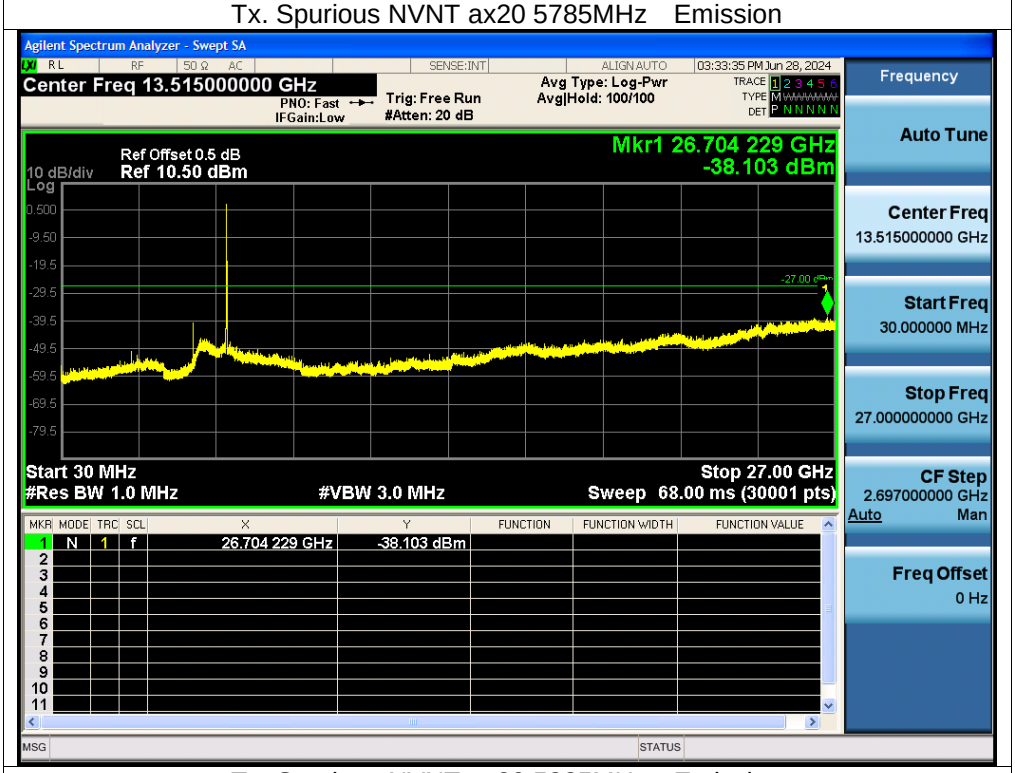
Tx. Spurious NVNT ac40 5795MHz Emission




Tx. Spurious NVNT ax20 5745MHz Emission



Tx. Spurious NVNT ax20 5785MHz Emission

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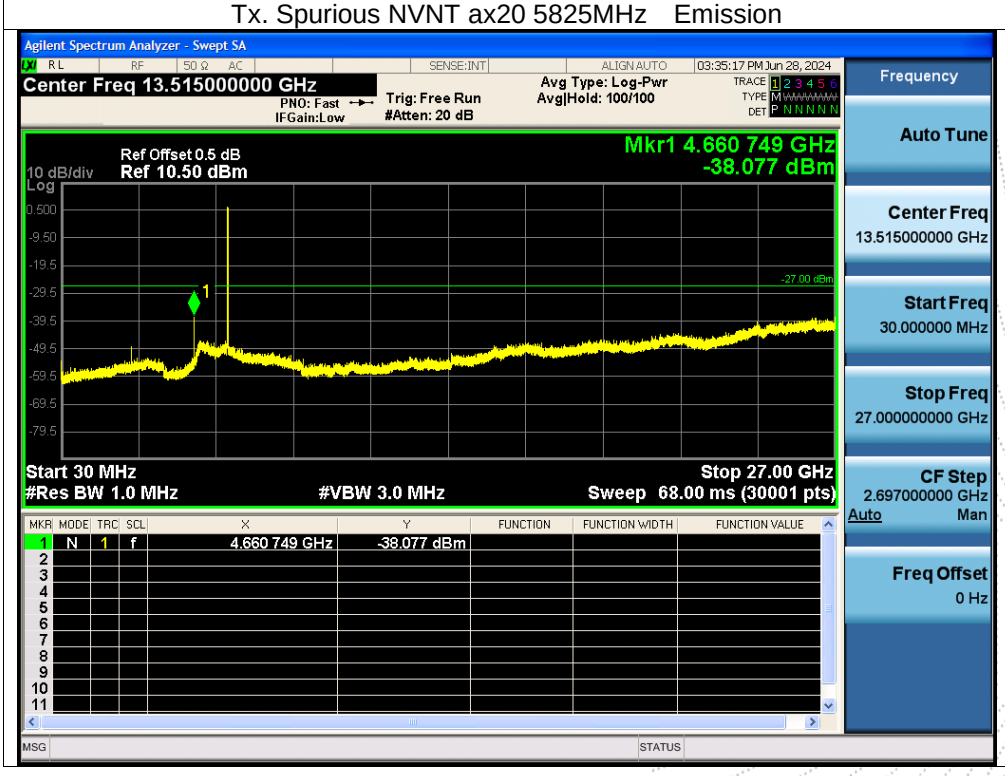
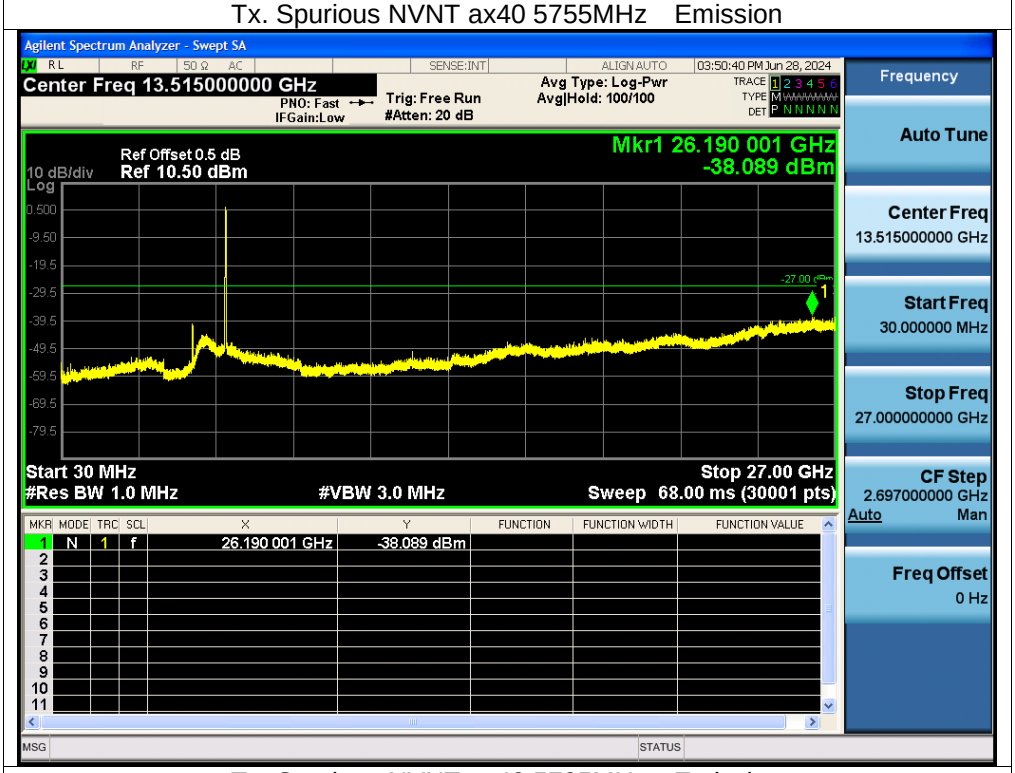
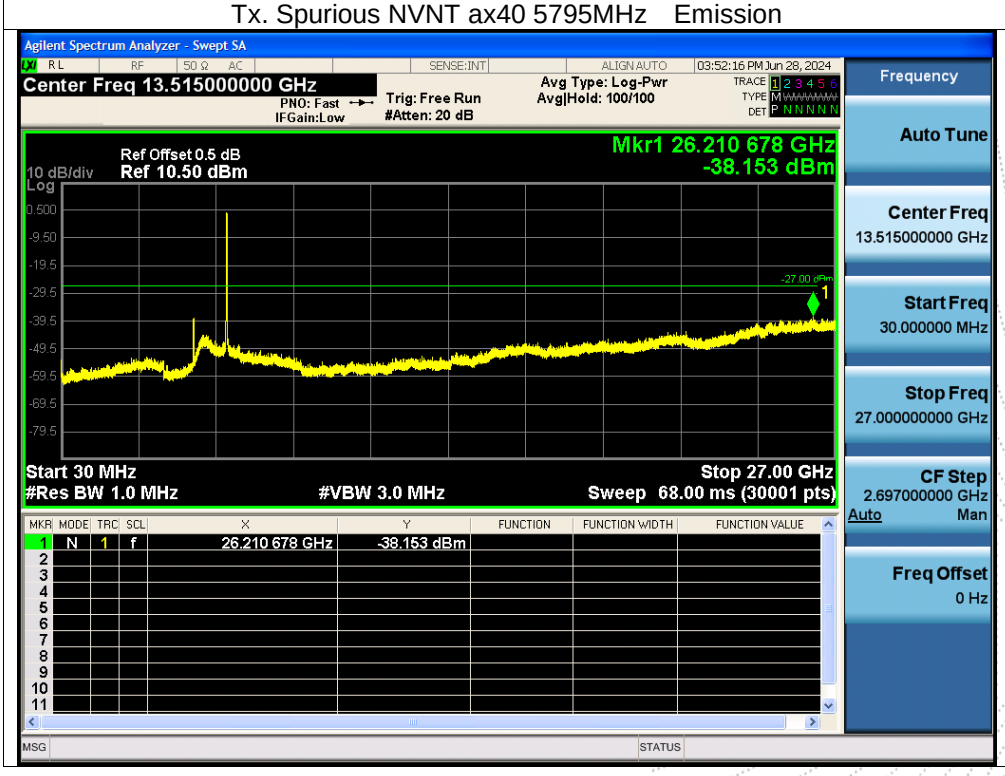


Tx. Spurious NVNT ax40 5755MHz Emission

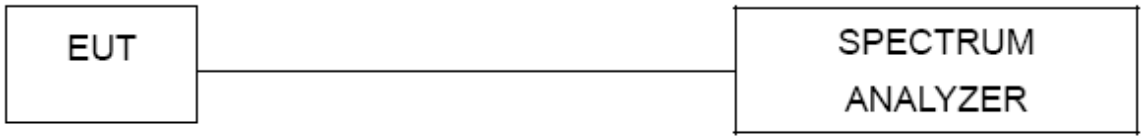



Tx. Spurious NVNT ax40 5795MHz Emission



# 13. Frequency Stability Measurement

## 13.1 Block Diagram Of Test Setup




## 13.2 Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification)..

## 13.3 Test Procedure

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 106 ppm and he limit is less than ±20ppm (IEEE 802.11nspecification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature is -20°C~70°C.

## 13.4 Test Result

| Temperature: | 26 ℃ | Relative Humidity: | 54% |
|---|---|---|---|
| Pressure: | 101KPa | Test Voltage: | AC 120V/60Hz |
| Test Mode: | TX (5.1G) Mode Frequency U-NII-1 (5180-5240MHz) | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency:5180MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120.00 | 5180.0036 | 5180 | 0.0036 | 0.6950 |
| | | V max (V) | 138.00 | 5180.0015 | 5180 | 0.0015 | 0.2896 |
| | | V min (V) | 102.00 | 5180.0053 | 5180 | 0.0053 | 1.0232 |
| Limits | | | | 5150-5250 MHz | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency:5180MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | -20 | 5180.0078 | 5180 | 0.0078 | 1.5058 |
| | | T (°C) | -10 | 5180.0028 | 5180 | 0.0028 | 0.5405 |
| | | T (°C) | 0 | 5180.0116 | 5180 | 0.0116 | 2.2394 |
| | | T (°C) | 10 | 5180.0082 | 5180 | 0.0082 | 1.5830 |
| | | T (°C) | 20 | 5180.0000 | 5180 | 0.0000 | 0.0000 |
| | | T (°C) | 30 | 5180.0103 | 5180 | 0.0103 | 1.9884 |
| | | T (°C) | 40 | 5180.0065 | 5180 | 0.0065 | 1.2548 |
| | | T (°C) | 50 | 5180.0072 | 5180 | 0.0072 | 1.3900 |
| | | T (°C) | 60 | 5180.0112 | 5180 | 0.0112 | 2.1622 |
| | | T (°C) | 70 | 5180.0096 | 5180 | 0.0096 | 1.8533 |
| Limits | | | | 5150-5250 MHz | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency: 5200MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120.00 | 5200.0135 | 5200 | 0.0135 | 2.5962 |
| | | V max (V) | 138.00 | 5200.0077 | 5200 | 0.0077 | 1.4808 |
| | | V min (V) | 102.00 | 5200.0116 | 5200 | 0.0116 | 2.2308 |
| Limits | | | | 5725-5850 MHz | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency: 5200MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | -20 | 5200.01310 | 5200 | 0.01310 | 2.5192 |
| | | T (°C) | -10 | 5200.00020 | 5200 | 0.00020 | 0.0385 |
| | | T (°C) | 0 | 5200.00250 | 5200 | 0.00250 | 0.4808 |
| | | T (°C) | 10 | 5200.01280 | 5200 | 0.01280 | 2.4615 |
| | | T (°C) | 20 | 5200.01250 | 5200 | 0.01250 | 2.4038 |
| | | T (°C) | 30 | 5200.00600 | 5200 | 0.00600 | 1.1538 |
| | | T (°C) | 40 | 5200.00270 | 5200 | 0.00270 | 0.5192 |
| | | T (°C) | 50 | 5200.00800 | 5200 | 0.00800 | 1.5385 |
| | | T (°C) | 60 | 5200.00460 | 5200 | 0.00460 | 0.8846 |
| | | T (°C) | 70 | 5200.00050 | 5200 | 0.00050 | 0.0962 |
| Limits | | | | 5150-5250 MHz | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency: 5240MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120.00 | 5240.0004 | 5240 | 0.0004 | 0.0763 |
| | | V max (V) | 138.00 | 5240.0006 | 5240 | 0.0006 | 0.1145 |
| | | V min (V) | 102.00 | 5240.0016 | 5240 | 0.0016 | 0.3053 |
| Limits | | | | 5150-5250 MHz | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency: 5240MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | -20 | 5240.0037 | 5240 | 0.0037 | 0.7061 |
| | | T (°C) | -10 | 5240.0051 | 5240 | 0.0051 | 0.9733 |
| | | T (°C) | 0 | 5240.0101 | 5240 | 0.0101 | 1.9275 |
| | | T (°C) | 10 | 5240.0011 | 5240 | 0.0011 | 0.2099 |
| | | T (°C) | 20 | 5240.0047 | 5240 | 0.0047 | 0.8969 |
| | | T (°C) | 30 | 5240.0002 | 5240 | 0.0002 | 0.0382 |
| | | T (°C) | 40 | 5240.0007 | 5240 | 0.0007 | 0.1336 |
| | | T (°C) | 50 | 5240.0016 | 5240 | 0.0016 | 0.3053 |
| | | T (°C) | 60 | 5240.0072 | 5240 | 0.0072 | 1.3740 |
| | | T (°C) | 70 | 5240.0015 | 5240 | 0.0015 | 0.2863 |
| Limits | | | | 5150-5250 MHz | | | |
| Result | | | | Complies | | | |

| | | | |
|---|---|---|---|
| Temperature: | 26 ℃ | Relative Humidity: | 54% |
| Pressure: | 101KPa | Test Voltage: | AC 120V/60Hz |
| Test Mode: | TX (5.8G) Mode Frequency U-NII-3 (5745-5825MHz) | | |

Voltage vs. Frequency Stabilit

| TEST CONDITIONS | | | | Reference Frequency:5745MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120.00 | 5745.00820 | 5745 | 0.00820 | 1.4273 |
| | | V max (V) | 138.00 | 5745.00840 | 5745 | 0.00840 | 1.4621 |
| | | V min (V) | 102.00 | 5745.00320 | 5745 | 0.00320 | 0.5570 |
| Limits | | | | 5725-5850 MHz | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency:5745MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | -20 | 5745.00090 | 5745 | 0.00090 | 0.1567 |
| | | T (°C) | -10 | 5745.00830 | 5745 | 0.00830 | 1.4447 |
| | | T (°C) | 0 | 5745.00730 | 5745 | 0.00730 | 1.2707 |
| | | T (°C) | 10 | 5745.00300 | 5745 | 0.00300 | 0.5222 |
| | | T (°C) | 20 | 5745.00170 | 5745 | 0.00170 | 0.2959 |
| | | T (°C) | 30 | 5745.00330 | 5745 | 0.00330 | 0.5744 |
| | | T (°C) | 40 | 5745.00500 | 5745 | 0.00500 | 0.8703 |
| | | T (°C) | 50 | 5745.00460 | 5745 | 0.00460 | 0.8007 |
| | | T (°C) | 60 | 5745.00090 | 5745 | 0.00090 | 0.1567 |
| | | T (°C) | 70 | 5745.00340 | 5745 | 0.00340 | 0.5918 |
| Limits | | | | 5725-5850 MHz | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency: 5785MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120.00 | 5785.01030 | 5785 | 0.01030 | 1.7805 |
| | | V max (V) | 138.00 | 5785.01060 | 5785 | 0.01060 | 1.8323 |
| | | V min (V) | 102.00 | 5785.00450 | 5785 | 0.00450 | 0.7779 |
| Limits | | | | 5725-5850 MHz | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency: 5785MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | -20 | 5785.01060 | 5785 | 0.01060 | 1.8323 |
| | | T (°C) | -10 | 5785.00010 | 5785 | 0.00010 | 0.0173 |
| | | T (°C) | 0 | 5785.00690 | 5785 | 0.00690 | 1.1927 |
| | | T (°C) | 10 | 5785.00580 | 5785 | 0.00580 | 1.0026 |
| | | T (°C) | 20 | 5785.01010 | 5785 | 0.01010 | 1.7459 |
| | | T (°C) | 30 | 5785.00370 | 5785 | 0.00370 | 0.6396 |
| | | T (°C) | 40 | 5785.01350 | 5785 | 0.01350 | 2.3336 |
| | | T (°C) | 50 | 5785.00840 | 5785 | 0.00840 | 1.4520 |
| | | T (°C) | 60 | 5785.00880 | 5785 | 0.00880 | 1.5212 |
| | | T (°C) | 70 | 5785.00490 | 5785 | 0.00490 | 0.8470 |
| Limits | | | | 5725-5850 MHz | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency: 5825MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120.00 | 5825.00590 | 5825 | 0.00590 | 1.0129 |
| | | V max (V) | 138.00 | 5825.00100 | 5825 | 0.00100 | 0.1717 |
| | | V min (V) | 102.00 | 5825.00410 | 5825 | 0.00410 | 0.7039 |
| Limits | | | | 5725-5850 MHz | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency: 5825MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | -20 | 5825.01200 | 5825 | 0.01200 | 2.0601 |
| | | T (°C) | -10 | 5825.01060 | 5825 | 0.01060 | 1.8197 |
| | | T (°C) | 0 | 5825.00940 | 5825 | 0.00940 | 1.6137 |
| | | T (°C) | 10 | 5825.00040 | 5825 | 0.00040 | 0.0687 |
| | | T (°C) | 20 | 5825.00850 | 5825 | 0.00850 | 1.4592 |
| | | T (°C) | 30 | 5825.00500 | 5825 | 0.00500 | 0.8584 |
| | | T (°C) | 40 | 5825.00160 | 5825 | 0.00160 | 0.2747 |
| | | T (°C) | 50 | 5825.01090 | 5825 | 0.01090 | 1.8712 |
| | | T (°C) | 60 | 5825.01270 | 5825 | 0.01270 | 2.1803 |
| | | T (°C) | 70 | 5825.00530 | 5825 | 0.00530 | 0.9099 |
| Limits | | | | 5725-5850 MHz | | | |
| Result | | | | Complies | | | |

# 14. Duty Cycle Of Test Signal

## 14.1 Standard Requirement

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle. All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

## 14.2 Formula

Duty Cycle = Ton / (Ton+Toff)

## 14.3 Test Procedure

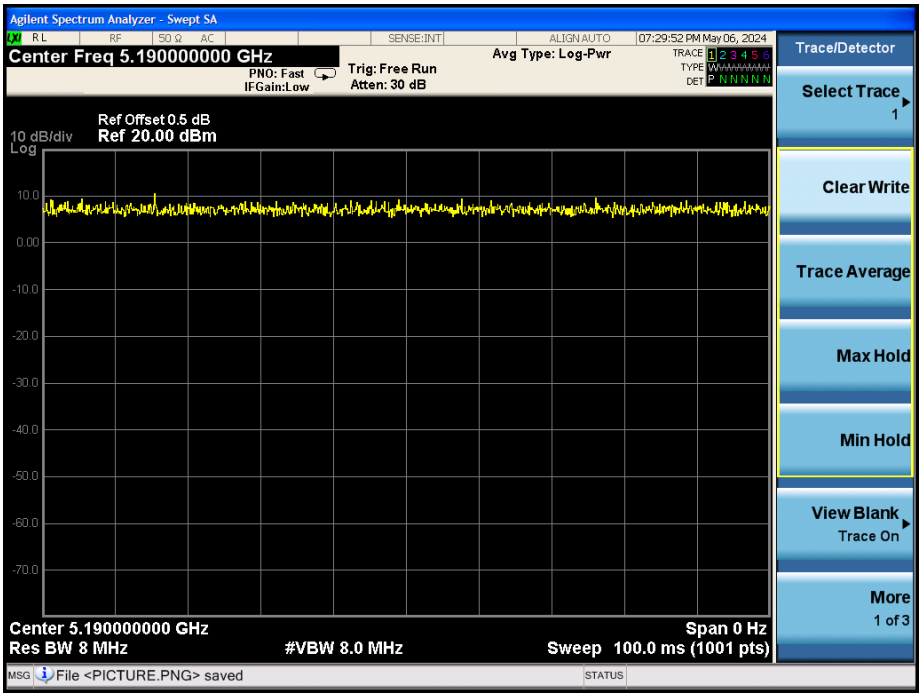
1.Set span = Zero
2. RBW = 8MHz
3. VBW = 8MHz,
4. Detector = Peak

## 14.4 Test Result

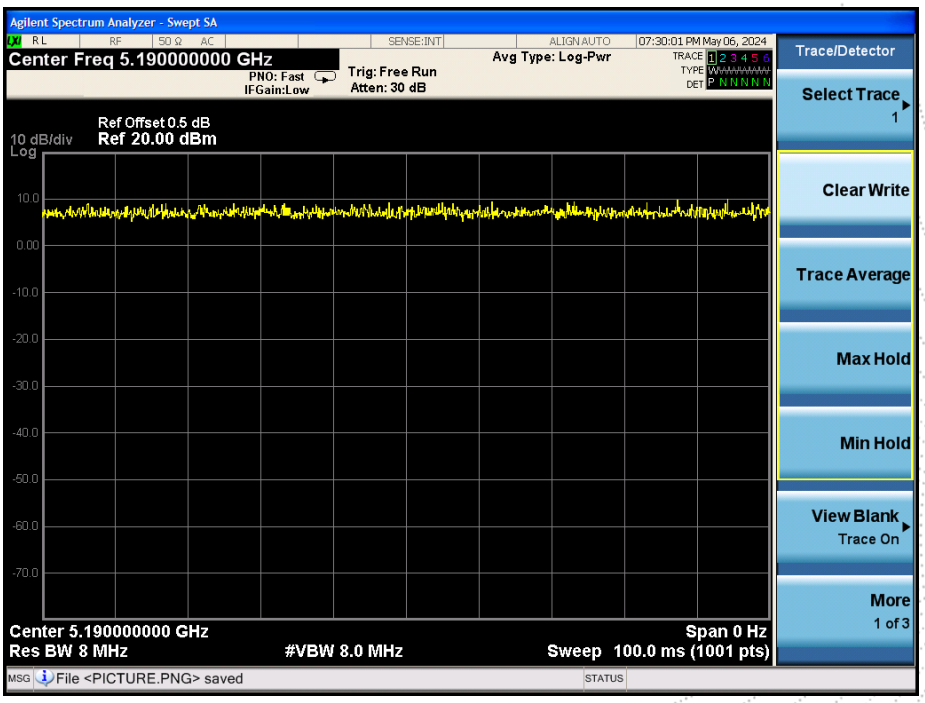
5.1G

| Condition | Mode | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|---|---|---|---|---|
| NVNT | a | 100 | 0 | 0 |
| NVNT | n20 | 100 | 0 | 0 |
| NVNT | n40 | 100 | 0 | 0 |
| NVNT | ac20 | 100 | 0 | 0 |
| NVNT | ac40 | 100 | 0 | 0 |
| NVNT | ax20 | 100 | 0 | 0 |
| NVNT | ax40 | 100 | 0 | 0 |

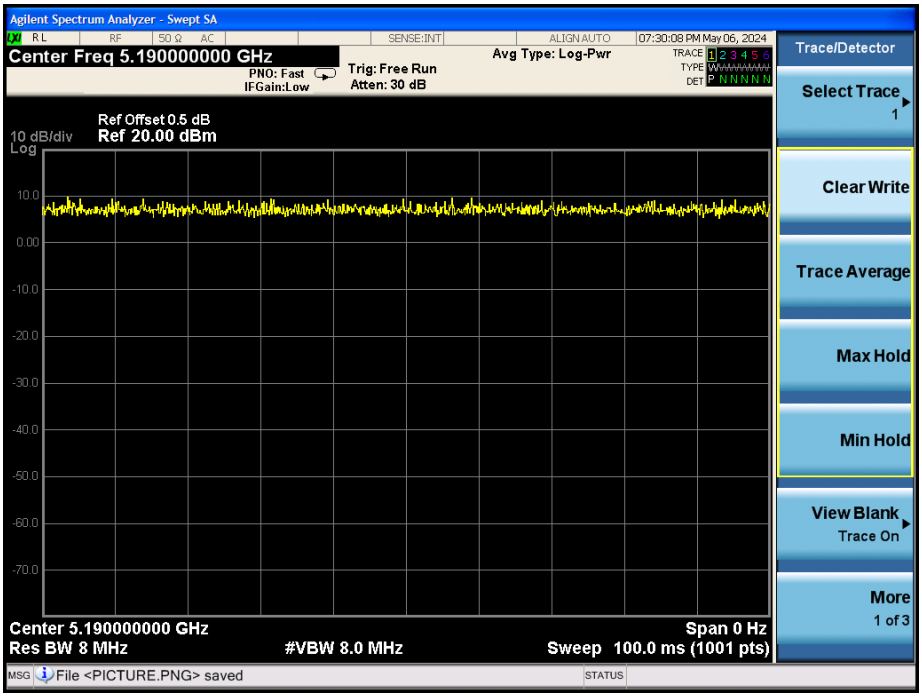
a


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.190000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
07:29:52 PM May 06, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.190000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Trace/Detector
Select Trace
1
Clear Write
Trace Average
Max Hold
Min Hold
View Blank
Trace On
More
1 of 3

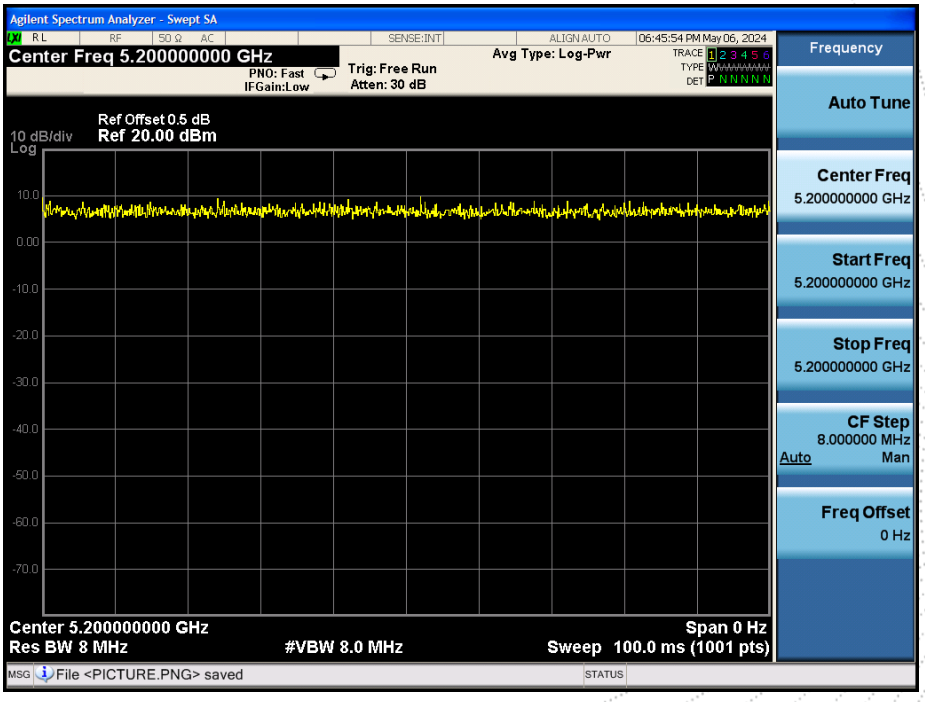
n20


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.190000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
07:30:01 PM May 06, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.190000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Trace/Detector
Select Trace
1
Clear Write
Trace Average
Max Hold
Min Hold
View Blank
Trace On
More
1 of 3

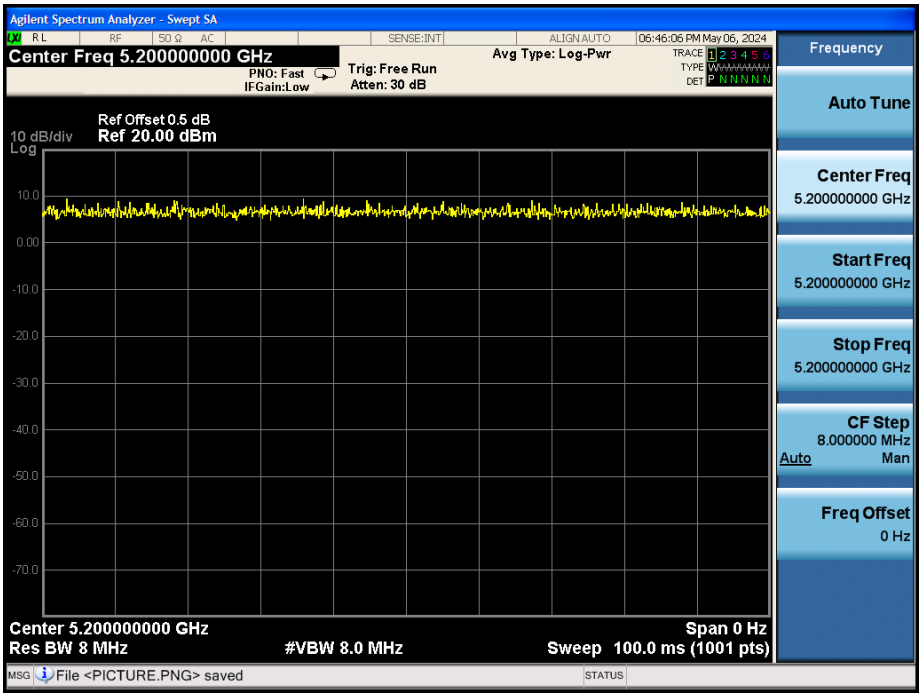
n40


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.190000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
07:30:08 PM May 06, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.190000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Trace/Detector
Select Trace 1
Clear Write
Trace Average
Max Hold
Min Hold
View Blank Trace On
More 1 of 3

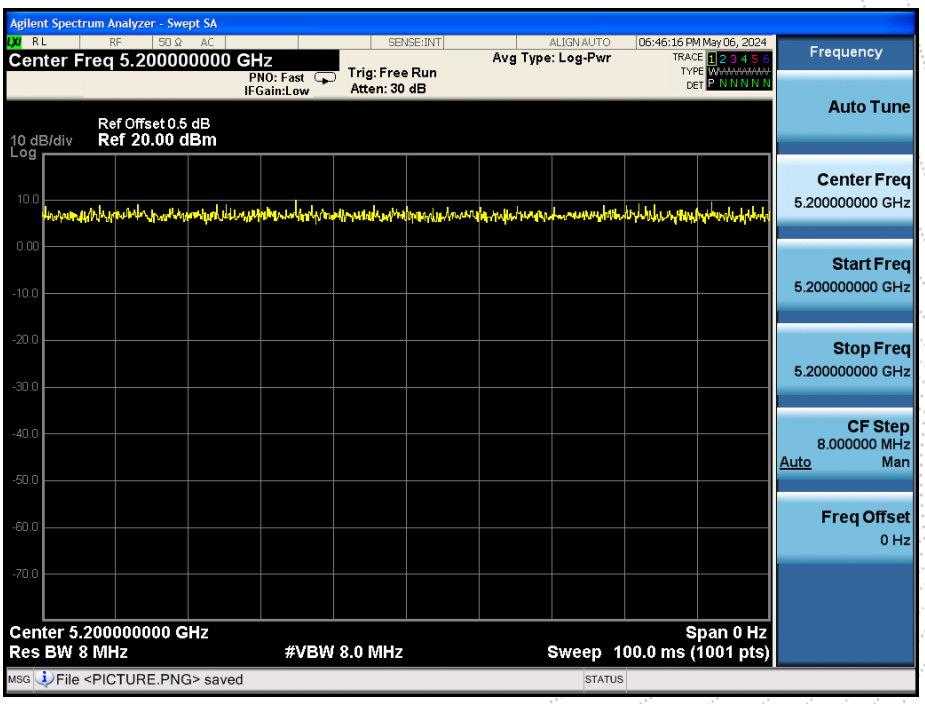
ac20


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.200000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
06:45:54 PM May 06, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.200000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Frequency
Auto Tune
Center Freq 5.200000000 GHz
Start Freq 5.200000000 GHz
Stop Freq 5.200000000 GHz
CF Step 8.000000 MHz
Auto Man
Freq Offset 0 Hz

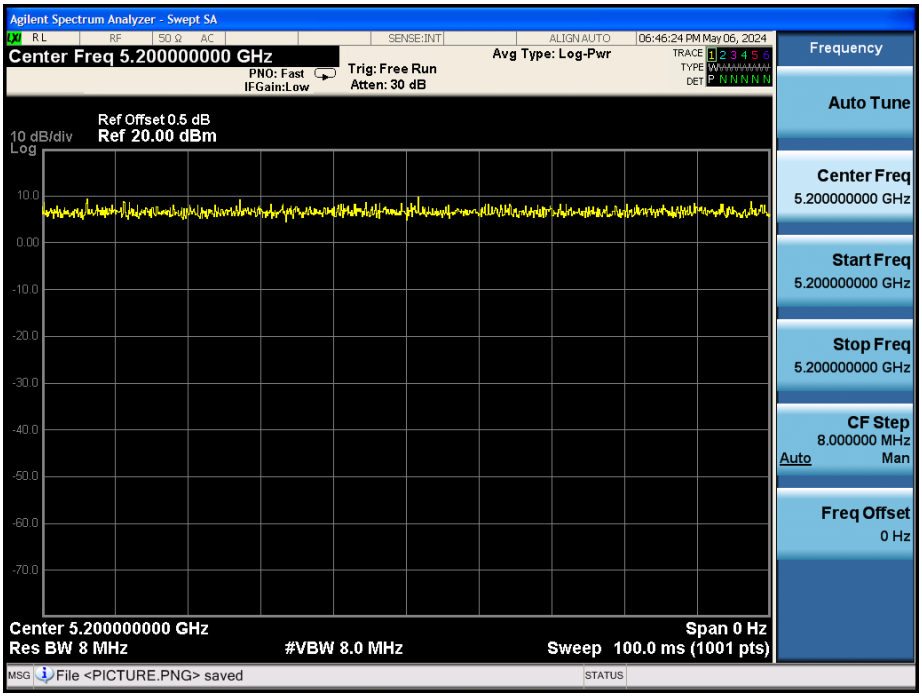
ac40


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.200000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
06:46:06 PM May 06, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.200000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Frequency
Auto Tune
Center Freq
5.200000000 GHz
Start Freq
5.200000000 GHz
Stop Freq
5.200000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz

ax20


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.200000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
06:46:16 PM May 06, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.200000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Frequency
Auto Tune
Center Freq
5.200000000 GHz
Start Freq
5.200000000 GHz
Stop Freq
5.200000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz

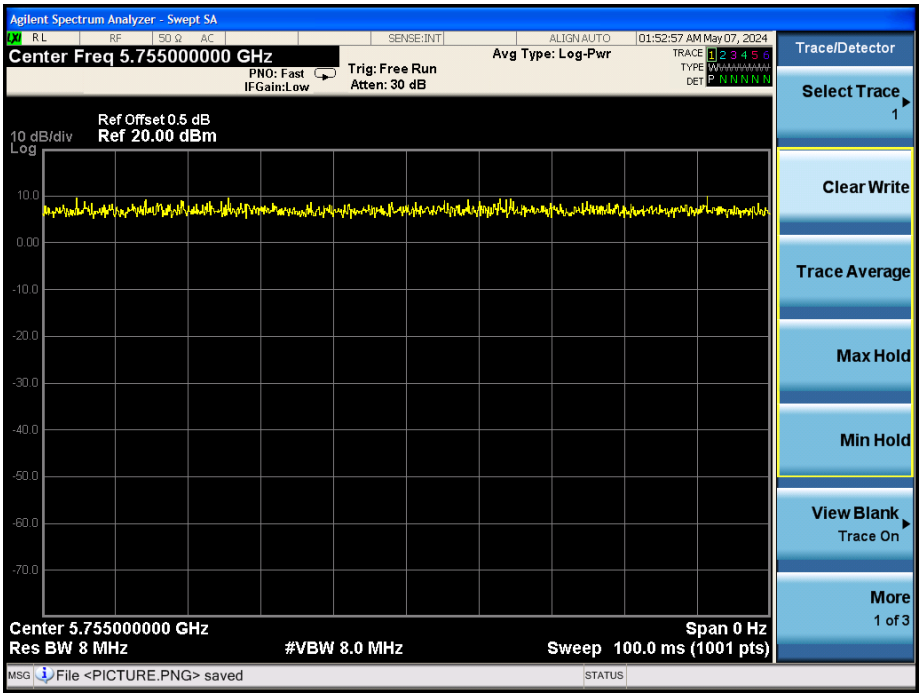
ax40


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.200000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
06:46:24 PM May 06, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.200000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Frequency
Auto Tune
Center Freq
5.200000000 GHz
Start Freq
5.200000000 GHz
Stop Freq
5.200000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz

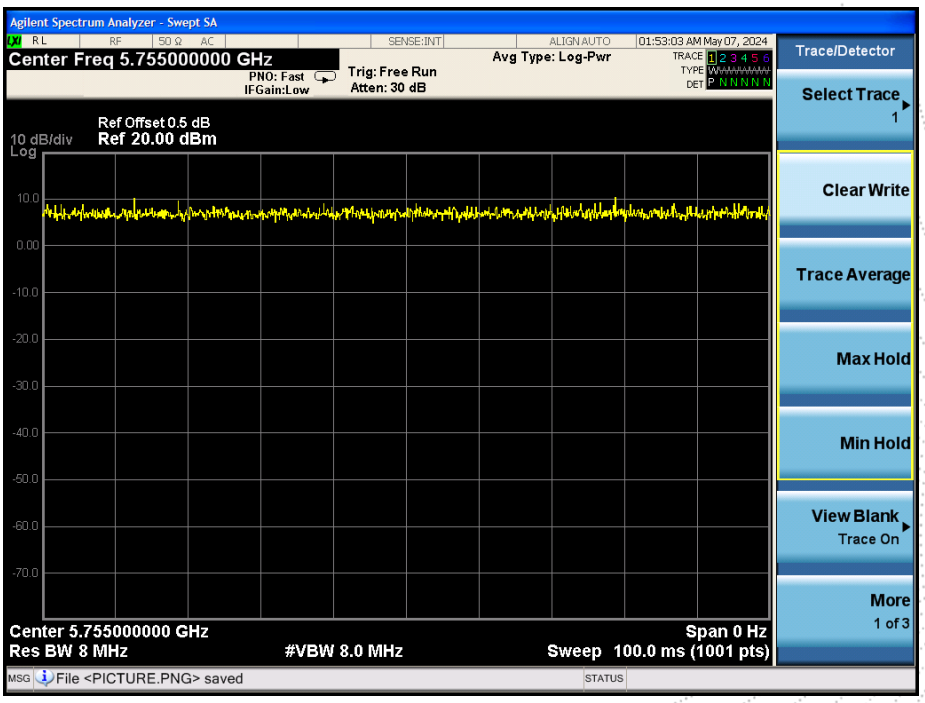
5.8G

| Condition | Mode | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|---|---|---|---|---|
| NVNT | a | 100 | 0 | 0 |
| NVNT | n20 | 100 | 0 | 0 |
| NVNT | n40 | 100 | 0 | 0 |
| NVNT | ac20 | 100 | 0 | 0 |
| NVNT | ac40 | 100 | 0 | 0 |
| NVNT | ax20 | 100 | 0 | 0 |
| NVNT | ax40 | 100 | 0 | 0 |

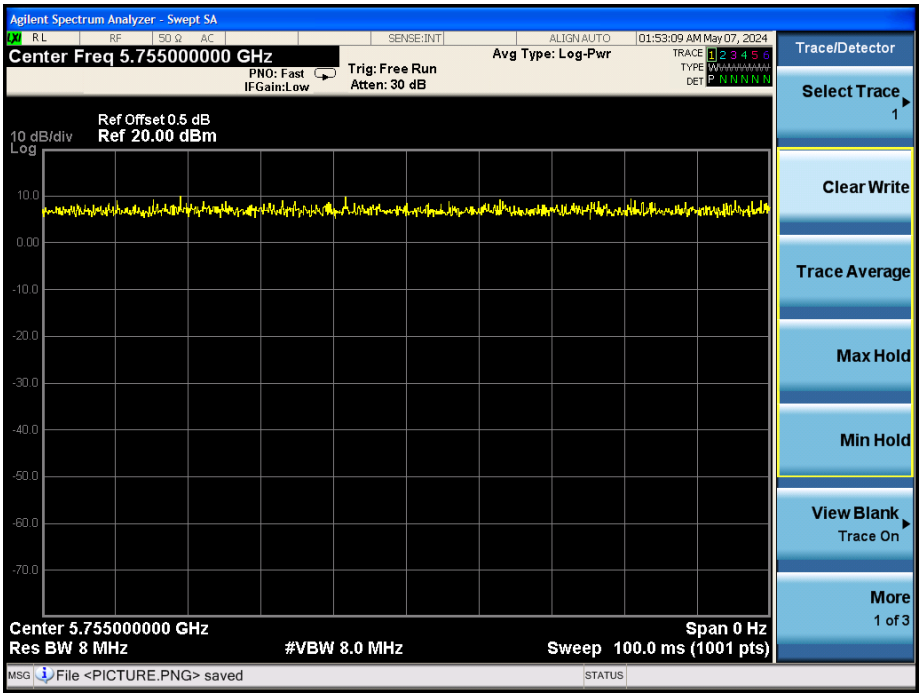
a


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:52:57 AM May 07, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.755000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Trace/Detector
Select Trace 1
Clear Write
Trace Average
Max Hold
Min Hold
View Blank Trace On
More 1 of 3

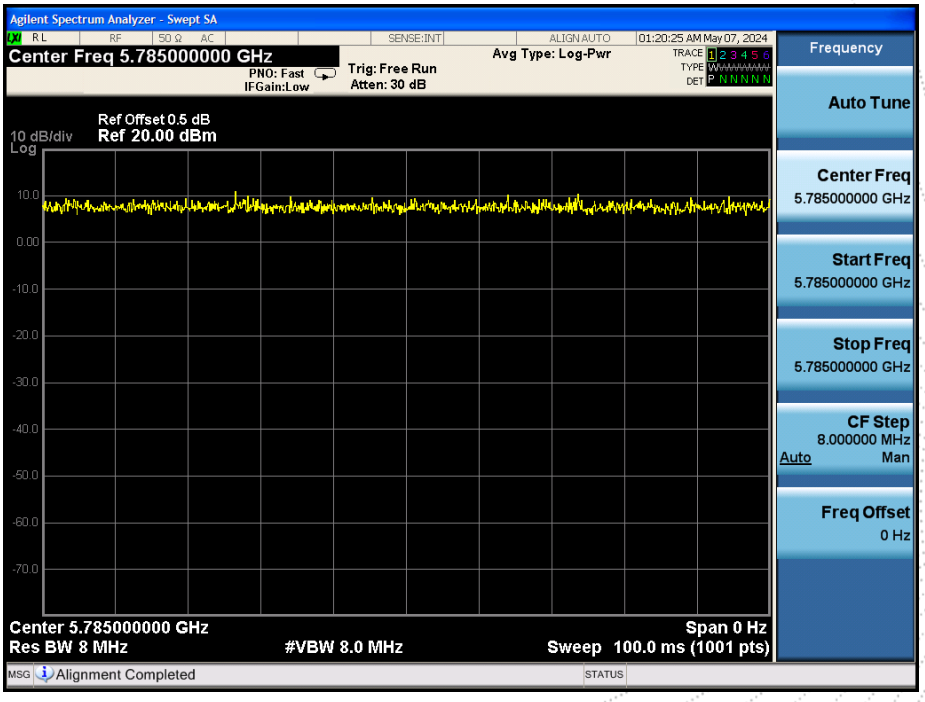
n20


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:53:03 AM May 07, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.755000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Trace/Detector
Select Trace 1
Clear Write
Trace Average
Max Hold
Min Hold
View Blank Trace On
More 1 of 3

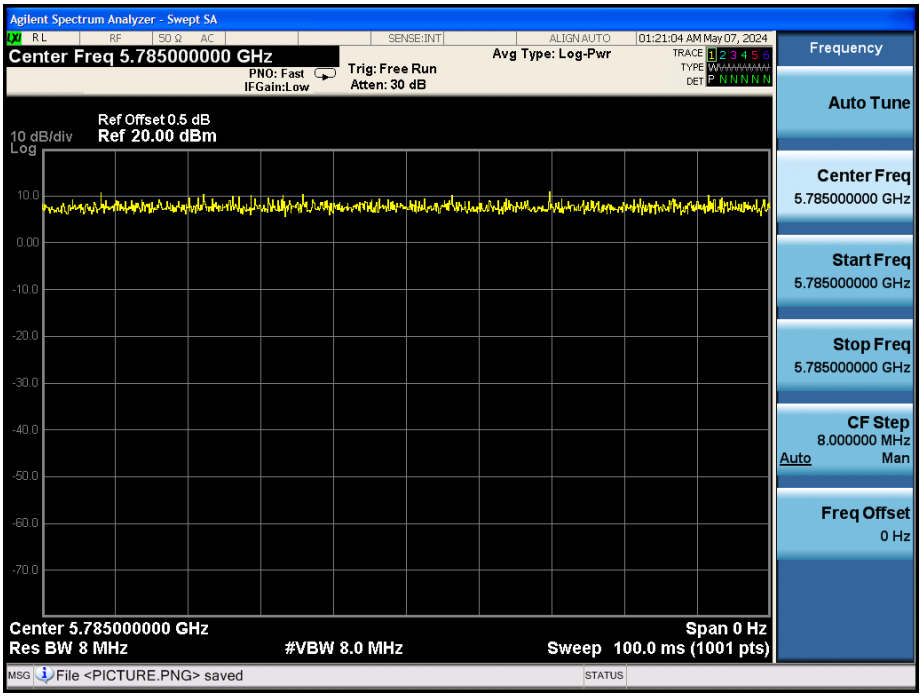
n40


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:53:09 AM May 07, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.755000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Trace/Detector
Select Trace 1
Clear Write
Trace Average
Max Hold
Min Hold
View Blank Trace On
More 1 of 3

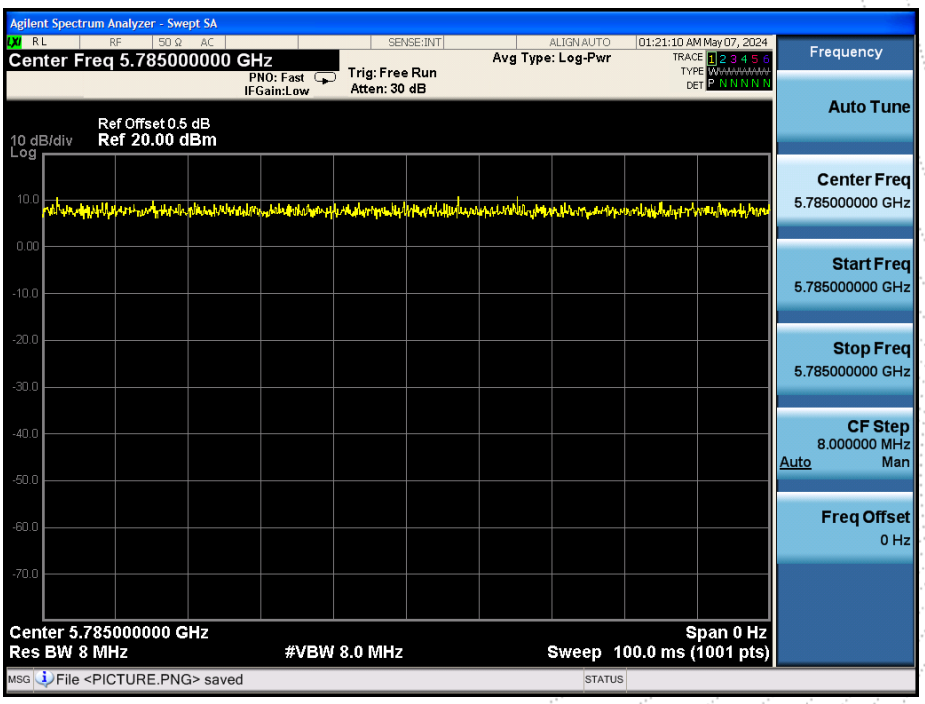
ac20


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:20:25 AM May 07, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.785000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
Alignment Completed
Frequency
Auto Tune
Center Freq 5.785000000 GHz
Start Freq 5.785000000 GHz
Stop Freq 5.785000000 GHz
CF Step 8.000000 MHz
Auto Man
Freq Offset 0 Hz

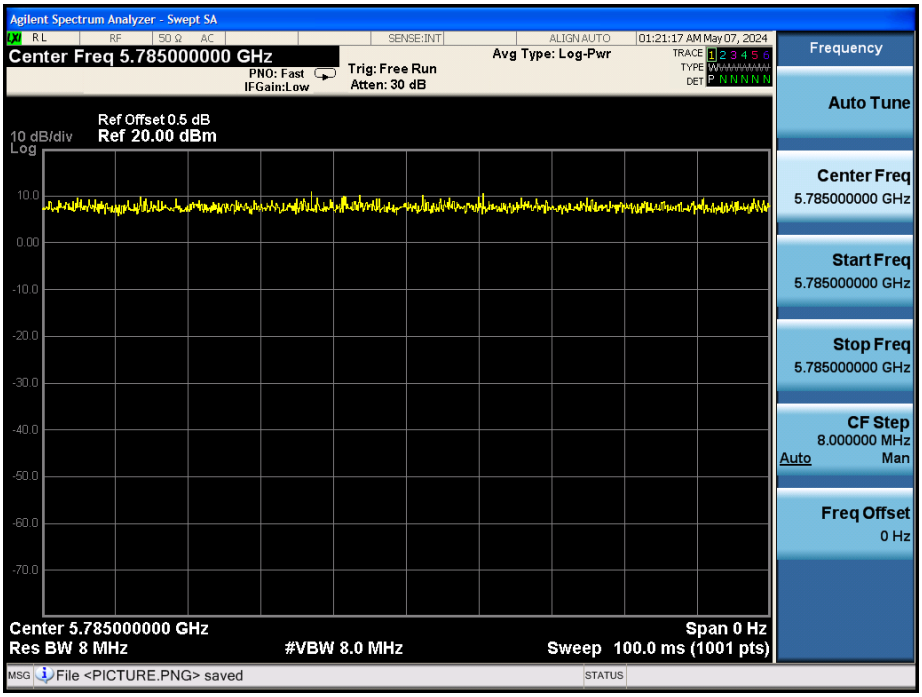
ac40


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:21:04 AM May 07, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.785000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.785000000 GHz
Stop Freq
5.785000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz

ax20


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:21:10 AM May 07, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.785000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.785000000 GHz
Stop Freq
5.785000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz

ax40


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
01:21:17 AM May 07, 2024
Ref Offset 0.5 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.785000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
File <PICTURE.PNG> saved
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.785000000 GHz
Stop Freq
5.785000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz

# 15. Antenna Requirement

## 15.1 Limit

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

## 15.2 Test Result

The EUT antenna is Internal antenna. It comply with the standard requirement.

## 16. EUT Photographs

**EUT Photo 1**

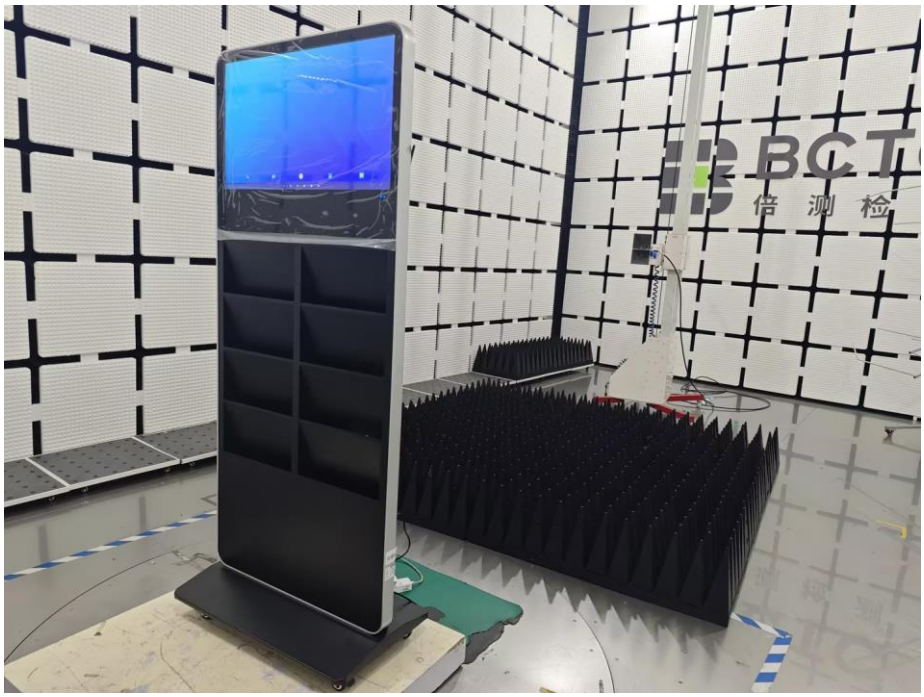
**EUT Photo 2**

NOTE: Appendix-Photographs Of EUT Constructional Details.

## 17. EUT Test Setup Photographs

**Conducted Emissions Photo**


**Radiated Measurement Photos**



# STATEMENT

1. The equipment lists are traceable to the national reference standards.

2. The test report can not be partially copied unless prior written approval is issued from our lab.

3. The test report is invalid without the "special seal for inspection and testing".

4. The test report is invalid without the signature of the approver.

5. The test process and test result is only related to the Unit Under Test.

6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.

7. The quality system of our laboratory is in accordance with ISO/IEC17025.

8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:
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Complaint/Advice E-mail: advice@bctc-lab.com.cn

※※※※※ END ※※※※※