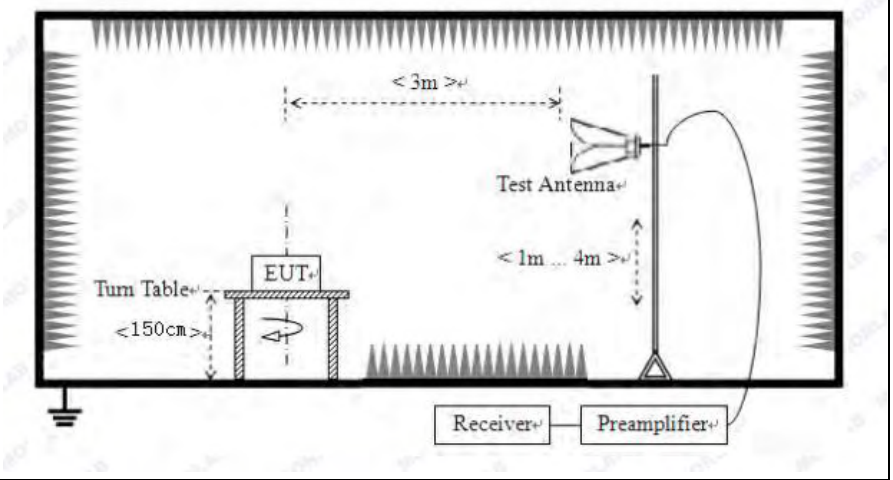
3.6 Band Edge

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 E Section 15.407 and 15.205, RSS-247 Issue 2, RSS-Gen Issue 5,</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m (Semi-Anechoic Chamber)</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>AV</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr>
<tr><td>68.2</td><td>Peak Value</td></tr>
</table>
Undesirable emission 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 EIRP of -27 dBm/MHz.
(2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.
(3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of −27 dBm/MHz.
</td></tr>
<tr><td>Test Procedure:</td><td>
a. The EUT was placed on the top of a rotating table 1.5 m above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
</td></tr>
<tr><td>Test setup:</td><td>Above 1GHz</td></tr>
</table>

	
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Remark:

According to KDB 789033 D02 v02r01 section G) 1) (d), for For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:

E[dBuV/m] = EIRP[dBm] + 95.2;

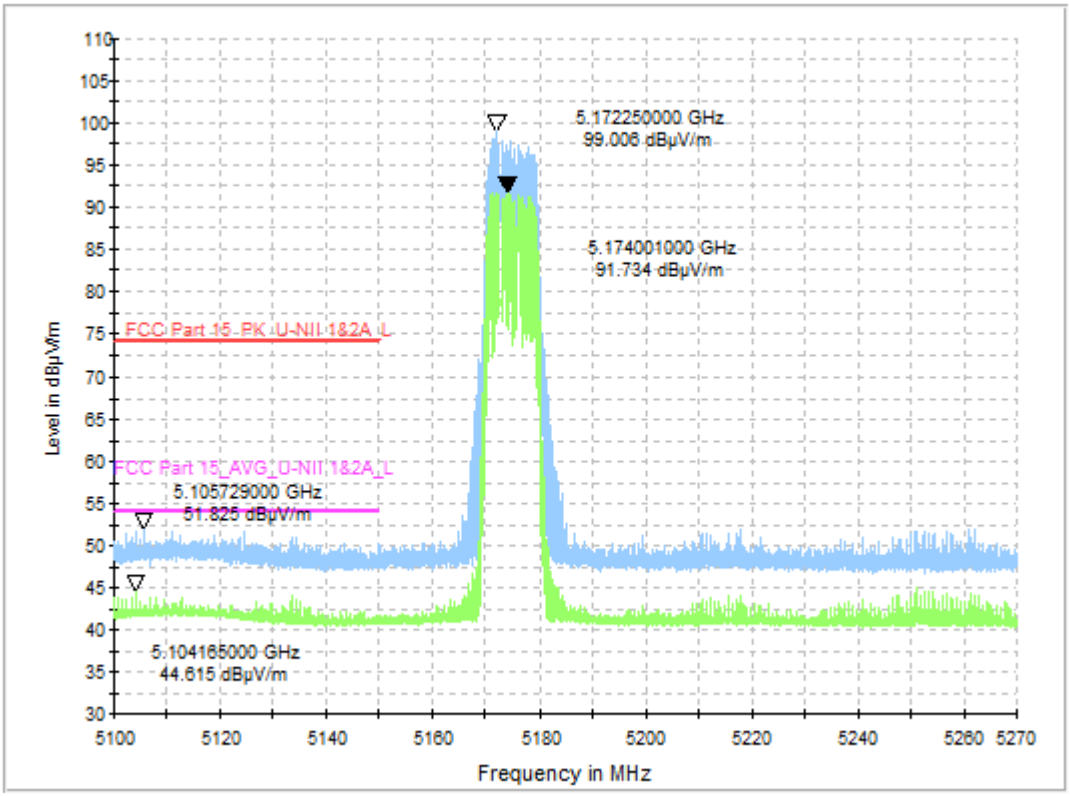
For example, if EIRP = -27dBm

E[dBuV/m] = -27 + 95.2 = 68.2dBuV/m.

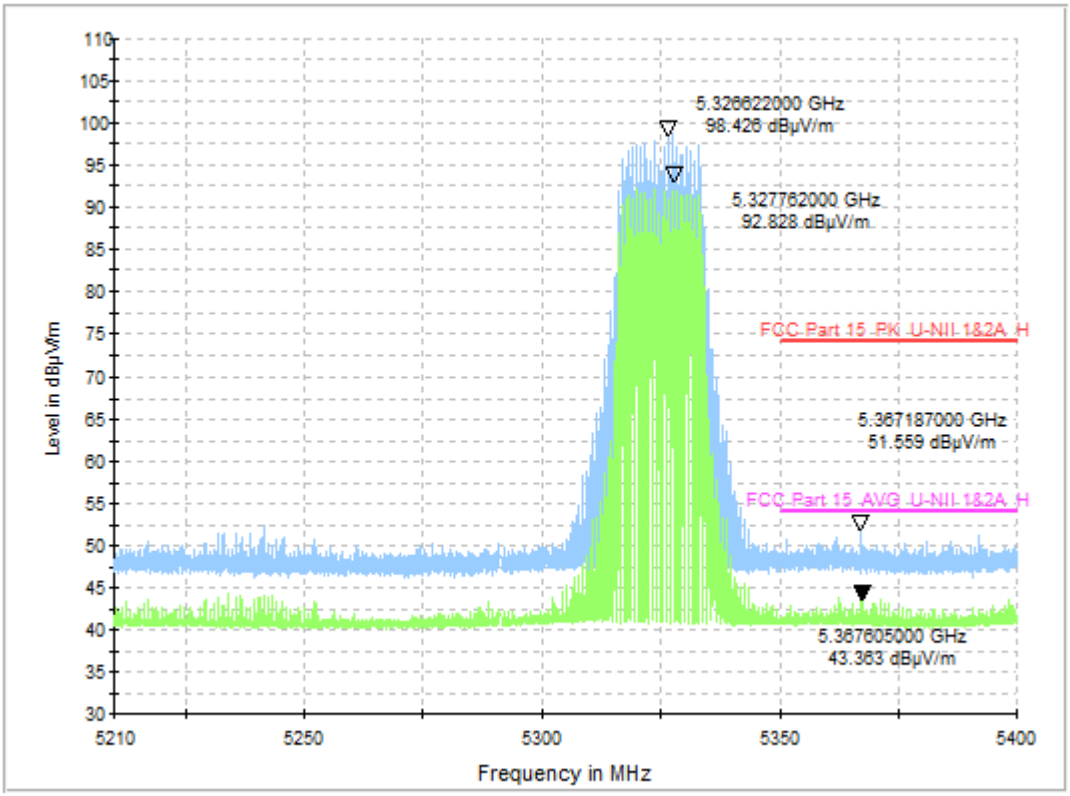
Measurement Data:

Band1&2

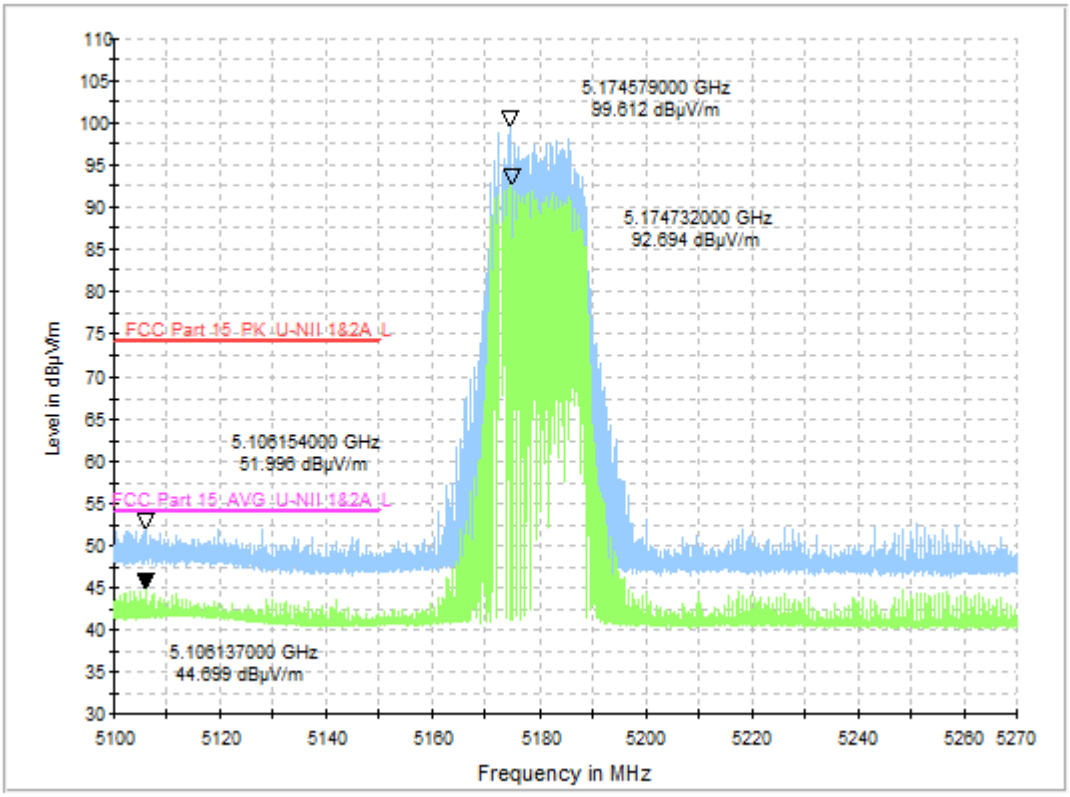
Mode:	802.11a10	Frequency:	5175MHz



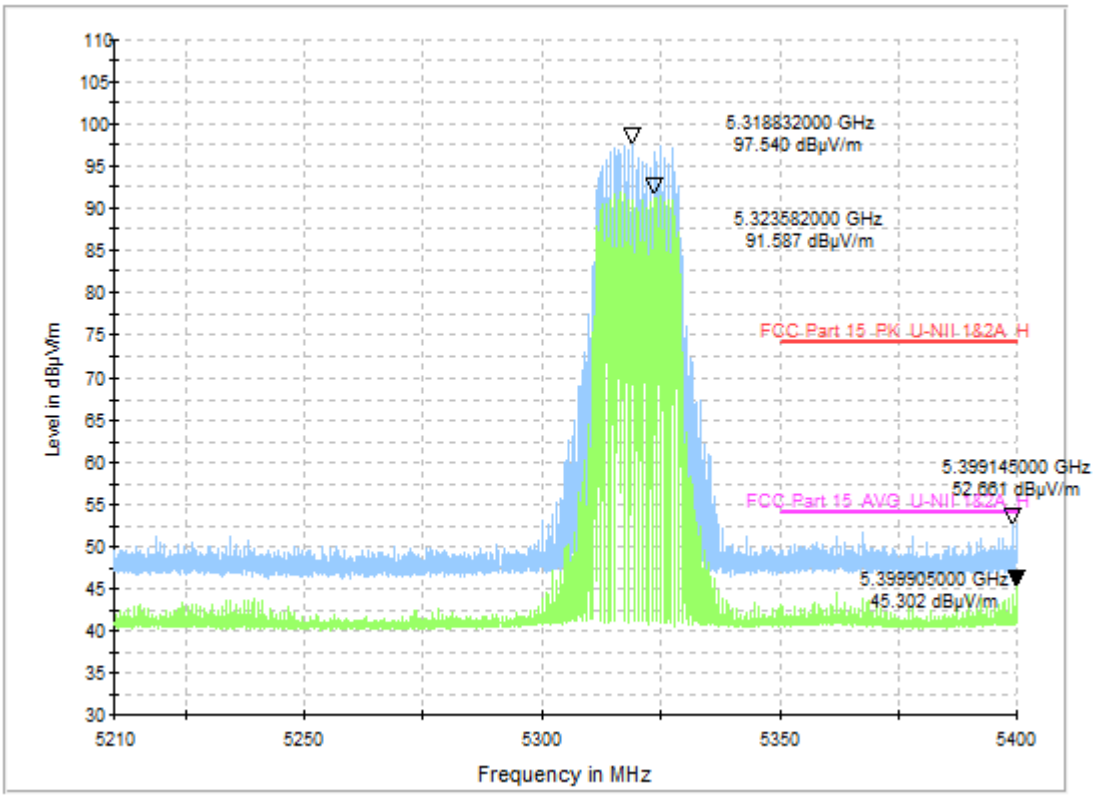
Mode:	802.11a10	Frequency:	5325MHz



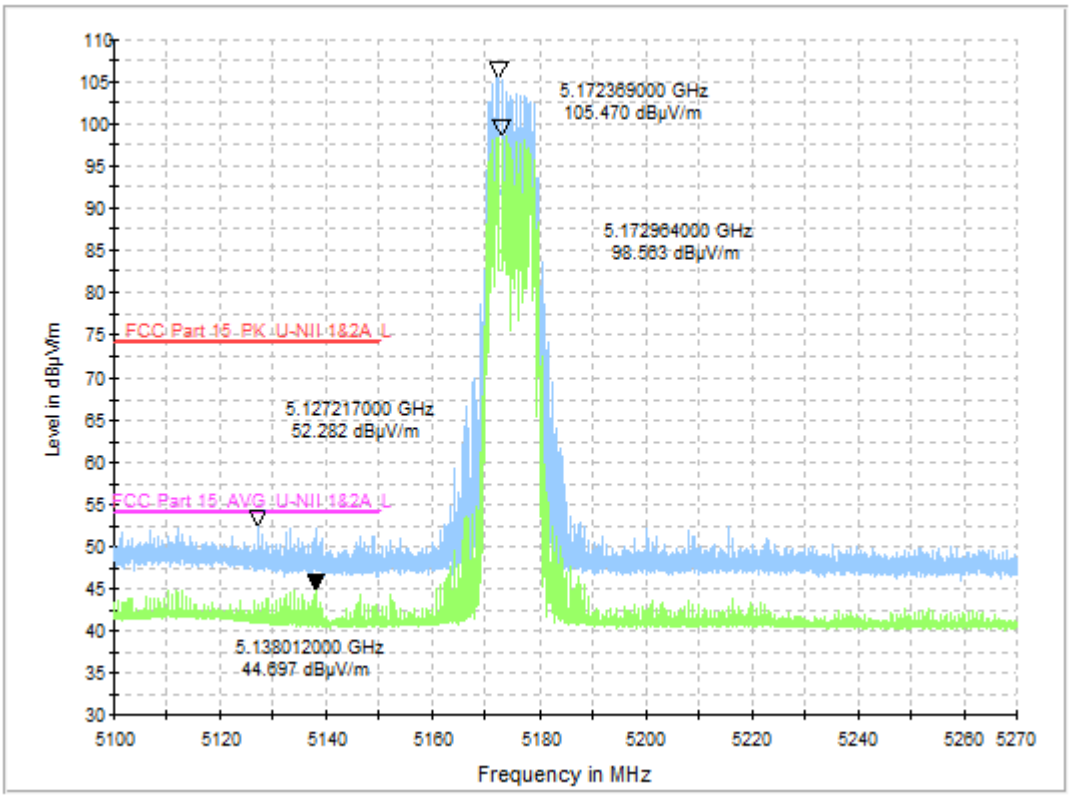
Mode:	802.11a20	Frequency:	5180MHz



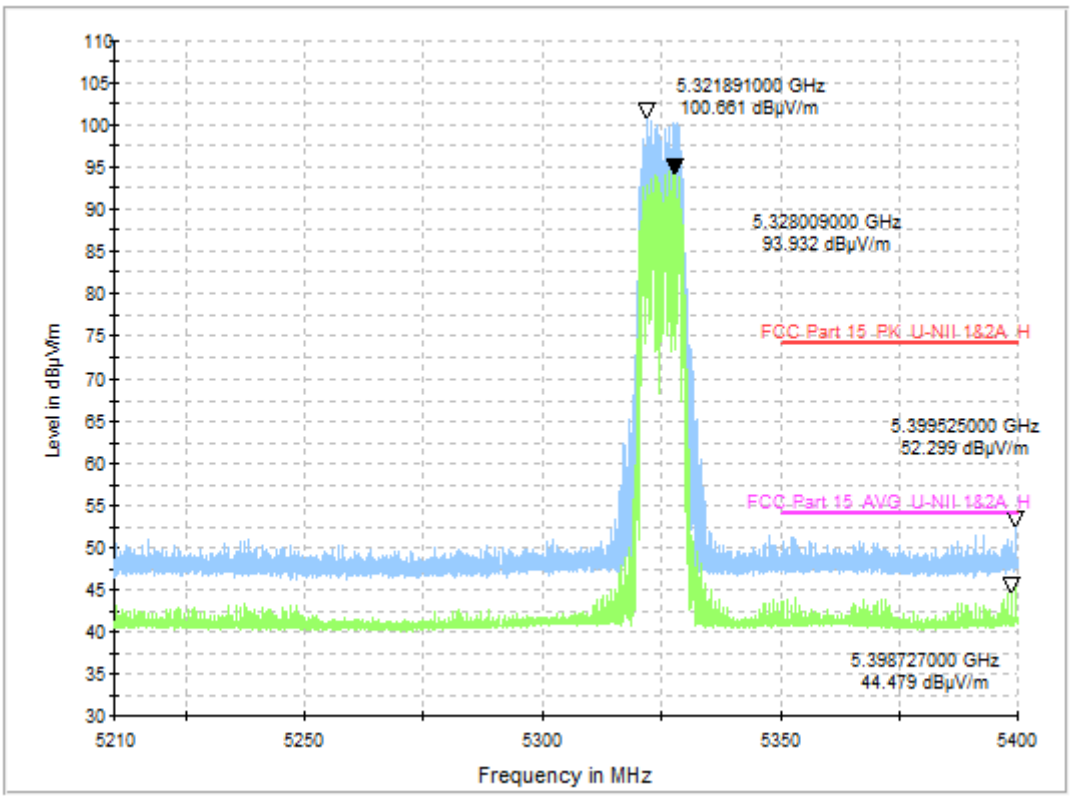
Mode:	802.11a20	Frequency:	5320MHz



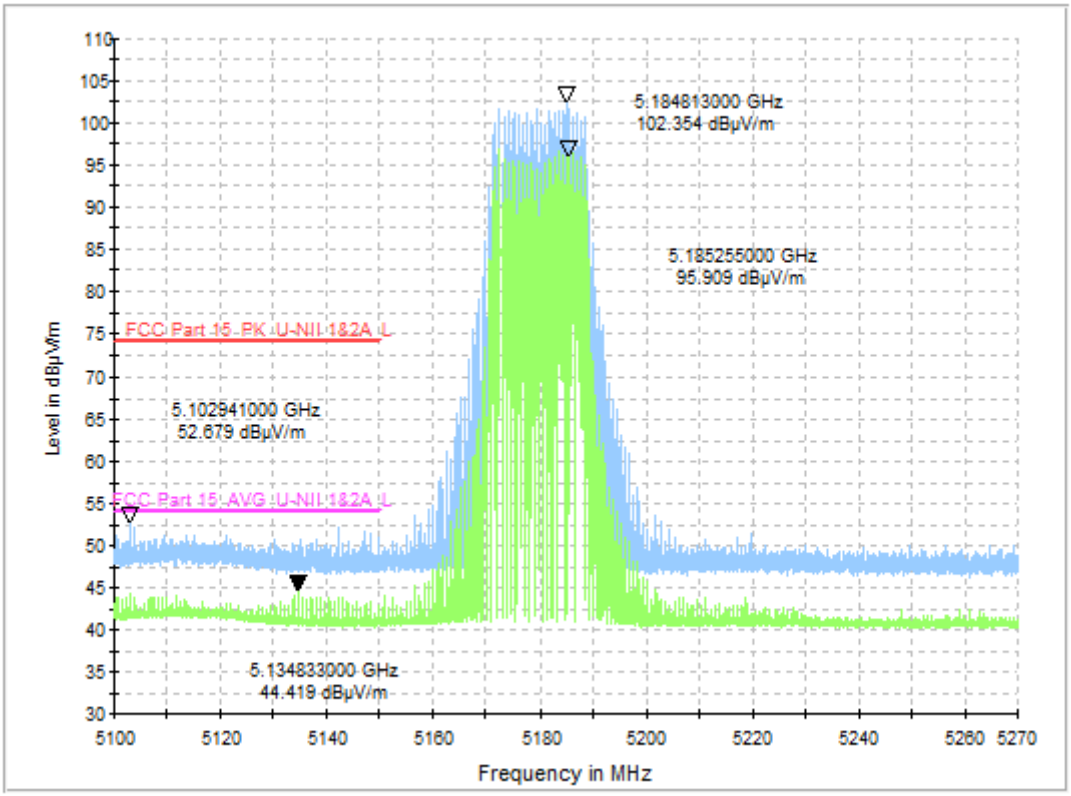
Mode:	802.11n(HT10)	Frequency:	5175MHz



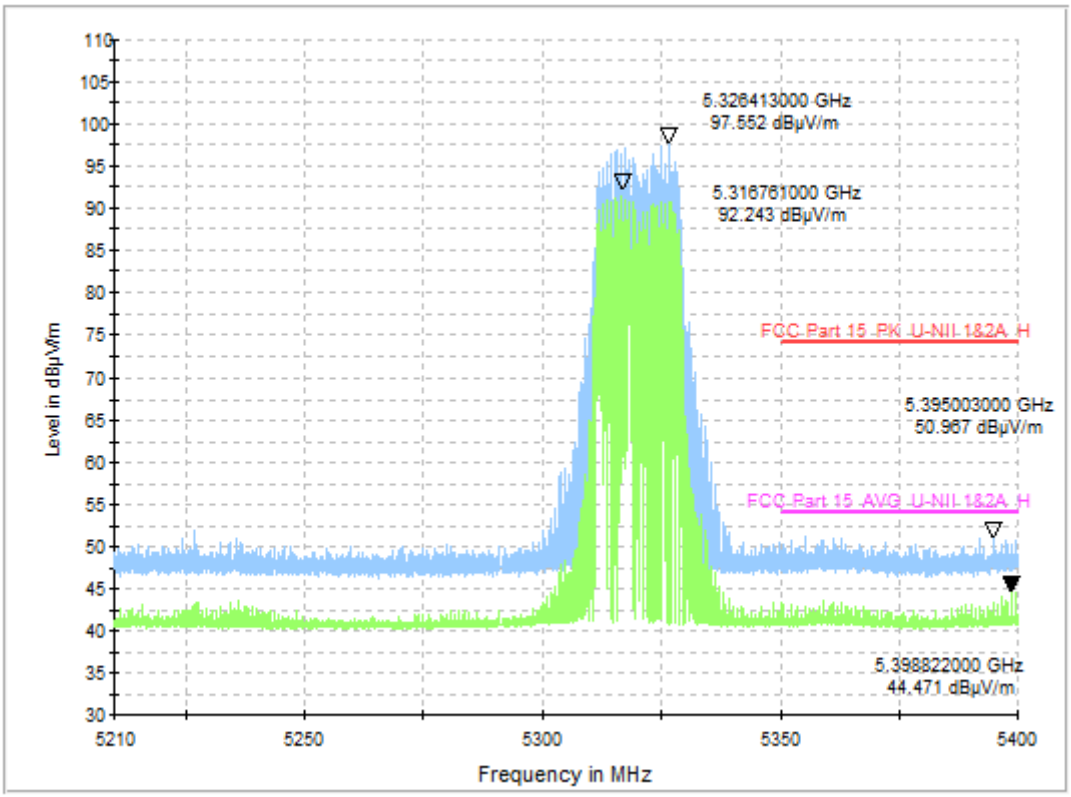
Mode:	802.11n(HT10)	Frequency:	5325MHz



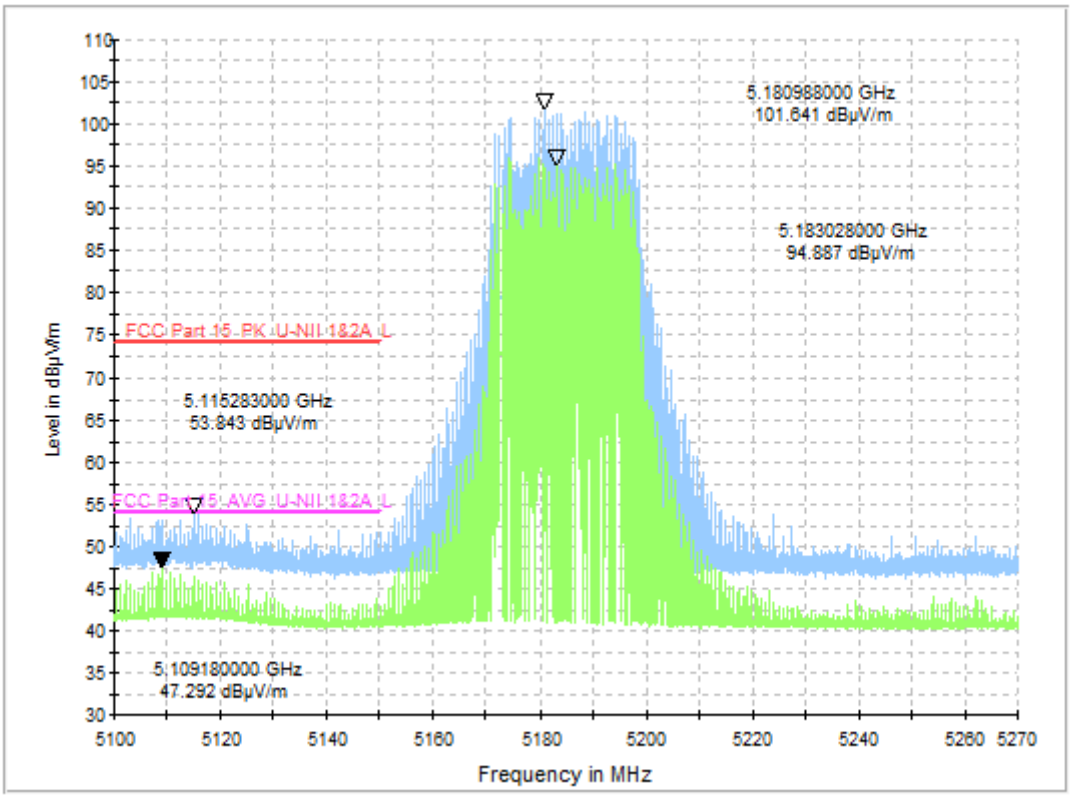
Mode:	802.11n(HT20)	Frequency:	5180MHz



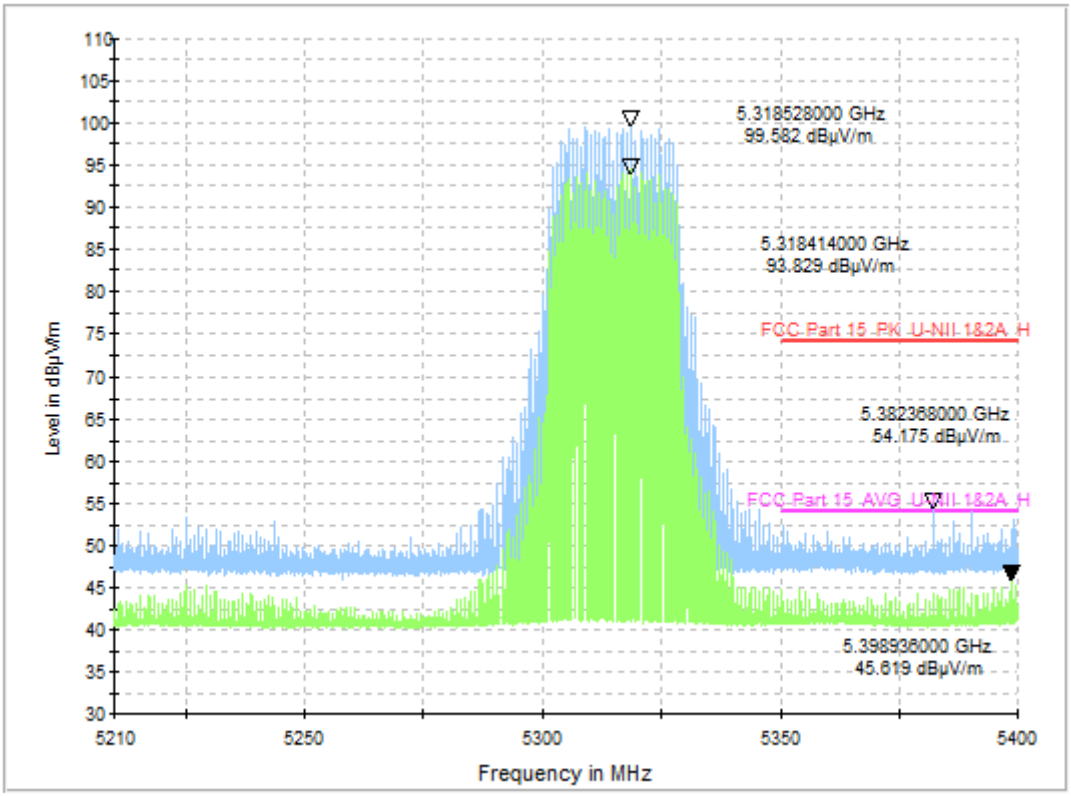
Mode:	802.11n(HT20)	Frequency:	5320MHz



Mode:	802.11n(HT30)	Frequency:	5185MHz

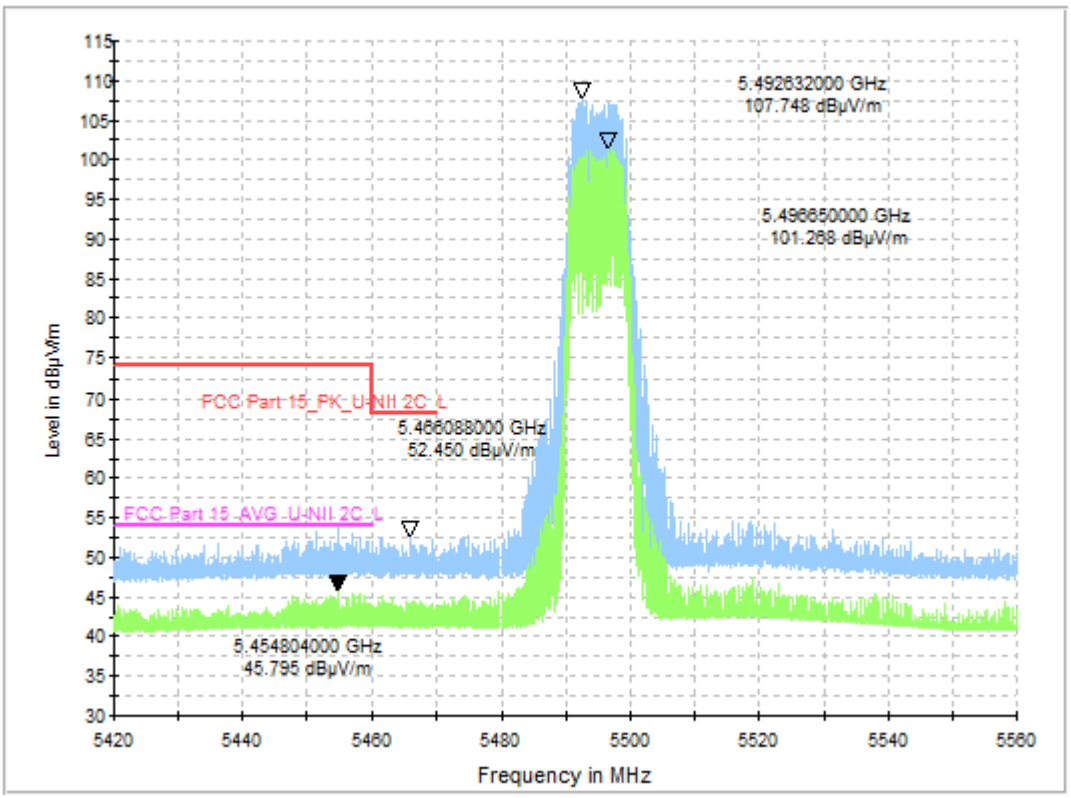


Mode:	802.11n(HT30)	Frequency:	5315MHz

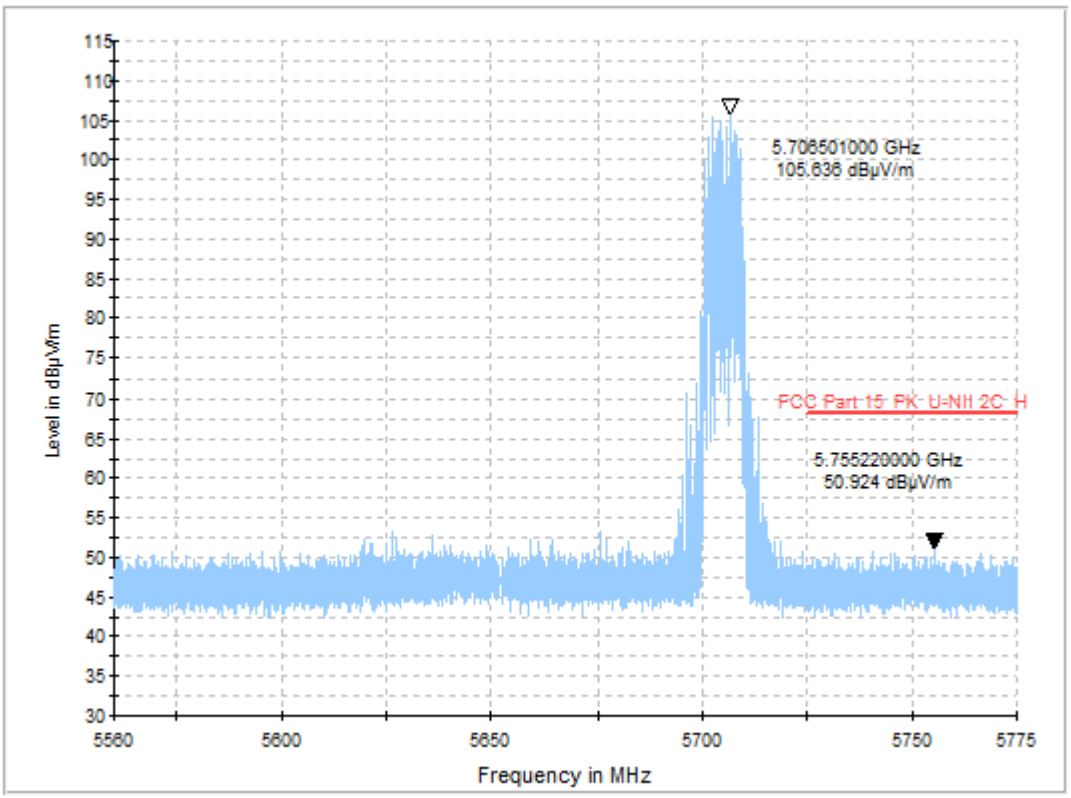


Band3

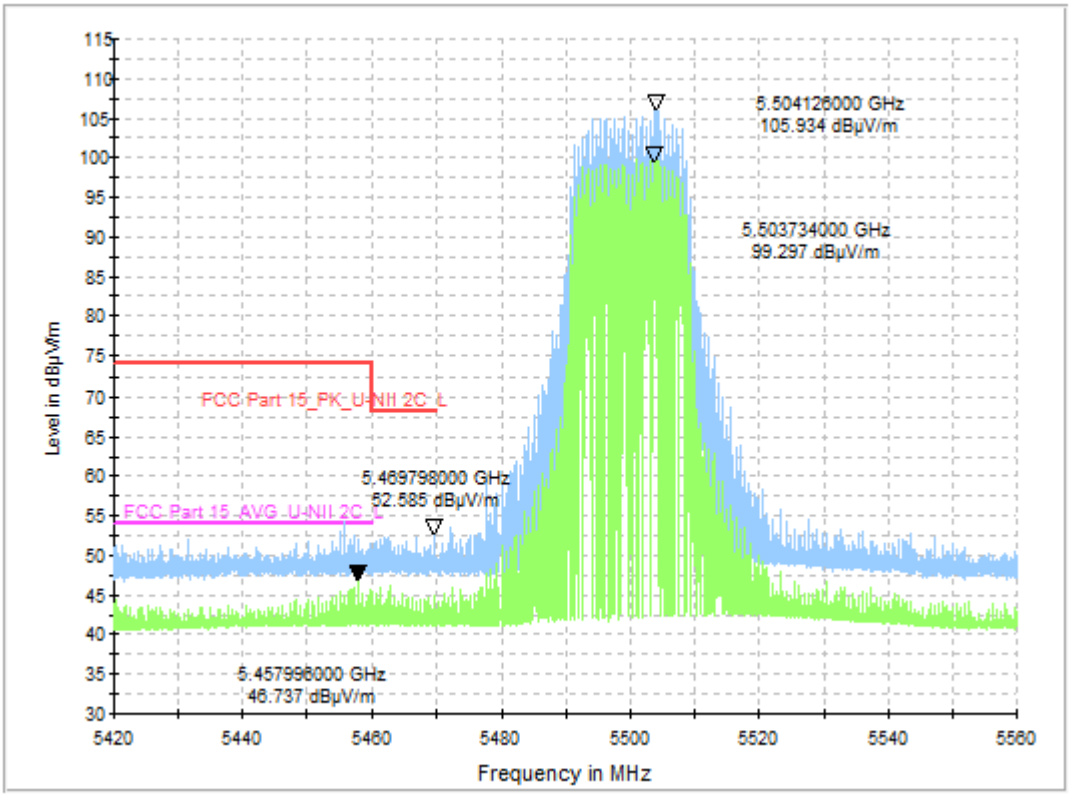
Mode:	802.11a10	Frequency:	5495MHz



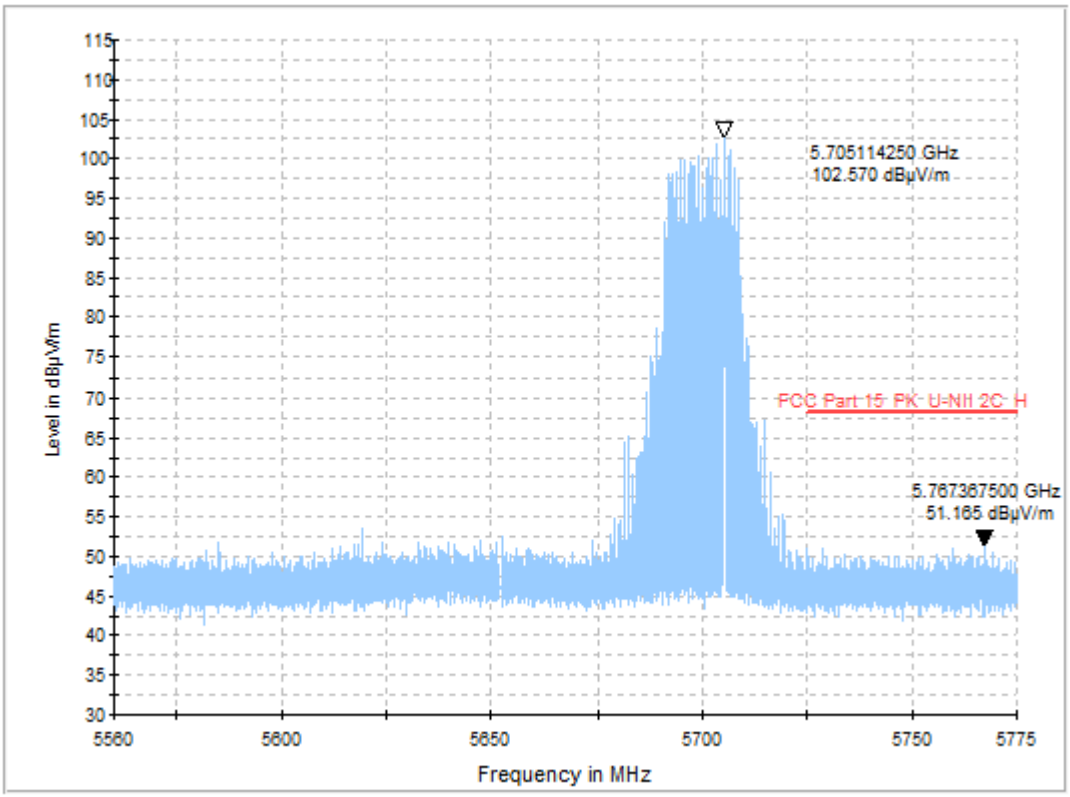
Mode:	802.11a10	Frequency:	5705MHz



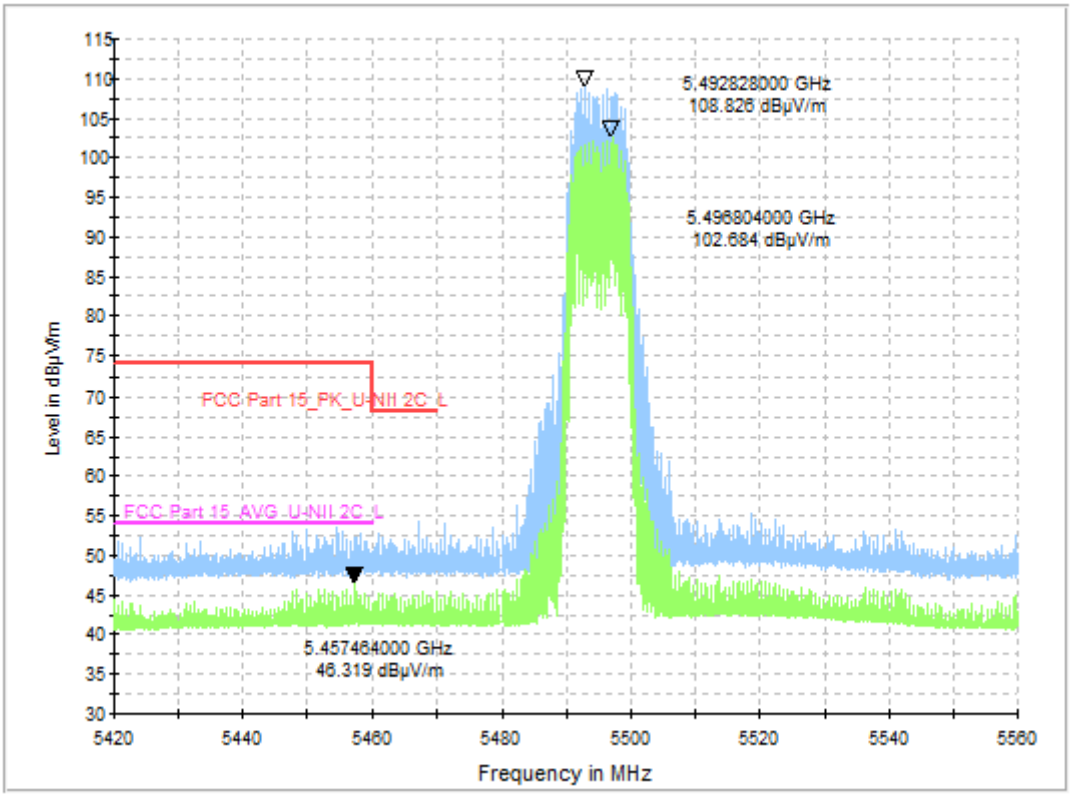
Mode:	802.11a20	Frequency:	5500MHz



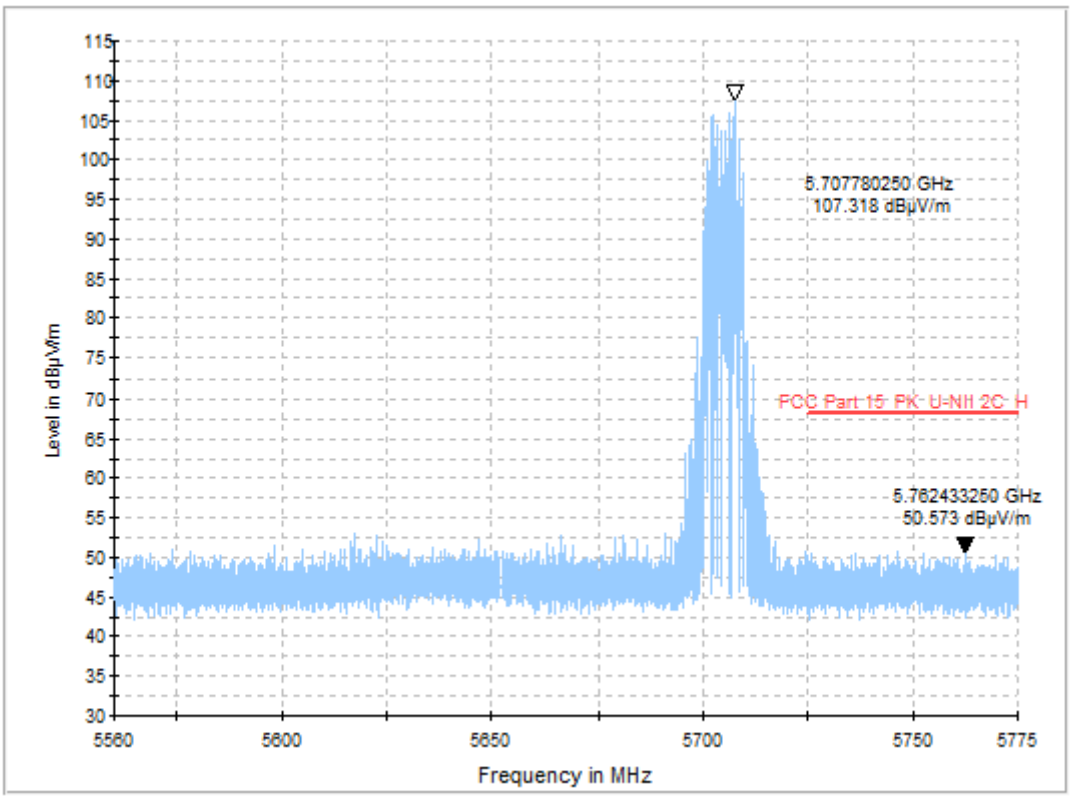
Mode:	802.11a20	Frequency:	5700MHz



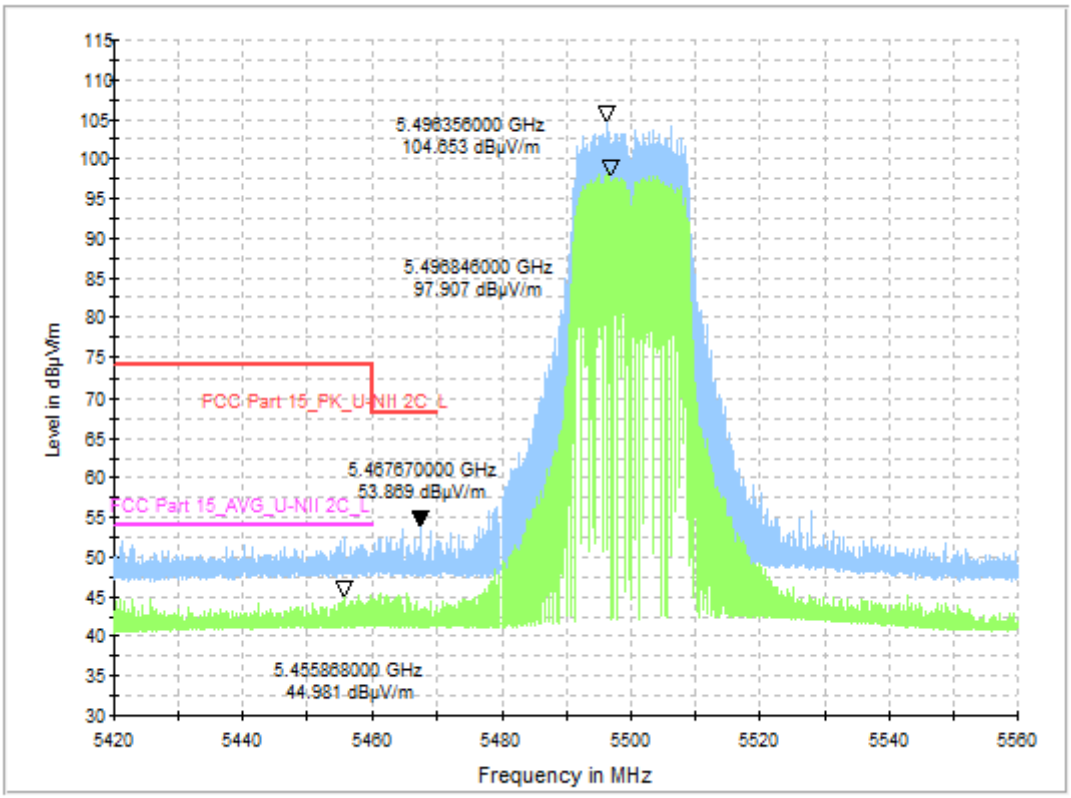
Mode:	802.11n(HT10)	Frequency:	5495MHz



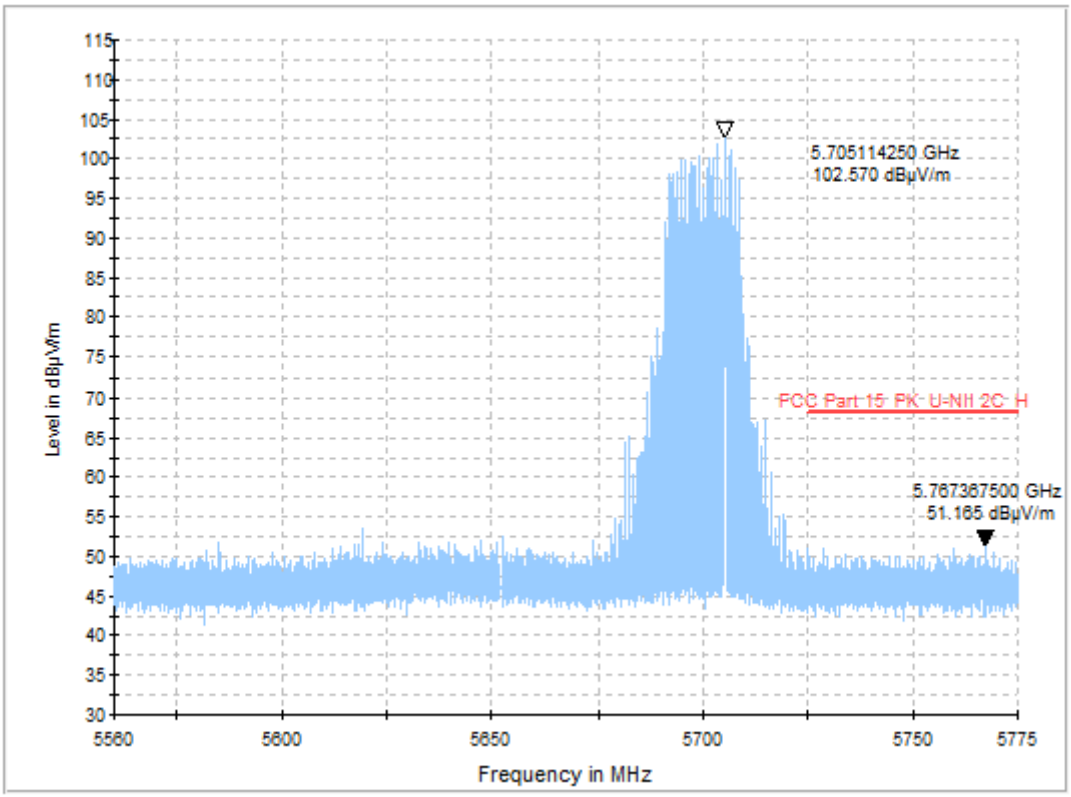
Mode:	802.11n(HT10)	Frequency:	5705MHz



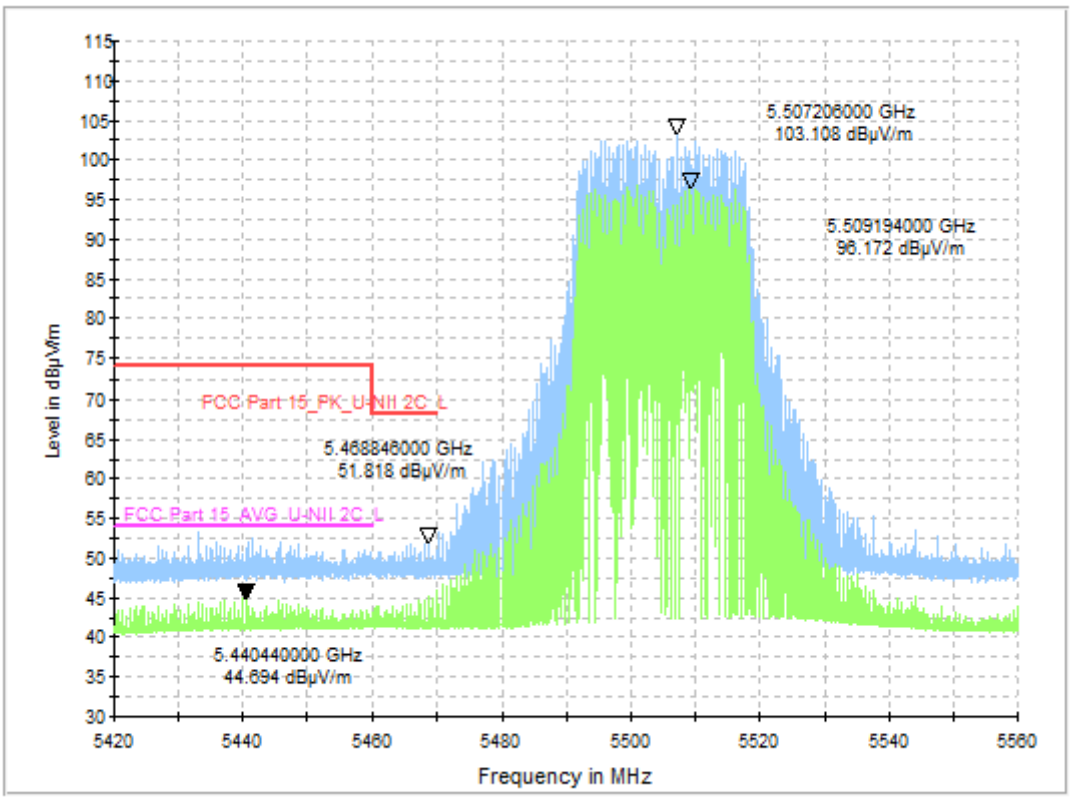
Mode:	802.11n(HT20)	Frequency:	5500MHz



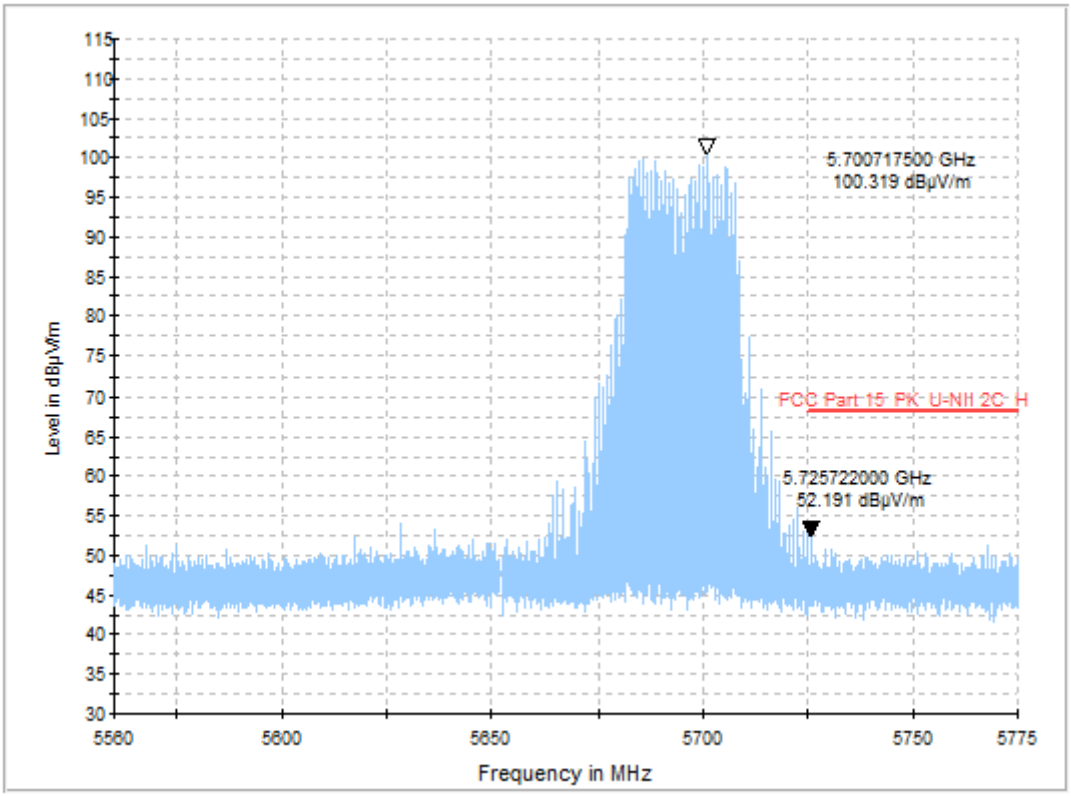
Mode:	802.11n(HT20)	Frequency:	5700MHz



Mode:	802.11n(HT30)	Frequency:	5505MHz

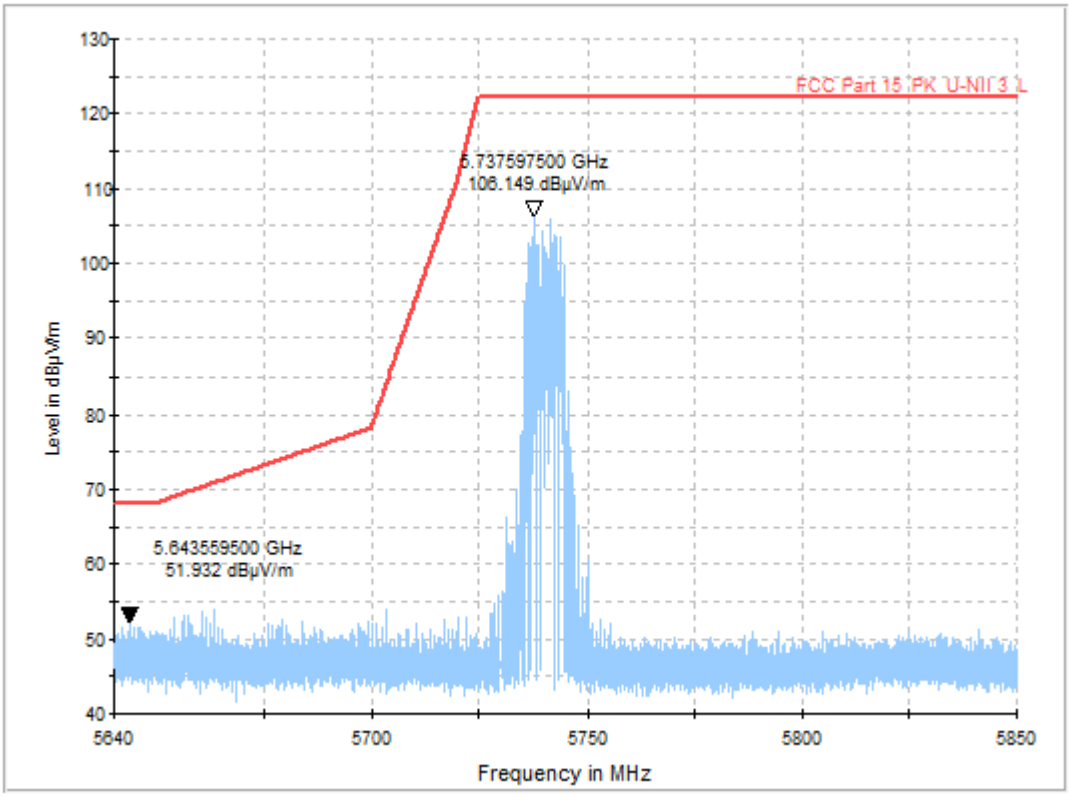


Mode:	802.11n(HT30)	Frequency:	5695MHz

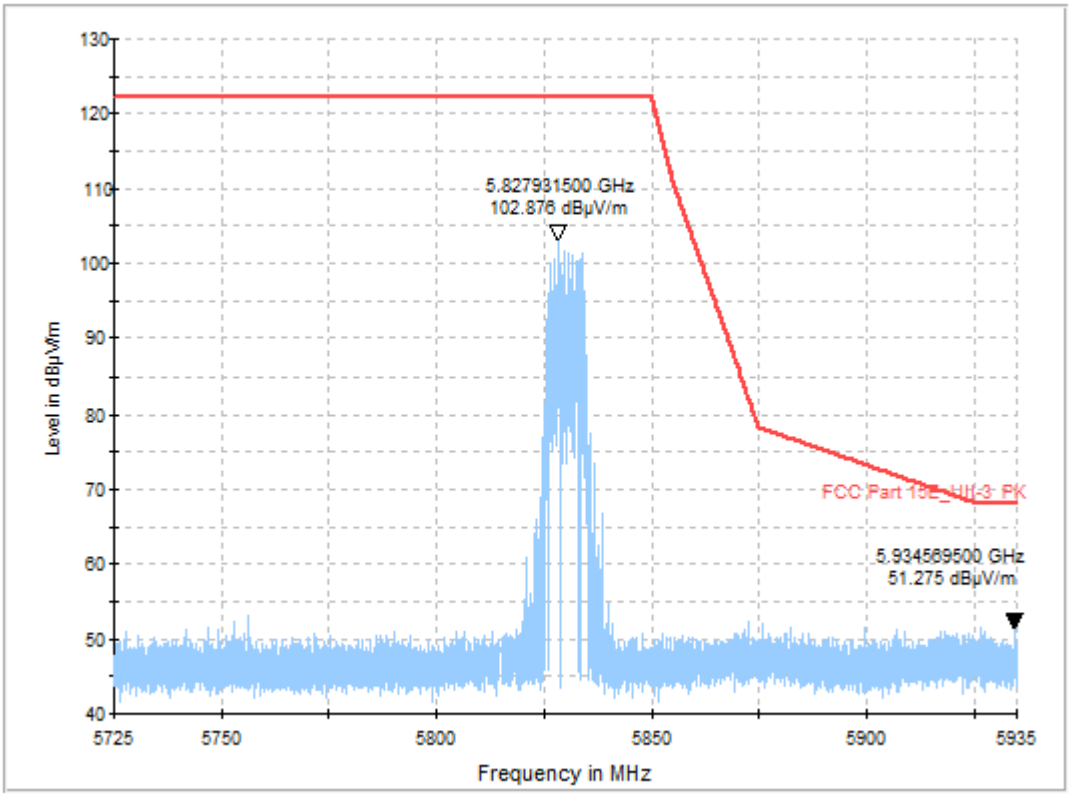


Band4

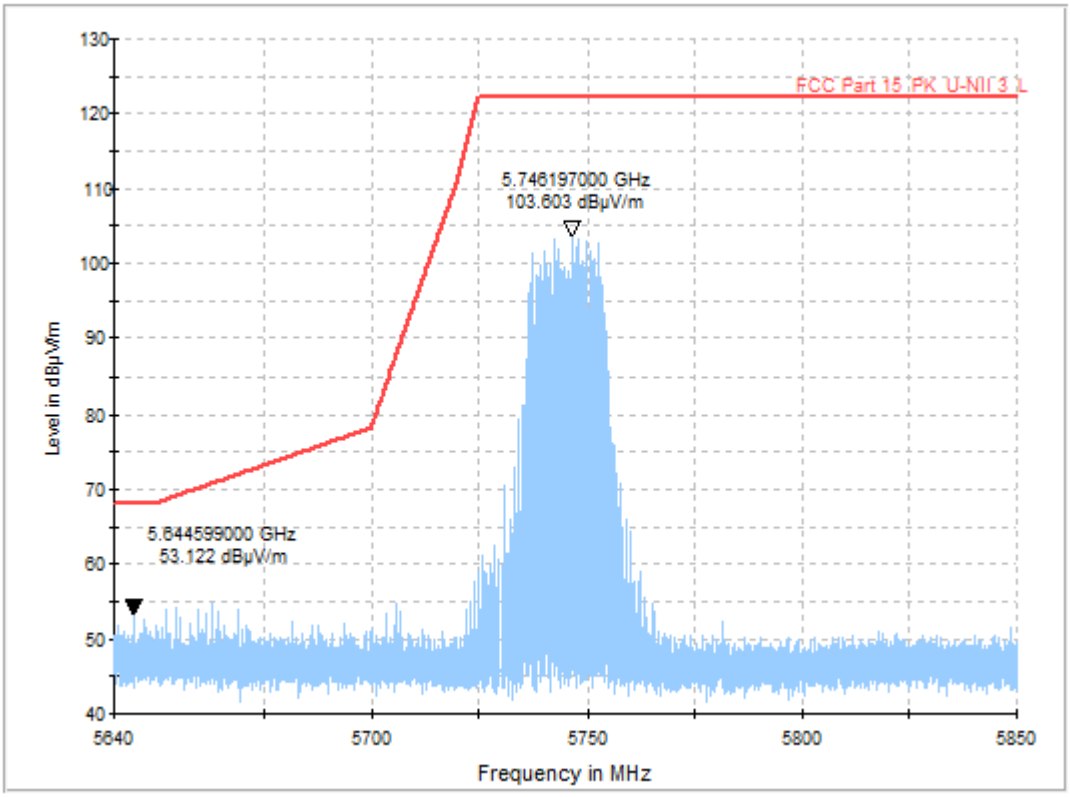
Mode:	802.11a10	Frequency:	5740MHz



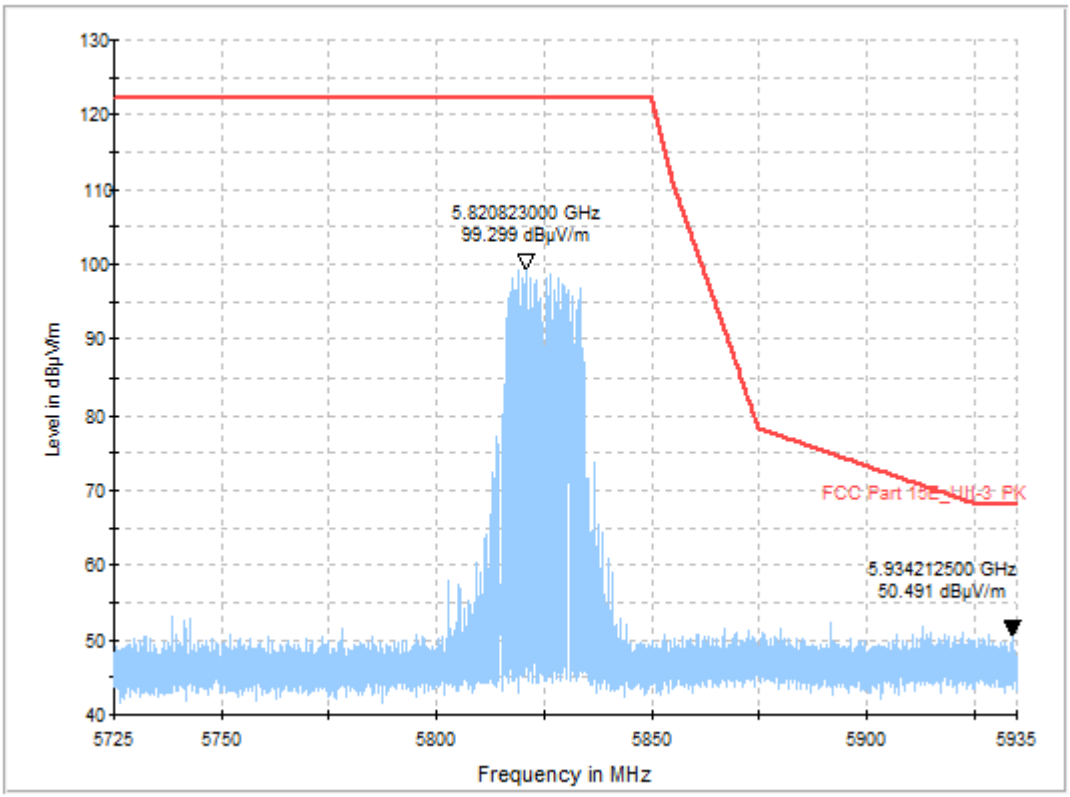
Mode:	802.11a10	Frequency:	5830MHz



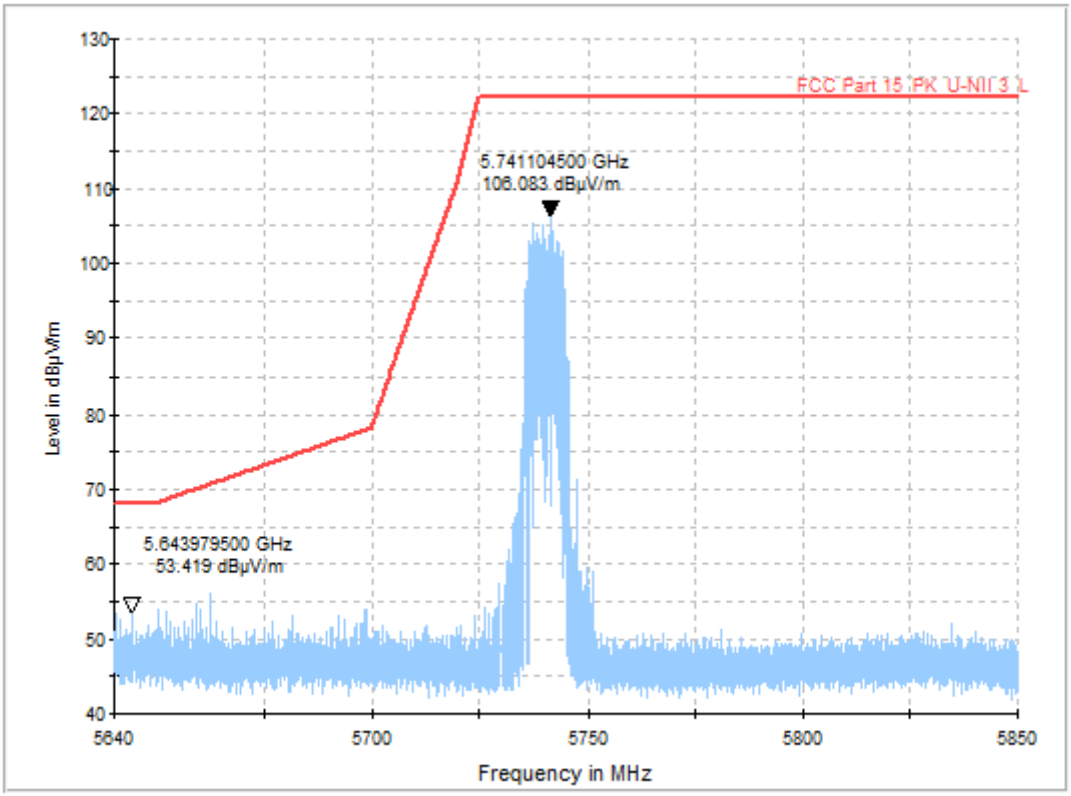
Mode:	802.11a20	Frequency:	5745MHz



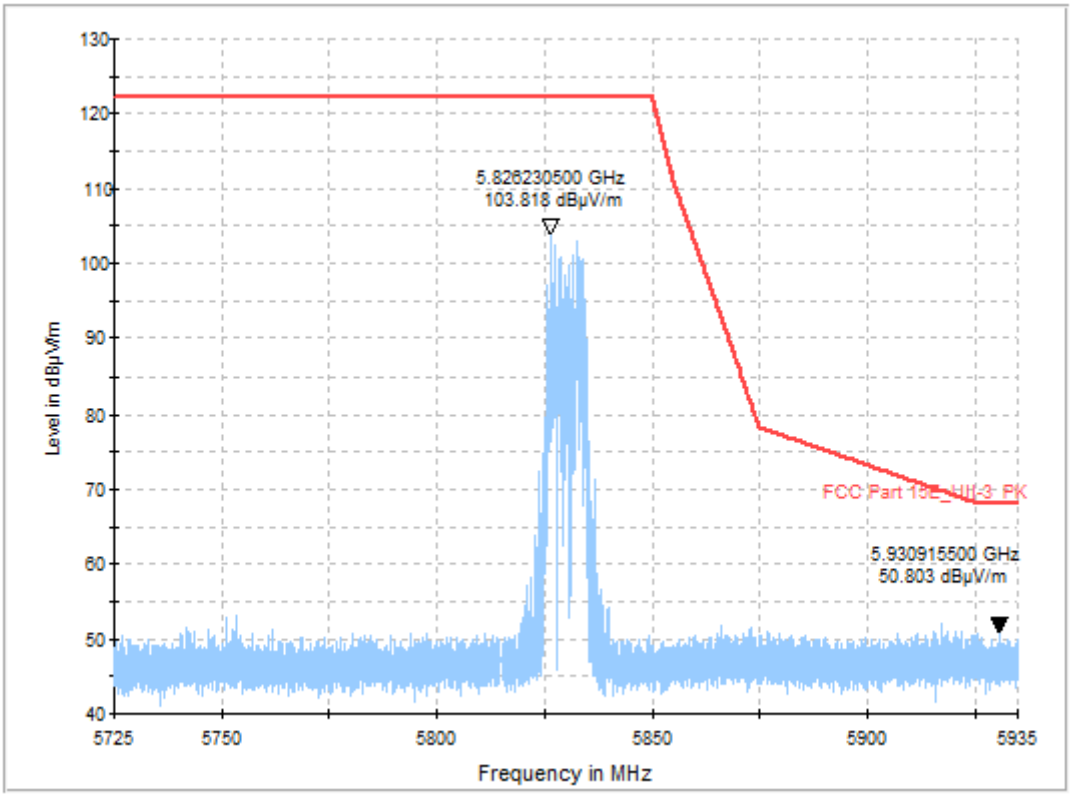
Mode:	802.11a20	Frequency:	5825MHz



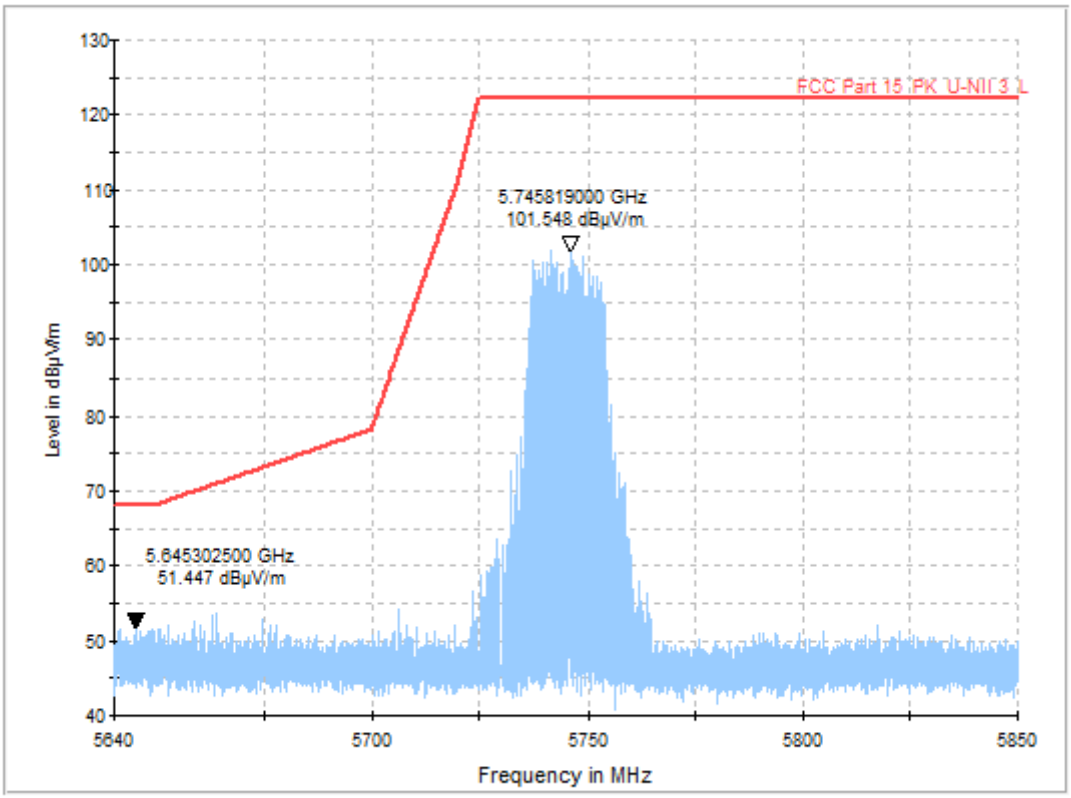
Mode:	802.11n(HT10)	Frequency:	5740MHz



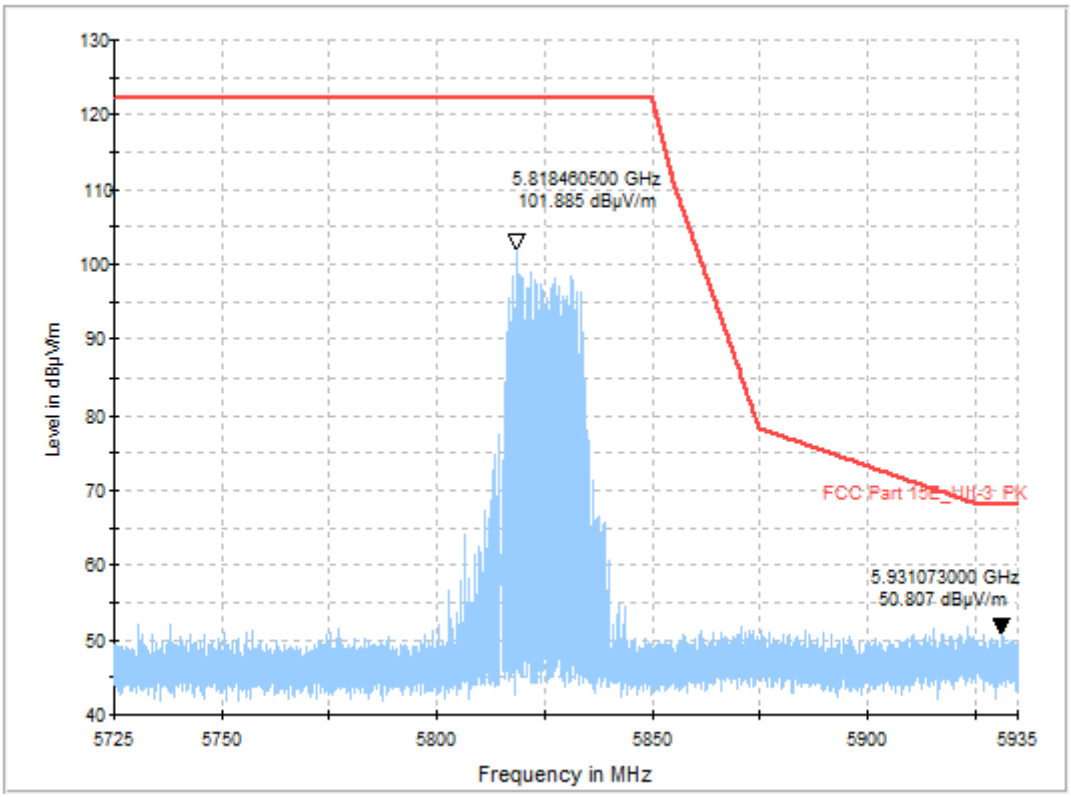
Mode:	802.11n(HT10)	Frequency:	5830MHz



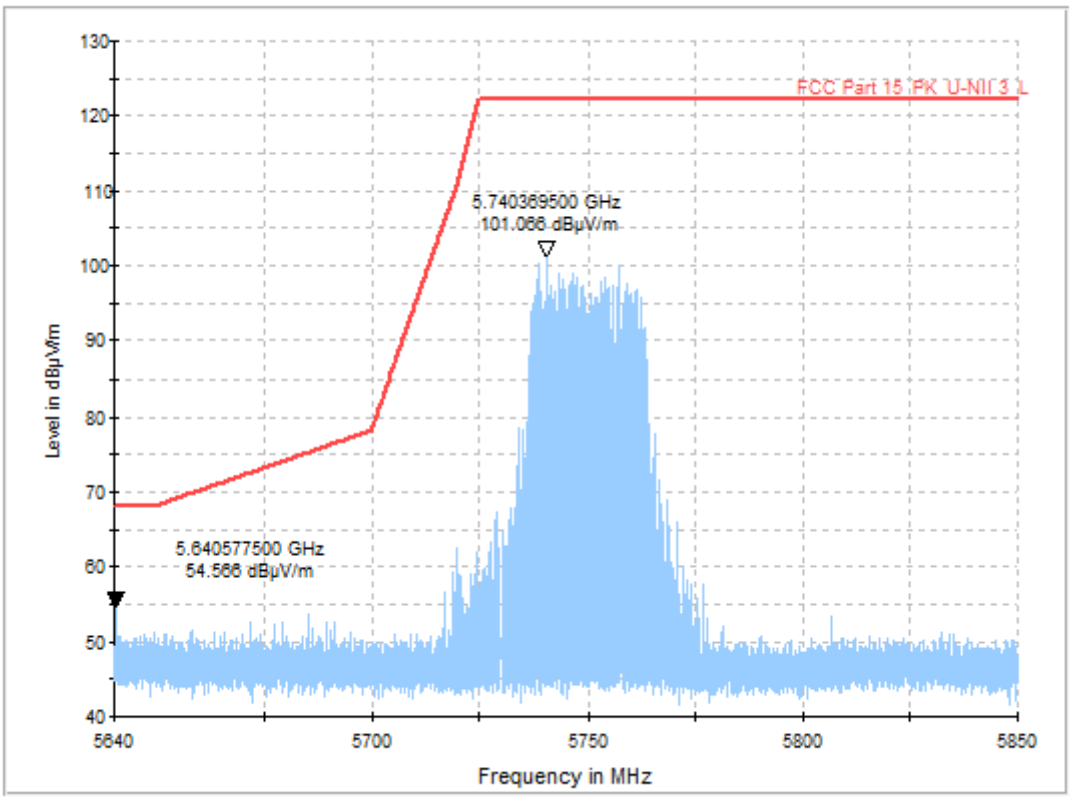
Mode:	802.11n(HT20)	Frequency:	5745MHz



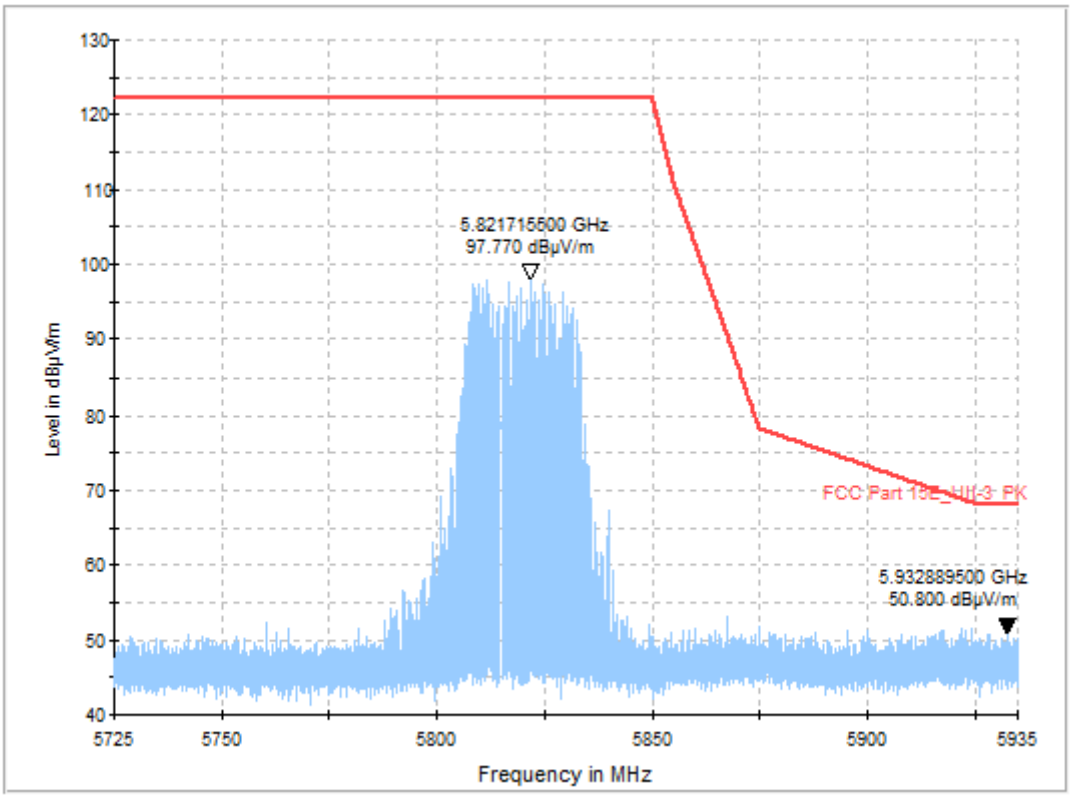
Mode:	802.11n(HT20)	Frequency:	5825MHz



Mode:	802.11n(HT30)	Frequency:	5750MHz



Mode:	802.11n(HT30)	Frequency:	5820MHz

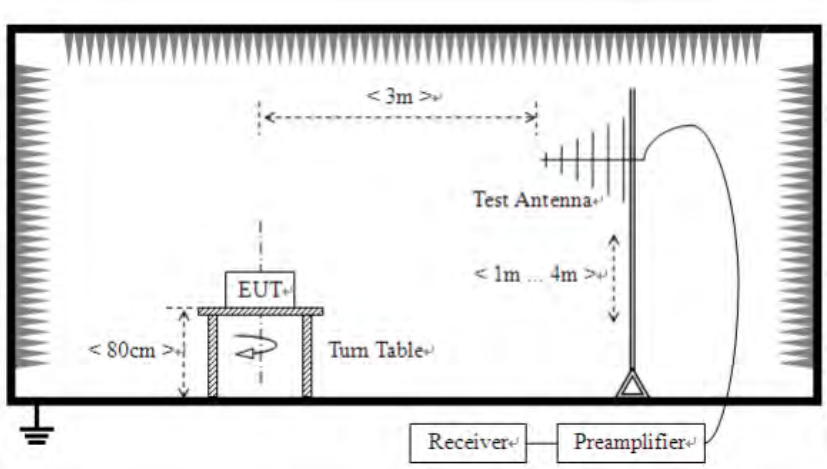
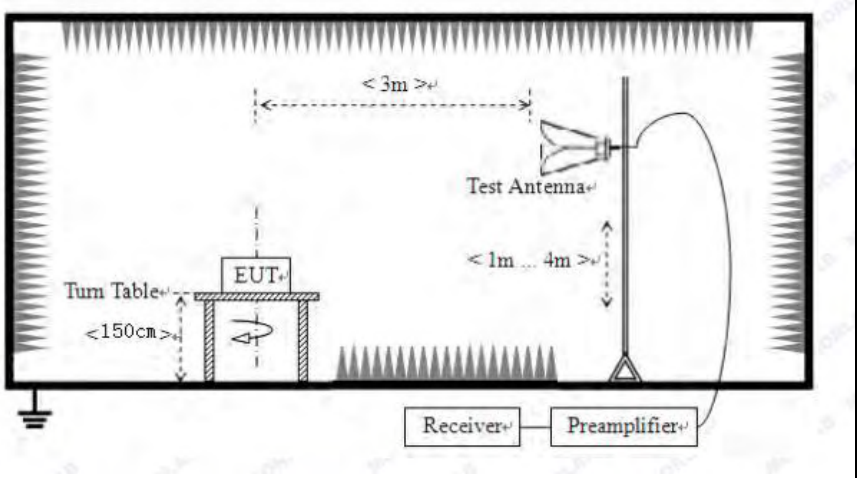


3.7 Radiated Emission

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209 and 15.205</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>30MHz to 40GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m (Semi-Anechoic Chamber)</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Value</th></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>AV</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></tr>
<tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>74.0</td><td>Peak Value</td></tr>
<tr><td>54.0</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Test Procedure:</td><td>
Substitution method was performed to determine the actual ERP emission levels of the EUT.
The following test procedure as below:

1>.Below 1GHz test procedure:
1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

2>.Above 1GHz test procedure:
1. On the test site as test setup graph above,the EUT shall be placed at the 1.5m support on the turntable and in the position closest to normal use as declared by the provider.
2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter.The output of the test antenna shall be connected to the measuring receiver.
3. The transmitter shall be switched on, if possible, without modulation and the measuring receiver shall be tuned to the frequency of the transmitter under test.
4. The test antenna shall be raised and lowered from 1m to 4m until a maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360 °in the horizontal plane, until the maximum signal level is
</td></tr>
</table>

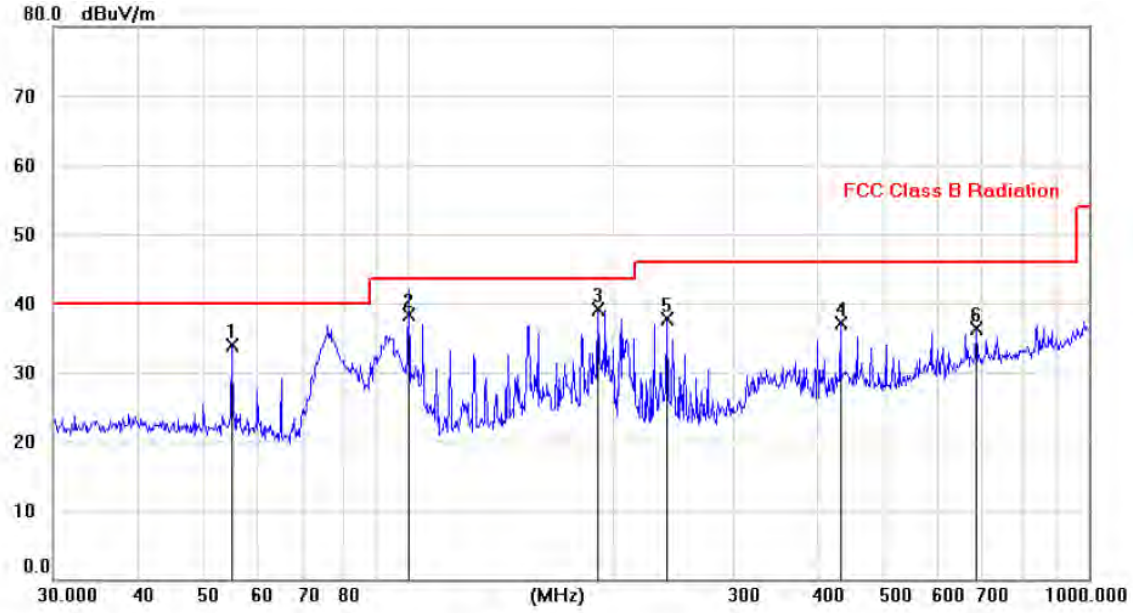
	detected by the measuring receiver. 5. Repeat step 4 for test frequency with the test antenna polarized horizontally. 6. Remove the transmitter and replace it with a substitution antenna 7. Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a nonradiating cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output. 8. Repeat step 7 with both antennas horizontally polarized for each test frequency. 9. Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps 7 and 8 by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula: EIRP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBi) where: Pg is the generator output power into the substitution antenna.
Test setup:	Below 1GHz  Above 1GHz 
Test Instruments:	Refer to section 5.10 for details

Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement Data:

Below 1GHz

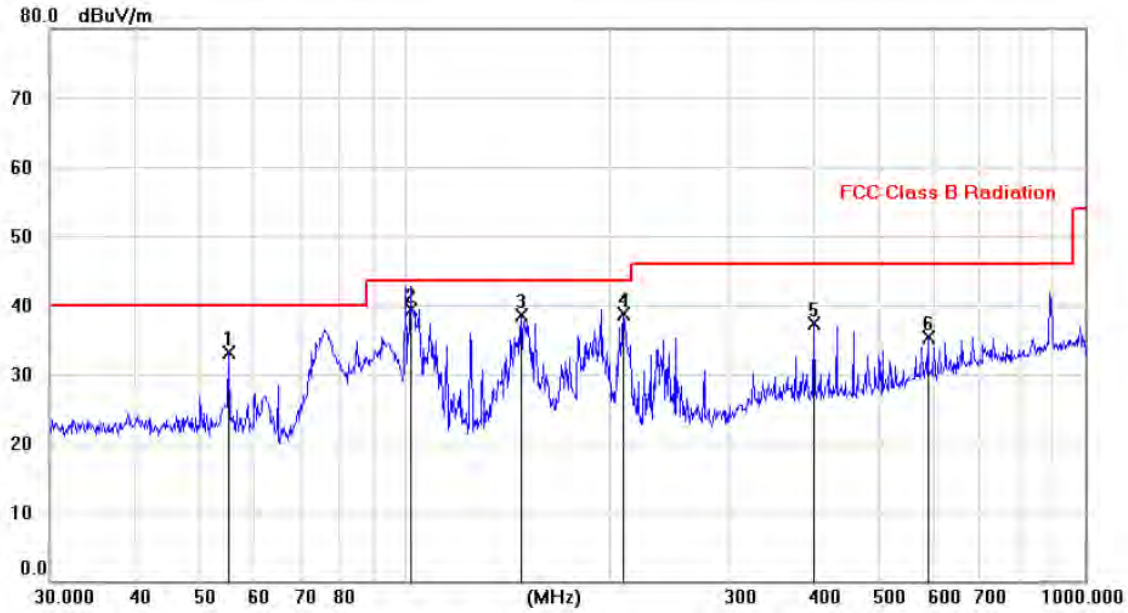
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		54.9951	20.37	13.57	33.94	40.00	-6.06	peak			
2		99.9945	27.37	10.85	38.22	43.50	-5.28	QP			
3	*	190.0047	27.62	11.47	39.09	43.50	-4.41	peak			
4		432.0403	19.90	17.13	37.03	46.00	-8.97	peak			
5		240.0149	25.18	12.55	37.73	46.00	-8.27	peak			
6		684.0253	14.90	21.48	36.38	46.00	-9.62	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		55.0016	19.63	13.57	33.20	40.00	-6.80	peak			
2	*	101.8820	28.20	11.03	39.23	43.50	-4.27	QP			
3		148.0944	23.62	14.92	38.54	43.50	-4.96	peak			
4		210.0235	27.55	11.07	38.62	43.50	-4.88	peak			
5		400.0108	21.05	16.24	37.29	46.00	-8.71	peak			
6		588.0107	15.38	19.98	35.36	46.00	-10.64	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Above 1GHz:

802.11a10 5175MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10350	PK	48.32	1.67	49.99	74	-24.01	Vertical
/	AVG	/	/	/	54	/	Vertical
15525	PK	46.54	3.78	50.32	74	-23.68	Vertical
/	AVG	/	/	/	54	/	Vertical
10350	PK	47.50	1.67	49.17	74	-24.83	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15525	PK	47.20	3.78	50.98	74	-23.02	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11a10 5200MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10400	PK	48.02	1.77	49.79	74	-24.21	Vertical
/	AVG	/	/	/	54	/	Vertical
15600	PK	47.02	3.85	50.87	74	-23.13	Vertical
/	AVG	/	/	/	54	/	Vertical
10400	PK	48.06	1.77	49.83	74	-24.17	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15600	PK	46.22	3.85	50.07	74	-23.93	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11a10 5245MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10490	PK	47.75	1.88	49.63	74	-24.37	Vertical
/	AVG	/	/	/	54	/	Vertical
15735	PK	46.45	4.03	50.48	74	-23.52	Vertical
/	AVG	/	/	/	54	/	Vertical
10490	PK	47.33	1.88	49.21	74	-24.79	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15735	PK	46.94	4.03	50.97	74	-23.03	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11a20 5180MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10360	PK	47.47	1.67	49.14	74	-24.86	Vertical
/	AVG	/	/	/	54	/	Vertical
15540	PK	46.49	3.8	50.29	74	-23.71	Vertical
/	AVG	/	/	/	54	/	Vertical
10360	PK	47.54	1.67	49.21	74	-24.79	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15540	PK	46.31	3.8	50.11	74	-23.89	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11a20 5200MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10400	PK	48.14	1.68	49.82	74	-24.18	Vertical
/	AVG	/	/	/	54	/	Vertical
15600	PK	46.96	3.85	50.81	74	-23.19	Vertical
/	AVG	/	/	/	54	/	Vertical
10400	PK	47.42	1.68	49.10	74	-24.90	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15600	PK	46.52	3.85	50.37	74	-23.63	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11a20 5240MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10480	PK	47.56	1.87	49.43	74	-24.57	Vertical
/	AVG	/	/	/	54	/	Vertical
15720	PK	46.29	4.02	50.31	74	-23.69	Vertical
/	AVG	/	/	/	54	/	Vertical
10480	PK	47.39	1.87	49.26	74	-24.74	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15720	PK	46.42	4.02	50.44	74	-23.56	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11n(HT10) 5175MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10350	PK	48.06	1.67	49.73	74	-24.27	Vertical
/	AVG	/	/	/	54	/	Vertical
15525	PK	47.02	3.78	50.80	74	-23.20	Vertical
/	AVG	/	/	/	54	/	Vertical
10350	PK	48.29	1.67	49.96	74	-24.04	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15525	PK	46.76	3.78	50.54	74	-23.46	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11n(HT10) 5200MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10400	PK	48.21	1.68	49.89	74	-24.11	Vertical
/	AVG	/	/	/	54	/	Vertical
15600	PK	46.63	3.85	50.48	74	-23.52	Vertical
/	AVG	/	/	/	54	/	Vertical
10400	PK	48.23	1.68	49.91	74	-24.09	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15600	PK	46.24	3.85	50.09	74	-23.91	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11n(HT10) 5245MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10490	PK	47.75	1.88	49.63	74	-24.37	Vertical
/	AVG	/	/	/	54	/	Vertical
15735	PK	46.76	4.03	50.79	74	-23.21	Vertical
/	AVG	/	/	/	54	/	Vertical
10490	PK	47.99	1.88	49.87	74	-24.13	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15735	PK	46.94	4.03	50.97	74	-23.03	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11n(HT20) 5180MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10360	PK	47.92	1.67	49.59	74	-24.41	Vertical
/	AVG	/	/	/	54	/	Vertical
15540	PK	46.45	3.8	50.25	74	-23.75	Vertical
/	AVG	/	/	/	54	/	Vertical
10360	PK	48.18	1.67	49.85	74	-24.15	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15540	PK	46.31	3.8	50.11	74	-23.89	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11n(HT20) 5200MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10400	PK	47.77	1.68	49.45	74	-24.55	Vertical
/	AVG	/	/	/	54	/	Vertical
15600	PK	46.43	3.85	50.28	74	-23.72	Vertical
/	AVG	/	/	/	54	/	Vertical
10400	PK	47.41	1.68	49.09	74	-24.91	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15600	PK	46.79	3.85	50.64	74	-23.36	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11n(HT20) 5240MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10480	PK	47.38	1.87	49.25	74	-24.75	Vertical
/	AVG	/	/	/	54	/	Vertical
15720	PK	46.46	4.02	50.48	74	-23.52	Vertical
/	AVG	/	/	/	54	/	Vertical
10480	PK	47.90	1.87	49.77	74	-24.23	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15720	PK	46.91	4.02	50.93	74	-23.07	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11n(HT30) 5185MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10370	PK	47.48	1.67	49.15	74	-24.85	Vertical
/	AVG	/	/	/	54	/	Vertical
15555	PK	46.44	3.8	50.24	74	-23.76	Vertical
/	AVG	/	/	/	54	/	Vertical
10370	PK	47.37	1.67	49.04	74	-24.96	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15555	PK	47.10	3.8	50.90	74	-23.10	Horizontal
/	AVG	/	/	/	54	/	Horizontal

802.11n(HT30) 5235MHz

Frequency (MHz)	Detector	Read Level (dBuV)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	polarization
10470	PK	47.71	1.86	49.57	74	-24.43	Vertical
/	AVG	/	/	/	54	/	Vertical
15705	PK	46.86	4.01	50.87	74	-23.13	Vertical
/	AVG	/	/	/	54	/	Vertical
10470	PK	47.66	1.876	49.53	74	-24.47	Horizontal
/	AVG	/	/	/	54	/	Horizontal
15705	PK	46.25	4.01	50.26	74	-23.74	Horizontal
/	AVG	/	/	/	54	/	Horizontal

Note:

1. Level = Read Level + Antenna Factor+ Cable loss- Preamp Factor.

2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn’t be performed.

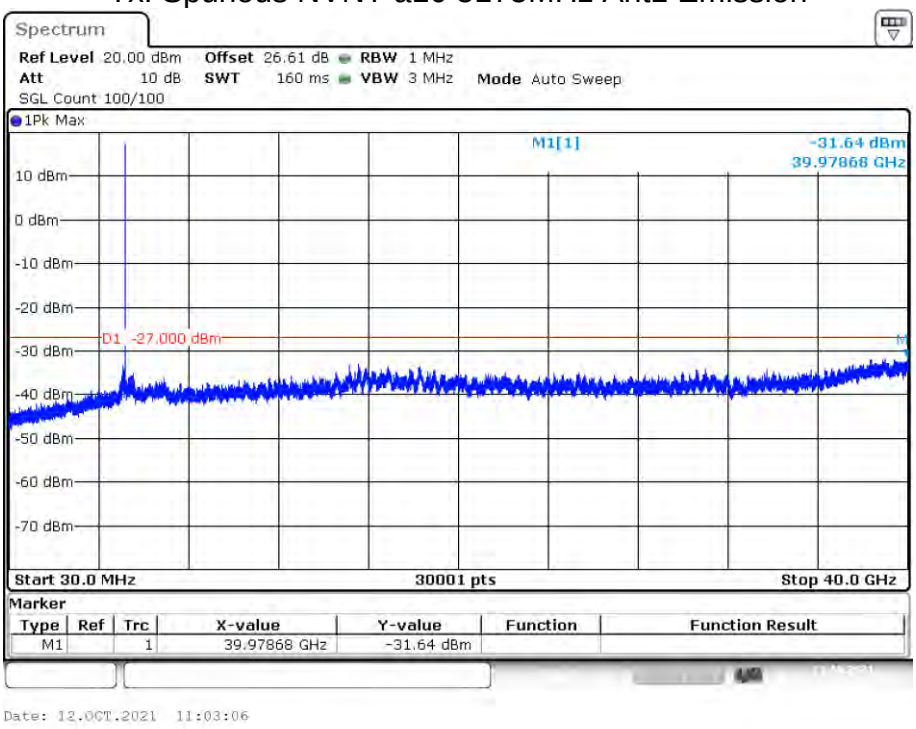
4. This Report only show the test plots of the worst case (U-NII-1).

Band 1

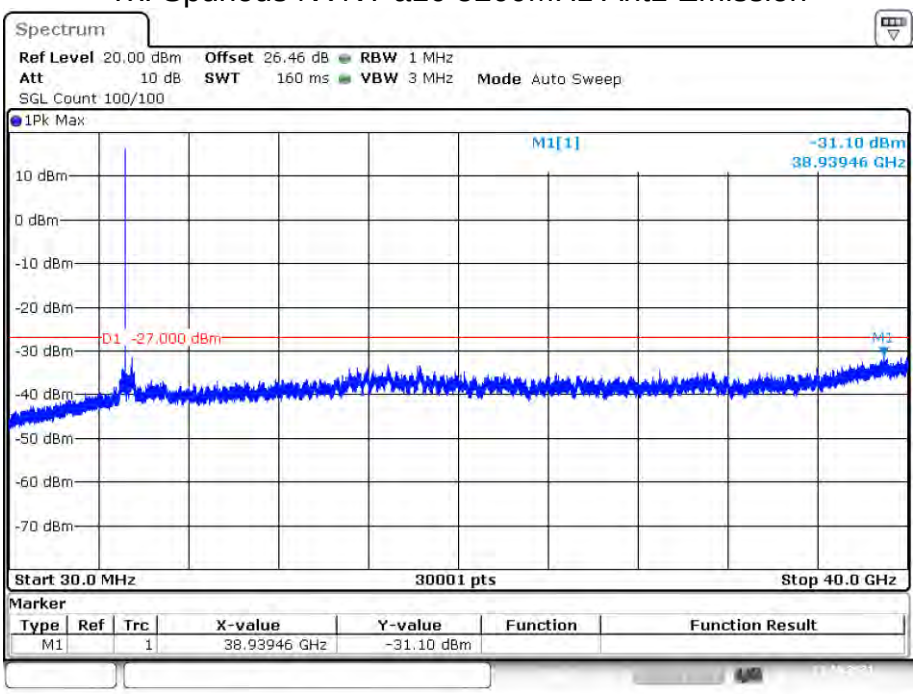
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a10	5175	Ant1	-31.64	-27	Pass
NVNT	a10	5200	Ant1	-31.1	-27	Pass
NVNT	a10	5245	Ant1	-31.34	-27	Pass
NVNT	a20	5180	Ant1	-31.44	-27	Pass
NVNT	a20	5200	Ant1	-31.19	-27	Pass
NVNT	a20	5240	Ant1	-31.47	-27	Pass
NVNT	n10	5175	Ant1	-31.51	-27	Pass
NVNT	n10	5200	Ant1	-31.21	-27	Pass
NVNT	n10	5245	Ant1	-31.51	-27	Pass
NVNT	n20	5180	Ant1	-31.49	-27	Pass
NVNT	n20	5200	Ant1	-31.7	-27	Pass
NVNT	n20	5240	Ant1	-30.51	-27	Pass
NVNT	n30	5185	Ant1	-30.81	-27	Pass
NVNT	n30	5235	Ant1	-31.21	-27	Pass

Tx. Spurious NVNT a10 5175MHz Ant1 Emission

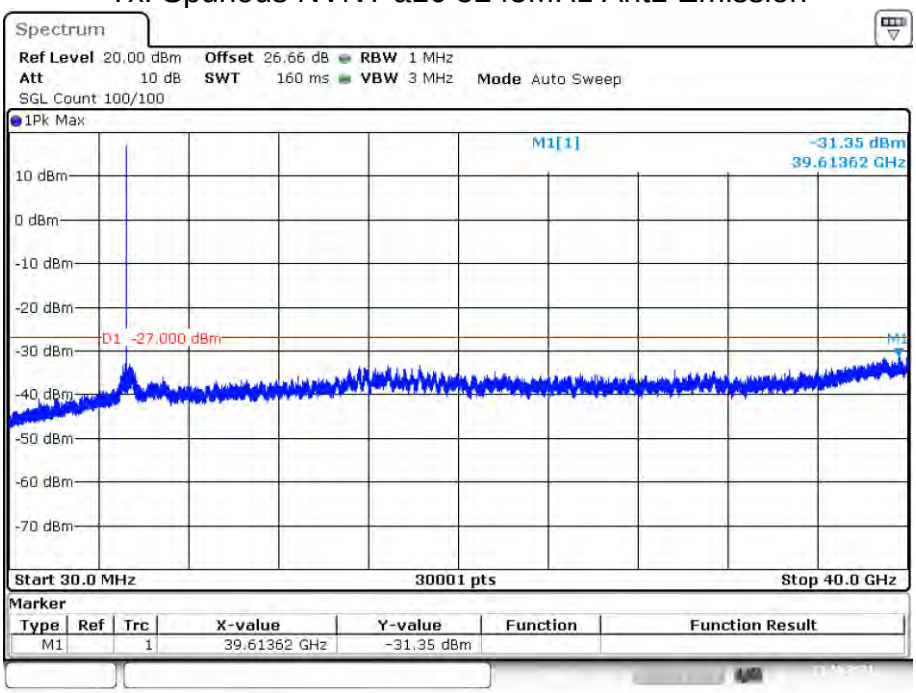


Tx. Spurious NVNT a10 5200MHz Ant1 Emission



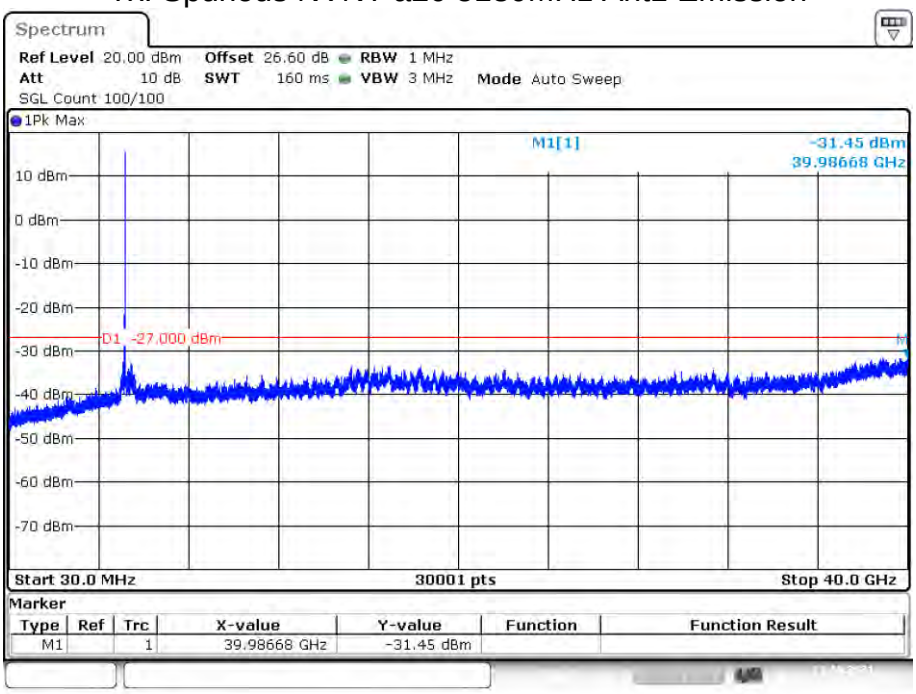
Date: 12.OCT.2021 11:08:18

Tx. Spurious NVNT a10 5245MHz Ant1 Emission



Date: 12.OCT.2021 11:15:07

Tx. Spurious NVNT a20 5180MHz Ant1 Emission



Date: 12.OCT.2021 11:51:50

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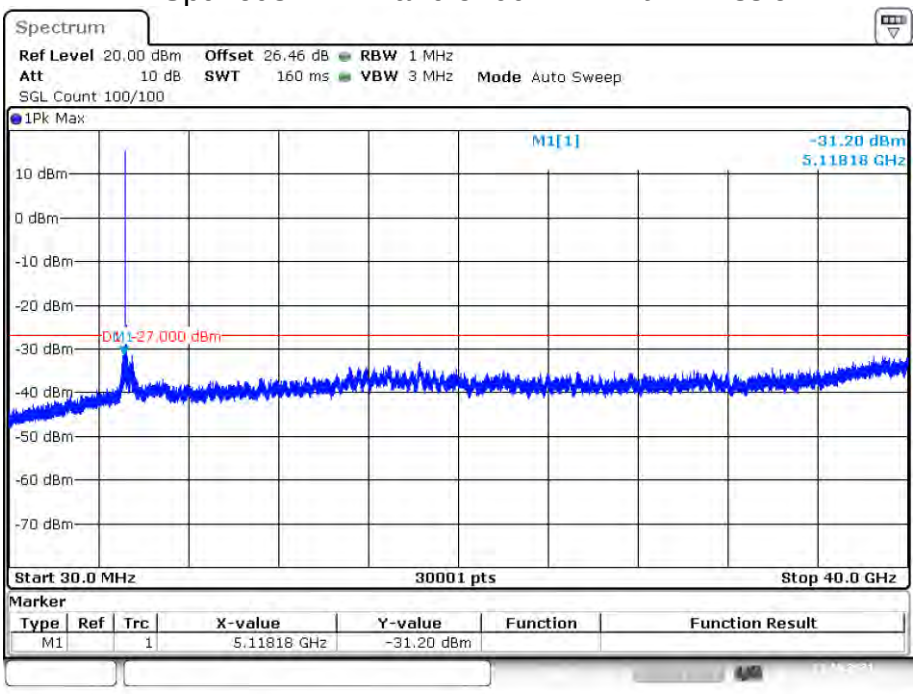
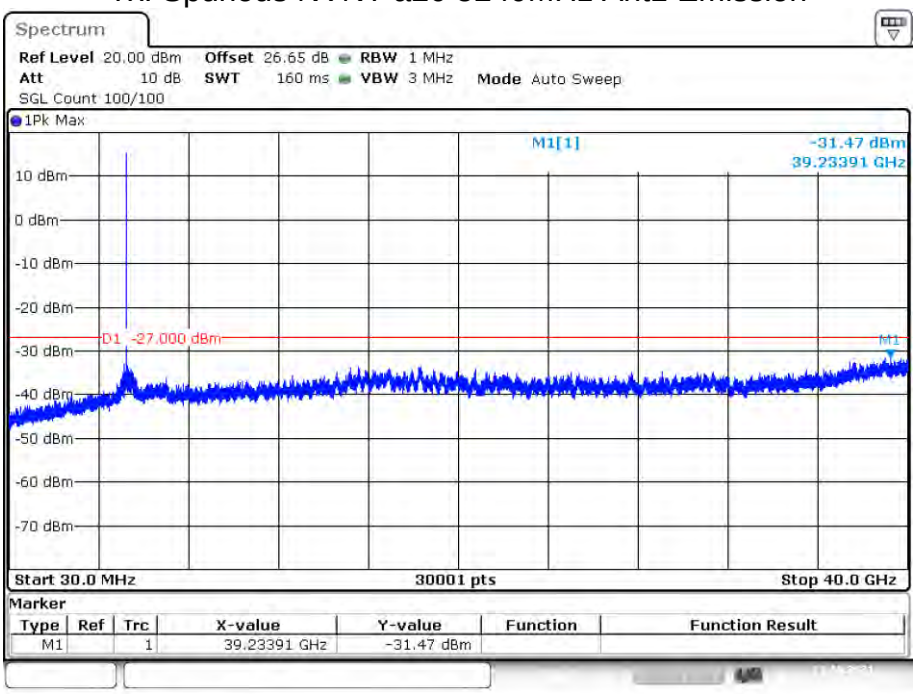


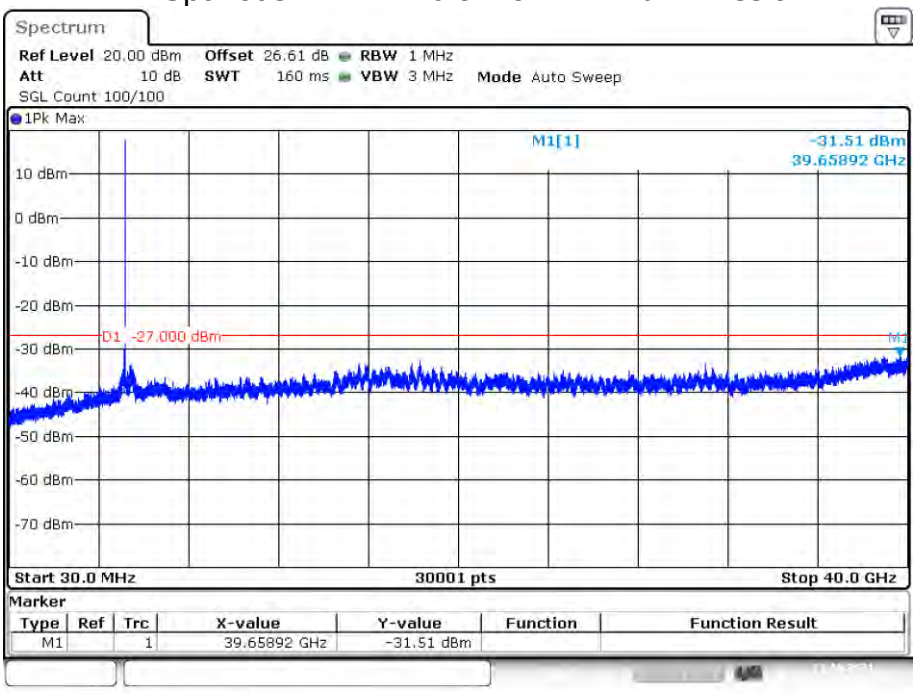
Date: 12.OCT.2021 11:56:57

Tx. Spurious NVNT a20 5240MHz Ant1 Emission



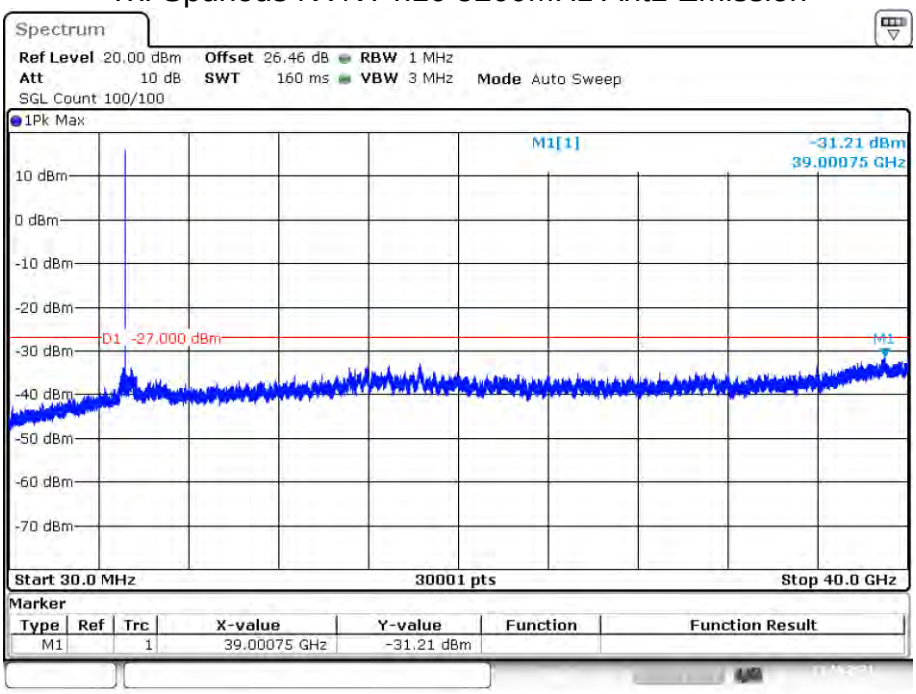
Date: 12.OCT.2021 12:07:23

Tx. Spurious NVNT n10 5175MHz Ant1 Emission



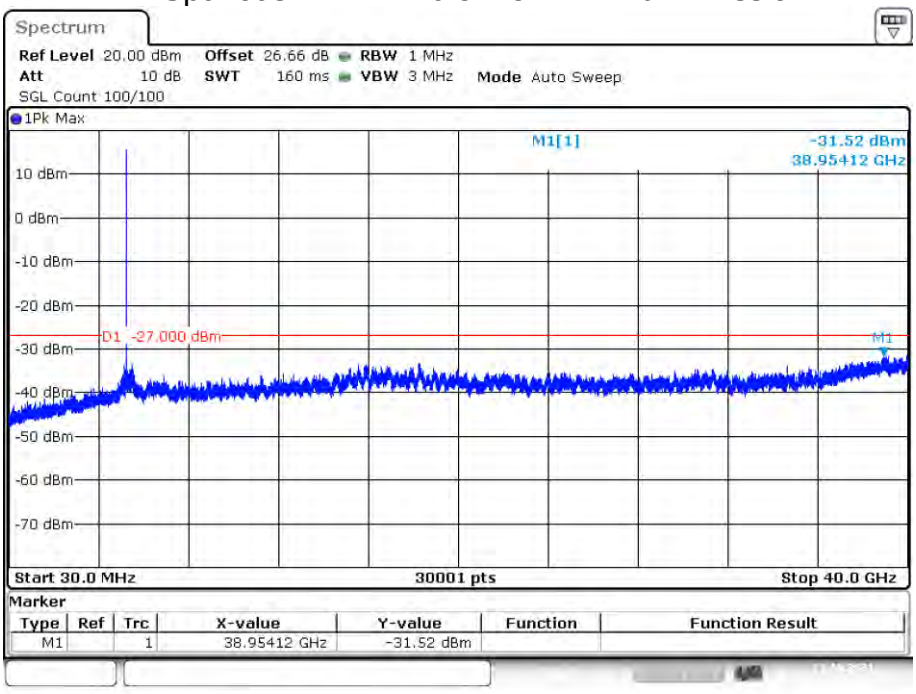
Date: 12.OCT.2021 11:27:34

Tx. Spurious NVNT n10 5200MHz Ant1 Emission



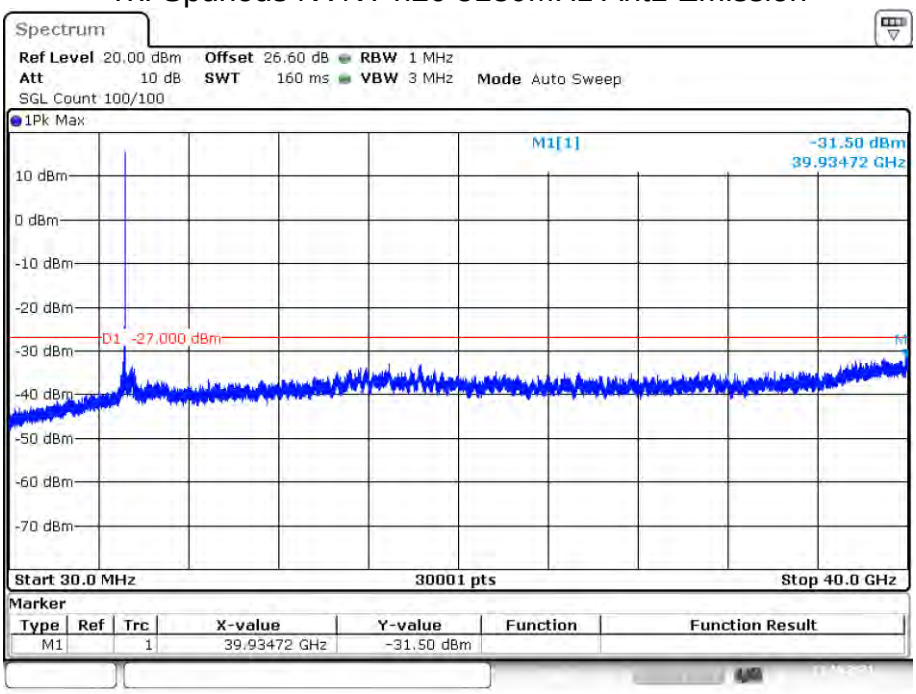
Date: 12.OCT.2021 11:33:01

Tx. Spurious NVNT n10 5245MHz Ant1 Emission



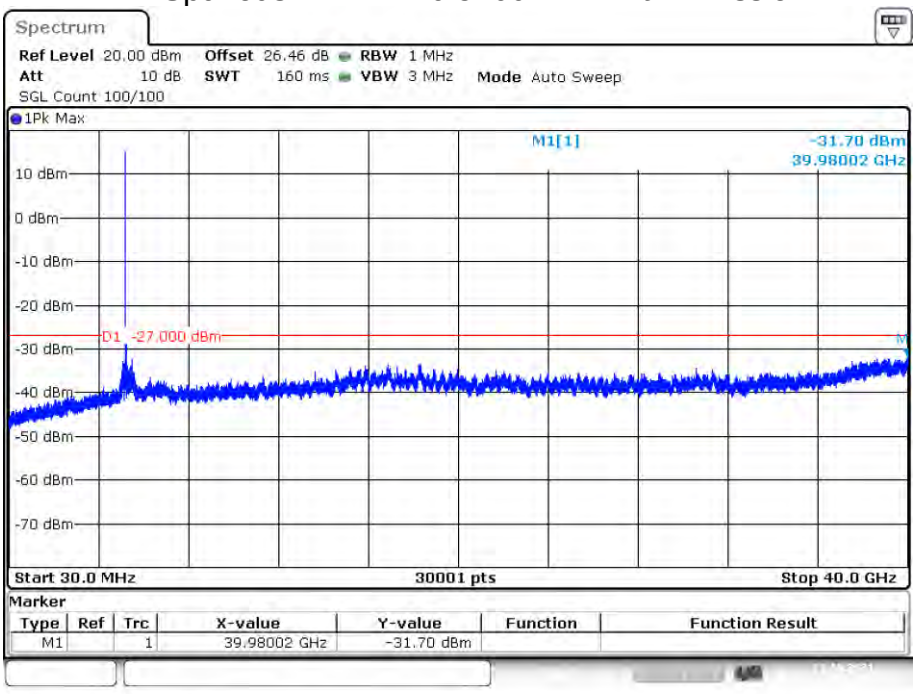
Date: 12.OCT.2021 11:36:59

Tx. Spurious NVNT n20 5180MHz Ant1 Emission



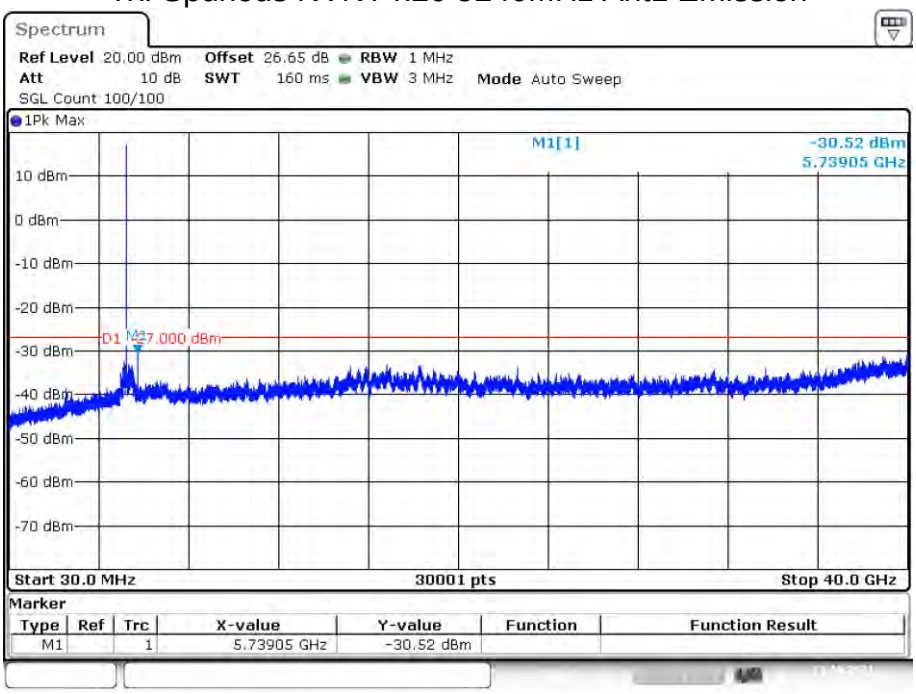
Date: 12.OCT.2021 12:18:30

Tx. Spurious NVNT n20 5200MHz Ant1 Emission



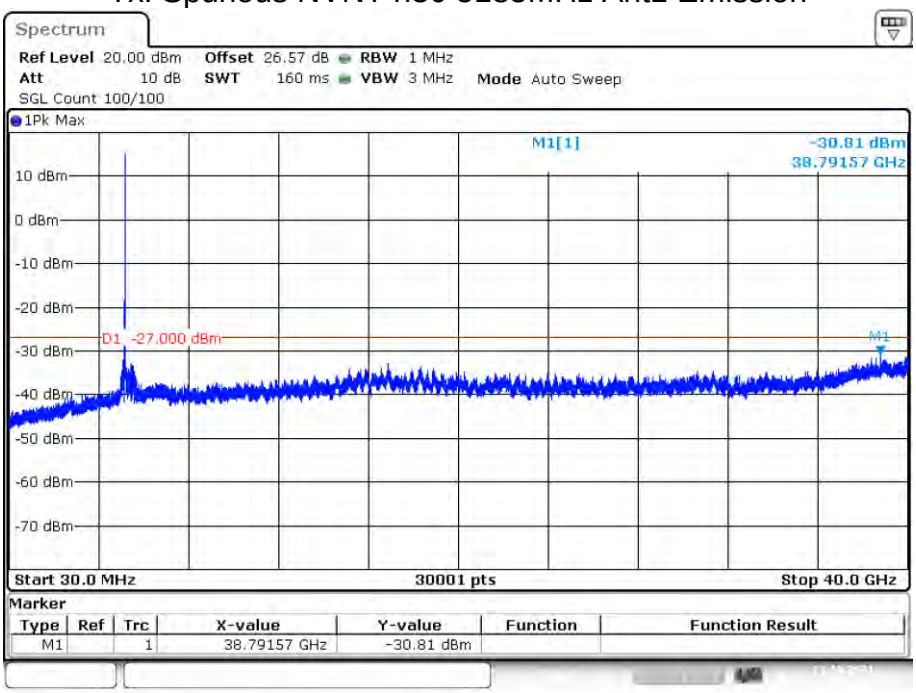
Date: 12.OCT.2021 12:32:57

Tx. Spurious NVNT n20 5240MHz Ant1 Emission



Date: 12.OCT.2021 12:39:15

Tx. Spurious NVNT n30 5185MHz Ant1 Emission



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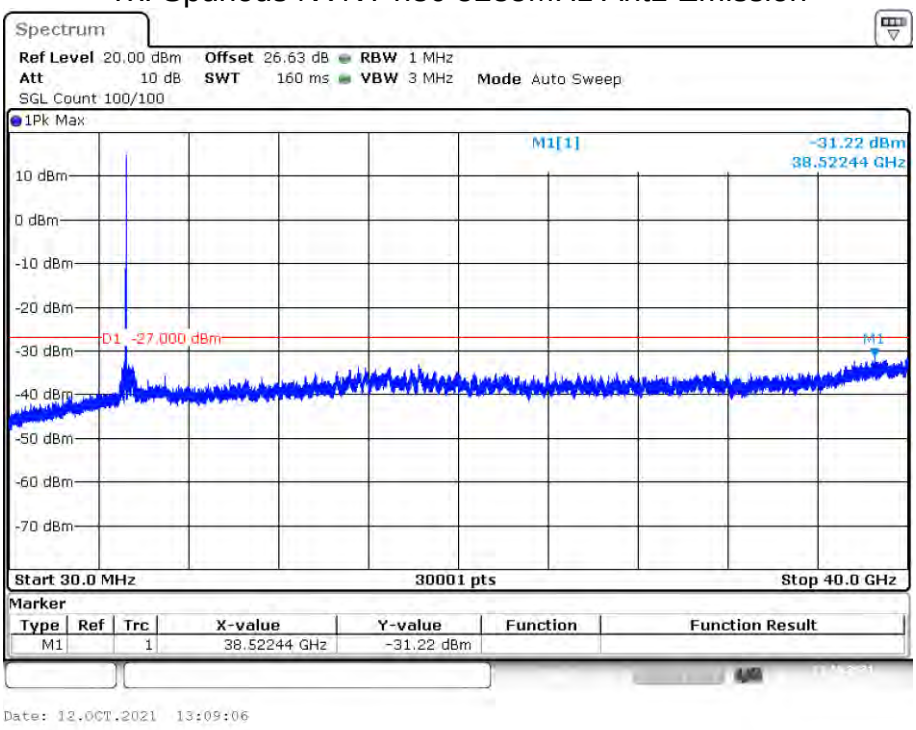
Tx. Spurious NVNT n30 5235MHz Ant1 Emission

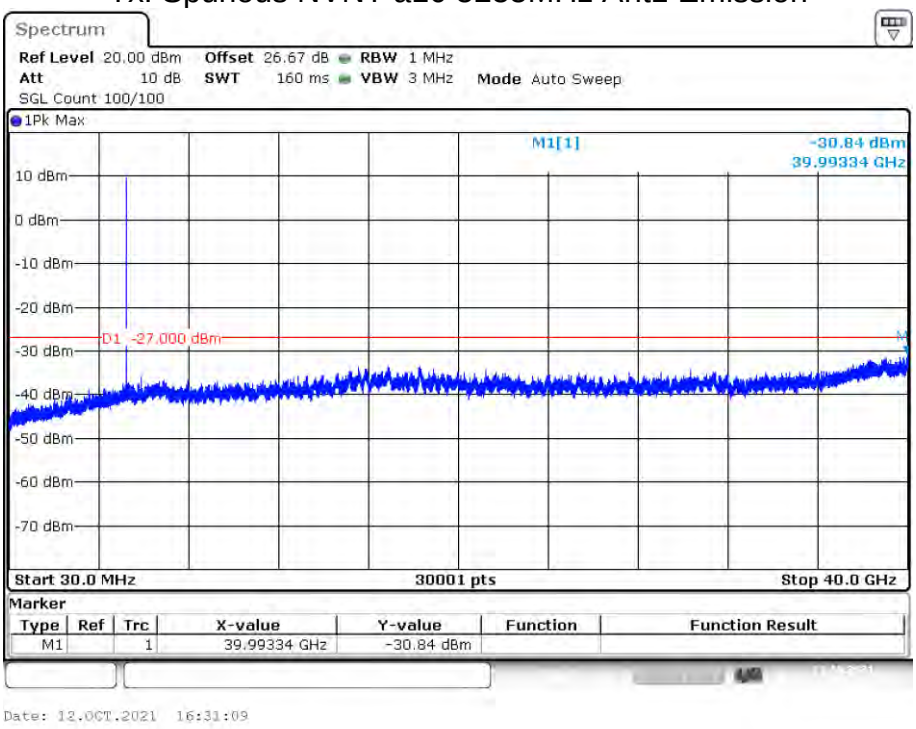


Band 2

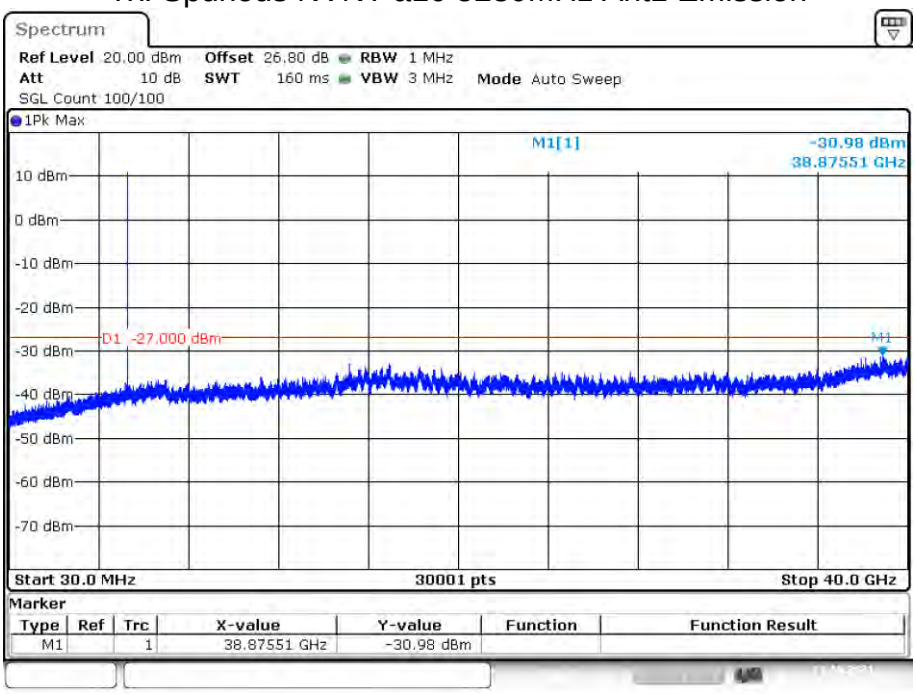
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a10	5255	Ant1	-30.83	-27	Pass
NVNT	a10	5280	Ant1	-30.97	-27	Pass
NVNT	a10	5325	Ant1	-31.72	-27	Pass
NVNT	a20	5260	Ant1	-31.55	-27	Pass
NVNT	a20	5280	Ant1	-31.18	-27	Pass
NVNT	a20	5320	Ant1	-31.32	-27	Pass
NVNT	n10	5255	Ant1	-31.01	-27	Pass
NVNT	n10	5280	Ant1	-30.74	-27	Pass
NVNT	n10	5325	Ant1	-30.99	-27	Pass
NVNT	n20	5260	Ant1	-31.46	-27	Pass
NVNT	n20	5280	Ant1	-31.31	-27	Pass
NVNT	n20	5320	Ant1	-31.42	-27	Pass
NVNT	n30	5265	Ant1	-31.74	-27	Pass
NVNT	n30	5315	Ant1	-31.47	-27	Pass

Tx. Spurious NVNT a10 5255MHz Ant1 Emission



Tx. Spurious NVNT a10 5280MHz Ant1 Emission



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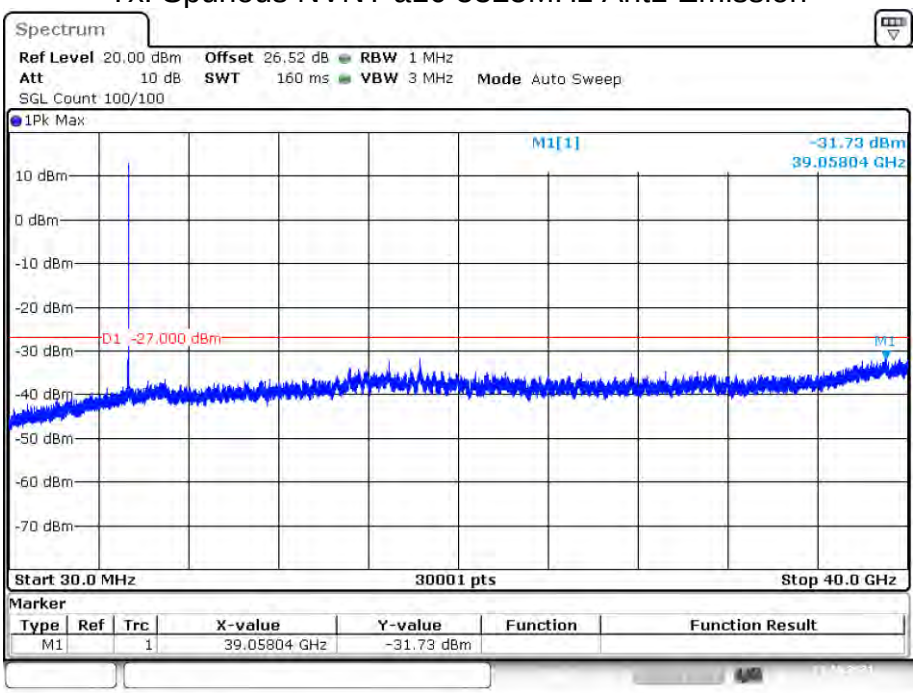
Tx. Spurious NVNT a10 5325MHz Ant1 Emission



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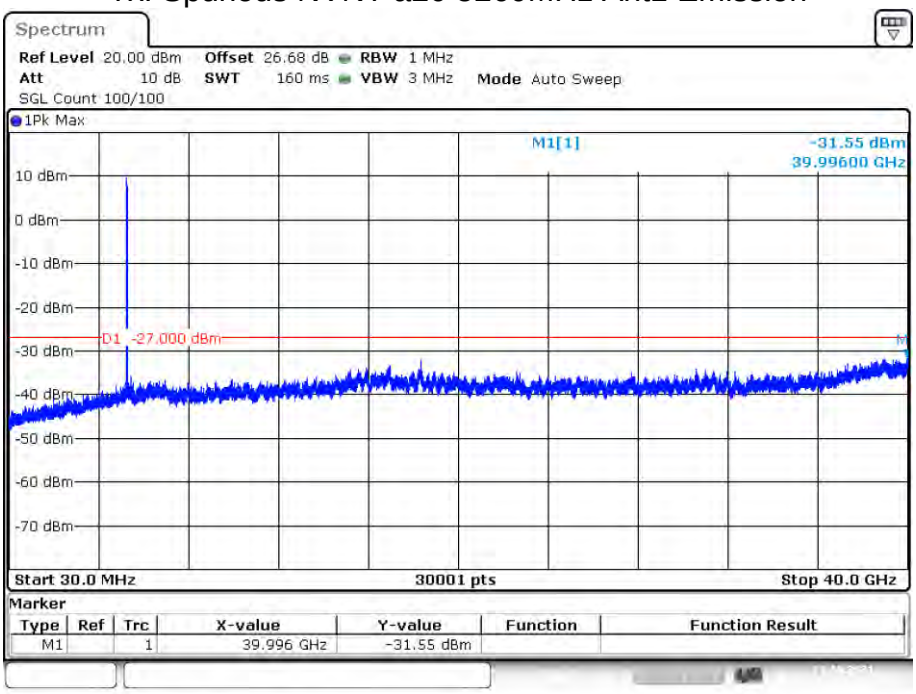

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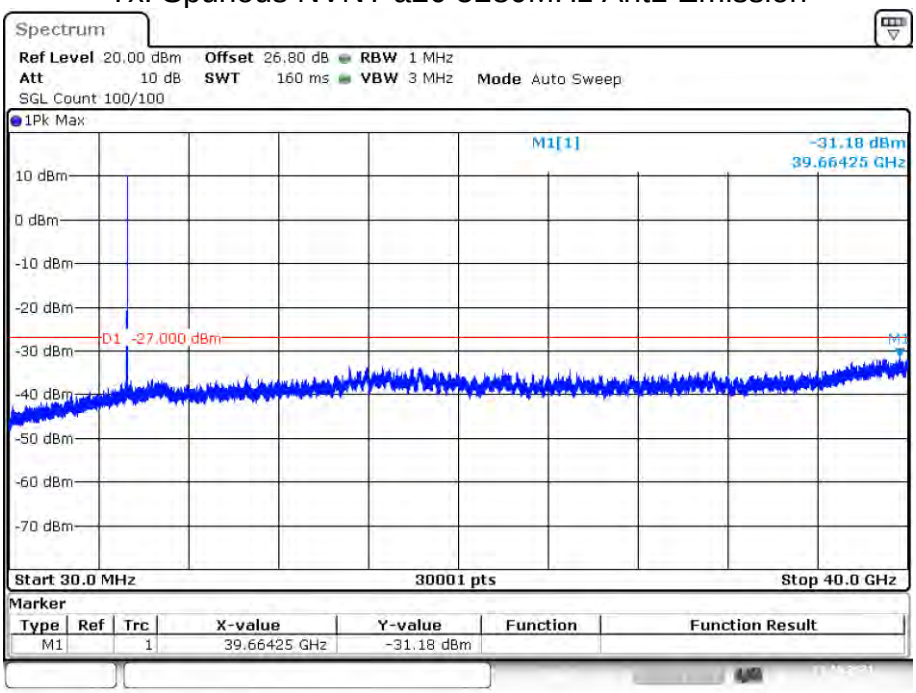
Tx. Spurious NVNT a20 5280MHz Ant1 Emission



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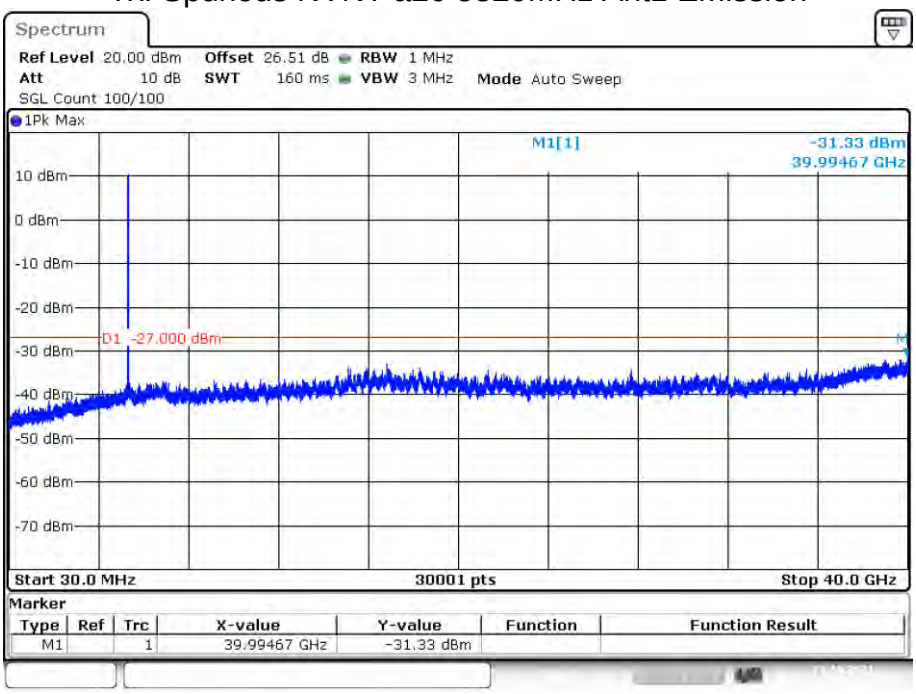
Tx. Spurious NVNT a20 5320MHz Ant1 Emission



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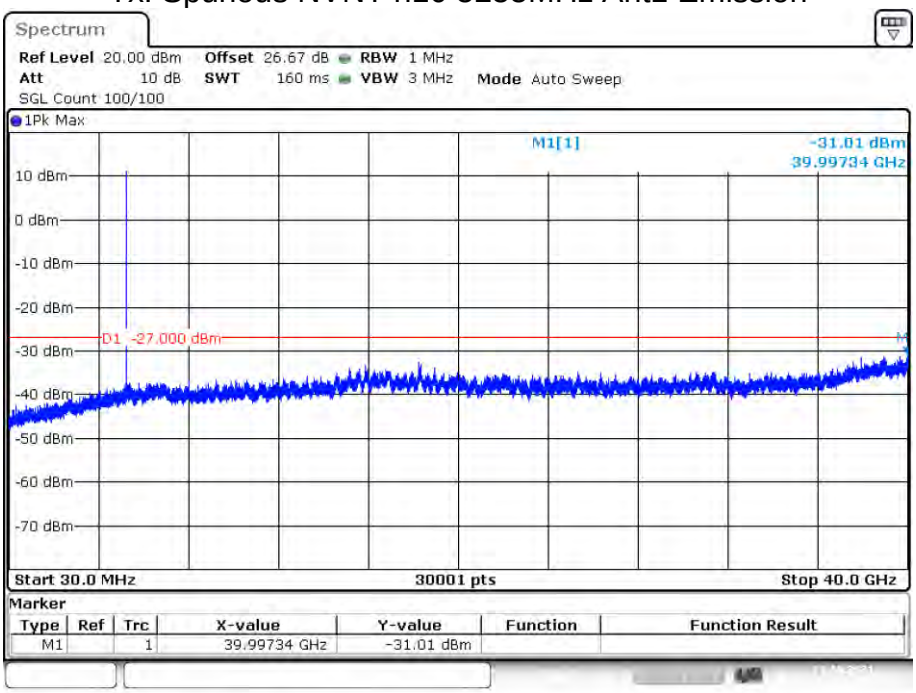
Tx. Spurious NVNT n10 5255MHz Ant1 Emission



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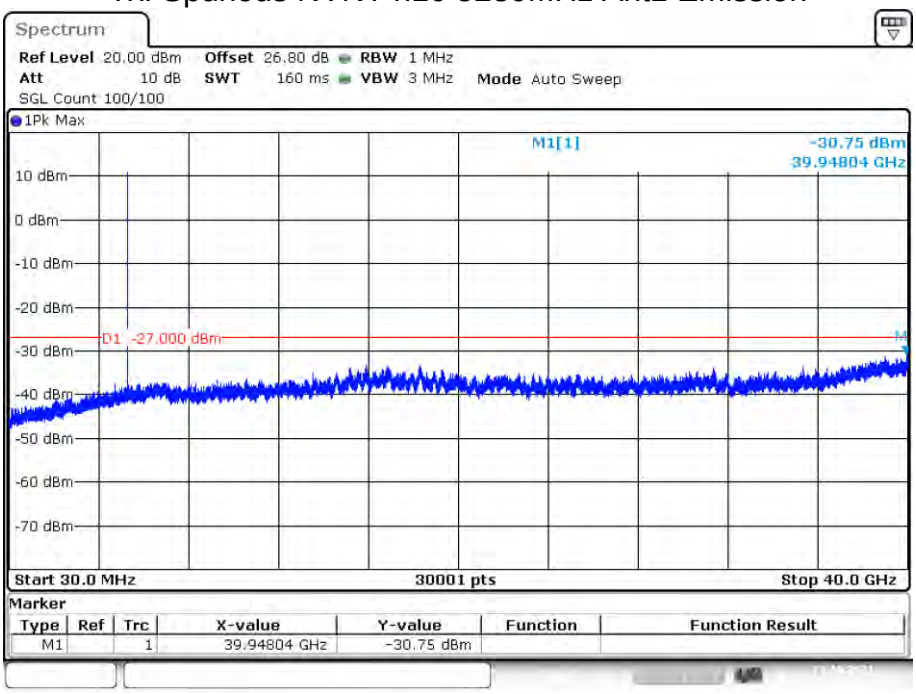
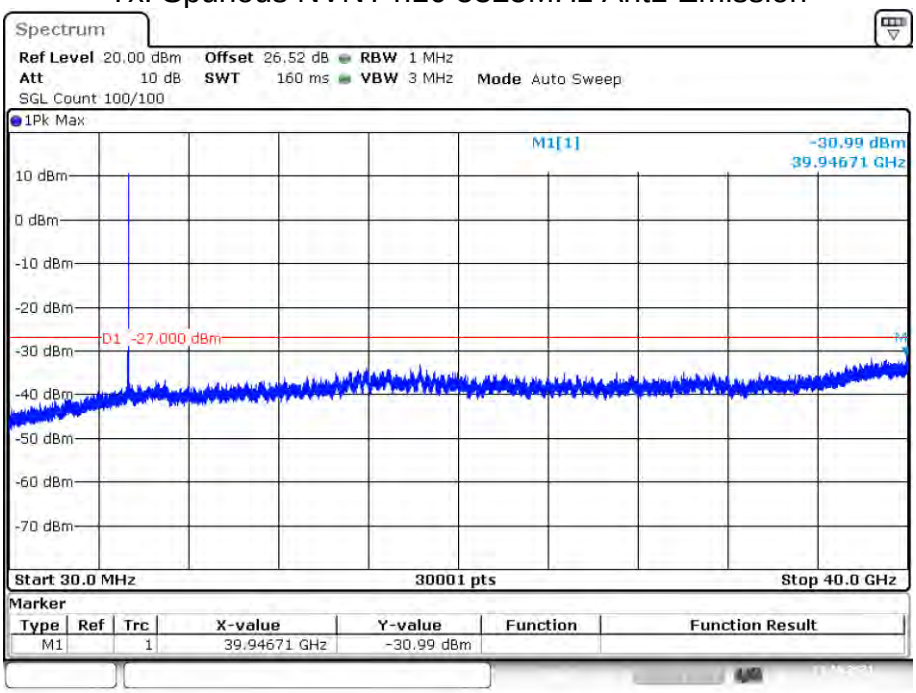
Tx. Spurious NVNT n10 5280MHz Ant1 Emission



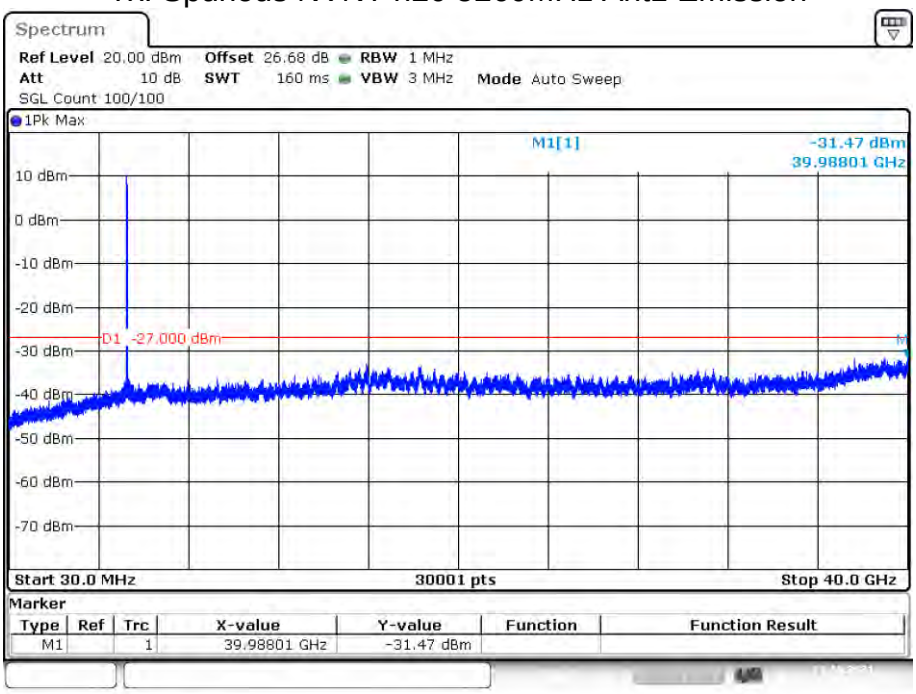
Date: 13.OCT.2021 04:46:24

Tx. Spurious NVNT n10 5325MHz Ant1 Emission



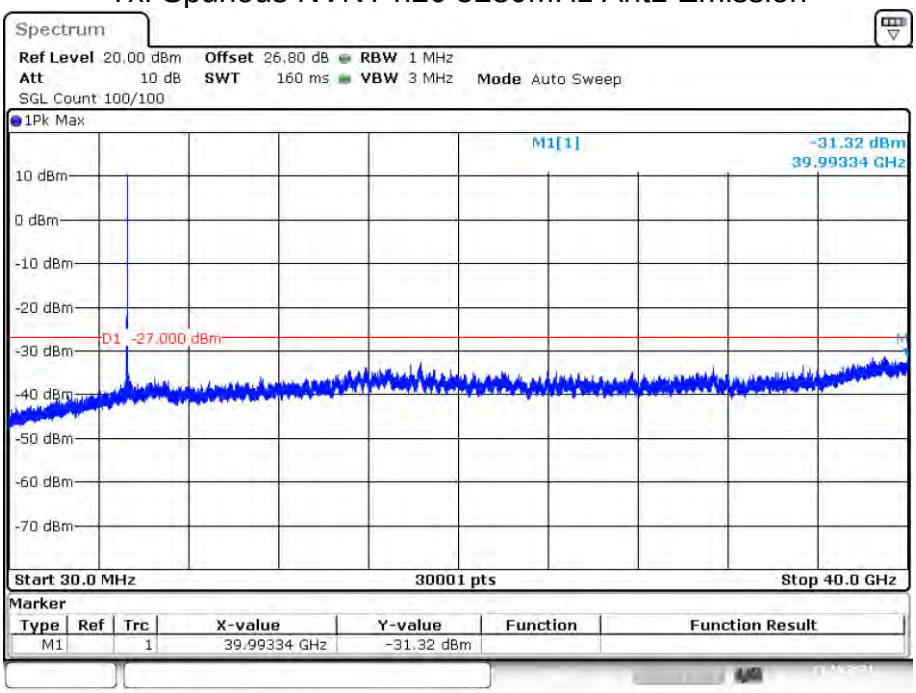
Date: 13.OCT.2021 04:51:18

Tx. Spurious NVNT n20 5260MHz Ant1 Emission



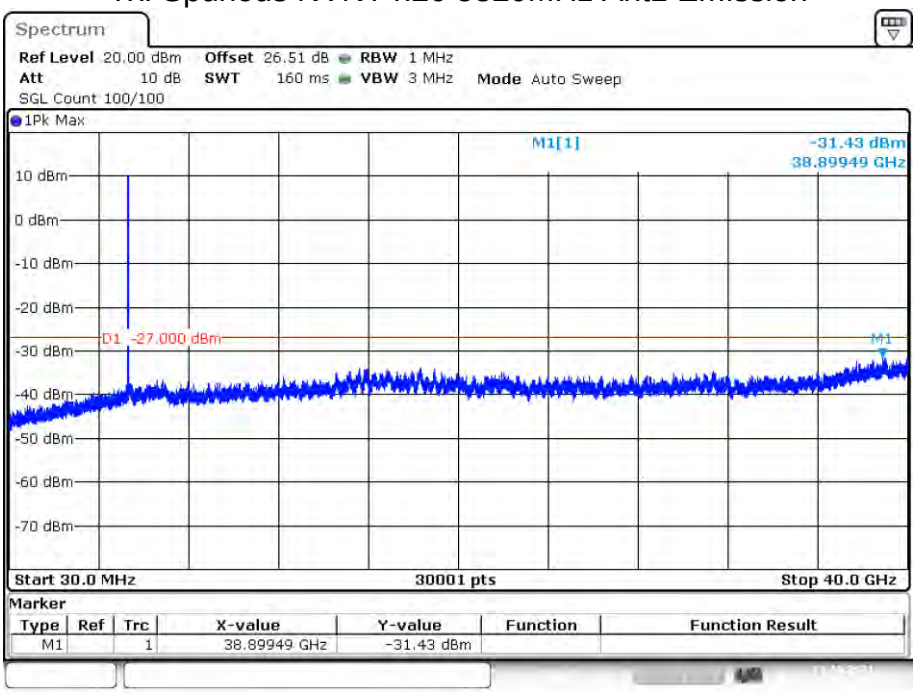
Date: 13.OCT.2021 05:27:58

Tx. Spurious NVNT n20 5280MHz Ant1 Emission



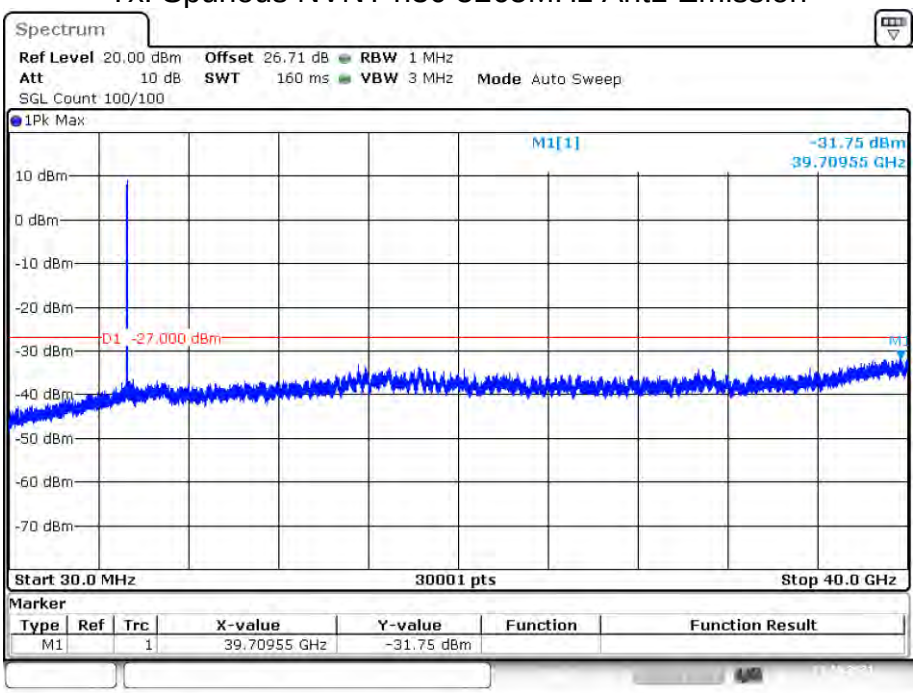
Date: 13.OCT.2021 05:34:47

Tx. Spurious NVNT n20 5320MHz Ant1 Emission



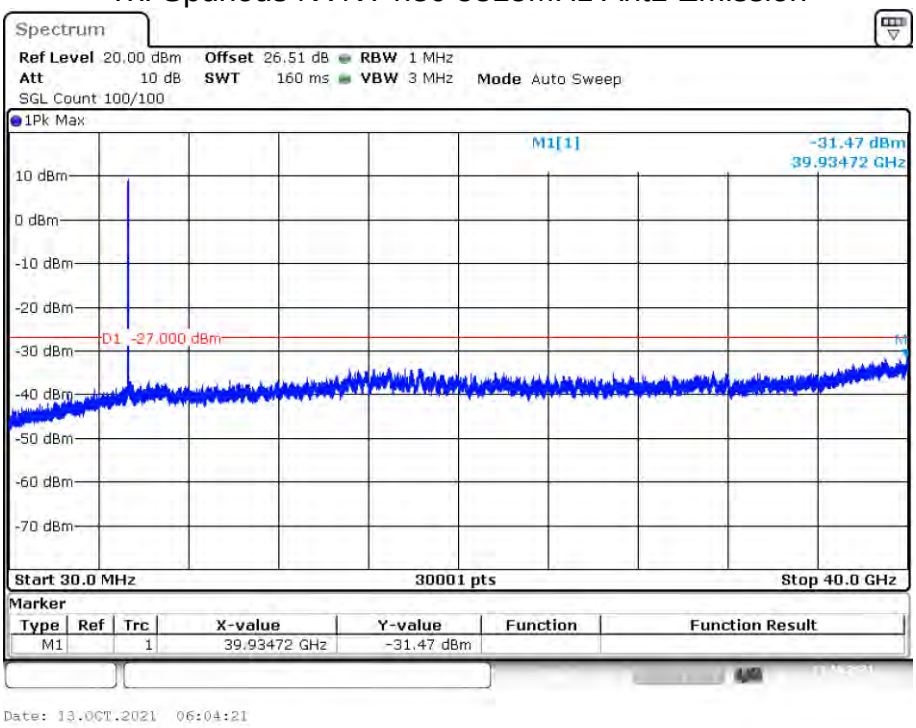
Date: 13.OCT.2021 05:42:58

Tx. Spurious NVNT n30 5265MHz Ant1 Emission



Date: 13.OCT.2021 05:53:33

Tx. Spurious NVNT n30 5315MHz Ant1 Emission

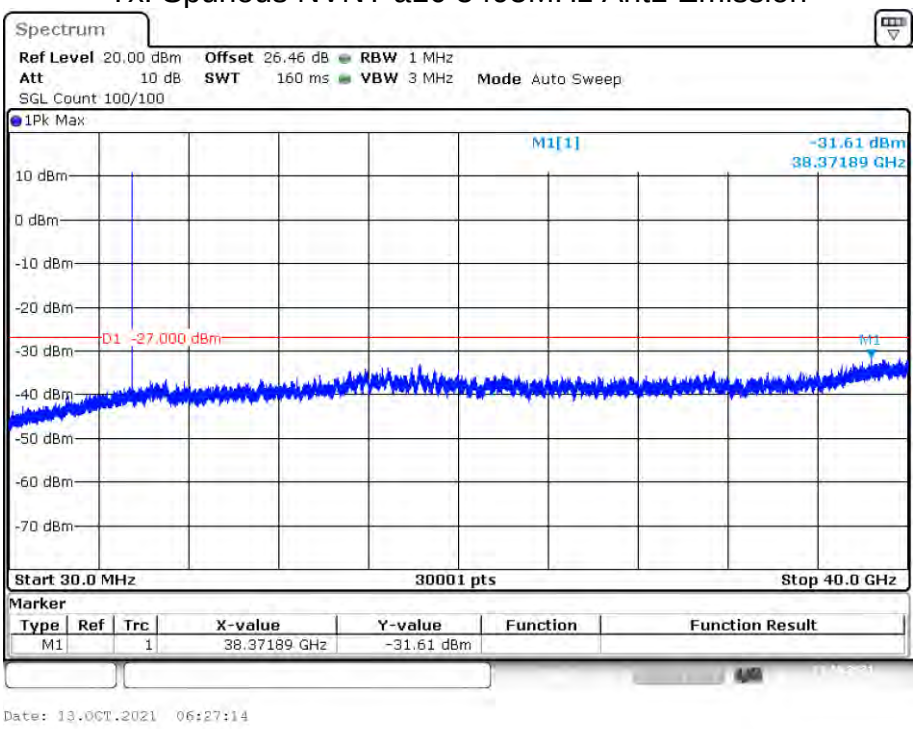


Band 3:

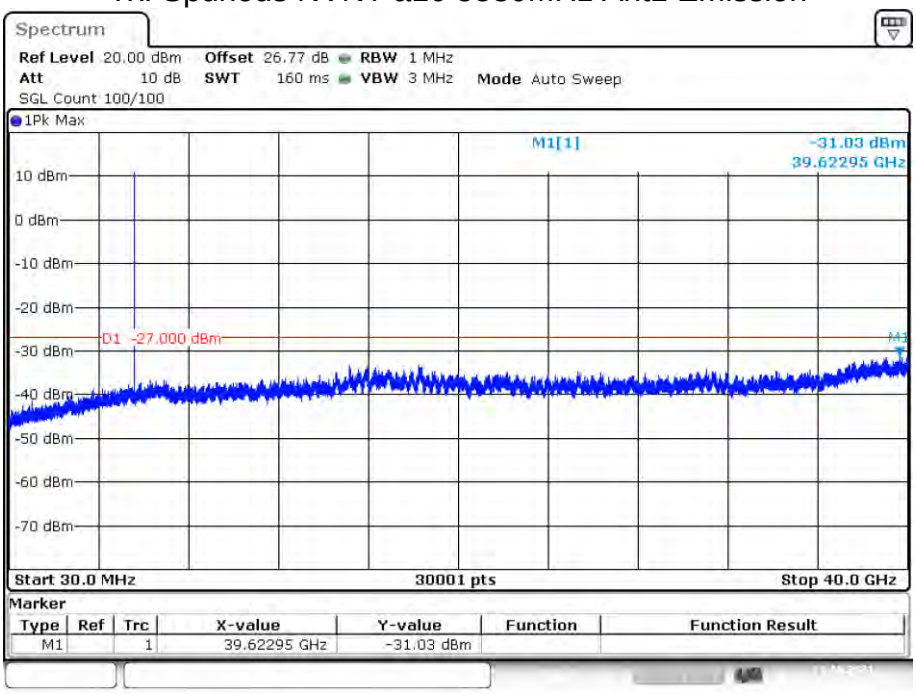
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a10	5495	Ant1	-31.61	-27	Pass
NVNT	a10	5580	Ant1	-31.02	-27	Pass
NVNT	a10	5705	Ant1	-30.86	-27	Pass
NVNT	a20	5500	Ant1	-31.12	-27	Pass
NVNT	a20	5580	Ant1	-31.08	-27	Pass
NVNT	a20	5700	Ant1	-30.72	-27	Pass
NVNT	n10	5495	Ant1	-32.17	-27	Pass
NVNT	n10	5580	Ant1	-30.41	-27	Pass
NVNT	n10	5705	Ant1	-31.13	-27	Pass
NVNT	n20	5500	Ant1	-31.22	-27	Pass
NVNT	n20	5580	Ant1	-31.16	-27	Pass
NVNT	n20	5700	Ant1	-30.7	-27	Pass
NVNT	n30	5505	Ant1	-31.23	-27	Pass
NVNT	n30	5695	Ant1	-30.91	-27	Pass

Tx. Spurious NVNT a10 5495MHz Ant1 Emission

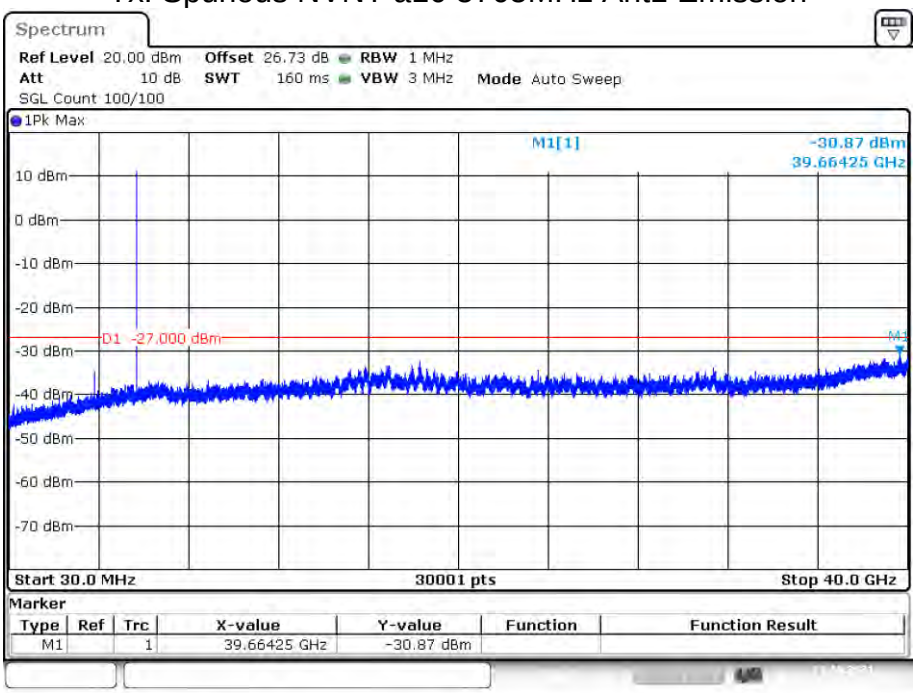


Tx. Spurious NVNT a10 5580MHz Ant1 Emission



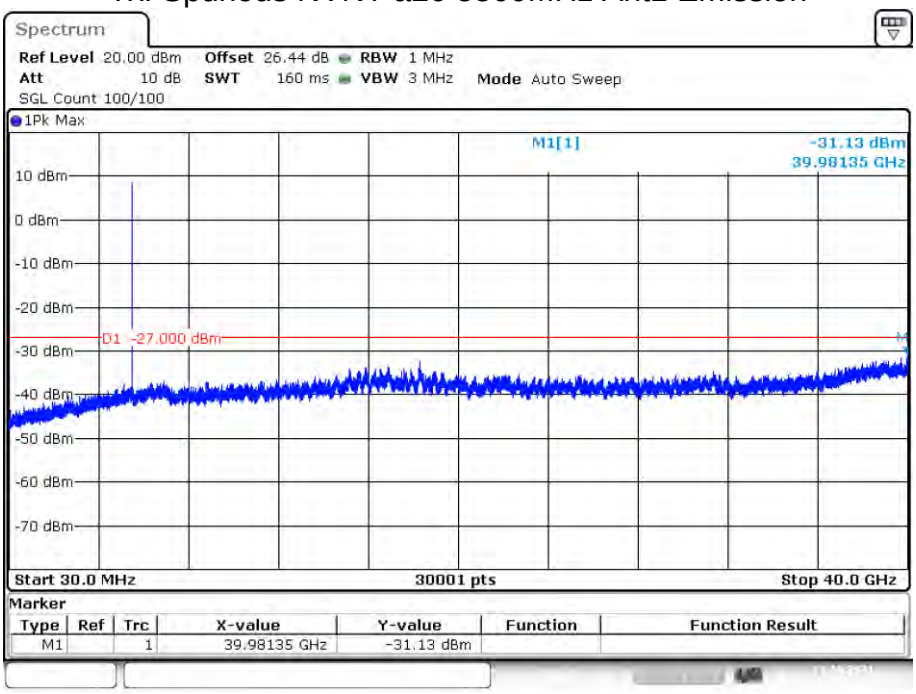
Date: 13.OCT.2021 06:36:54

Tx. Spurious NVNT a10 5705MHz Ant1 Emission



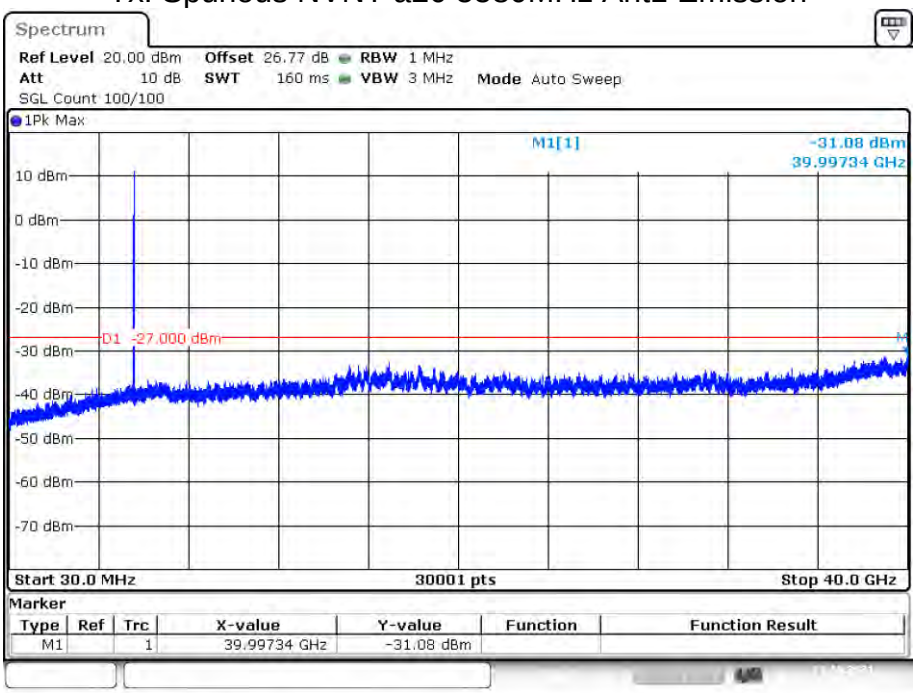
Date: 13.OCT.2021 06:59:48

Tx. Spurious NVNT a20 5500MHz Ant1 Emission



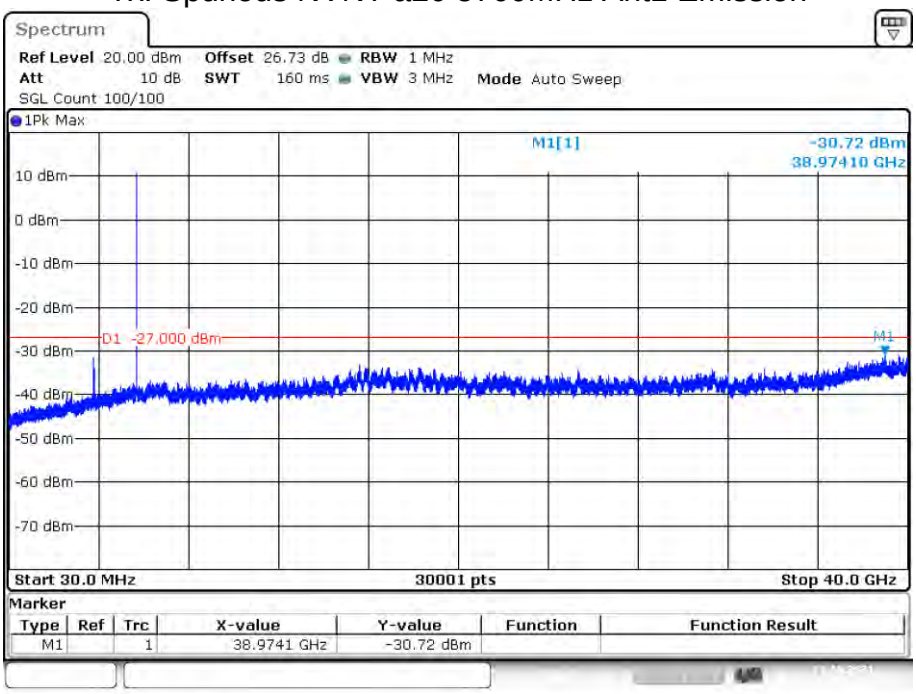
Date: 13.OCT.2021 09:14:06

Tx. Spurious NVNT a20 5580MHz Ant1 Emission



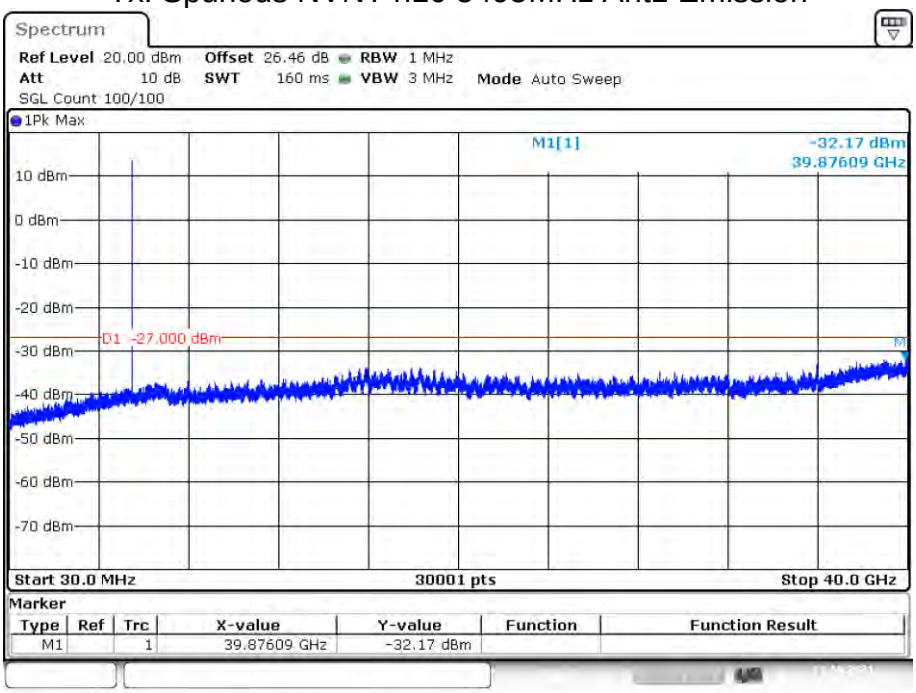
Date: 13.OCT.2021 09:19:42

Tx. Spurious NVNT a20 5700MHz Ant1 Emission



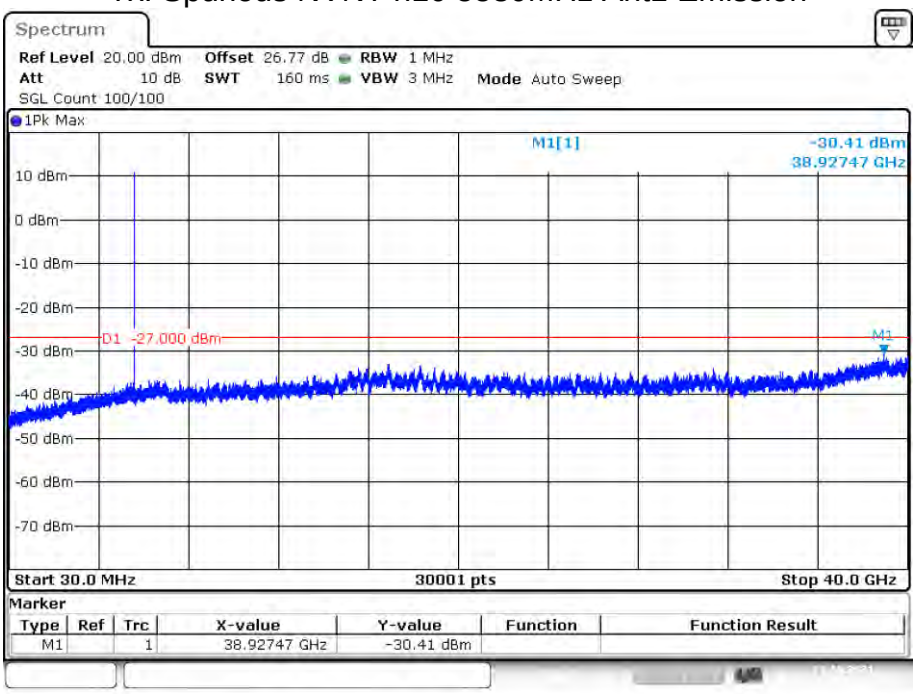
Date: 13.OCT.2021 09:24:45

Tx. Spurious NVNT n10 5495MHz Ant1 Emission



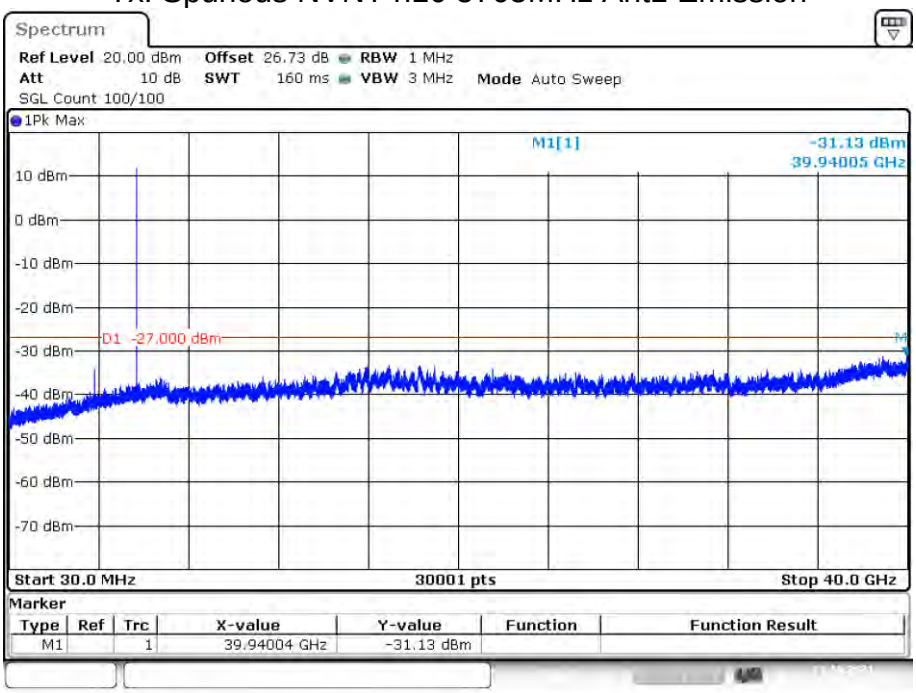
Date: 13.OCT.2021 07:06:33

Tx. Spurious NVNT n10 5580MHz Ant1 Emission



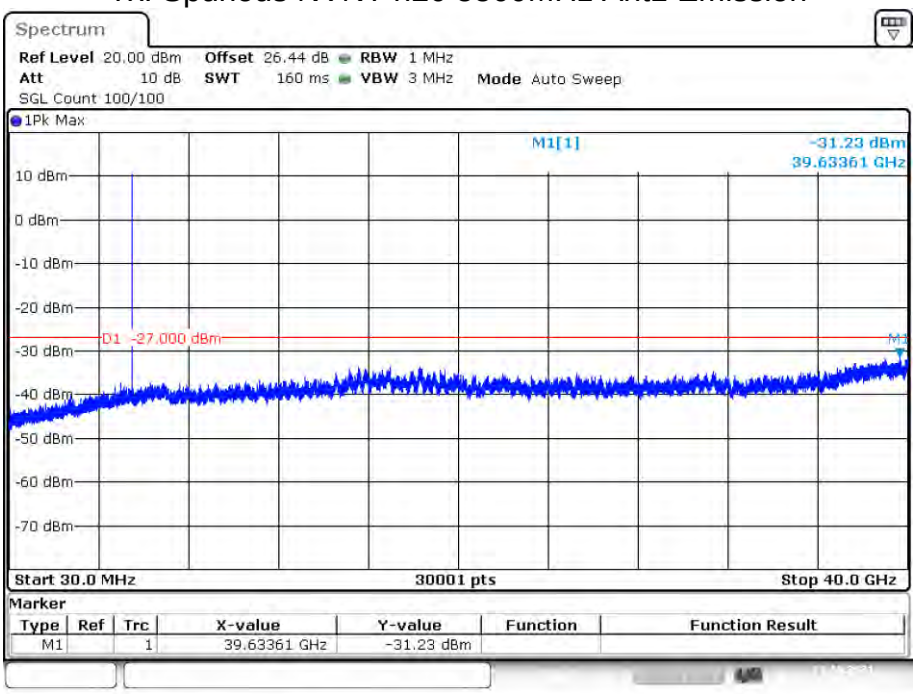
Date: 13.OCT.2021 08:55:29

Tx. Spurious NVNT n10 5705MHz Ant1 Emission



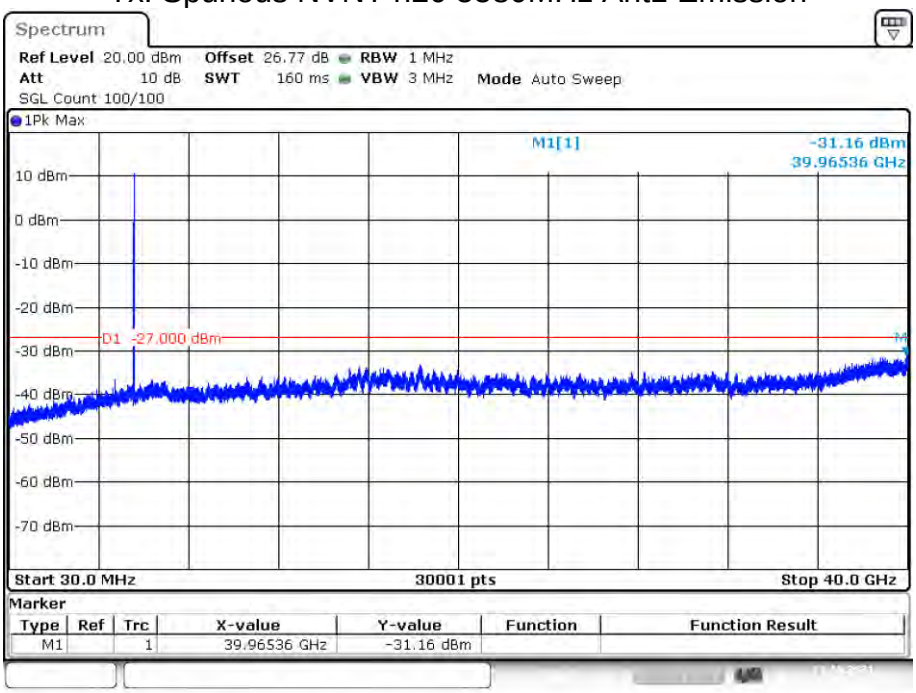
Date: 13.OCT.2021 09:06:48

Tx. Spurious NVNT n20 5500MHz Ant1 Emission



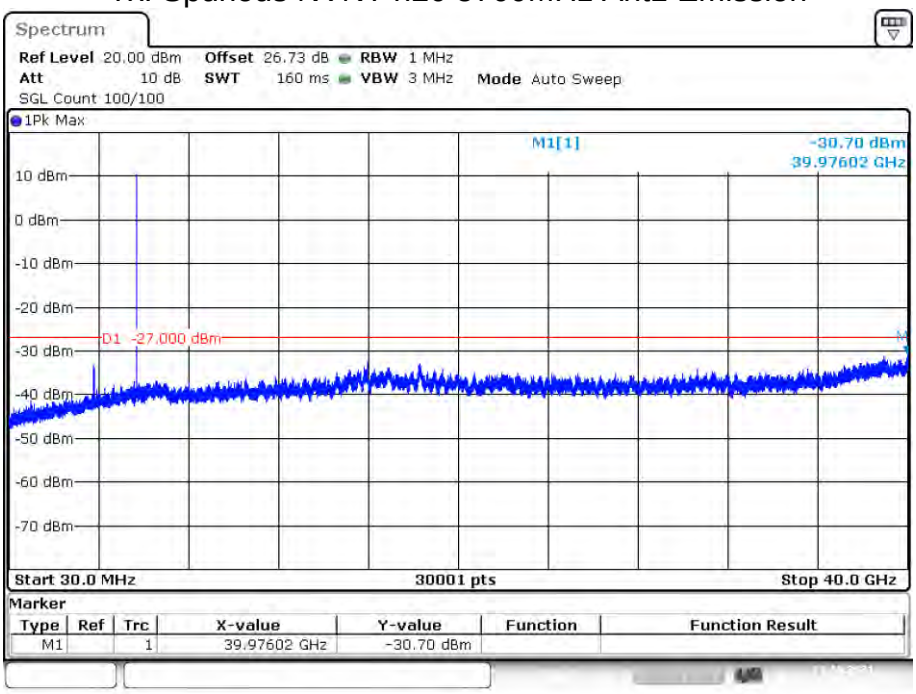
Date: 13.OCT.2021 09:31:49

Tx. Spurious NVNT n20 5580MHz Ant1 Emission



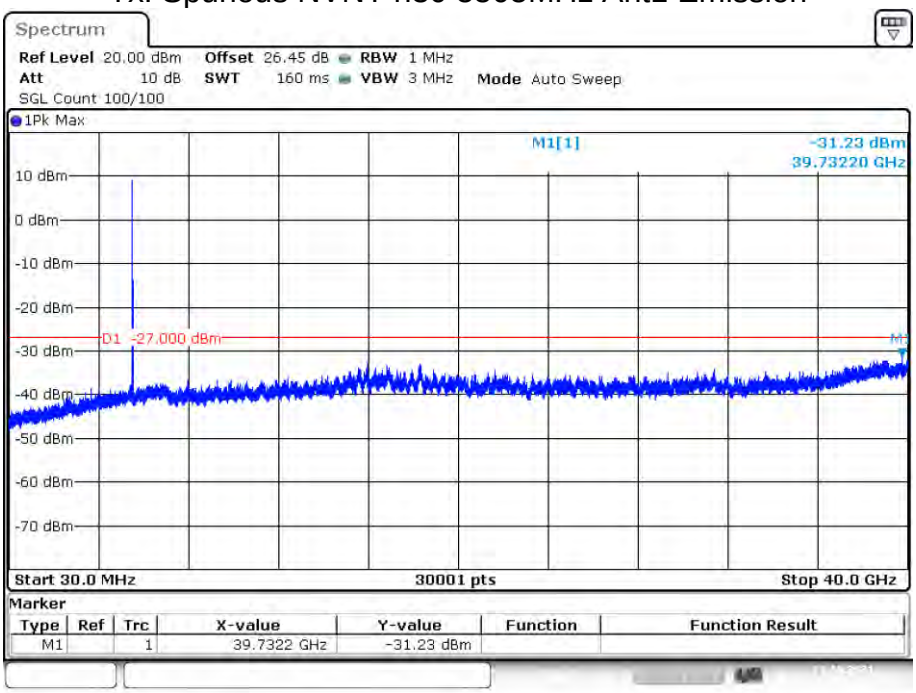
Date: 13.OCT.2021 09:39:26

Tx. Spurious NVNT n20 5700MHz Ant1 Emission



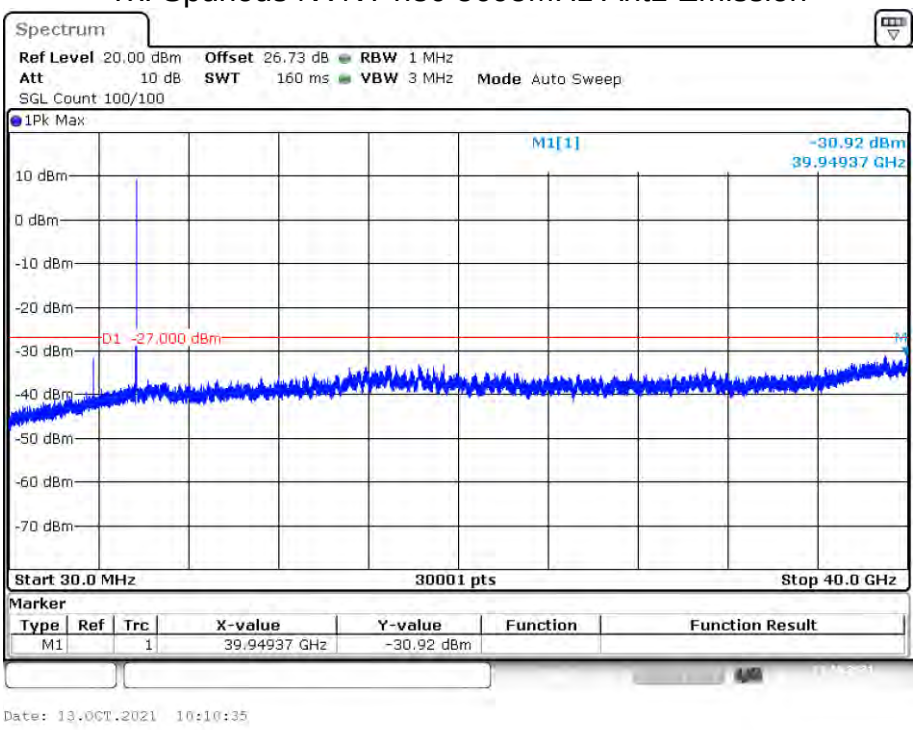
Date: 13.OCT.2021 09:49:32

Tx. Spurious NVNT n30 5505MHz Ant1 Emission



Date: 13.OCT.2021 09:59:54

Tx. Spurious NVNT n30 5695MHz Ant1 Emission

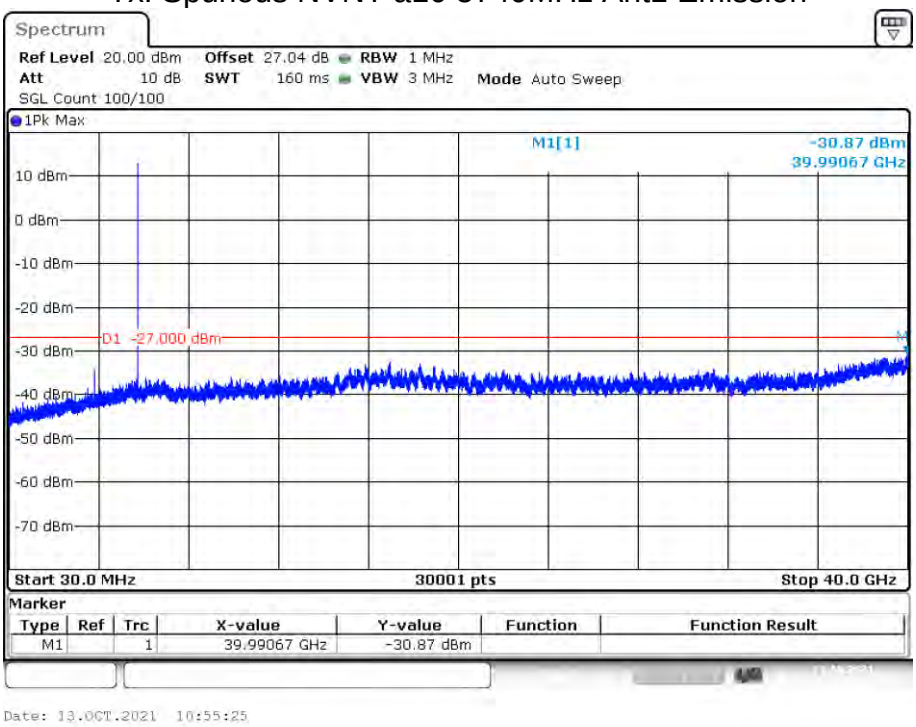


Band 4

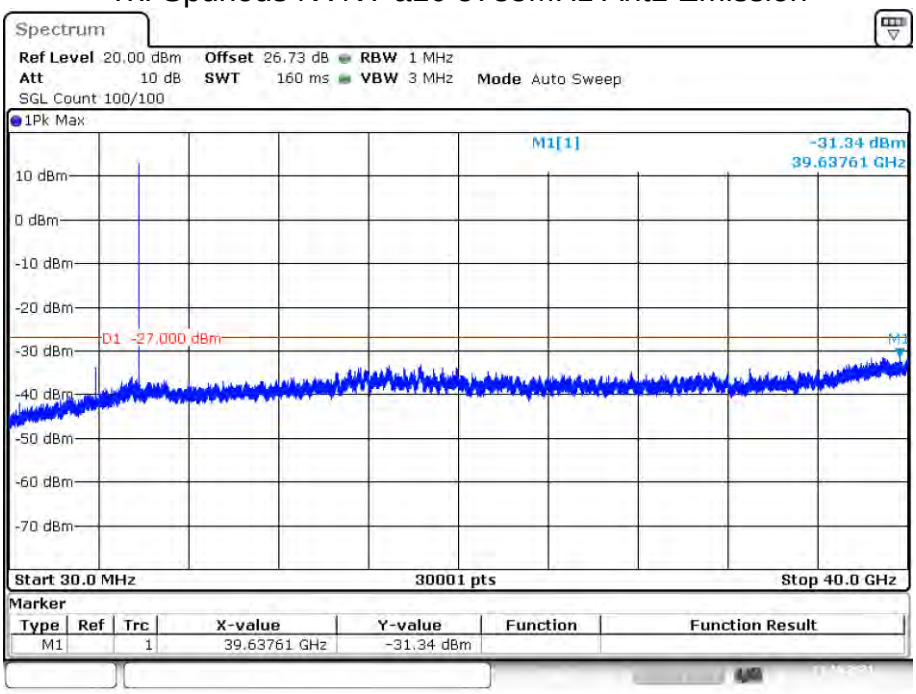
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a10	5740	Ant1	-30.87	-27	Pass
NVNT	a10	5785	Ant1	-31.34	-27	Pass
NVNT	a10	5830	Ant1	-30.78	-27	Pass
NVNT	a20	5745	Ant1	-31.32	-27	Pass
NVNT	a20	5785	Ant1	-31.41	-27	Pass
NVNT	a20	5825	Ant1	-30.42	-27	Pass
NVNT	n10	5740	Ant1	-30.99	-27	Pass
NVNT	n10	5785	Ant1	-31.36	-27	Pass
NVNT	n10	5830	Ant1	-31.28	-27	Pass
NVNT	n20	5745	Ant1	-30.56	-27	Pass
NVNT	n20	5785	Ant1	-31.05	-27	Pass
NVNT	n20	5825	Ant1	-30.56	-27	Pass
NVNT	n30	5750	Ant1	-30.91	-27	Pass
NVNT	n30	5800	Ant1	-30.8	-27	Pass

Tx. Spurious NVNT a10 5740MHz Ant1 Emission

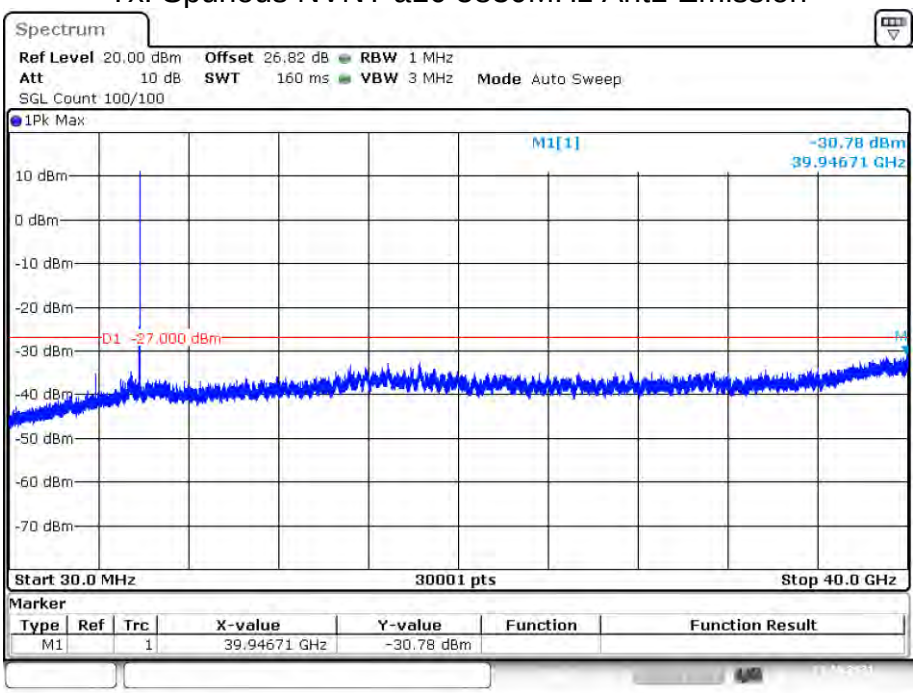


Tx. Spurious NVNT a10 5785MHz Ant1 Emission



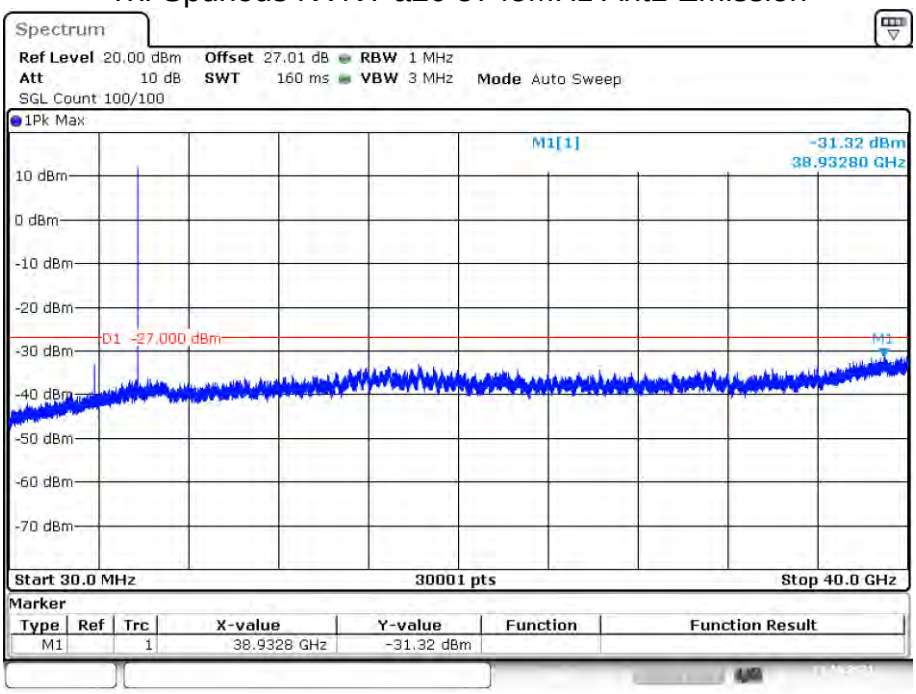
Date: 13.OCT.2021 11:01:36

Tx. Spurious NVNT a10 5830MHz Ant1 Emission



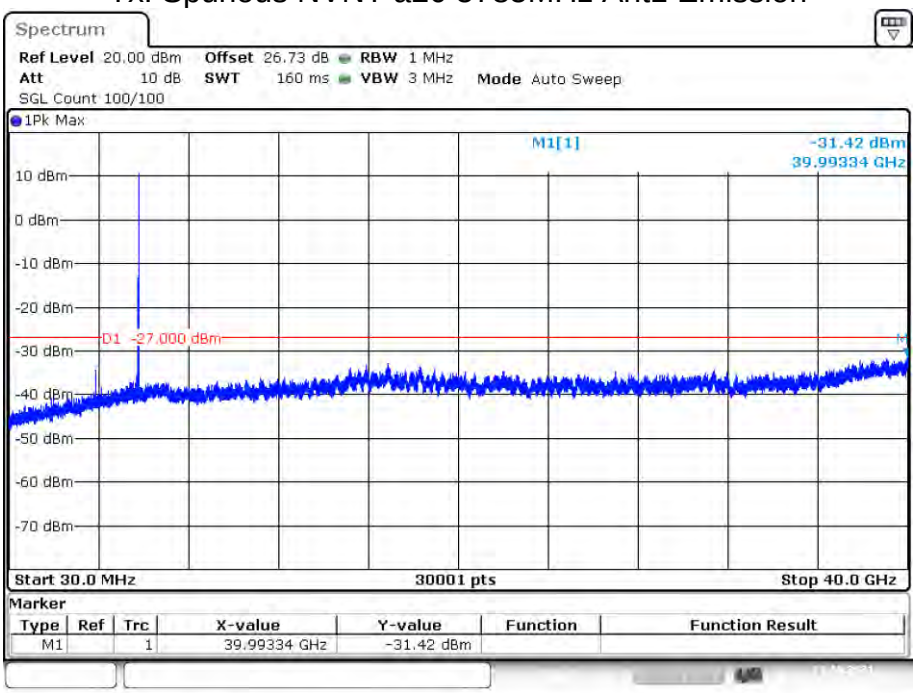
Date: 13.OCT.2021 11:14:14

Tx. Spurious NVNT a20 5745MHz Ant1 Emission



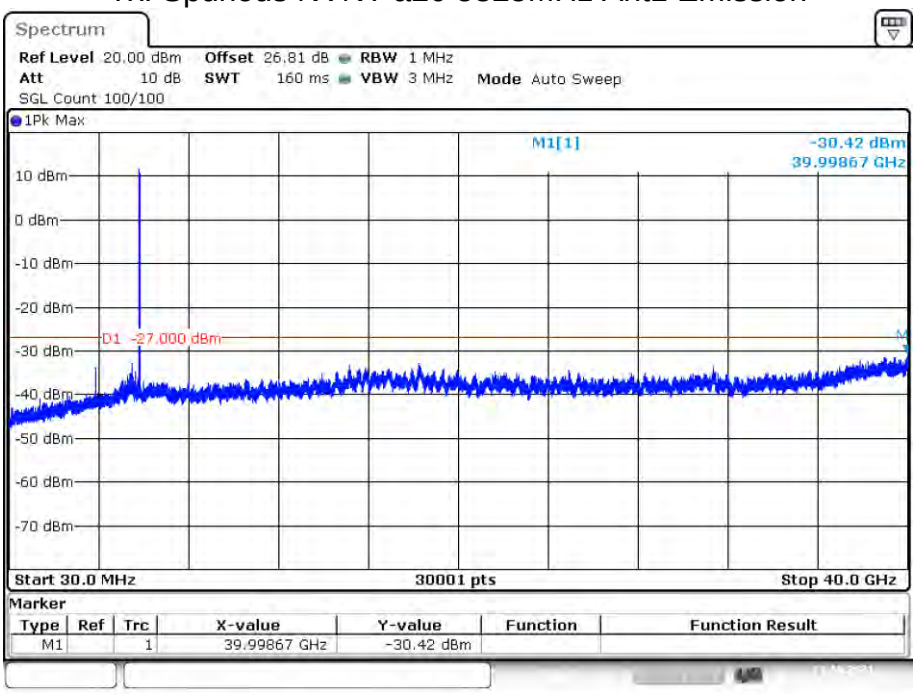
Date: 13.OCT.2021 11:55:19

Tx. Spurious NVNT a20 5785MHz Ant1 Emission



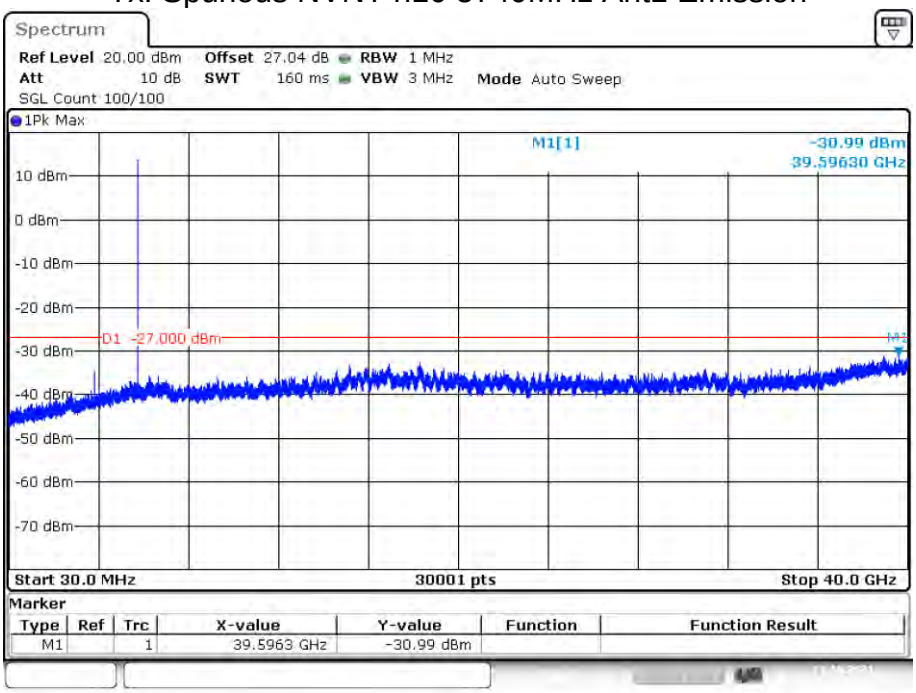
Date: 13.OCT.2021 12:00:26

Tx. Spurious NVNT a20 5825MHz Ant1 Emission



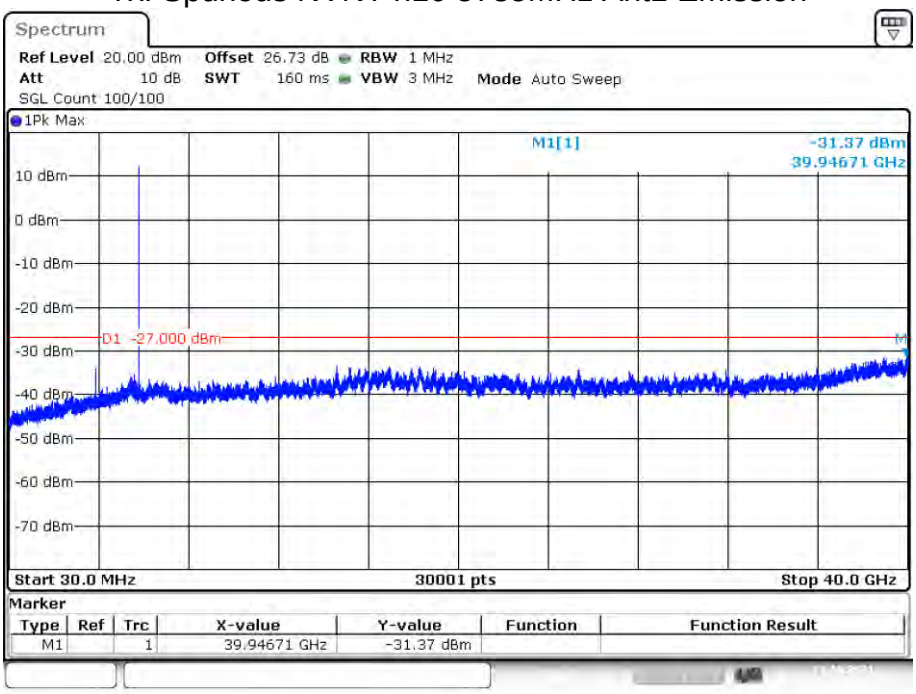
Date: 13.OCT.2021 12:13:25

Tx. Spurious NVNT n10 5740MHz Ant1 Emission



Date: 13.OCT.2021 11:25:20

Tx. Spurious NVNT n10 5785MHz Ant1 Emission



Date: 13.OCT.2021 11:35:46

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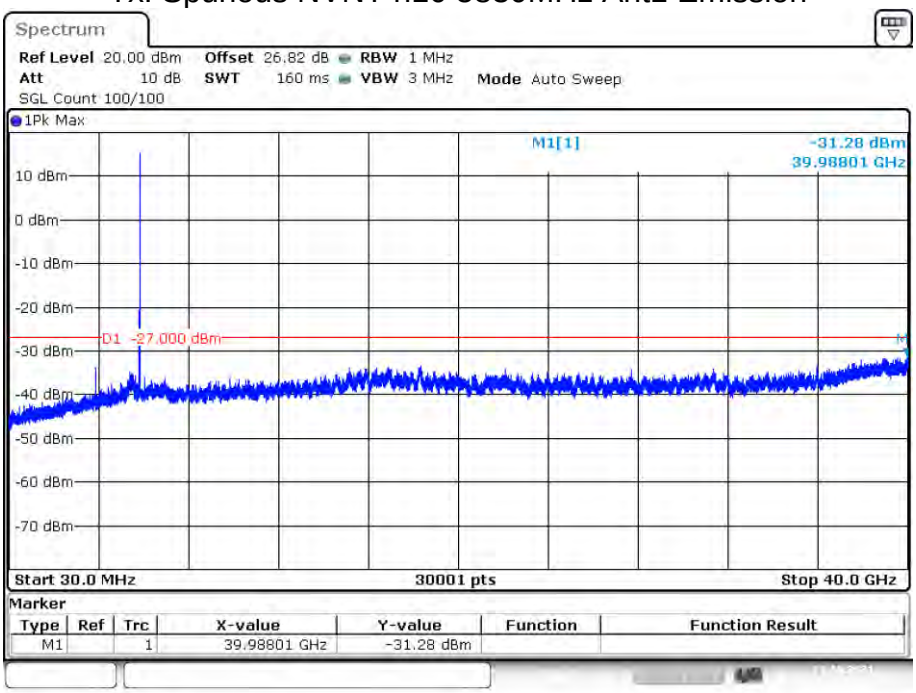
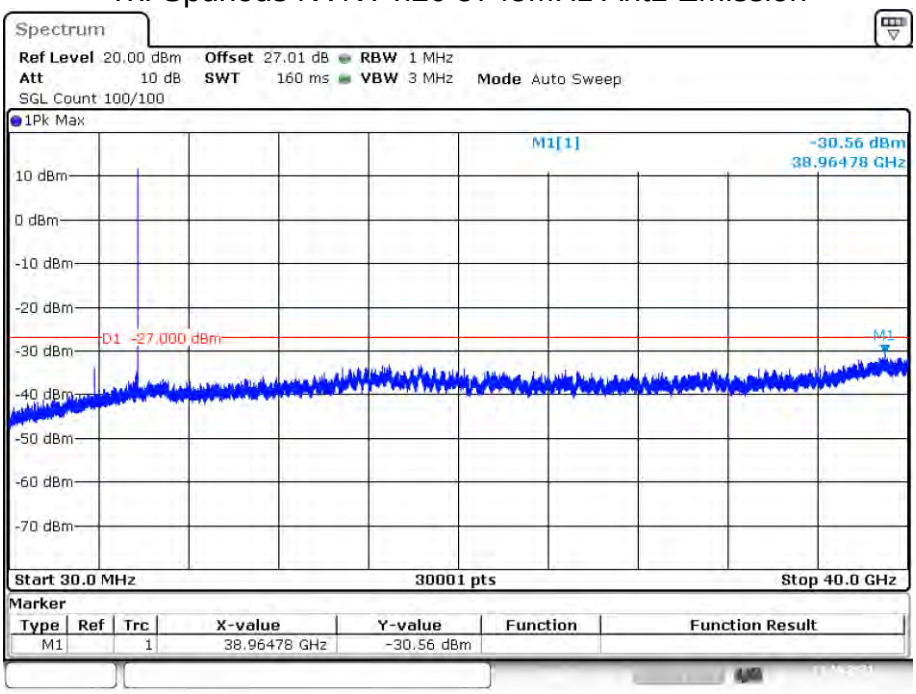


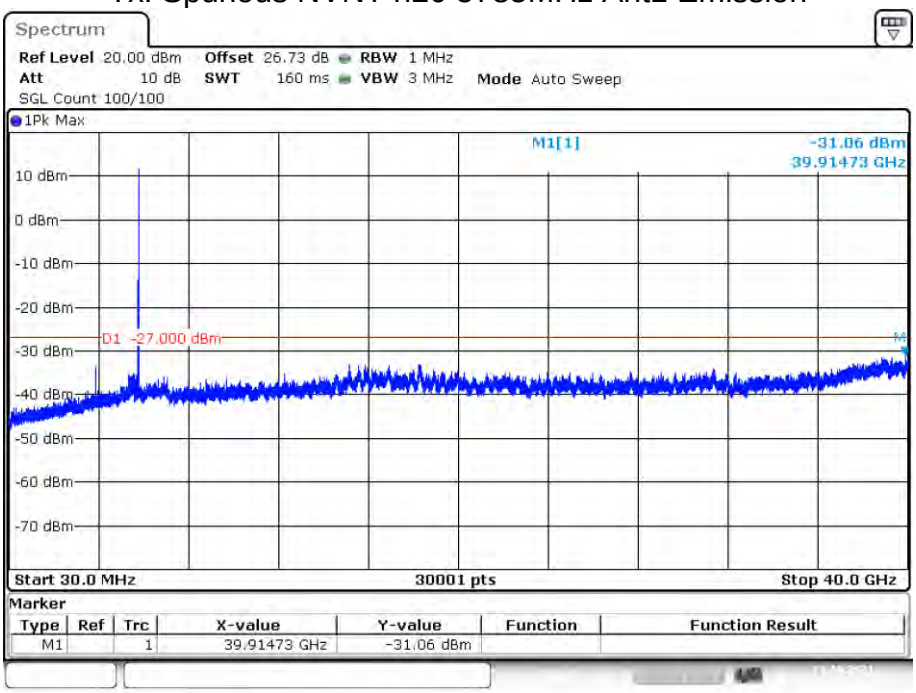
Date: 13.OCT.2021 11:45:41

Tx. Spurious NVNT n20 5745MHz Ant1 Emission



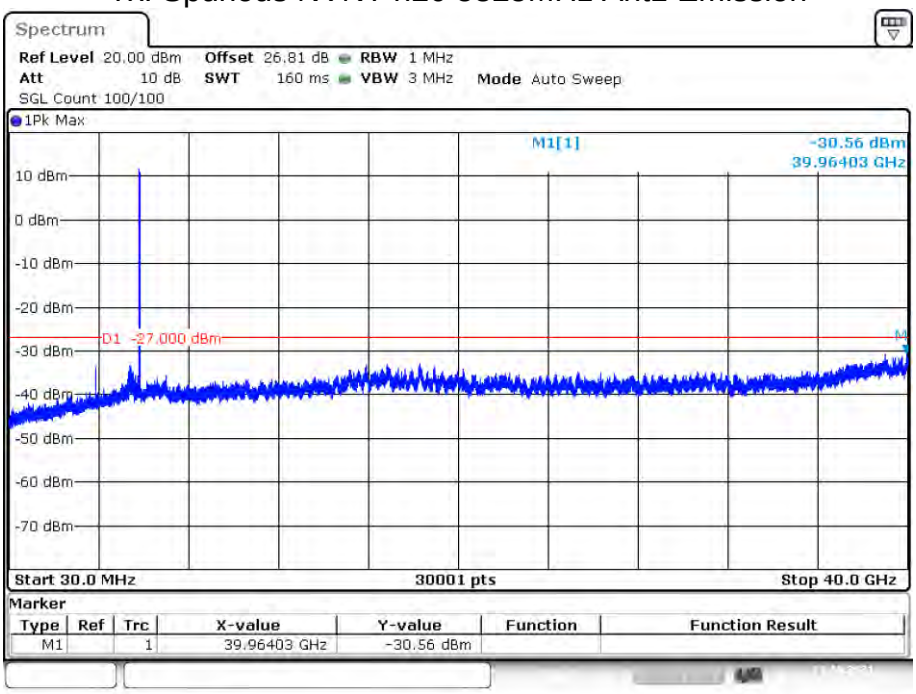
Date: 13.OCT.2021 12:21:24

Tx. Spurious NVNT n20 5785MHz Ant1 Emission



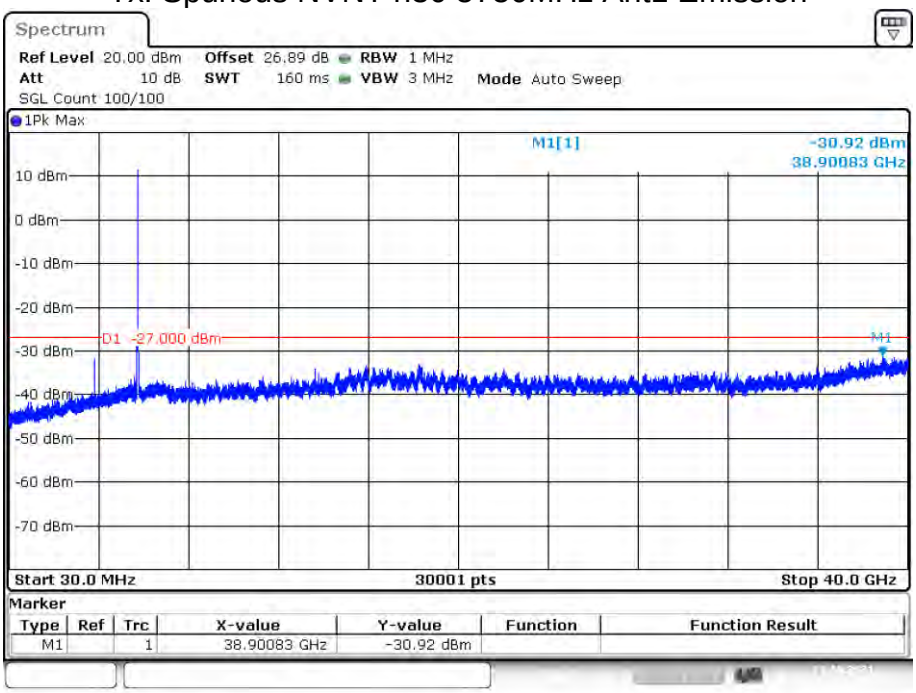
Date: 13.OCT.2021 12:33:03

Tx. Spurious NVNT n20 5825MHz Ant1 Emission



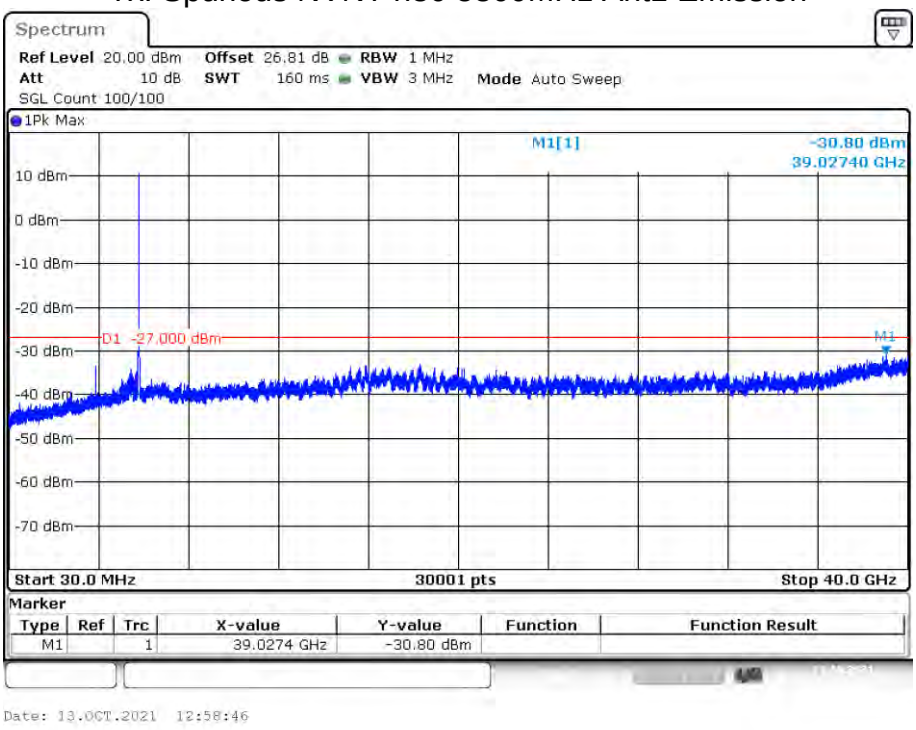
Date: 13.OCT.2021 12:39:18

Tx. Spurious NVNT n30 5750MHz Ant1 Emission



Date: 13.OCT.2021 12:50:56

Tx. Spurious NVNT n30 5800MHz Ant1 Emission



3.8 Frequency stability

Test limit	Manufacturers 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.
Test results:	Pass

Measurement Data:

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	DC 15.3V	5180.046	46	5240.032	32
	DC 18V	5180.024	24	5239.982	-18
	DC 20.7V	5180.038	38	5240.032	32
Mode	Voltage (V)	FHL (5260MHz)	Deviation (KHz)	FHH (5320MHz)	Deviation (KHz)
Band 2 (5250-5350 MHz)	DC 15.3V	5260.036	36	5320.022	22
	DC 18V	5260.000	0	5320.022	22
	DC 20.7V	5260.034	34	5320.022	22
Mode	Voltage (V)	FHL (5500MHz)	Deviation (KHz)	FHH (5700MHz)	Deviation (KHz)
Band 3 (5470-5725 MHz)	DC 15.3V	5500.034	34	5700.032	32
	DC 18V	5500.026	26	5700.022	22
	DC 20.7V	5500.038	38	5700.034	34
Mode	Voltage (V)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	DC 15.3V	5745.024	24	5825.028	28
	DC 18V	5745.012	12	5825.014	14
	DC 20.7V	5745.024	24	5825.022	22

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	-20℃	5179.988	-12	5239.980	-20
	-10℃	5179.984	-16	5239.991	-9
	0℃	5179.994	-6	5239.990	-10
	+10℃	5180.000	0	5239.981	-19
	+20℃	5180.003	3	5239.985	-15
	+30℃	5179.999	-1	5239.996	-4
	+40℃	5179.990	-10	5239.986	-14
	+50℃	5179.990	-10	5239.994	-6
	+60℃	5179.988	-12	5239.992	-8
Mode	Voltage (V)	FHL (5260MHz)	Deviation (KHz)	FHH (5320MHz)	Deviation (KHz)
Band 2 (5250-5350 MHz)	-20℃	5259.986	-14	5319.992	-8
	-10℃	5259.991	-9	5319.993	-7
	0℃	5259.993	-7	5319.996	-4
	+10℃	5259.987	-13	5319.989	-11
	+20℃	5259.993	-7	5319.987	-13
	+30℃	5259.981	-19	5319.989	-11
	+40℃	5259.983	-17	5319.988	-12
	+50℃	5259.993	-7	5320.002	2
	+60℃	5259.990	-10	5319.993	-7

Mode	Voltage (V)	FHL (5500MHz)	Deviation (KHz)	FHH (5700MHz)	Deviation (KHz)
Band 3 (5470-5725 MHz)	-20℃	5499.997	-3	5699.983	-17
	-10℃	5500.001	1	5699.983	-17
	0℃	5499.995	-5	5699.984	-16
	+10℃	5500.004	4	5699.981	-19
	+20℃	5500.008	8	5699.983	-17
	+30℃	5499.992	-8	5699.980	-20
	+40℃	5499.981	-19	5699.982	-18
	+50℃	5499.998	-2	5699.988	-12
	+60℃	5499.992	-8	5699.984	-16
Mode	Voltage (V)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	-20℃	5744.992	-8	5825.001	1
	-10℃	5744.998	-2	5824.996	-4
	0℃	5744.984	-16	5824.991	-9
	+10℃	5744.993	-7	5824.993	-7
	+20℃	5744.995	-5	5825.008	8
	+30℃	5745.004	4	5824.985	-15
	+40℃	5744.993	-7	5824.999	-1
	+50℃	5744.994	-6	5825.004	4
	+60℃	5745.001	1	5824.995	-5

--------END OF REPORT-------