TCT 通测检测 TESTING CENTRE TECHNOLOGY

TEST REPORT

FCC ID. ..... :	2AWFG-AD-1565
Test Report No..... :	TCT220223E919
Date of issue..... :	Feb. 25, 2022
Testing laboratory ..... :	SHENZHEN TONGCE TESTING LAB
Testing location/ address:	TCT Testing Industrial Park Fuqiao 5th Industrial Zone, Fuhai Street, Bao'an District Shenzhen, Guangdong, 518103, People's Republic of China
Applicant's name..... :	Shenzhen Sunchip Technology Co., Ltd.
Address..... :	2nd-3rd Floor, Building 4, Fuan Industry, Area Phase 2, Dayang Development Zone, Fuyong, Baoan, Shenzhen, China
Manufacturer's name ... :	Shenzhen Sunchip Technology Co., Ltd.
Address..... :	2nd-3rd Floor, Building 4, Fuan Industry, Area Phase 2, Dayang Development Zone, Fuyong, Baoan, Shenzhen, China
Standard(s) ..... :	FCC CFR Title 47 Part 15 Subpart E Section 15.407 KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
Test item description ..... :	15.6" Advertising all in one
Trade Mark ..... :	SUNCHIP RAISING TECHNOLOGY
Model/Type reference..... :	AD-1565, AD-1563, AD-1563A, AD-1563B, AD-1564, AD-1564A, AD-1564B, AD-1565A, AD-1565B
Rating(s)..... :	Adapter Information: MODEL: FJ-SW20261203000 INPUT: AC 100-240V, 50/60Hz,1.5A Max OUTPUT: DC 12.0V, 3.0A, 36.0W
Date of receipt of test item ..... :	Feb. 23, 2022
Date (s) of performance of test..... :	Nov. 01, 2021 - Dec. 01, 2021
Tested by (+signature) ... :	Rleo LIU
Check by (+signature).... :	Beryl ZHAO
Approved by (+signature):	Tomsin
Remark..... :	This test report was based on TCT211101E023; Change model name, product name, trademark, applicant's and manufacturer's information.

SHENZHEN TONGCE TESTING LAB TCT

General disclaimer:

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Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

1. General Product Information

1.1. EUT description

Test item description .....:	15.6" Advertising all in one
Model/Type reference.....:	AD-1565
Sample Number.....:	TCT211101E012-0101
Operation Frequency.....:	Band 1: 5150 MHz -5250 MHz Band 3: 5725 MHz -5850 MHz
Channel Bandwidth.....:	802.11a: 20MHz 802.11n: 20MHz, 40MHz 802.11ac: 20MHz, 40MHz, 80MHz
Modulation Technology .....:	Orthogonal Frequency Division Multiplexing(OFDM)
Modulation Type.....:	256QAM, 64QAM, 16QAM, BPSK, QPSK
Antenna Type.....:	Internal Antenna
Antenna Gain.....:	2dBi
Rating(s).....:	Adapter Information: MODEL: FJ-SW20261203000 INPUT: AC 100-240V, 50/60Hz,1.5A Max OUTPUT: DC 12.0V, 3.0A, 36.0W

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

No.	Model No.	Tested with
1	AD-1565	☒
Other models	AD-1563, AD-1563A, AD-1563B, AD-1564, AD-1564A, AD-1564B, AD-1565A, AD-1565B	☐
Note: AD-1565 is tested model, other models are derivative models. The models are identical in circuit and PCB layout, only different on the model names. So the test data of AD-1565 can represent the remaining models.		

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1.3. Test Frequency

Band 1

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180	38	5190	42	5210
40	5200	46	5230		
48	5240				

Band 3

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745	151	5755	155	5775
157	5785	159	5795		
165	5825				

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

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2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Maximum Conducted Output Power	§15.407(a)	PASS
6dB Emission Bandwidth	§15.407(a)	PASS
26dB Emission Bandwidth& 99% Occupied Bandwidth	§15.407(a)	PASS
Power Spectral Density	§15.407(a)	PASS
Restricted Bands around fundamental frequency	§15.407(a)	PASS
Radiated Emission	§15.407(a)	PASS
Frequency Stability	§15.407(g)	PASS

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

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3. General Information

3.1. Test environment and mode

Operating Environment:		
Condition	Conducted Emission	Radiated Emission
Temperature:	27.4 °C	25.2 °C
Humidity:	48 % RH	50 % RH
Atmospheric Pressure:	1010 mbar	1010 mbar
Test Mode:		
Engineering mode:	Keep the EUT in continuous transmitting by select channel and modulations.	

The sample was placed 0.8m & 1.5m for the measurement below & above 1GHz above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case(Z axis) are shown in Test Results of the following pages.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate
802.11a	6 Mbps
802.11n(HT20)	6.5 Mbps
802.11n(HT40)	13.5 Mbps
802.11ac(VHT20)	6.5 Mbps
802.11ac(VHT40)	13.5 Mbps
802.11ac(VHT80)	29.3 Mbps

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3.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

3. For conducted measurements (Output Power, Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

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4. Facilities and Accreditations

4.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

  SHENZHEN TONGCE TESTING LAB

  Designation Number: CN1205

  The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

  SHENZHEN TONGCE TESTING LAB

  CAB identifier: CN0031

  The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: TCT Testing Industrial Park Fuqiao 5th Industrial Zone, Fuhai Street, Bao'an District Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4.3. Measurement Uncertainty

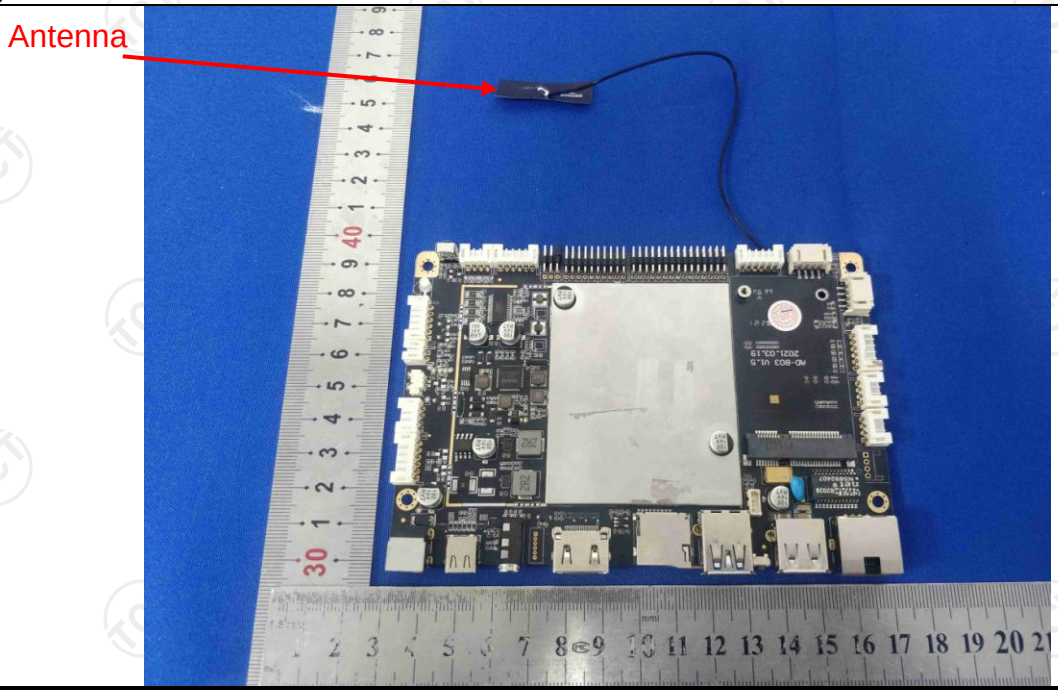
The reported uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	± 3.10 dB
2	RF power, conducted	± 0.12 dB
3	Spurious emissions, conducted	± 0.11 dB
4	All emissions, radiated(<1 GHz)	± 4.56 dB
5	All emissions, radiated(1 GHz - 18 GHz)	± 4.22 dB
6	All emissions, radiated(18 GHz- 40 GHz)	± 4.36 dB

5. Test Results and Measurement Data

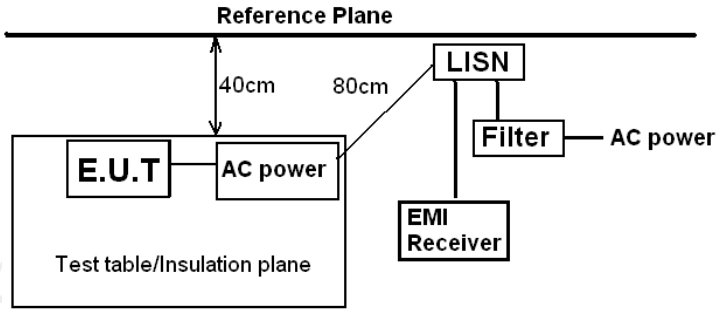
5.1. Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
E.U.T Antenna:	
The WIFI antenna is internal antenna which permanently attached, and the best case gain of the antenna is 2dBi.	



5.2. Conducted Emission

5.2.1. Test Specification

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.207</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Frequency Range:</td><td>150 kHz to 30 MHz</td></tr>
<tr><td>Receiver setup:</td><td>RBW=9 kHz, VBW=30 kHz, Sweep time=auto</td></tr>
<tr><td>Limits:</td><td>
<table>
<tr><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBuV)</td></tr>
<tr><td>Quasi-peak</td><td>Average</td></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
</td></tr>
<tr><td>Test Setup:</td><td> 

Remark:
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m</td></tr>
<tr><td>Test Mode:</td><td>Transmitting Mode</td></tr>
<tr><td>Test Procedure:</td><td>1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.
2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).
3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.</td></tr>
<tr><td>Test Result:</td><td>PASS</td></tr>
</table>

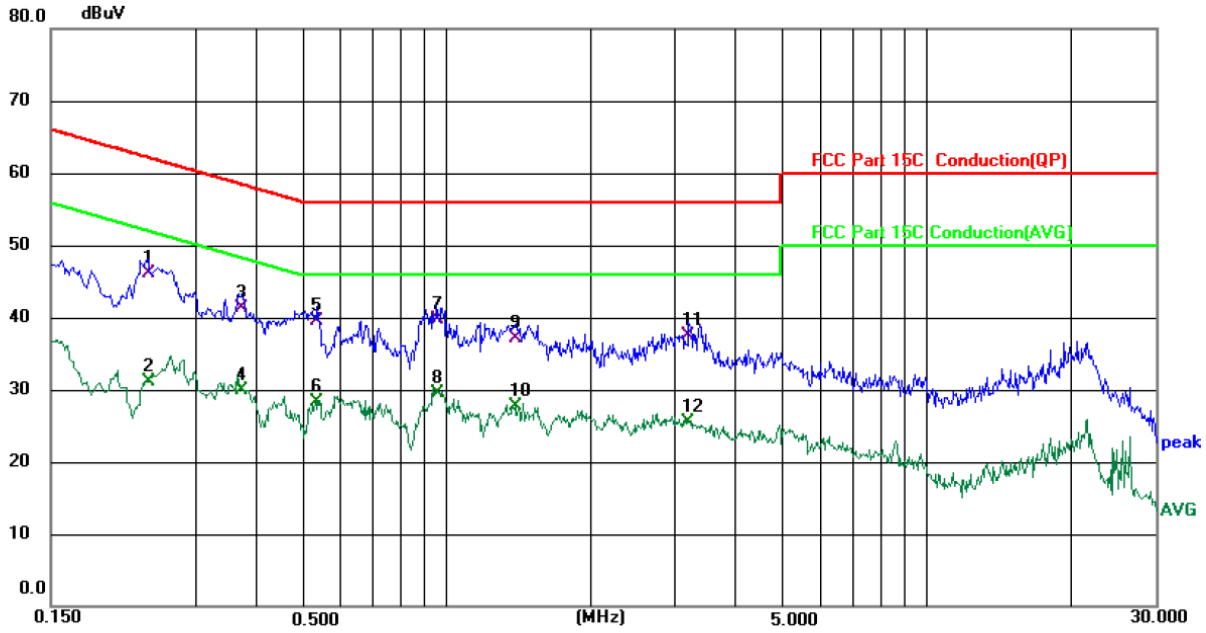
5.2.2. Test Instruments

Conducted Emission Shielding Room Test Site (843)				
Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMI Test Receiver	R&S	ESCI3	100898	Jul. 07, 2022
Line Impedance Stabilisation Newtork(LISN)	Schwarzbeck	NSLK 8126	8126453	Mar. 11, 2022
Line-5	TCT	CE-05	N/A	Jul. 07, 2022
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

5.2.3. Test data

Please refer to following diagram for individual

Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)



Site 844 Shielding Room | Phase: *L1* | Temperature: 27.4 (℃) | Humidity: 48 %

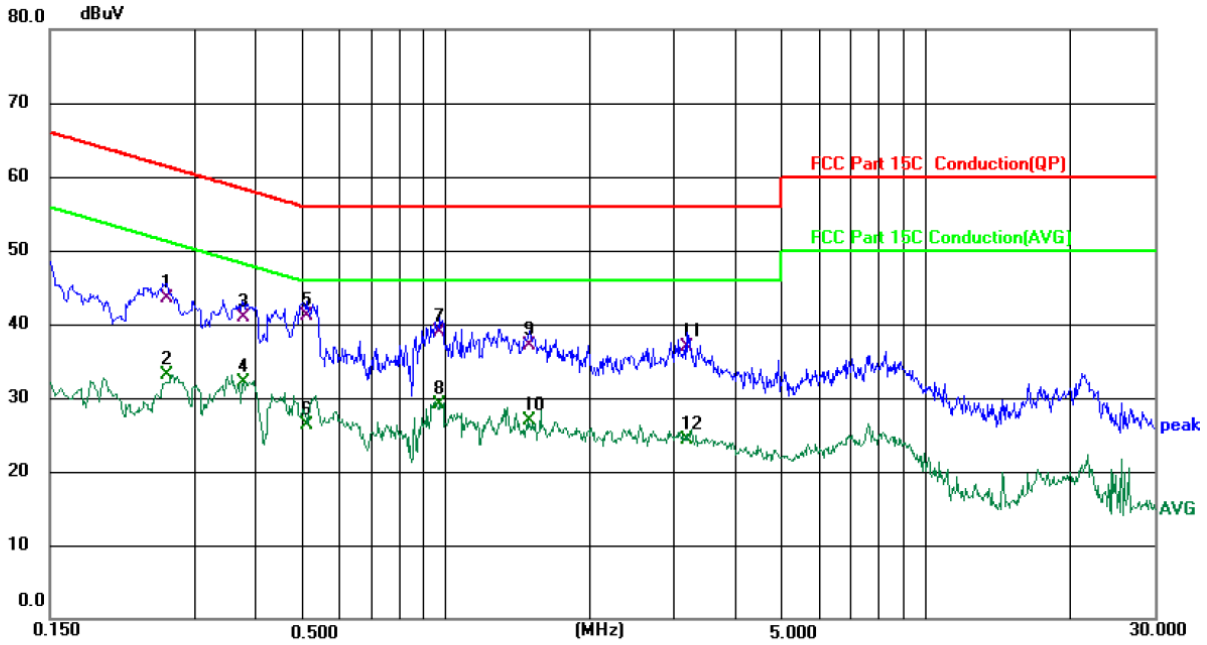
Limit: FCC Part 15C Conduction(QP) | Power: AC 120 V/60 Hz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2379	36.70	9.36	46.06	62.17	-16.11	QP	
2		0.2379	21.76	9.36	31.12	52.17	-21.05	AVG	
3		0.3738	32.02	9.25	41.27	58.42	-17.15	QP	
4		0.3738	20.60	9.25	29.85	48.42	-18.57	AVG	
5		0.5380	30.22	9.20	39.42	56.00	-16.58	QP	
6		0.5380	19.20	9.20	28.40	46.00	-17.60	AVG	
7		0.9537	30.31	9.30	39.61	56.00	-16.39	QP	
8		0.9537	20.26	9.30	29.56	46.00	-16.44	AVG	
9		1.3937	27.65	9.37	37.02	56.00	-18.98	QP	
10		1.3937	18.27	9.37	27.64	46.00	-18.36	AVG	
11		3.1979	27.94	9.52	37.46	56.00	-18.54	QP	
12		3.1979	15.94	9.52	25.46	46.00	-20.54	AVG	

Note:

Freq. = Emission frequency in MHz
Reading level (dBμV) = Receiver reading
Corr. Factor (dB) = LISN factor + Cable loss
Measurement (dBμV) = Reading level (dBμV) + Corr. Factor (dB)
Limit (dBμV) = Limit stated in standard
Margin (dB) = Measurement (dBμV) – Limits (dBμV)
Q.P. =Quasi-Peak
AVG =average
** is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.*

Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)



Site 844 Shielding Room | Phase: *N* | Temperature: 27.4 (℃) | Humidity: 48 %

Limit: FCC Part 15C Conduction(QP) | Power: AC 120 V/60 Hz

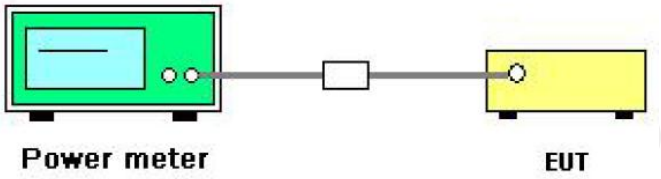
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2620	34.09	9.34	43.43	61.37	-17.94	QP	
2		0.2620	23.72	9.34	33.06	51.37	-18.31	AVG	
3		0.3780	31.67	9.27	40.94	58.32	-17.38	QP	
4		0.3780	22.87	9.27	32.14	48.32	-16.18	AVG	
5	*	0.5140	31.84	9.22	41.06	56.00	-14.94	QP	
6		0.5140	17.18	9.22	26.40	46.00	-19.60	AVG	
7		0.9778	29.65	9.30	38.95	56.00	-17.05	QP	
8		0.9778	19.87	9.30	29.17	46.00	-16.83	AVG	
9		1.4979	27.79	9.34	37.13	56.00	-18.87	QP	
10		1.4979	17.54	9.34	26.88	46.00	-19.12	AVG	
11		3.1859	27.54	9.42	36.96	56.00	-19.04	QP	
12		3.1859	14.90	9.42	24.32	46.00	-21.68	AVG	

Note:

Freq. = Emission frequency in MHz
Reading level (dBμV) = Receiver reading
Corr. Factor (dB) = LISN factor + Cable loss
Measurement (dBμV) = Reading level (dBμV) + Corr. Factor (dB)
Limit (dBμV) = Limit stated in standard
Margin (dB) = Measurement (dBμV) – Limits (dBμV)
Q.P. =Quasi-Peak
AVG =average
** is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.*

5.3. Maximum Conducted Output Power

5.3.1. Test Specification

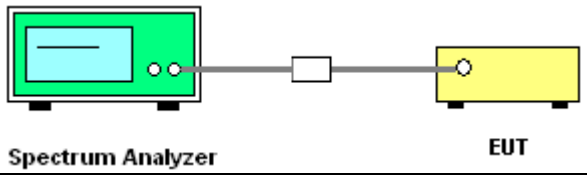
<table>
<tr><td>Test Requirement:</td><td>FCC Part15 E Section 15.407(a)& Part 2 J Section 2.1046</td></tr>
<tr><td>Test Method:</td><td>KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td>Frequency Band (MHz)</td><td>Limit</td></tr>
<tr><td>5180 - 5240</td><td>24dBm(250mW) for client device</td></tr>
<tr><td>5260 - 5320</td><td>24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz</td></tr>
<tr><td>5470 - 5725</td><td>24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz</td></tr>
<tr><td>5745 - 5825</td><td>30dBm(1W)</td></tr>
</table>
</td></tr>
<tr><td>Test Setup:</td><td> 
</td></tr>
<tr><td>Test Mode:</td><td>Transmitting mode with modulation</td></tr>
<tr><td>Test Procedure:</td><td>1. The testing follows the Measurement Procedure of KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E, 3, a
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.</td></tr>
<tr><td>Test Result:</td><td>PASS</td></tr>
<tr><td>Remark:</td><td>Conducted output power
= measurement power+10log(1/DC)
DC is duty cycle</td></tr>
</table>

5.3.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Power Meter	Agilent	E4418B	GB43312526	Jul. 07, 2022
Power Sensor	Agilent	E9301A	MY41497725	Jul. 07, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022

5.4. 6dB Emission Bandwidth

5.4.1. Test Specification

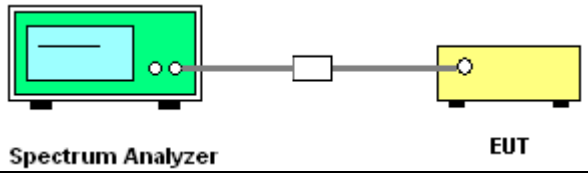
Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)& Part 2 J Section 2.1049
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C
Limit:	>500kHz
Test Setup:	
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz. 4. Measure and record the results in the test report.
Test Result:	PASS

5.4.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022

5.5. 26dB Bandwidth and 99% Occupied Bandwidth

5.5.1. Test Specification

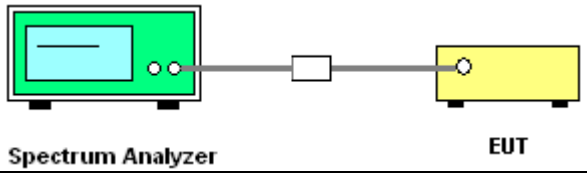
Test Requirement:	47 CFR Part 15C Section 15.407 (a)& Part 2 J Section 2.1049
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D
Limit:	No restriction limits
Test Setup:	
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. 4. Measure and record the results in the test report.
Test Result:	PASS

5.5.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022

5.6. Power Spectral Density

5.6.1. Test Specification

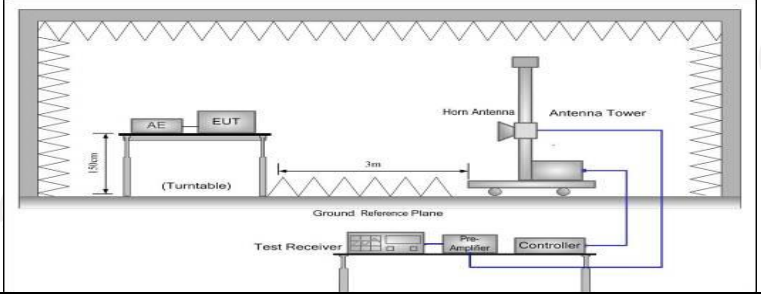
Test Requirement:	FCC Part15 E Section 15.407 (a)
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section F
Limit:	≤11.00dBm/MHz for Band 1 5150MHz-5250MHz(client device) ≤11.00dBm/MHz for Band 2A&2C 5250-5350&5470-5725 ≤30.00dBm/500KHz for Band 3 5725MHz-5850MHz The e.i,r,p spectral density for Band 1 5150MHz – 5250 MHz should not exceed 10dBm/MHz
Test Setup:	
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth. 1. Set RBW = 510 kHz/1 MHz, VBW ≥ 3*RBW, Sweep time = Auto, Detector = RMS. 2. Allow the sweeps to continue until the trace stabilizes. 3. Use the peak marker function to determine the maximum amplitude level. 4. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.
Test Result:	PASS

5.6.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Combiner Box	Ascentest	AT890-RFB	N/A	Jul. 07, 2022

5.7. Band edge

5.7.1. Test Specification

<table>
<tr><td>Test Requirement:</td><td>FCC CFR47 Part 15E Section 15.407</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10 2013</td></tr>
<tr><td>Limit:</td><td>In un-restricted band:
For Band 1&2A&2C: -27dBm/MHz
For Band 3:
<table>
<tr><th>Frequency (MHz)</th><th>Limit (dBm/MHz)</th><th>Frequency (MHz)</th><th>Limit (dBm/MHz)</th></tr>
<tr><td><5650</td><td>-27</td><td>5850~5855</td><td>27~15.6</td></tr>
<tr><td>5650~5700</td><td>-27~10</td><td>5855~5875</td><td>15.6~10</td></tr>
<tr><td>5700~5720</td><td>10~15.6</td><td>5875~5925</td><td>10~-27</td></tr>
<tr><td>5720~5725</td><td>15.6~27</td><td>> 5925</td><td>-27</td></tr>
</table>
E[dBμV/m] = EIRP[dBm] + 95.2 @3m
In restricted band:
<table>
<tr><th>Detector</th><th>Limit@3m</th></tr>
<tr><td>Peak</td><td>74dBμV/m</td></tr>
<tr><td>AVG</td><td>54dBμV/m</td></tr>
</table></td></tr>
<tr><td>Test Setup:</td><td> 
</td></tr>
<tr><td>Test Mode:</td><td>Transmitting mode with modulation</td></tr>
<tr><td>Test Procedure:</td><td>1. The EUT was placed on the top of a rotating table 0.8 meters 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 rota 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</td></tr>
</table>

	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, quasipeak or average method as specified and then reported in a data sheet.
Test Result:	PASS

5.7.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMI Test Receiver	R&S	ESIB7	100197	Jul. 07, 2022
Spectrum Analyzer	R&S	FSQ40	200061	Jul. 07, 2022
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Mar. 11, 2022
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Apr. 08, 2022
Pre-amplifier	HP	8447D	2727A05017	Jul. 07, 2022
Loop antenna	ZHINAN	ZN30900A	12024	Sep. 05, 2022
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 04, 2022
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 04, 2022
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Apr. 10, 2023
Coaxial cable	SKET	RC_DC18G-N	N/A	Apr. 08, 2022
Coaxial cable	SKET	RC-DC18G-N	N/A	Apr. 08, 2022
Coaxial cable	SKET	RC-DC40G-N	N/A	Jul. 07, 2022
Antenna Mast	Keleto	CC-A-4M	N/A	N/A
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

5.7.3. Test Data

802.11 a	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	37.06	5.82	42.88	74	54	-11.12	H
		5150	40.48	5.82	46.30	74	54	-7.70	V
	Highest	5250	37.26	6.52	43.78	74	54	-10.22	H
		5250	41.19	6.52	47.71	74	54	-6.29	V
Band 3	Lowest	5725	79.60	5.82	85.42	122.2	/	-36.78	H
		5725	81.05	5.82	86.87	122.2	/	-35.33	V
	Highest	5850	79.85	6.52	86.37	122.2	/	-35.83	H
		5850	82.78	6.52	89.30	122.2	/	-32.90	V
Remark: Factor(dB)= Ant. Factor + Cable Loss - Amp. Factor									

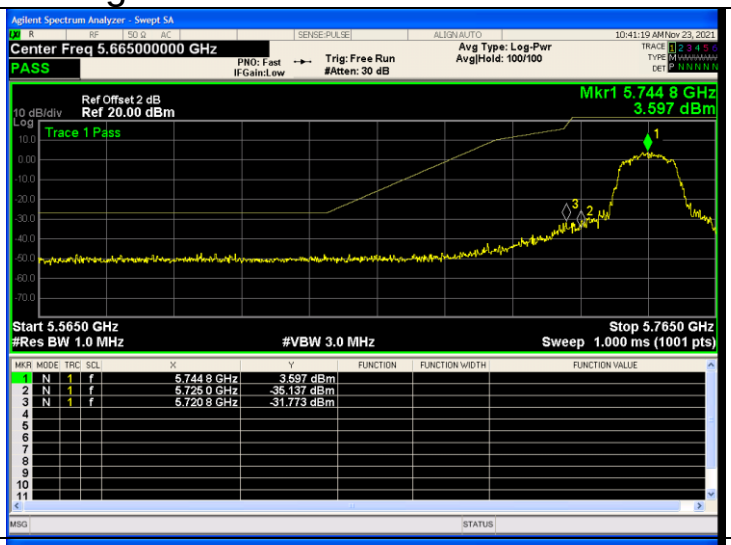
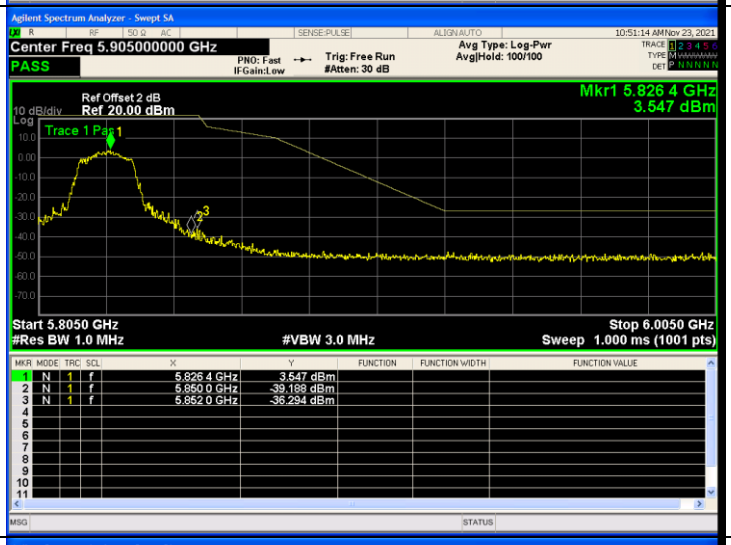
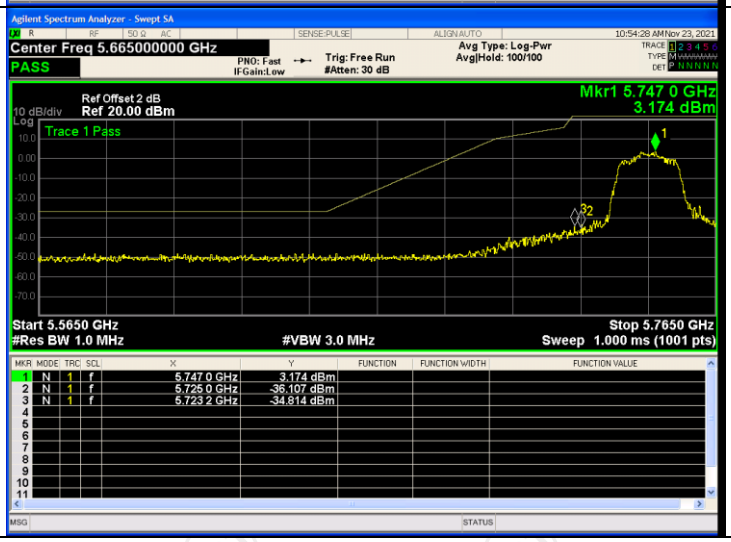
802.11 nHT20	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	35.82	6.96	42.78	74	54	-11.22	H
		5150	38.46	6.96	45.42	74	54	-8.58	V
	Highest	5250	35.48	8.21	43.69	74	54	-10.31	H
		5250	39.83	8.21	48.04	74	54	-5.96	V
Band 3	Lowest	5725	74.18	8.21	82.39	122.2	/	-39.81	H
		5725	80.72	8.21	88.93	122.2	/	-33.27	V
	Highest	5850	75.63	8.87	84.50	122.2	/	-37.70	H
		5850	81.75	8.87	90.62	122.2	/	-31.58	V
Remark: Factor(dB)= Ant. Factor + Cable Loss - Amp. Factor									

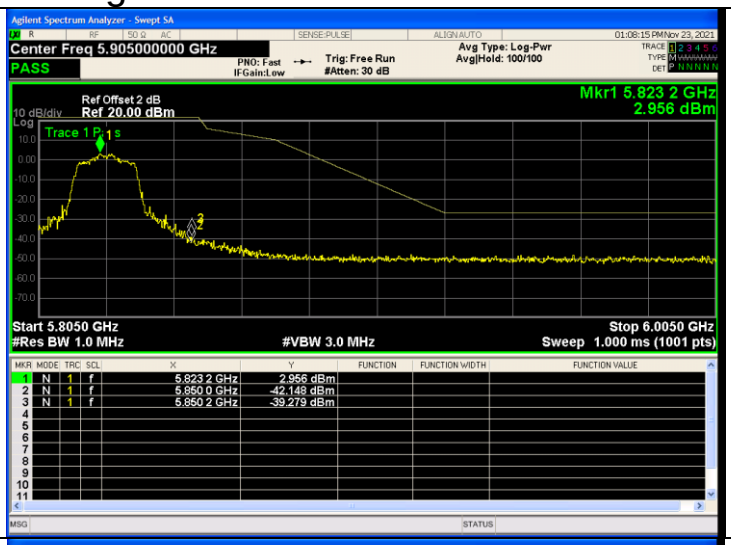
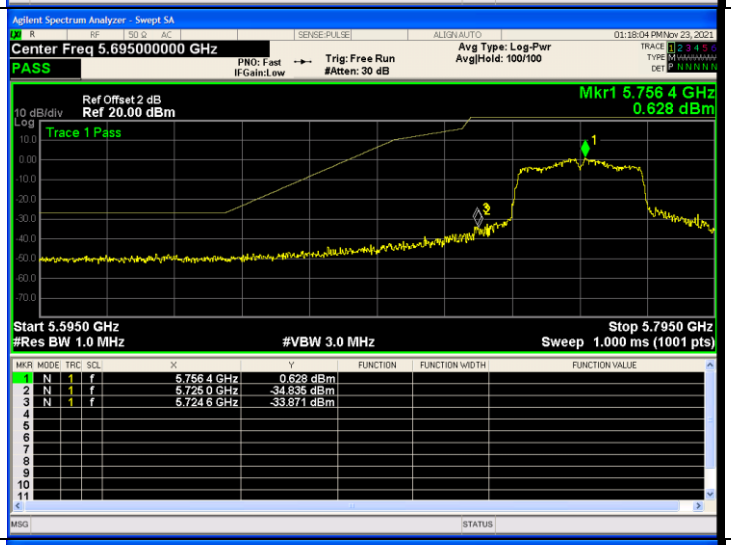
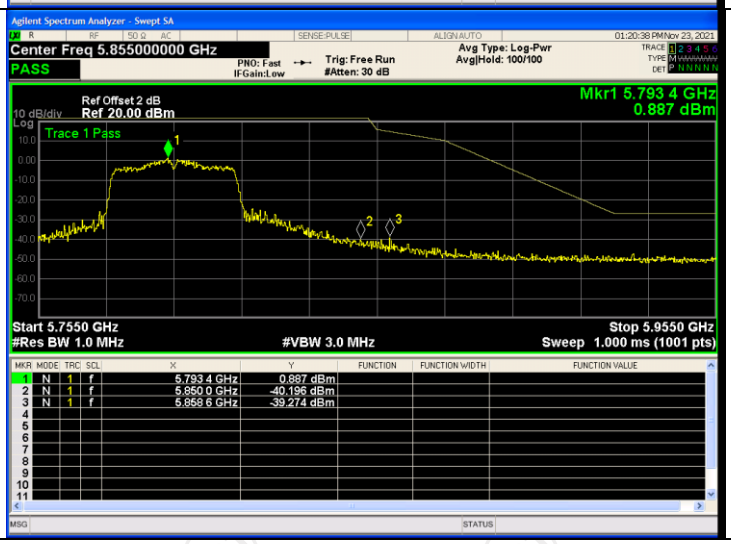
802.11 nHT40	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	36.00	5.82	41.82	74	54	-12.18	H
		5150	39.16	5.82	44.98	74	54	-9.02	V
	Highest	5250	36.23	6.52	42.75	74	54	-11.25	H
		5250	39.67	6.52	46.19	74	54	-7.81	V
Band 3	Lowest	5725	75.67	5.82	81.49	122.2	/	-40.71	H
		5725	76.63	5.82	82.45	122.2	/	-39.75	V
	Highest	5850	72.64	6.52	79.16	122.2	/	-43.04	H
		5850	74.84	6.52	81.36	122.2	/	-40.84	V
Remark: Factor(dB)= Ant. Factor + Cable Loss - Amp. Factor									

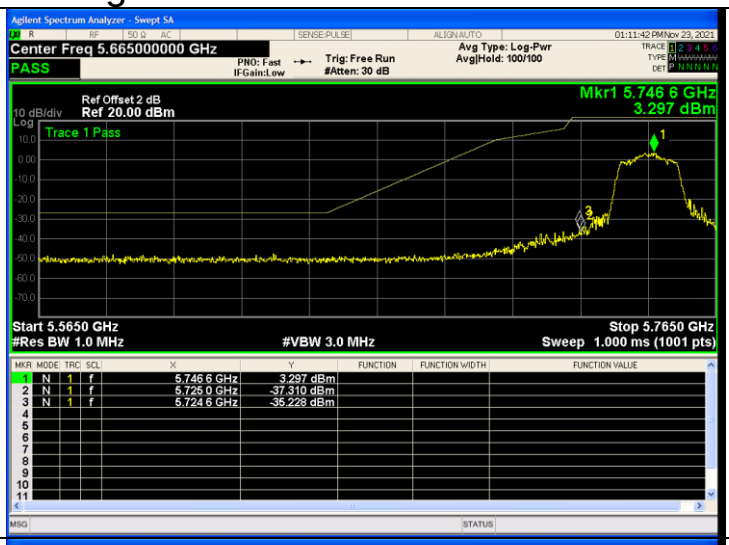
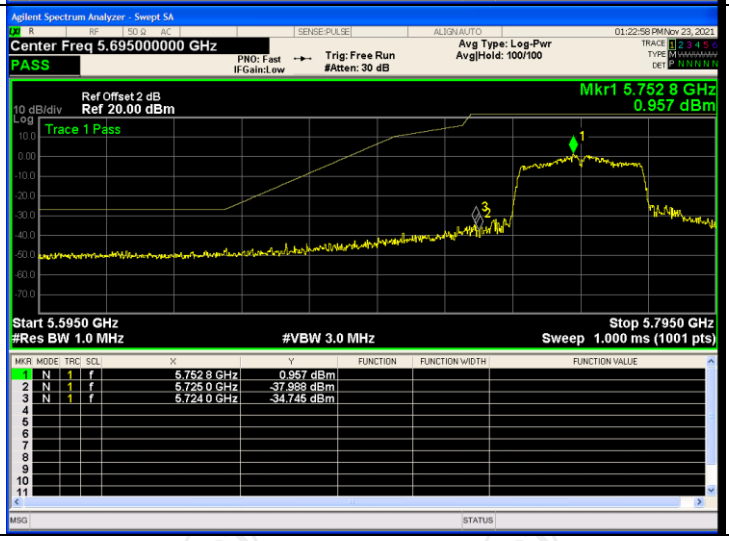
802.11 ac HT20	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	36.80	6.96	43.76	74	54	-10.24	H
		5150	39.50	6.96	46.46	74	54	-7.54	V
	Highest	5250	37.45	8.21	45.66	74	54	-8.34	H
		5250	40.28	8.21	48.49	74	54	-5.51	V
Band 3	Lowest	5725	78.70	8.21	86.91	122.2	/	-35.29	H
		5725	80.52	8.21	88.73	122.2	/	-33.47	V
	Highest	5850	74.49	8.87	83.36	122.2	/	-38.84	H
		5850	78.06	8.87	86.93	122.2	/	-35.27	V
Remark: Factor(dB)= Ant. Factor + Cable Loss - Amp. Factor									

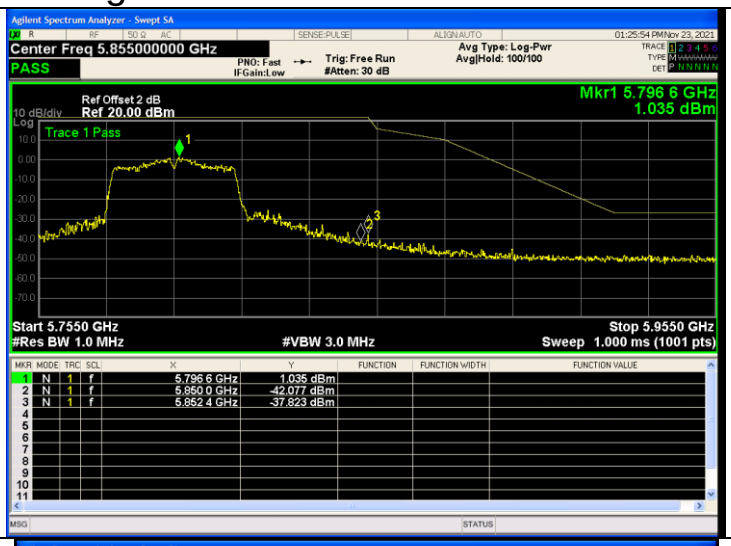
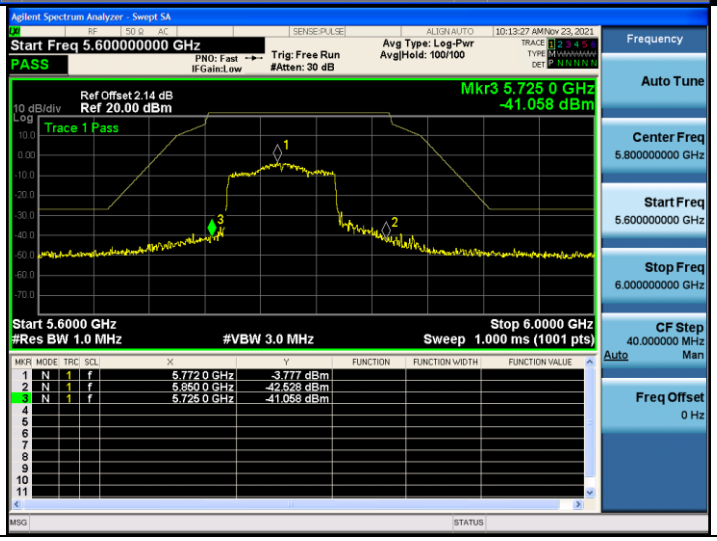
802.11 ac HT40	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	36.42	5.82	42.24	74	54	-11.76	H
		5150	38.82	5.82	44.64	74	54	-9.36	V
	Highest	5250	37.46	6.52	43.98	74	54	-10.02	H
		5250	39.35	6.52	45.87	74	54	-8.13	V
Band 3	Lowest	5725	76.21	5.82	82.03	122.2	/	-40.17	H
		5725	79.58	5.82	85.40	122.2	/	-36.80	V
	Highest	5850	68.41	6.52	74.93	122.2	/	-47.27	H
		5850	73.39	6.52	79.91	122.2	/	-42.29	V
Remark: Factor(dB)= Ant. Factor + Cable Loss - Amp. Factor									

802.11 ac HT80	CH	Freq. (MHz)	Read_level (dBuV/m)	Factor (dB)	Peak (dBuV/m)	Limit (dBuV/m) (Peak)	Limit (dBuV/m) (Avg)	Over	Ant. Pol. H/V
Band 1	Lowest	5150	36.87	6.96	43.83	74	54	-10.17	H
		5150	40.85	6.96	47.81	74	54	-6.19	V
	Highest	5250	37.42	8.21	45.63	74	54	-8.37	H
		5250	41.01	8.21	49.22	74	54	-4.78	V
Band 3	Lowest	5725	71.08	8.21	79.29	122.2	/	-42.91	H
		5725	74.98	8.21	83.19	122.2	/	-39.01	V
	Highest	5850	71.03	8.87	79.90	122.2	/	-42.30	H
		5850	73.75	8.87	82.62	122.2	/	-39.58	V
Remark: Factor(dB)= Ant. Factor + Cable Loss-Amp. Factor									

Band 3 Band-edge for RF Conducted Emissions			
802.11a /LCH			
802.11a /HCH			
802.11n HT20 / LCH			

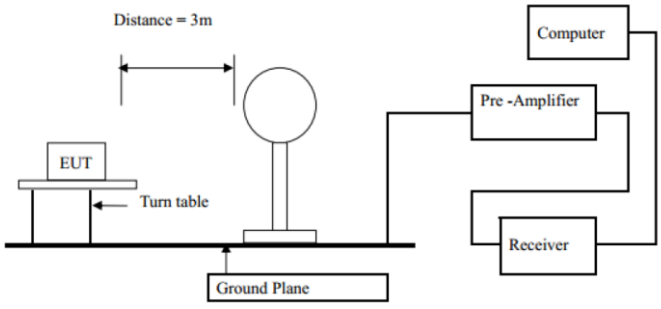
Band 3 Band-edge for RF Conducted Emissions			
802.11n HT20 / HCH			
802.11n HT40 /LCH			
802.11n HT40 /HCH			

Band 3 Band-edge for RF Conducted Emissions			
802.11ac HT20 / LCH			
802.11ac HT20 / HCH			
802.11ac HT40 / LCH			

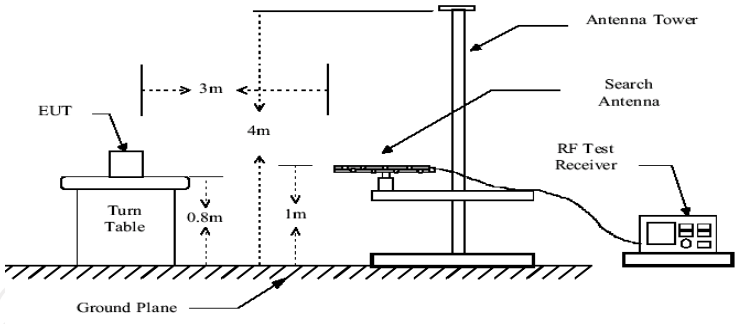
Band 3 Band-edge for RF Conducted Emissions			
802.11ac HT40 / HCH			
802.11ac HT80 / MCH			

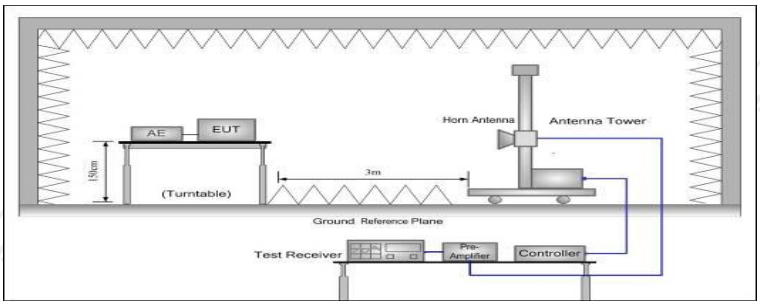
5.8. Unwanted Emission

5.8.1. Test Specification

<table>
<tr><td>Test Requirement:</td><td>FCC CFR47 Part 15 Section 15.407 & 15.209 & 15.205</td></tr>
<tr><td>Test Method:</td><td>KDB 789033 D02 v02r01</td></tr>
<tr><td>Frequency Range:</td><td>9kHz to 40GHz</td></tr>
<tr><td>Measurement Distance:</td><td>3 m</td></tr>
<tr><td>Antenna Polarization:</td><td>Horizontal & Vertical</td></tr>
<tr><td>Operation mode:</td><td>Transmitting mode with modulation</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>9kHz- 150kHz</td><td>Quasi-peak</td><td>200Hz</td><td>1kHz</td><td>Quasi-peak Value</td></tr>
<tr><td>150kHz-30MHz</td><td>Quasi-peak</td><td>9kHz</td><td>30kHz</td><td>Quasi-peak Value</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120KHz</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>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,
<table>
<tr><td>Frequency</td><td>Field Strength (microvolts/meter)</td><td>Measurement Distance (meters)</td></tr>
<tr><td>0.009-0.490</td><td>2400/F(KHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(KHz)</td><td>30</td></tr>
<tr><td>1.705-30</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100</td><td>3</td></tr>
<tr><td>88-216</td><td>150</td><td>3</td></tr>
<tr><td>216-960</td><td>200</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table>
<table>
<tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Detector</td></tr>
<tr><td rowspan="2">Above 1G</td><td>74.0</td><td>Peak</td></tr>
<tr><td>54.0</td><td>Average</td></tr>
</table>
</td></tr>
<tr><td>Test setup:</td><td>For radiated emissions below 30MHz


30MHz to 1GHz</td></tr>
</table>

<table>
<tr><td></td><td> 

Above 1GHz

</td></tr>
<tr><td>Test Procedure:</td><td>1. The EUT was placed on the top of a rotating table 0.8 meters above the groundat a 3 meter camber. The table was rotated 360 degrees todetermine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, whichwas 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 thenthe antenna was tuned to heights from 1 meter to 4 meters and the rotatablewas turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and SpecifiedBandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limitspecified, then testing could be stopped and the peak values of the EUT wouldbe reported. Otherwise the emissions that did not have 10dB margin would bere-tested one by one using peak, quasi-peak or average method as specified andthen reported in a data sheet.</td></tr>
<tr><td>Test results:</td><td>PASS</td></tr>
</table>

5.8.2. Test Instruments

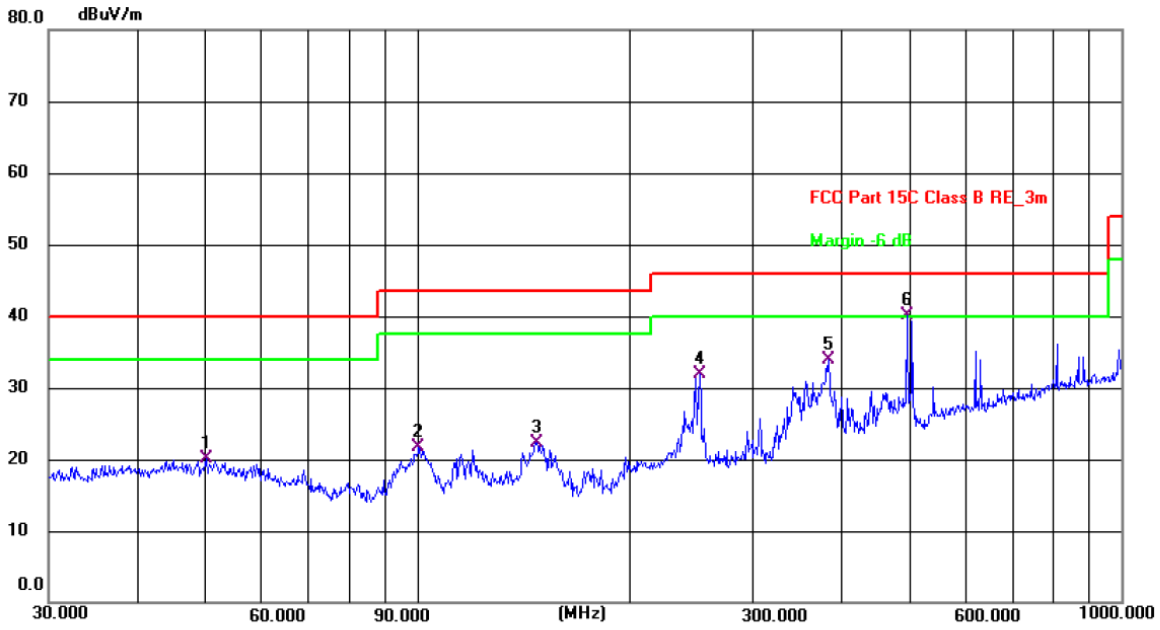
Radiated Emission Test Site (966)				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMI Test Receiver	R&S	ESIB7	100197	Jul. 07, 2022
Spectrum Analyzer	R&S	FSQ40	200061	Jul. 07, 2022
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Mar. 11, 2022
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Apr. 08, 2022
Pre-amplifier	HP	8447D	2727A05017	Jul. 07, 2022
Loop antenna	ZHINAN	ZN30900A	12024	Sep. 05, 2022
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 04, 2022
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 04, 2022
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Apr. 10, 2023
Coaxial cable	SKET	RC_DC18G-N	N/A	Apr. 08, 2022
Coaxial cable	SKET	RC-DC18G-N	N/A	Apr. 08, 2022
Coaxial cable	SKET	RC-DC40G-N	N/A	Jul. 07, 2022
Antenna Mast	Keleto	CC-A-4M	N/A	N/A
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A

5.8.3. Test Data

Please refer to following diagram for individual

Below 1GHz

Horizontal:

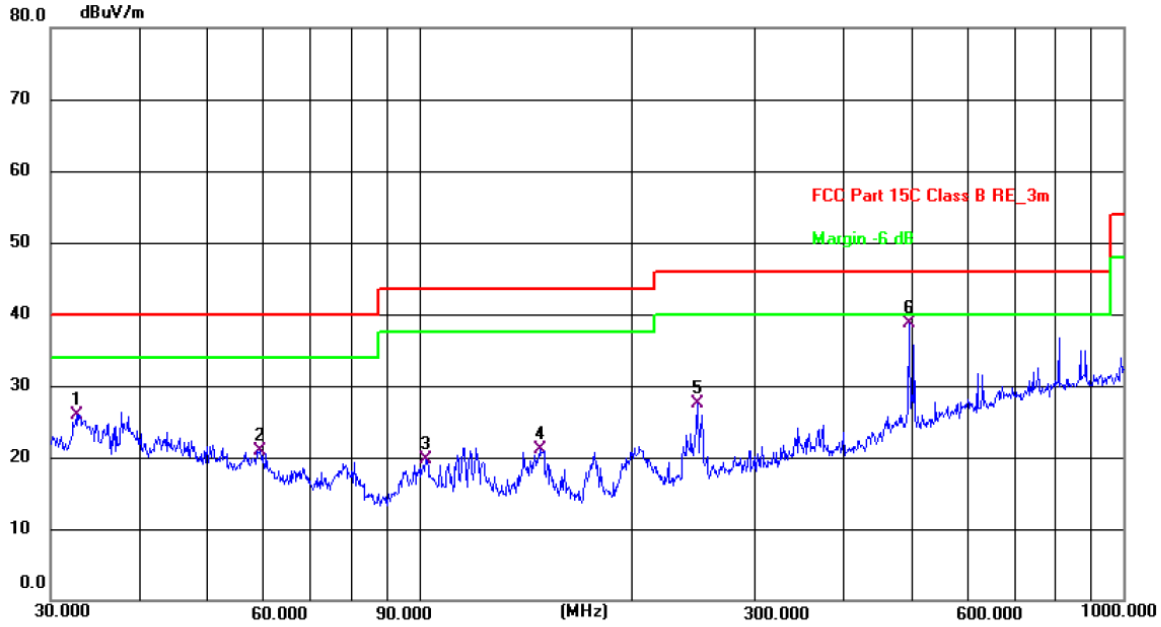


Site #1 3m Anechoic Chamber Polarization: ***Horizontal*** Temperature: 25.2(C) Humidity: 50 %

Limit: FCC Part 15C Class B RE_3m Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	50.2323	6.71	13.30	20.01	40.00	-19.99	QP	P	
2	100.5806	11.94	9.77	21.71	43.50	-21.79	QP	P	
3	147.9214	9.59	12.80	22.39	43.50	-21.11	QP	P	
4	252.0627	19.86	12.14	32.00	46.00	-14.00	QP	P	
5	383.9318	18.60	15.38	33.98	46.00	-12.02	QP	P	
6 *	495.9344	21.92	18.17	40.09	46.00	-5.91	QP	P	

Vertical:



Site #1 3m Anechoic Chamber Polarization: ***Vertical*** Temperature: 25.2(C) Humidity: 50 %

Limit: FCC Part 15C Class B RE_3m Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	32.6340	13.27	12.71	25.98	40.00	-14.02	QP	P	
2	59.4405	8.78	12.14	20.92	40.00	-19.08	QP	P	
3	102.3596	9.78	9.92	19.70	43.50	-23.80	QP	P	
4	148.4410	8.29	12.82	21.11	43.50	-22.39	QP	P	
5	248.5517	15.45	12.12	27.57	46.00	-18.43	QP	P	
6 *	495.9343	20.46	18.17	38.63	46.00	-7.37	QP	P	

Note: *1.The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported*

2. Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11a, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80), and the worst case Mode (Lowest channel and 802.11a) was submitted only.

3.Measurement (dBμV) = Reading level + Correction Factor, correction Factor= Antenna Factor + Cable loss – Pre-amplifier.

Modulation Type: Band 1									
11a CH36: 5180MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10360	H	38.91	---	8.02	46.93	---	68.2	---	-21.27
15540	H	40.26	---	9.87	50.13	---	74	54	-3.87
---	H	---	---	---	---	---	---	---	---
10360	V	38.74	---	8.02	46.76	---	68.2	---	-21.44
15540	V	39.83	---	9.87	49.70	---	74	54	-4.30
---	V	---	---	---	---	---	---	---	---
11a CH40: 5200MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10400	H	39.96	---	7.97	47.93	---	68.2	---	-20.27
15600	H	38.15	---	9.83	47.98	---	74	54	-6.02
---	H	---	---	---	---	---	---	---	---
10400	V	40.62	---	7.97	48.59	---	68.2	---	-19.61
15600	V	39.57	---	9.83	49.40	---	74	54	-4.60
---	V	---	---	---	---	---	---	---	---
11a CH48: 5240MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10480	H	39.60	---	7.97	47.57	---	68.2	---	-20.63
15720	H	39.82	---	9.83	49.65	---	74	54	-4.35
---	H	---	---	---	---	---	---	---	---
10480	V	39.84	---	7.97	47.81	---	68.2	---	-20.39
15720	V	37.05	---	9.83	46.88	---	74	54	-7.12
---	V	---	---	---	---	---	---	---	---
11n(HT20) CH36: 5180MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10360	H	39.97	---	8.02	47.99	---	68.2	---	-20.21
15540	H	38.61	---	9.87	48.48	---	74	54	-5.52
---	H	---	---	---	---	---	---	---	---
10360	V	40.28	---	8.02	48.30	---	68.2	---	-19.90
15540	V	37.59	---	9.87	47.46	---	74	54	-6.54
---	V	---	---	---	---	---	---	---	---
11n(HT20) CH40: 5200MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10400	H	38.14	---	7.97	46.11	---	68.2	---	-22.09
15600	H	39.36	---	9.83	49.19	---	74	54	-4.81
---	H	---	---	---	---	---	---	---	---
10400	V	40.52	---	7.97	48.49	---	68.2	---	-19.71
15600	V	38.43	---	9.83	48.26	---	74	54	-5.74
---	V	---	---	---	---	---	---	---	---
11n(HT20) CH48: 5240MHz									

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level Peak (dBμV/m)	Emission Level AV (dBμV/m)	Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
10480	H	38.19	---	7.97	46.16	---	68.2	---	-22.04
15720	H	37.88	---	9.83	47.71	---	74	54	-6.29
---	H	---	---	---	---	---	---	---	---
10480	V	39.12	---	7.97	47.09	---	68.2	---	-21.11
15720	V	38.75	---	9.83	48.58	---	74	54	-5.42
---	V	---	---	---	---	---	---	---	---

11n(HT40)CH38: 5190MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level Peak (dBμV/m)	Emission Level AV (dBμV/m)	Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
10380	H	40.04	---	7.75	47.79	---	68.2	---	-20.41
15570	H	38.16	---	9.87	48.03	---	74	54	-5.97
---	H	---	---	---	---	---	---	---	---
10380	V	39.90	---	7.75	47.65	---	68.2	---	-20.55
15570	V	38.48	---	9.87	48.35	---	74	54	-5.65
---	V	---	---	---	---	---	---	---	---

11n(HT40)CH46: 5230MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level Peak (dBμV/m)	Emission Level AV (dBμV/m)	Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
10460	H	41.58	---	7.97	49.55	---	68.2	---	-18.65
15690	H	38.63	---	9.83	48.46	---	74	54	-5.54
---	H	---	---	---	---	---	---	---	---
10460	V	40.79	---	7.97	48.76	---	68.2	---	-19.44
15690	V	38.14	---	9.83	47.97	---	74	54	-6.03
---	V	---	---	---	---	----	---	---	---

11ac(VHT20) CH36: 5180MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level Peak (dBμV/m)	Emission Level AV (dBμV/m)	Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
10360	H	40.25	---	8.02	48.27	---	68.2	---	-19.93
15540	H	38.30	---	9.87	48.17	---	74	54	-5.83
---	H	---	---	---	---	---	---	---	---
10360	V	38.49	---	8.02	46.51	---	68.2	---	-21.69
15540	V	39.08	---	9.87	48.95	---	74	54	-5.05
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH40: 5200MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level Peak (dBμV/m)	Emission Level AV (dBμV/m)	Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
10400	H	40.51	---	7.97	48.48	---	68.2	---	-19.72
15600	H	38.67	---	9.83	48.50	---	74	54	-5.50
---	H	---	---	---	---	---	---	---	---
10400	V	39.40	---	7.97	47.37	---	68.2	---	-20.83
15600	V	38.55	---	9.83	48.38	---	74	54	-5.62
---	V	---	---	---	---	---	---	---	---

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11ac(VHT20) CH48: 5240MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10480	H	39.20	---	7.97	47.17	---	68.2	---	-21.03
15720	H	37.43	---	9.83	47.26	---	74	54	-6.74
---	H	---	---	---	---	---	---	---	---
10480	V	39.81	---	7.97	47.78	---	68.2	---	-20.42
15720	V	38.00	---	9.83	47.83	---	74	54	-6.17
---	V	---	---	---	---	---	---	---	---

11ac(VHT40) CH38: 5190MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10380	H	41.46	---	7.75	49.21	---	68.2	---	-18.99
15570	H	38.83	---	9.87	48.70	---	74	54	-5.30
---	H	---	---	---	---	---	---	---	---
10380	V	39.11	---	7.75	46.86	---	68.2	---	-7.14
15570	V	39.84	---	9.87	49.71	---	74	54	-4.29
---	V	---	---	---	---	---	---	---	---

11ac(VHT40) CH46: 5230MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10460	H	39.65	---	7.97	47.62	---	68.2	---	-20.58
15690	H	39.19	---	9.83	49.02	---	74	54	-4.98
---	H	---	---	---	---	---	---	---	---
10460	V	40.27	---	7.97	48.24	---	68.2	---	-19.96
15690	V	37.30	---	9.83	47.13	---	74	54	-6.87
---	V	---	---	---	---	----	---	---	---

11ac(VHT80) CH42:5210									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10420	H	40.44	---	7.96	48.40	---	68.2	---	-19.80
15630	H	38.12	---	9.84	47.96	---	74	54	-6.04
	H	---	---	---	---	---	---	---	---
10420	V	39.68	---	7.96	47.64	---	68.2	---	-20.56
15630	V	38.22	---	9.84	48.06	---	74	54	-5.94
	V	---	---	---	---	----	---	---	---

Note:

1. *Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier*
2. *Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
4. *Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.*
5. *Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.*

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Modulation Type: Band 3									
11a(HT20) CH149: 5745MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
11490	H	39.40	---	8.09	47.49	---	74	54	-6.51
17235	H	37.24	---	9.67	46.91	---	68.2	---	-21.29
---	H	---	---	---	---	---	---	---	---
11490	V	41.86	---	8.09	49.95	---	74	54	-4.05
17235	V	37.37	---	9.67	47.04	---	68.2	---	-21.16
---	V	---	---	---	---	---	---	---	---

11a(HT20) CH157: 5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
11570	H	40.29	---	8.10	48.39	---	74	54	-5.61
17355	H	37.13	---	9.65	46.78	---	68.2	---	-21.42
---	H	---	---	---	---	---	---	---	---
11570	V	38.62	---	8.10	46.72	---	74	54	-7.28
17355	V	36.28	---	9.65	45.93	---	68.2	---	-22.27
---	V	---	---	---	---	---	---	---	---

11a(HT20) CH165: 5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
11650	H	39.01	---	8.12	47.13	---	74	54	-6.87
17475	H	37.84	---	9.62	47.46	---	68.2	---	-20.74
---	H	---	---	---	---	---	---	---	---
11650	V	40.39	---	8.12	48.51	---	74	54	-5.49
17475	V	37.06	---	9.62	46.68	---	68.2	---	-21.52
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH149: 5745MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
11490	H	40.15	---	8.09	48.24	---	74	54	-5.76
17235	H	37.24	---	9.67	46.91	---	68.2	---	-21.29
---	H	---	---	---	---	---	---	---	---
11490	V	39.76	---	8.09	47.85	---	74	54	-6.15
17235	V	37.53	---	9.67	47.20	---	68.2	---	-21.00
---	V	---	---	---	---	---	---	---	---

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11n(HT20) CH157: 5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11570	H	40.55	---	8.10	48.65	---	74	54	-5.35
17355	H	37.80	---	9.65	47.45	---	68.2	---	-20.75
---	H	---	---	---	---	---	---	---	---
11570	V	39.78	---	8.10	47.88	---	74	54	-6.12
17355	V	35.91	---	9.65	45.56	---	68.2	---	-22.64
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH165: 5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11650	H	39.50	---	8.12	47.62	---	74	54	-6.38
17475	H	37.61	---	9.62	47.23	---	68.2	---	-20.97
---	H	---	---	---	---	---	---	---	---
11650	V	40.98	---	8.12	49.10	---	74	54	-4.90
17475	V	37.23	---	9.62	46.85	---	68.2	---	-21.35
---	V	---	---	---	---	---	---	---	---

11n(HT40) CH151: 5755MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11510	H	41.49	---	8.09	49.58	---	74	54	-4.42
17265	H	37.90	---	9.67	47.57	---	68.2	---	-20.63
---	H	---	---	---	---	---	---	---	---
11510	V	41.66	---	8.09	49.75	---	74	54	-4.25
17265	V	37.53	---	9.67	47.20	---	68.2	---	-21.00
---	V	---	---	---	---	---	---	---	---

11n(HT40) CH159: 5795MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11590	H	40.78	---	8.10	48.88	---	74	54	-5.12
17385	H	37.67	---	9.65	47.32	---	68.2	---	-20.88
---	H	---	---	---	---	---	---	---	---
11590	V	40.95	---	8.10	49.05	---	74	54	-4.95
17385	V	36.11	---	9.65	45.76	---	68.2	---	-22.44
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH149: 5745MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11490	H	40.63	---	8.09	48.72	---	74	54	-5.28
17235	H	38.24	---	9.67	47.91	---	68.2	---	-20.29
---	H	---	---	---	---	---	---	---	---
11490	V	40.39	---	8.09	48.48	---	74	54	-5.52
17235	V	37.26	---	9.67	46.93	---	68.2	---	-21.27
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH157: 5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11570	H	39.14	---	8.10	47.24	---	74	54	-6.76
17355	H	37.08	---	9.65	46.73	---	68.2	---	-21.47
---	H	---	---	---	---	---	---	---	---
11570	V	37.85	---	8.10	45.95	---	74	54	-8.05
17355	V	35.73	---	9.65	45.38	---	68.2	---	-22.82
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH165: 5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11650	H	40.28	---	8.12	48.40	---	74	54	-5.60
17475	H	37.41	---	9.62	47.03	---	68.2	---	-21.17
---	H	---	---	---	---	---	---	---	---
11650	V	40.26	---	8.12	48.38	---	74	54	-5.62
17475	V	35.40	---	9.62	45.02	---	68.2	---	-23.18
---	V	---	---	---	---	---	---	---	---

11ac(VHT40) CH151: 5755MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11510	H	39.88	---	8.09	47.97	---	74	54	-6.03
17265	H	37.56	---	9.67	47.23	---	68.2	---	-20.97
---	H	---	---	---	---	---	---	---	---
11510	V	40.94	---	8.09	49.03	---	74	54	-4.97
17265	V	38.63	---	9.67	48.30	---	68.2	---	-19.90
---	V	---	---	---	---	---	---	---	---

11ac(VHT40) CH159: 5795MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
11590	H	39.00	---	8.10	47.10	---	74	54	-6.90
17385	H	36.81	---	9.65	46.46	---	68.2	---	-21.74
---	H	---	---	---	---	---	---	---	---
11590	V	40.64	---	8.10	48.74	---	74	54	-5.26
17385	V	38.89	---	9.65	48.54	---	68.2	---	-19.66
---	V	---	---	---	---	---	---	---	---

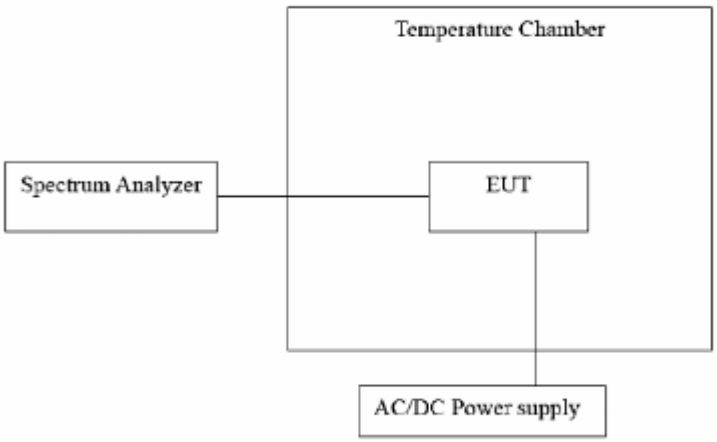
11ac(VHT80) CH155: 5775MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
					Peak (dBµV/m)	AV (dBµV/m)			
11550	H	40.76	---	8.09	48.85	---	74	54	-5.15
17325	H	35.24	---	9.66	44.90	---	68.2	---	-23.30
---	H	---	---	---	---	---	---	---	---
11550	V	40.39	---	8.09	48.48	---	74	54	-5.52
17325	V	37.10	---	9.66	46.76	---	68.2	---	-21.44
---	V	---	---	---	---	---	---	---	---

Note:

1. *Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier*
2. *Margin (dB) = Emission Level (Peak) (dBµV/m)-Average limit (dBµV/m)*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
4. *Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.*
5. *Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.*

5.9. Frequency Stability Measurement

5.9.1. Test Specification

Test Requirement:	FCC Part15 Section 15.407(g) &Part2 J Section 2.1055
Test Method:	ANSI C63.10: 2013
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 45 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Setup:	
Test Procedure:	The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test Result:	PASS
Remark:	Pre-scan was performed at all models(11a,11n,11ac), the worst case (11ac) was found and test data was shown in this report.

Test plots as follows:

Test mode:	802.11ac(VHT20)	Frequency(MHz):	5180
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5180.0592	59200	PASS
35		5179.9765	-23500	PASS
25		5180.0596	59600	PASS
15		5180.0591	59100	PASS
5		5180.0584	58400	PASS
0		5179.9842	-15800	PASS
20	9	5179.9935	-6500	PASS
	12	5180.0601	60100	PASS
	15	5180.0593	59300	PASS

Test mode:	802.11ac(VHT20)	Frequency(MHz):	5200
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5200.0572	57200	PASS
35		5200.0565	56500	PASS
25		5200.0594	59400	PASS
15		5199.9983	-1700	PASS
5		5200.0592	59100	PASS
0		5200.0597	59700	PASS
20	9	5200.0583	58300	PASS
	12	5199.9952	-4800	PASS
	15	5200.0593	59300	PASS

Test mode:	802.11ac(VHT20)	Frequency(MHz):	5240
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5240.0572	57200	PASS
35		5240.0586	58600	PASS
25		5240.0593	59300	PASS
15		5239.9975	-2500	PASS
5		5240.0485	48500	PASS
0		5239.9984	-1600	PASS
20	9	5240.0572	57200	PASS
	12	5240.0610	61000	PASS
	15	5239.9965	-3500	PASS

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Test mode:	802.11ac(VHT20)	Frequency(MHz):	5745
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5745.0798	79800	PASS
35		5745.0762	76200	PASS
25		5744.9964	-3600	PASS
15		5744.9952	-4800	PASS
5		5745.0786	78600	PASS
0		5745.0798	79800	PASS
20	9	5745.0785	78500	PASS
	12	5745.0830	83000	PASS
	15	5745.0765	76500	PASS

Test mode:	802.11ac(VHT20)	Frequency(MHz):	5785
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5785.0584	58400	PASS
35		5785.0586	58600	PASS
25		5784.9982	-1800	PASS
15		5785.0565	56500	PASS
5		5785.0546	54600	PASS
0		5785.0582	58200	PASS
20	9	5784.9974	-2600	PASS
	12	5785.0600	60000	PASS
	15	5784.9975	-2500	PASS

Test mode:	802.11ac(VHT20)	Frequency(MHz):	5825
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5824.9812	-18800	PASS
35		5825.0080	8000	PASS
25		5824.9954	-4600	PASS
15		5824.9987	-1300	PASS
5		5825.0617	61700	PASS
0		5825.0582	58200	PASS
20	9	5825.0427	42700	PASS
	12	5824.9976	-2400	PASS
	15	5825.0514	51400	PASS

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Test mode:	802.11ac(VHT40)	Frequency(MHz):	5190

Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5190.0125	12500	PASS
35		5190.0368	36800	PASS
25		5190.0103	10300	PASS
15		5190.0036	3600	PASS
5		5190.0262	26200	PASS
0		5190.0097	9700	PASS
20	9	5189.9913	-8700	PASS
	12	5189.9976	-2400	PASS
	15	5190.0345	34500	PASS

Test mode:	802.11ac(VHT40)	Frequency(MHz):	5230

Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5230.0127	12700	PASS
35		5230.0135	13500	PASS
25		5230.0398	39800	PASS
15		5229.9967	-3300	PASS
5		5229.9982	-1800	PASS
0		5230.0054	5400	PASS
20	9	5230.0042	4200	PASS
	12	5230.0029	2900	PASS
	15	5229.9972	-2800	PASS

Test mode:	802.11ac(VHT40)	Frequency(MHz):	5755

Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5755.0376	37600	PASS
35		5755.0380	38000	PASS
25		5755.0267	26700	PASS
15		5755.0345	34500	PASS
5		5755.0381	38100	PASS
0		5755.0362	36200	PASS
20	9	5755.0497	49700	PASS
	12	5755.0410	41000	PASS
	15	5755.0394	39400	PASS

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Test mode:	802.11ac(VHT40)	Frequency(MHz):	5795

Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5794.9803	-19700	PASS
35		5794.9848	-15200	PASS
25		5795.0147	14700	PASS
15		5795.0336	33600	PASS
5		5795.0422	42200	PASS
0		5795.0261	26100	PASS
20	9	5795.0152	15200	PASS
	12	5794.9984	-1600	PASS
	15	5795.0085	8500	PASS

Test mode:	802.11ac(VHT80)	Frequency(MHz):	5210

Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5209.9805	-19500	PASS
35		5209.9848	-15200	PASS
25		5210.0246	24600	PASS
15		5210.0035	3500	PASS
5		5210.0127	12700	PASS
0		5210.0063	6300	PASS
20	9	5210.0258	25800	PASS
	12	5209.9981	-1900	PASS
	15	5210.0084	8400	PASS

Test mode:	802.11ac(VHT80)	Frequency(MHz):	5775

Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	12V	5775.0048	4800	PASS
35		5774.9976	-2400	PASS
25		5775.0042	4200	PASS
15		5775.0035	3500	PASS
5		5775.0129	12900	PASS
0		5775.0364	36400	PASS
20	9	5775.0258	25800	PASS
	12	5774.9982	-1800	PASS
	15	5775.0086	8600	PASS

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Appendix A: Test Result of Conducted Test

Duty Cycle

Band1

Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	97.86	0.09
NVNT	a	5200	97.87	0.09
NVNT	a	5240	97.86	0.09
NVNT	ac20	5180	97.64	0.10
NVNT	ac20	5200	97.74	0.10
NVNT	ac20	5240	97.74	0.10
NVNT	ac40	5190	95.68	0.19
NVNT	ac40	5230	95.71	0.19
NVNT	ac80	5210	91.89	0.37
NVNT	n20	5180	97.73	0.10
NVNT	n20	5200	97.72	0.10
NVNT	n20	5240	97.75	0.10
NVNT	n40	5190	95.71	0.19
NVNT	n40	5230	95.74	0.19

Band3

Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5745	97.89	0.09
NVNT	a	5785	97.86	0.09
NVNT	a	5825	97.89	0.09
NVNT	ac20	5745	97.78	0.10
NVNT	ac20	5785	97.81	0.10
NVNT	ac20	5825	97.81	0.10
NVNT	ac40	5755	95.68	0.19
NVNT	ac40	5795	95.68	0.19
NVNT	ac80	5775	92.02	0.36
NVNT	n20	5745	97.74	0.10
NVNT	n20	5785	97.74	0.10
NVNT	n20	5825	97.74	0.10
NVNT	n40	5755	95.71	0.19
NVNT	n40	5795	95.77	0.19

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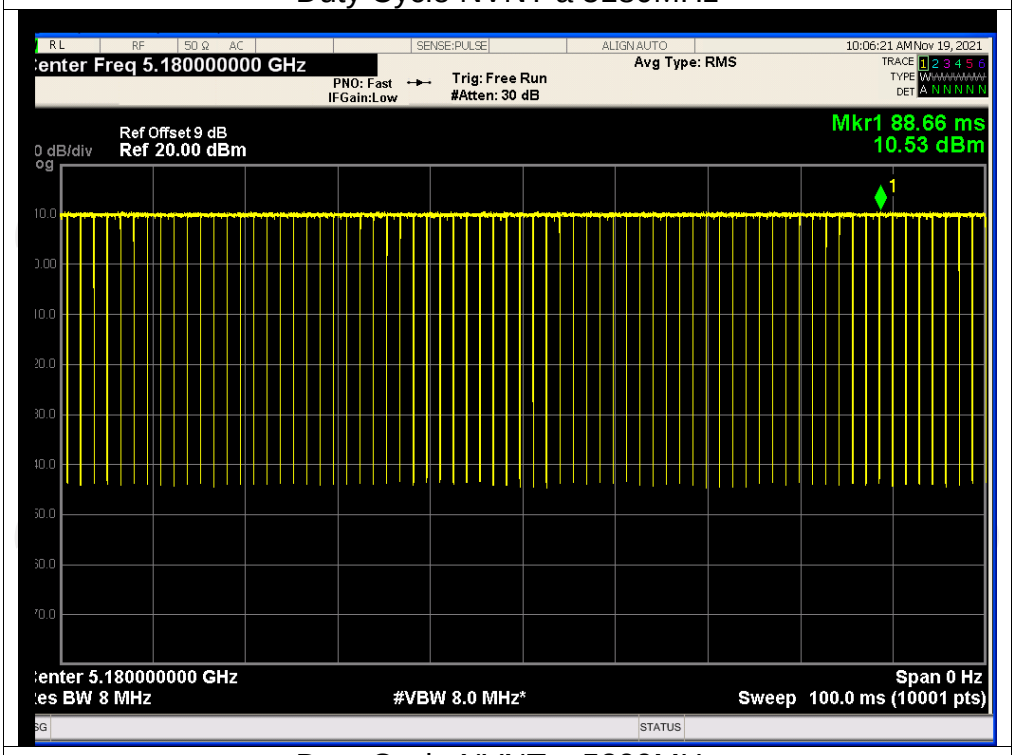
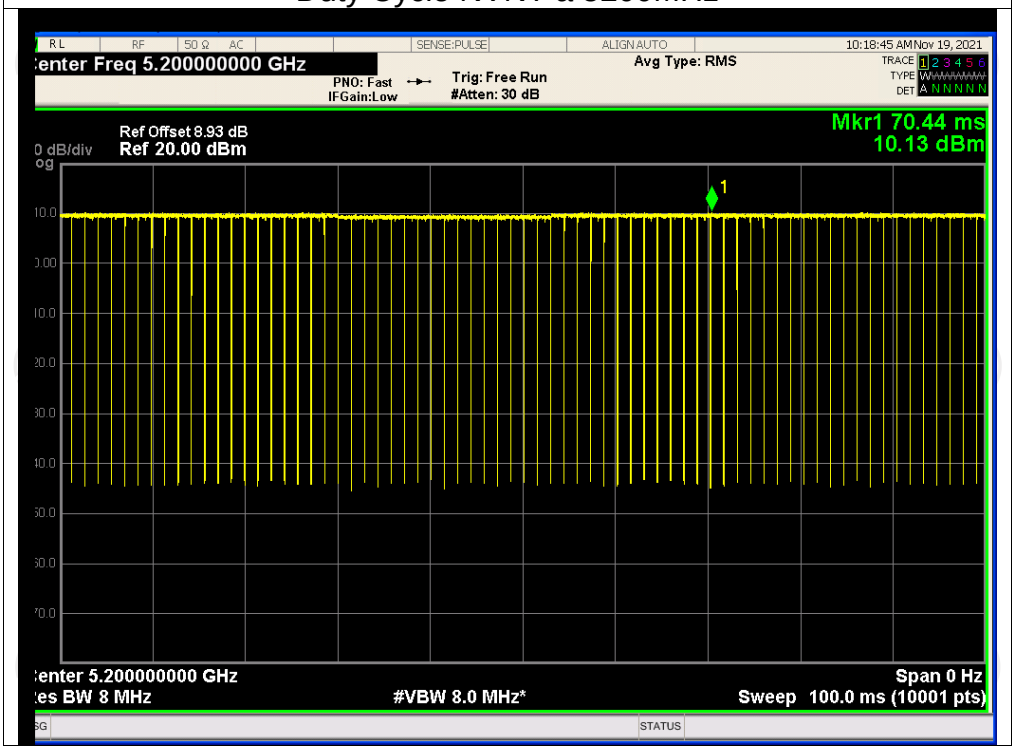
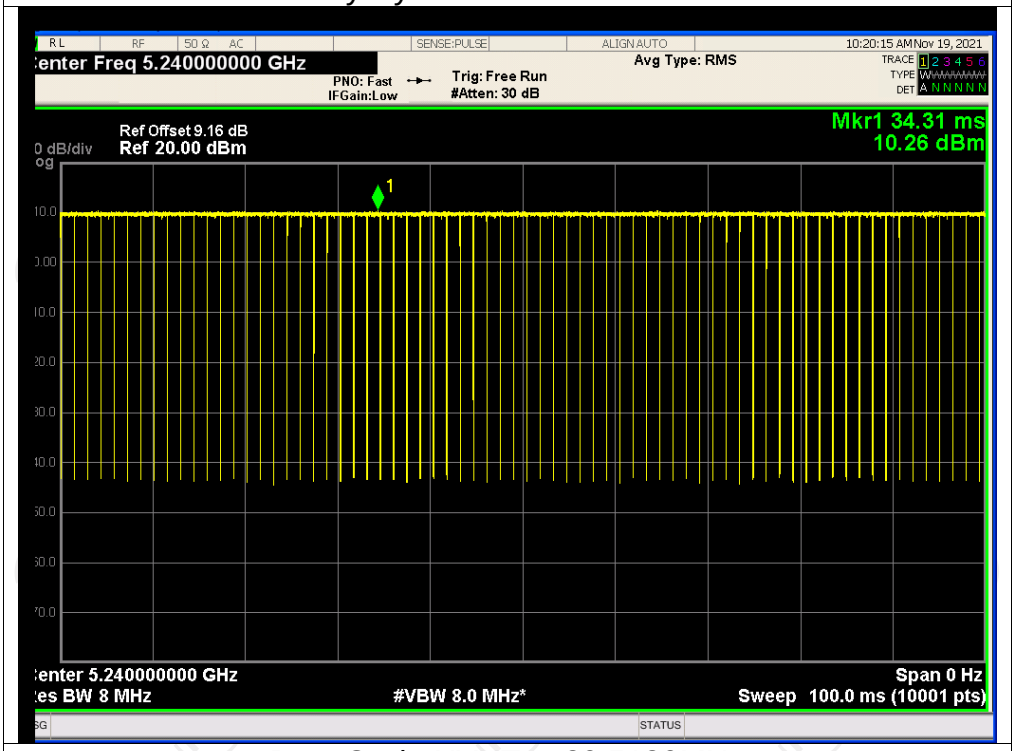
Test Graphs Band1
Duty Cycle NVNT a 5180MHz



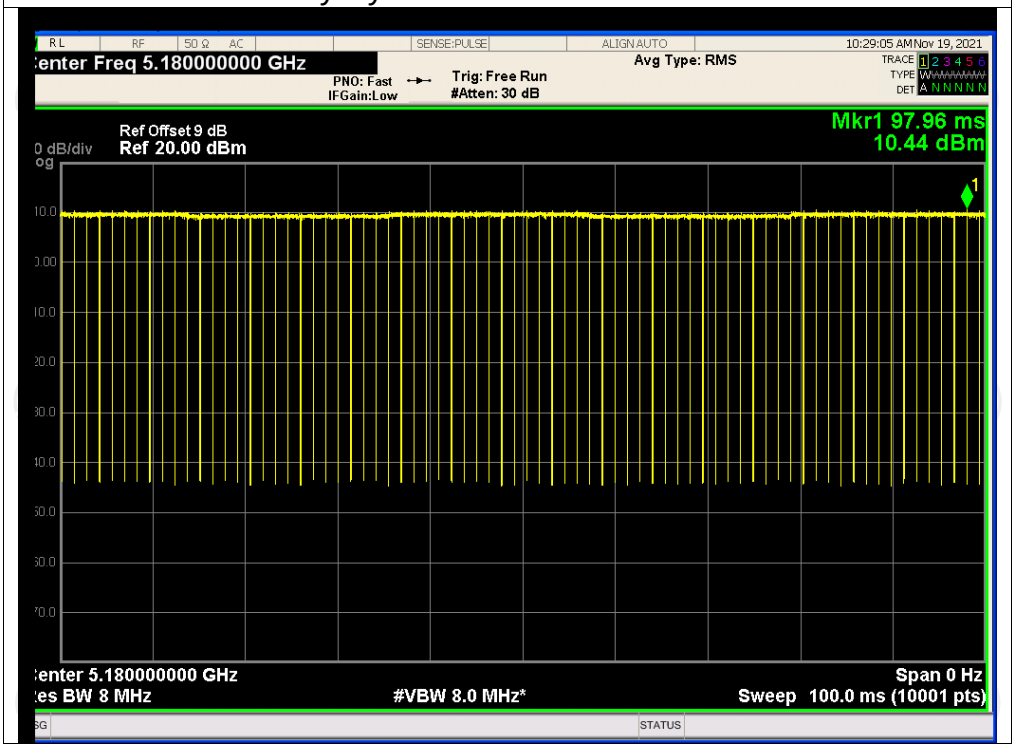
Duty Cycle NVNT a 5200MHz



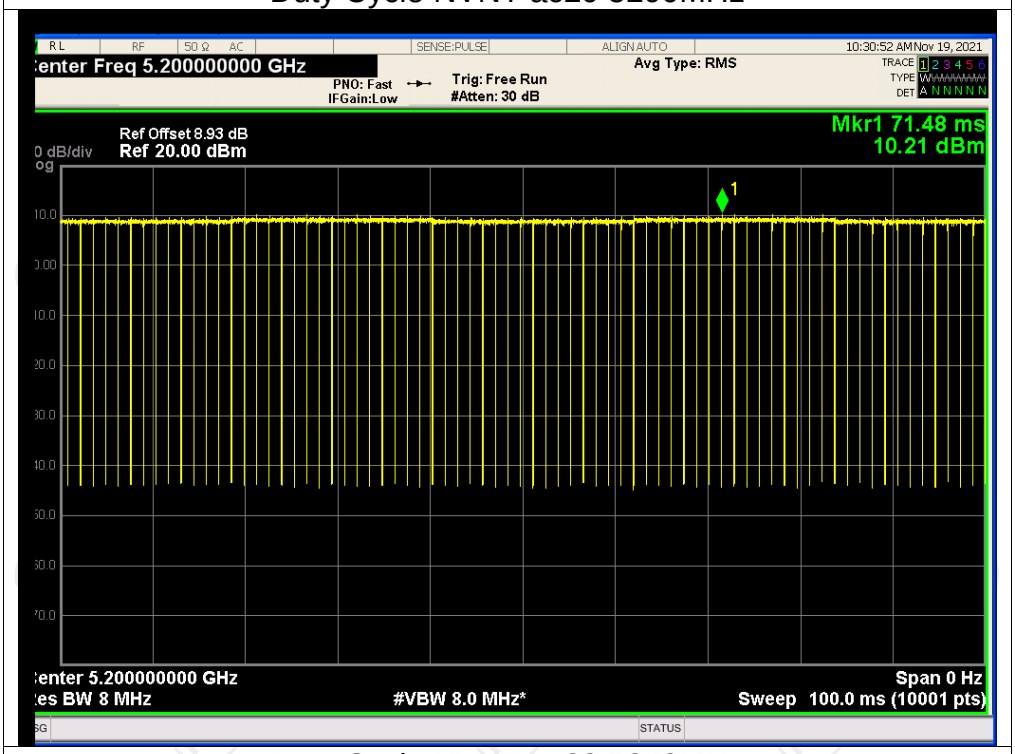
Duty Cycle NVNT a 5240MHz



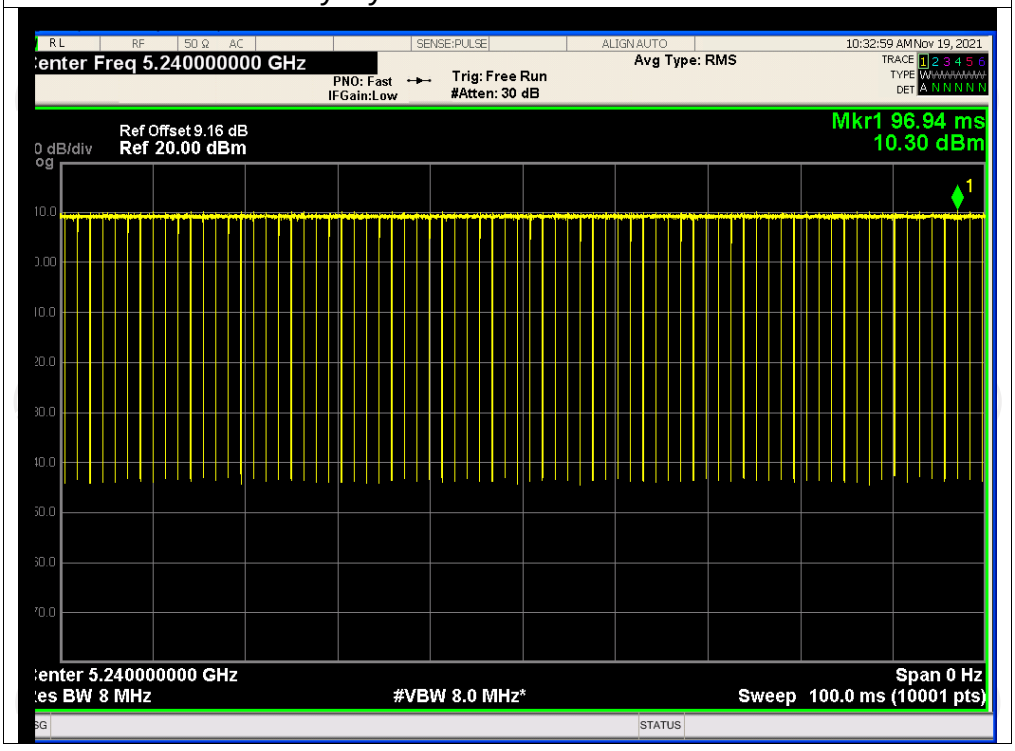
Duty Cycle NVNT ac20 5180MHz



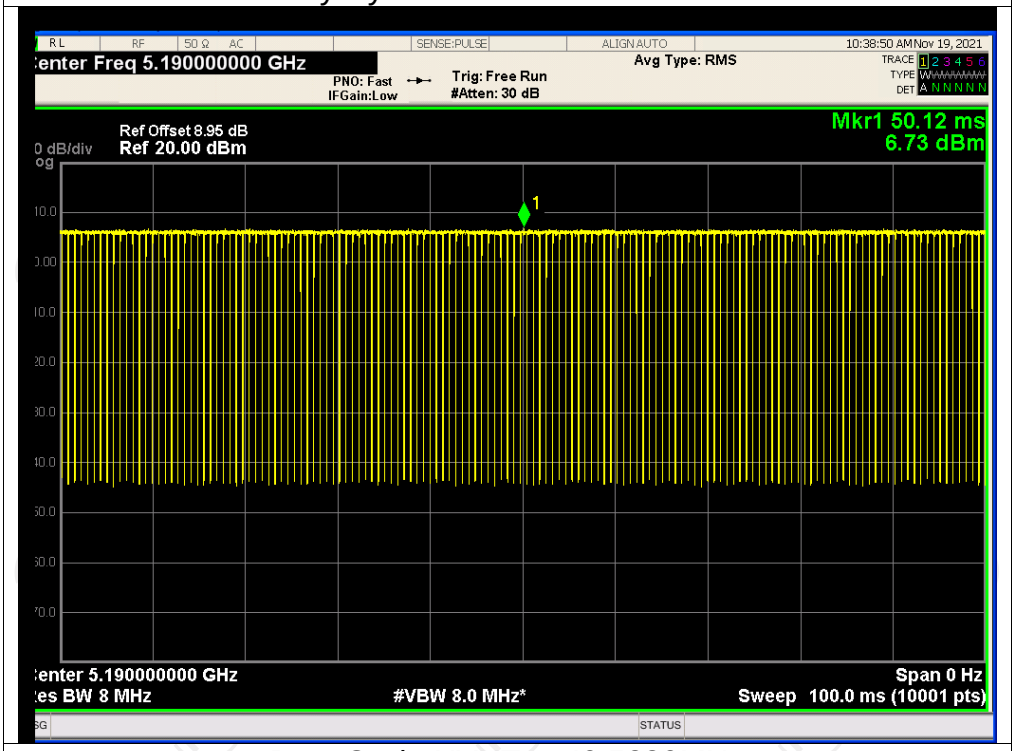
Duty Cycle NVNT ac20 5200MHz



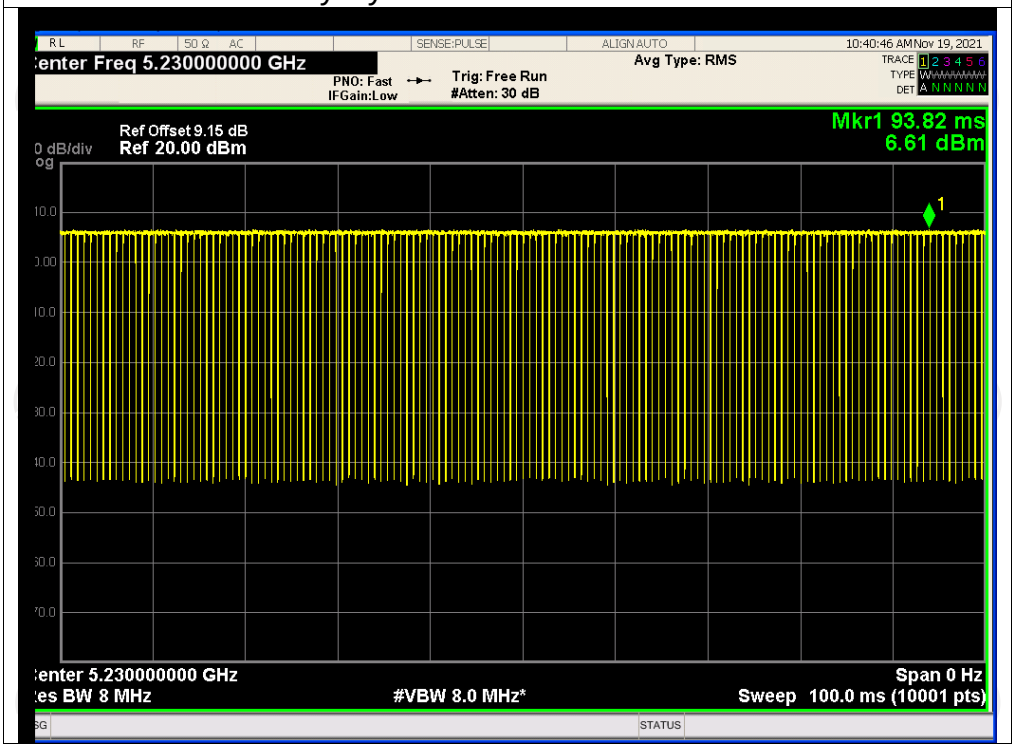
Duty Cycle NVNT ac20 5240MHz



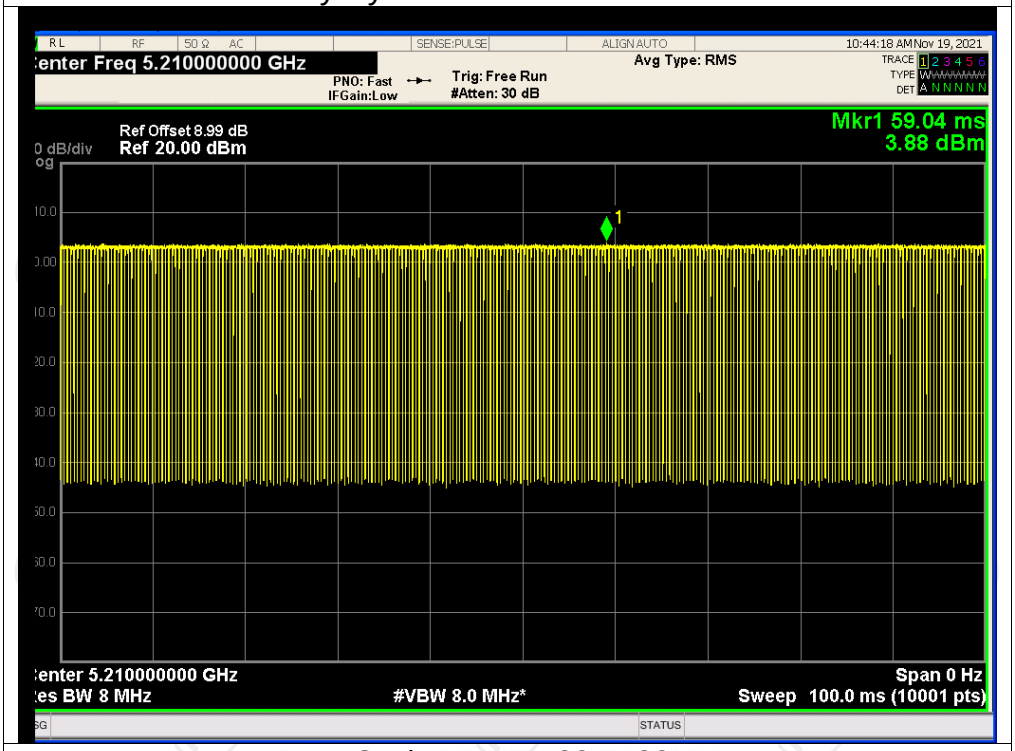
Duty Cycle NVNT ac40 5190MHz



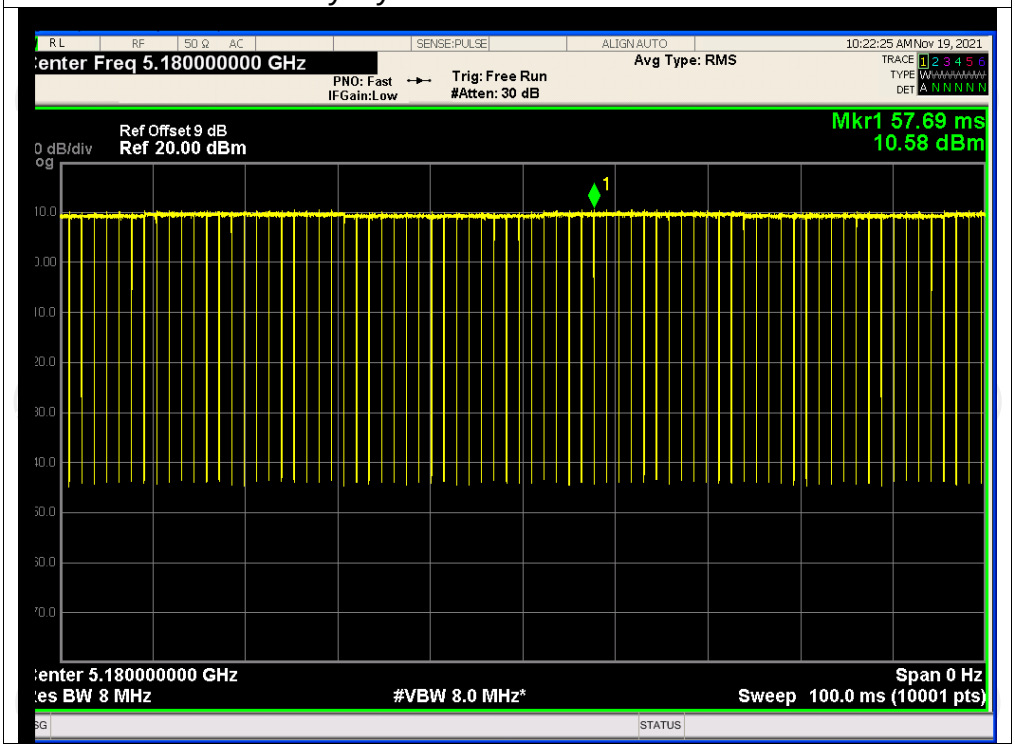
Duty Cycle NVNT ac40 5230MHz



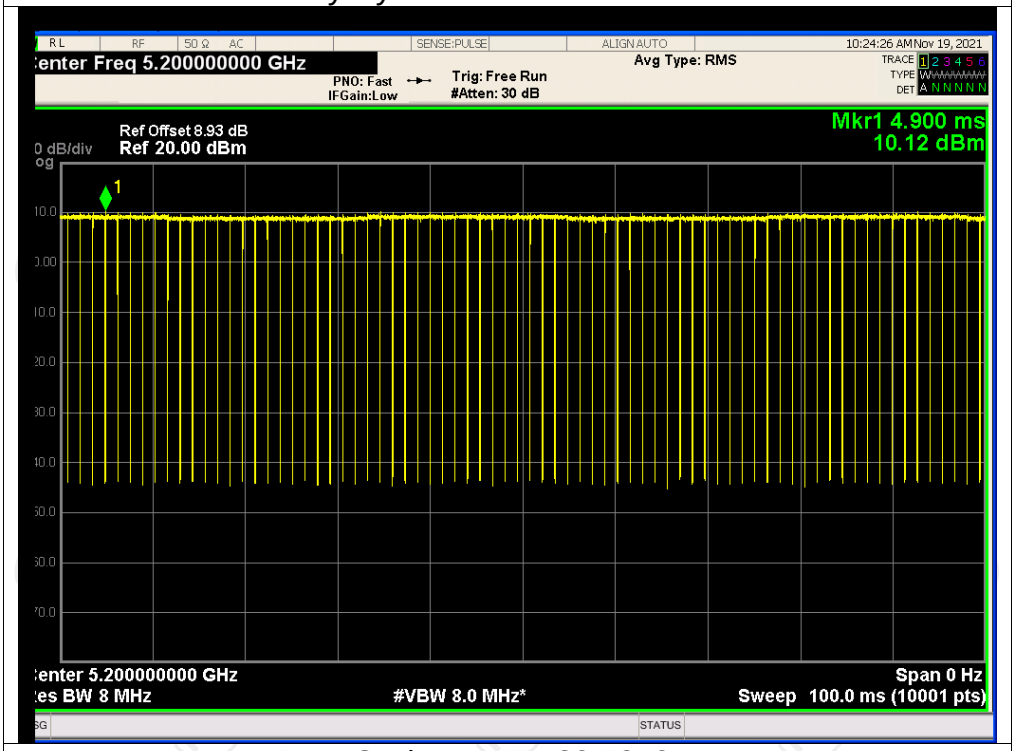
Duty Cycle NVNT ac80 5210MHz



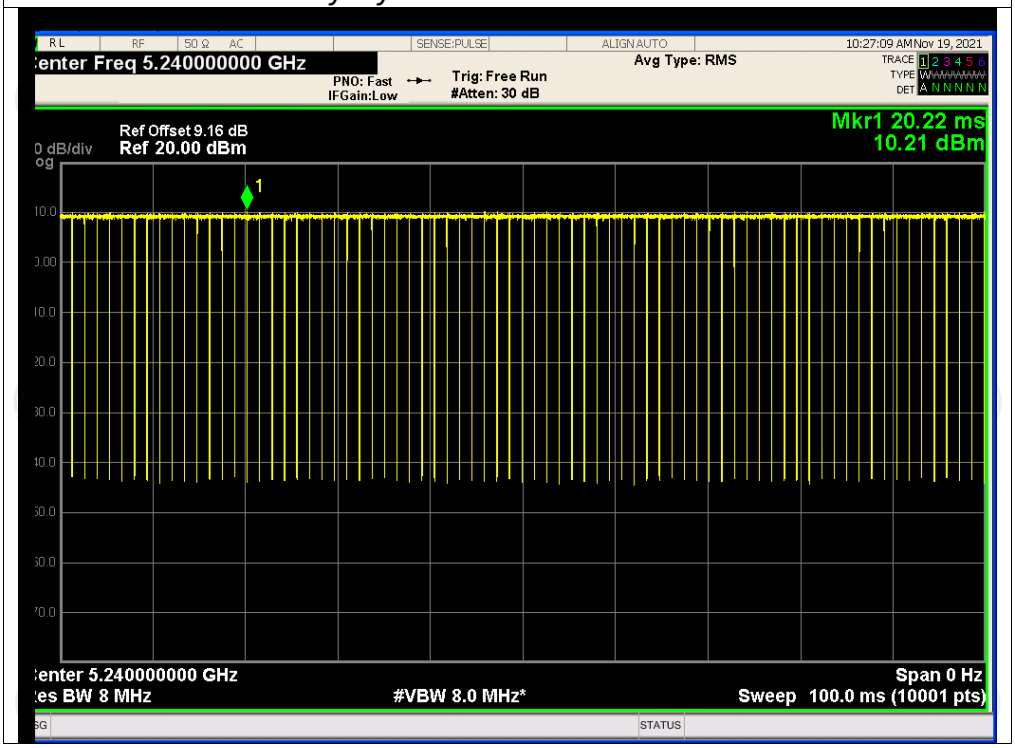
Duty Cycle NVNT n20 5180MHz



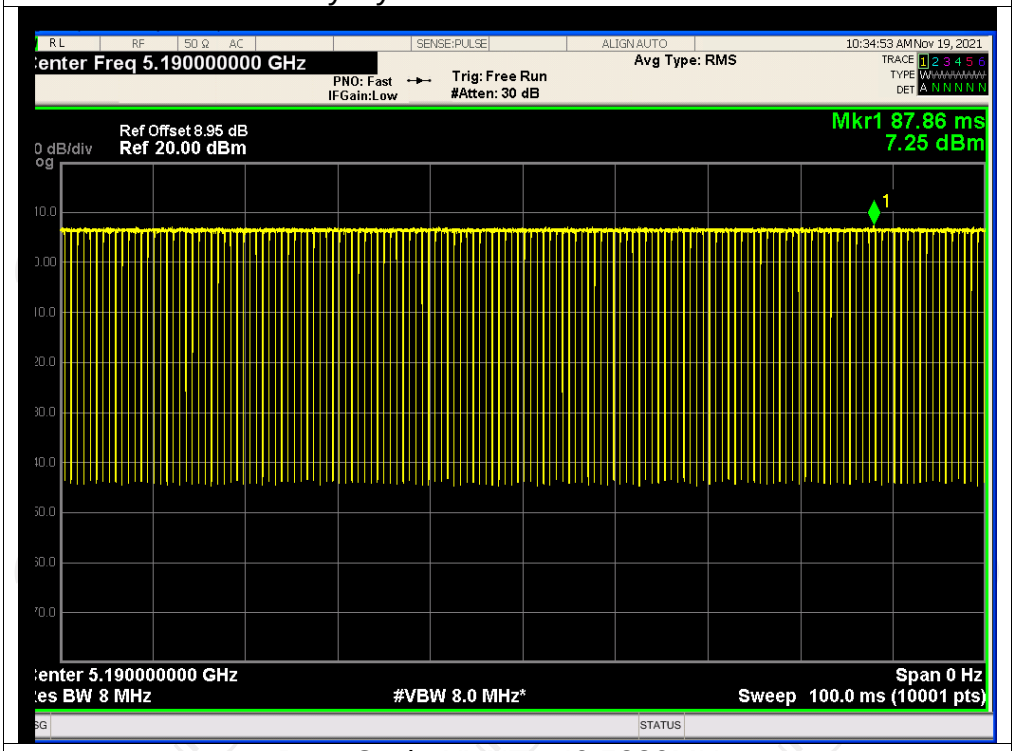
Duty Cycle NVNT n20 5200MHz



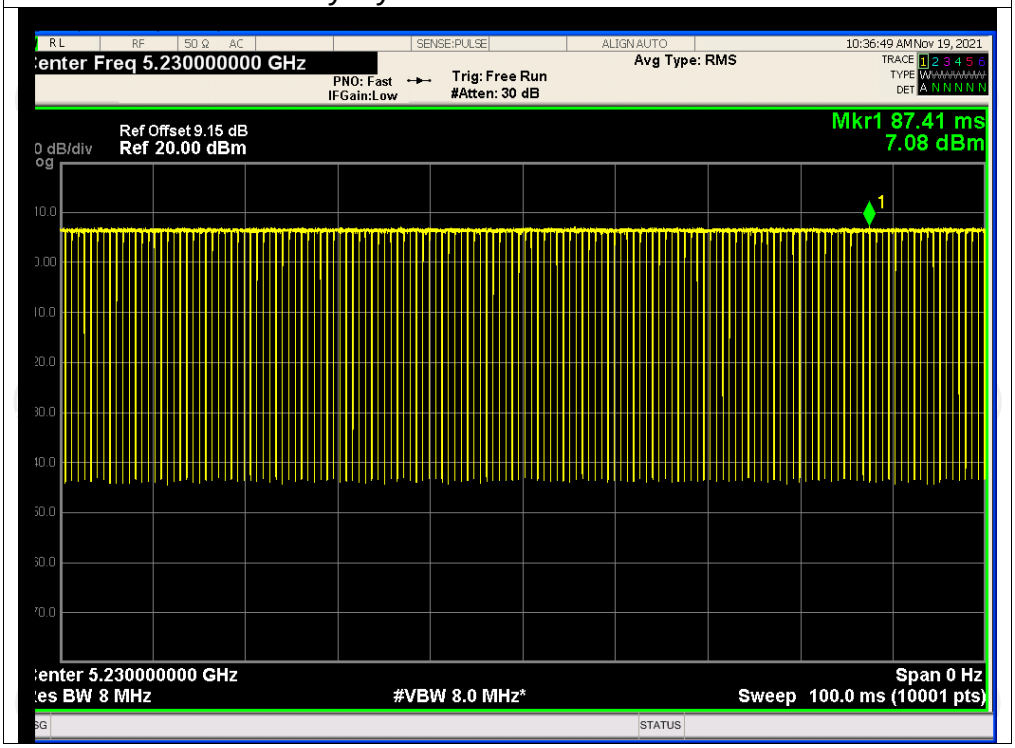
Duty Cycle NVNT n20 5240MHz



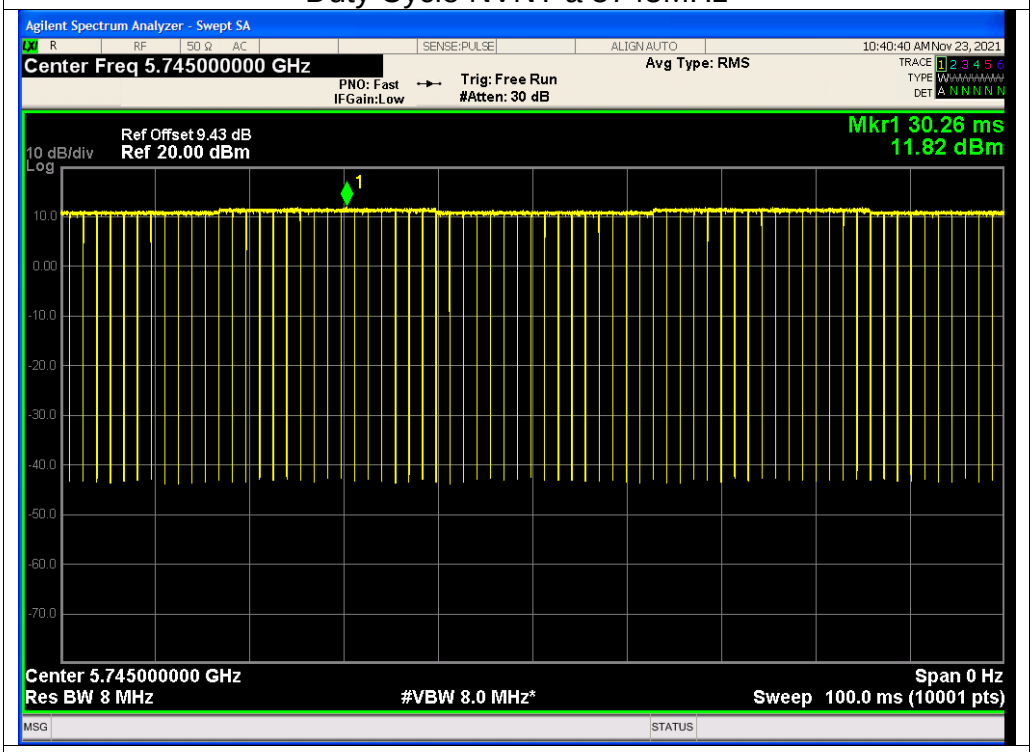
Duty Cycle NVNT n40 5190MHz



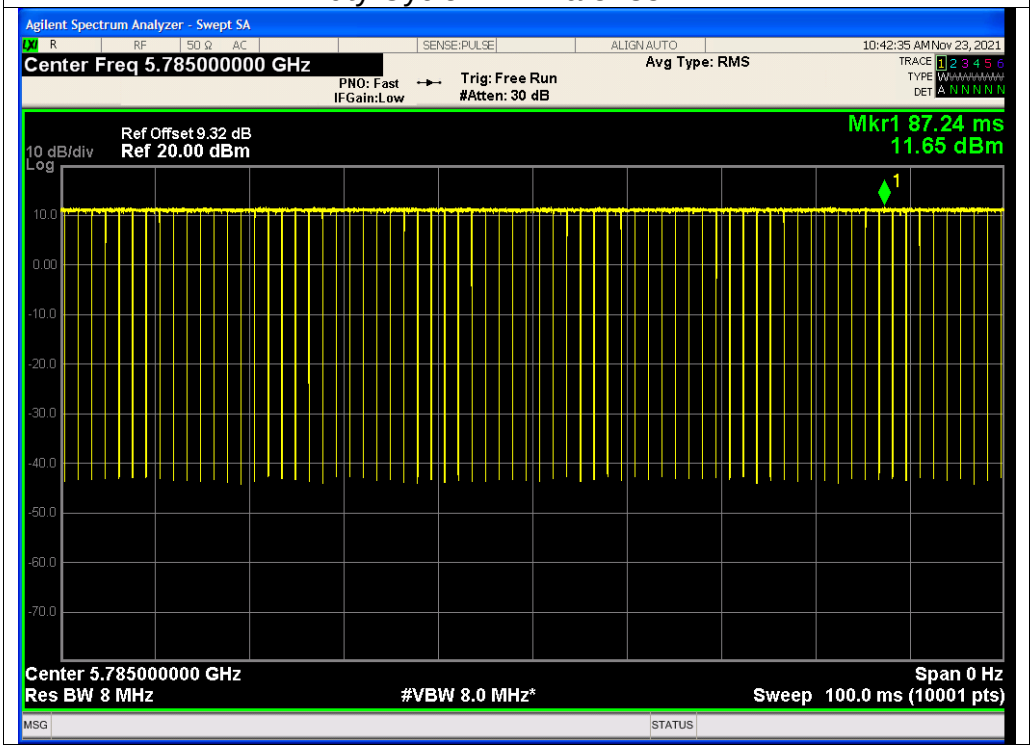
Duty Cycle NVNT n40 5230MHz



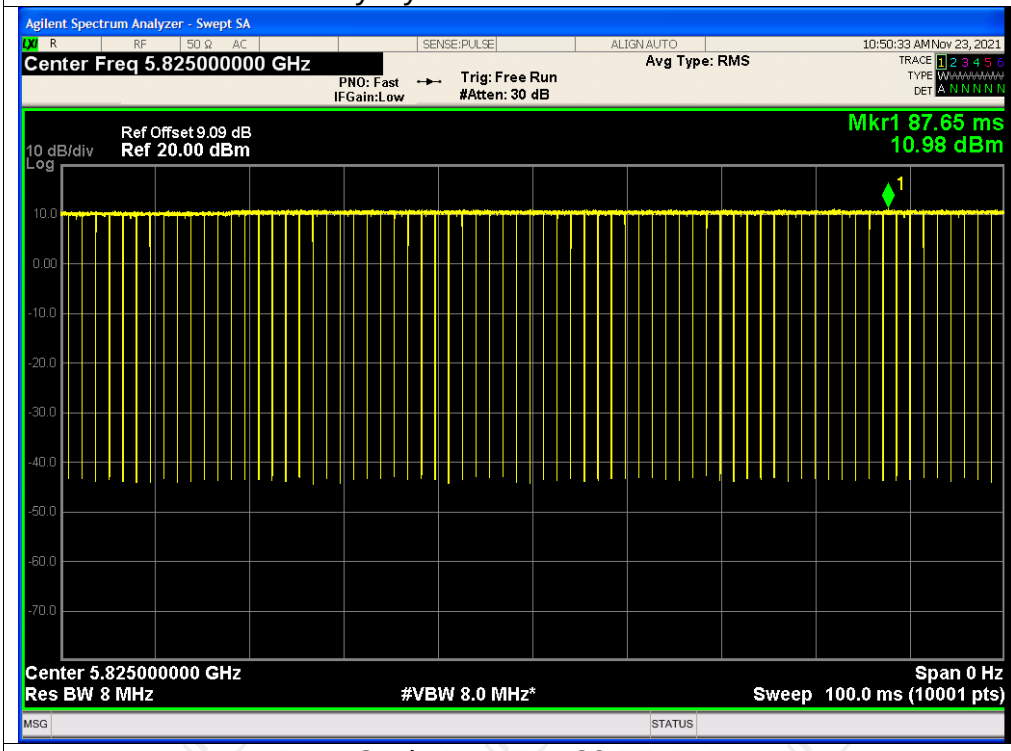
Test Graphs Band3
Duty Cycle NVNT a 5745MHz



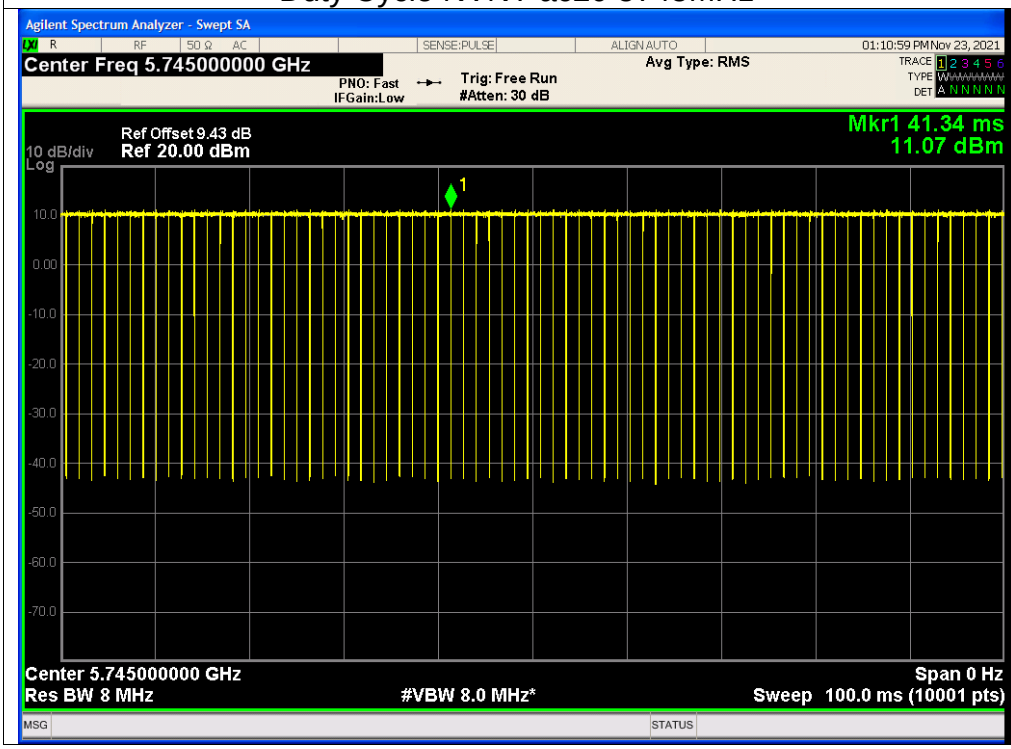
Duty Cycle NVNT a 5785MHz



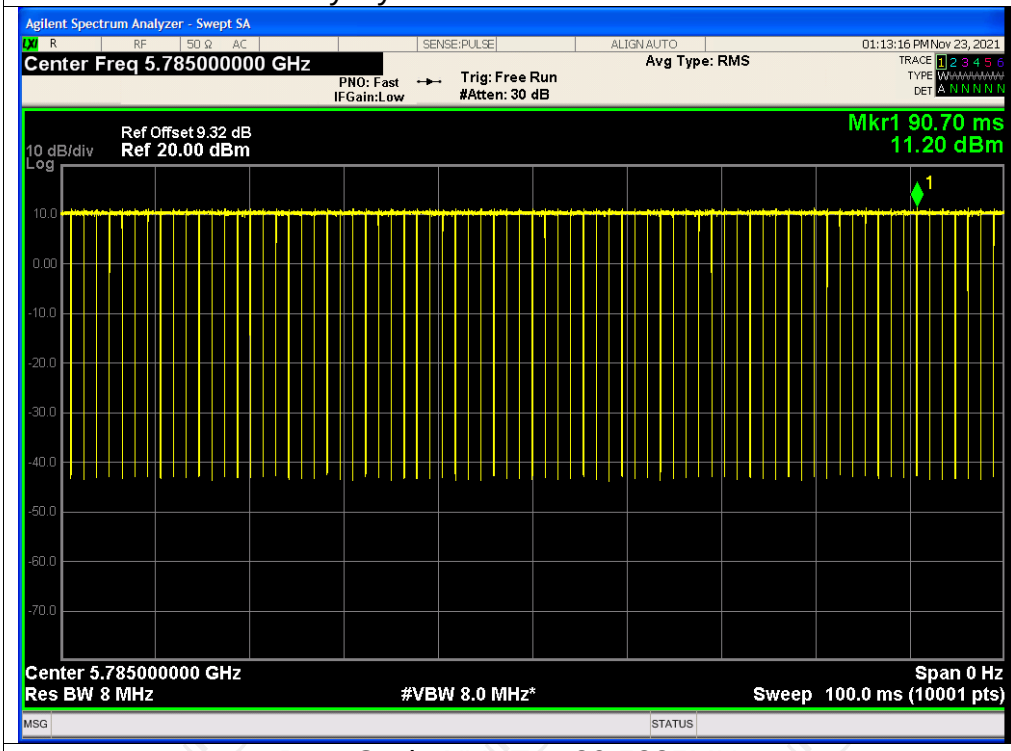
Duty Cycle NVNT a 5825MHz



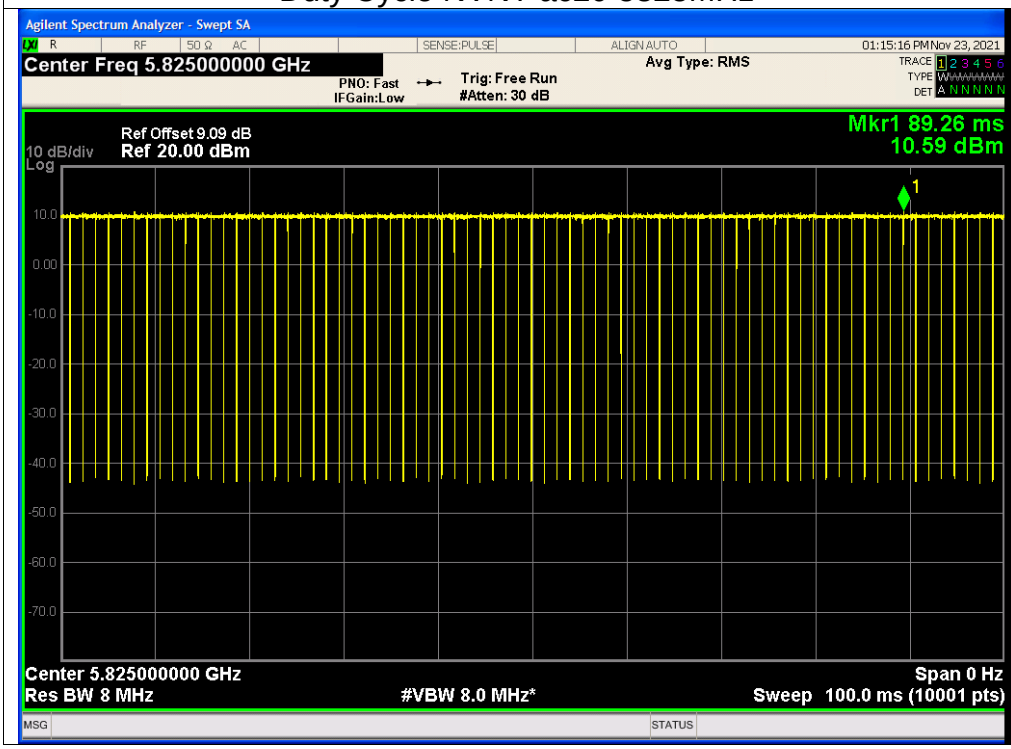
Duty Cycle NVNT ac20 5745MHz



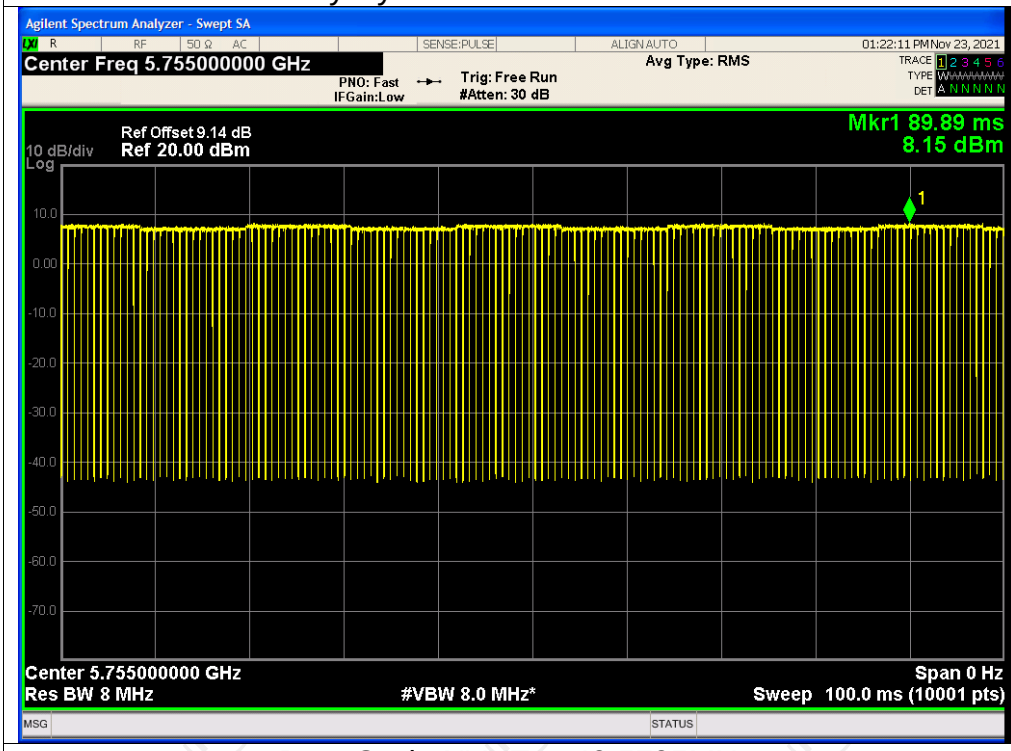
Duty Cycle NVNT ac20 5785MHz



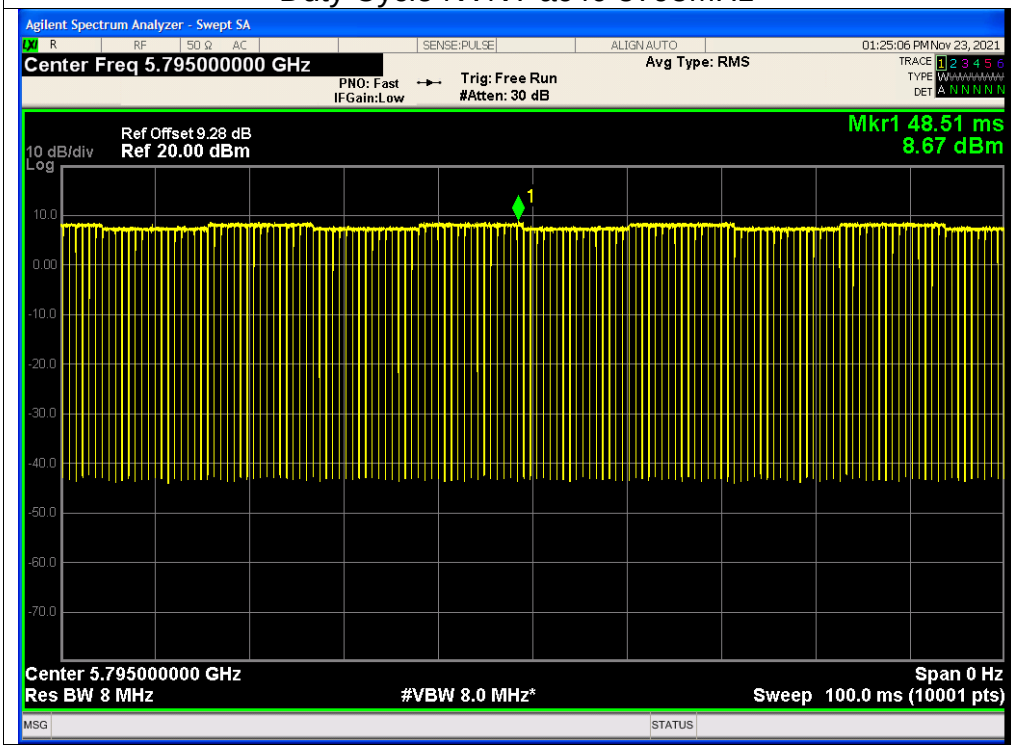
Duty Cycle NVNT ac20 5825MHz



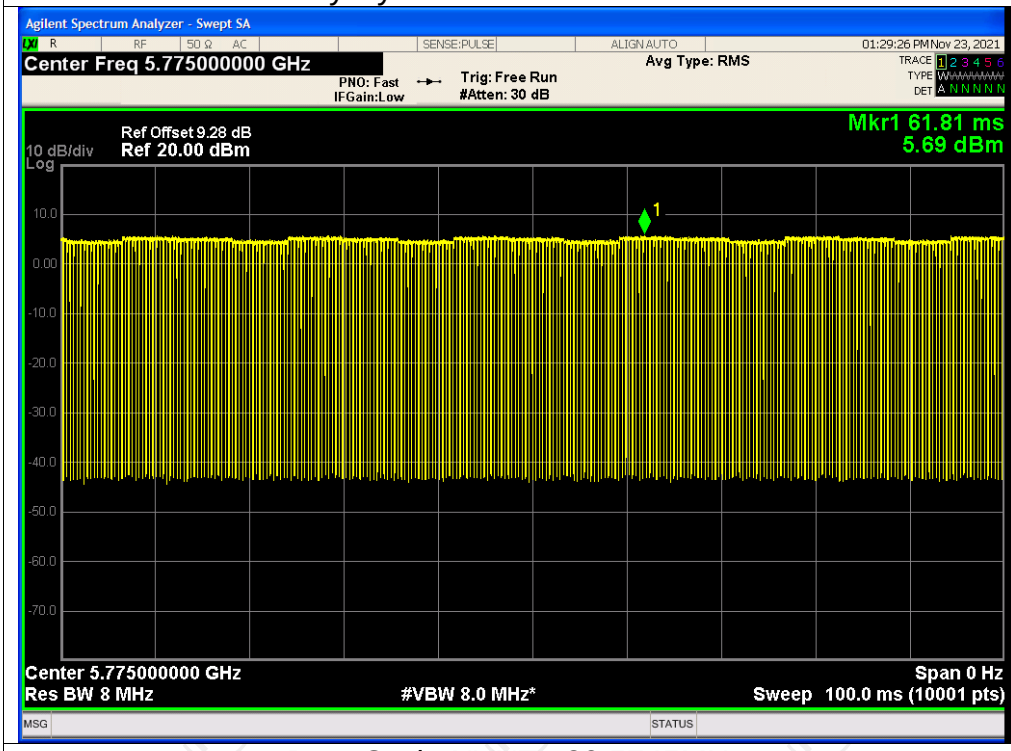
Duty Cycle NVNT ac40 5755MHz



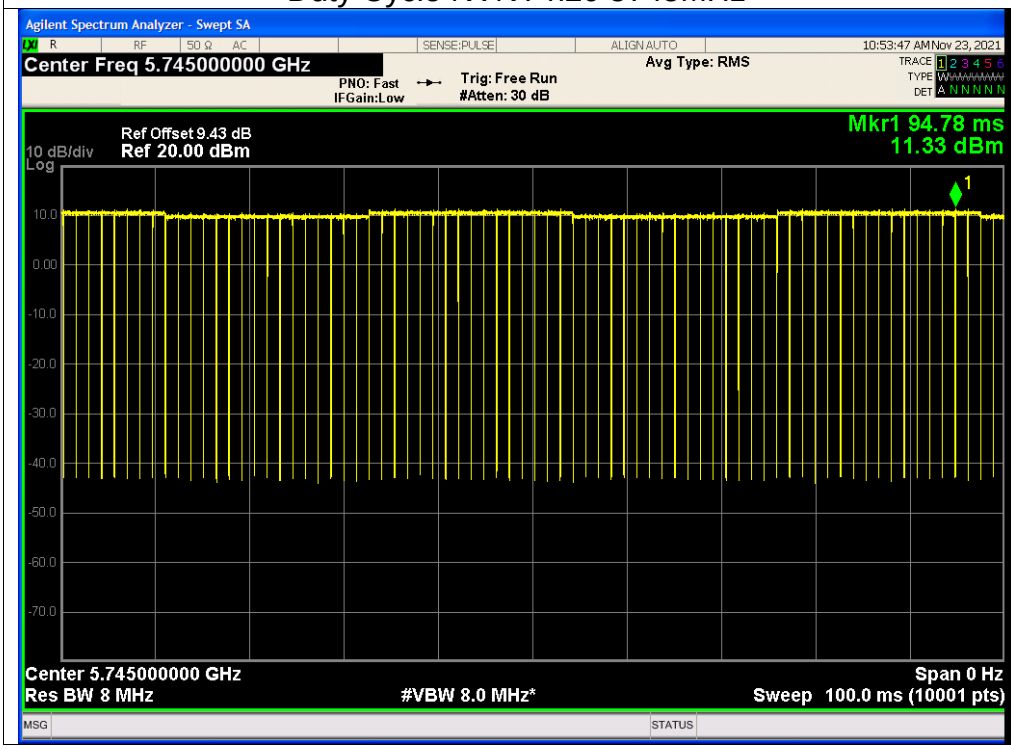
Duty Cycle NVNT ac40 5795MHz



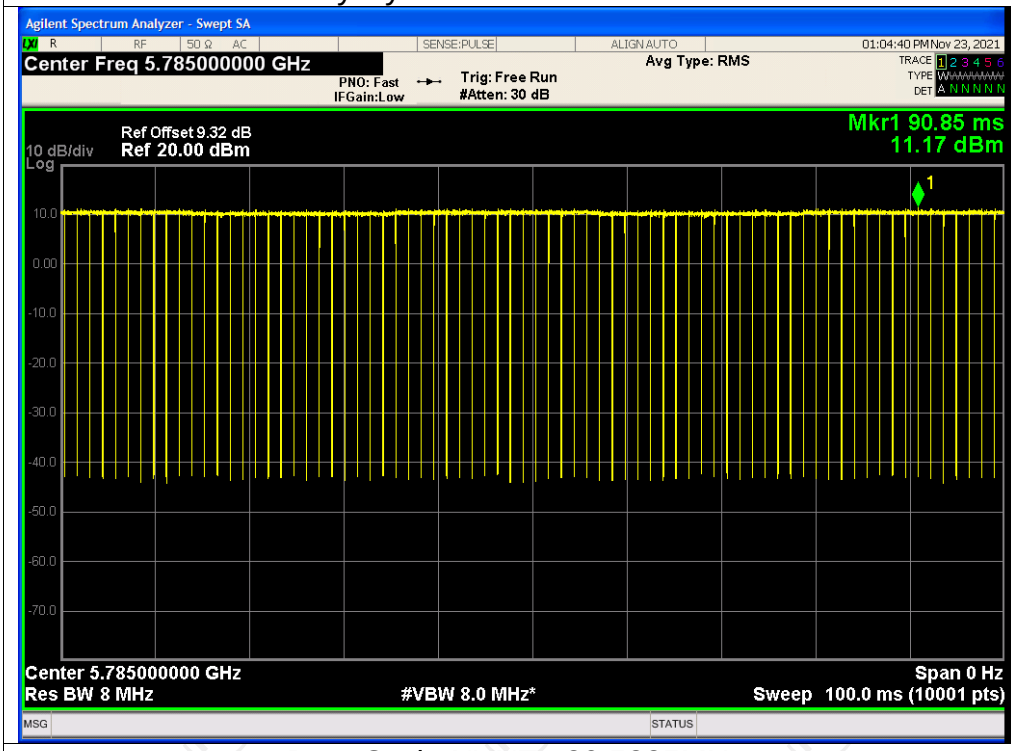
Duty Cycle NVNT ac80 5775MHz



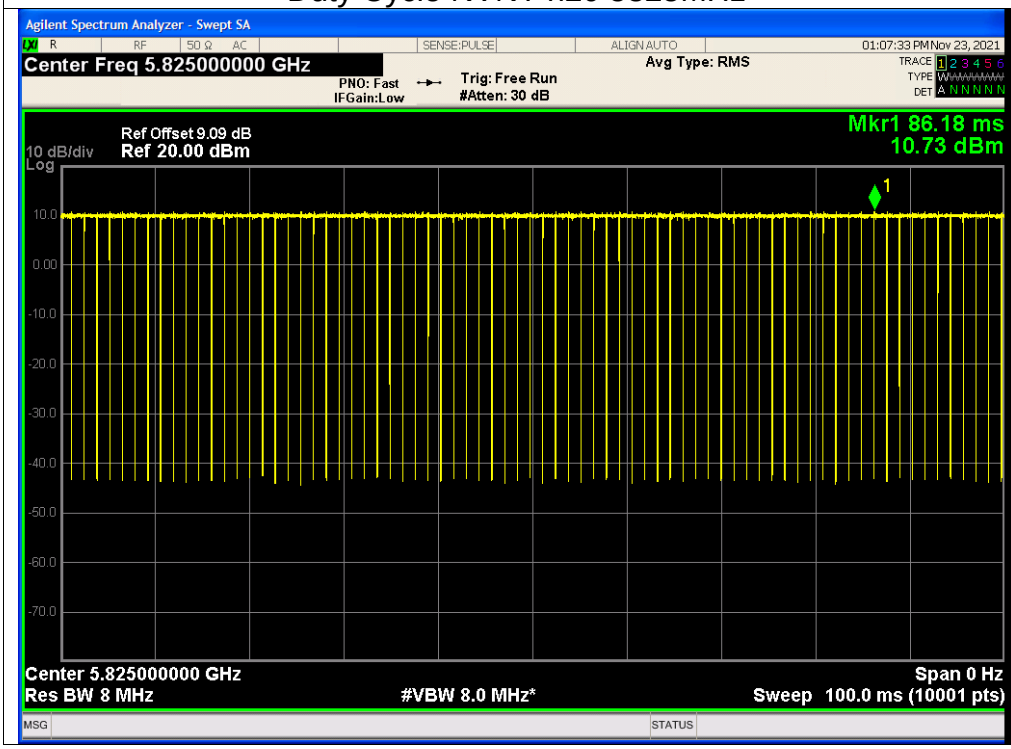
Duty Cycle NVNT n20 5745MHz



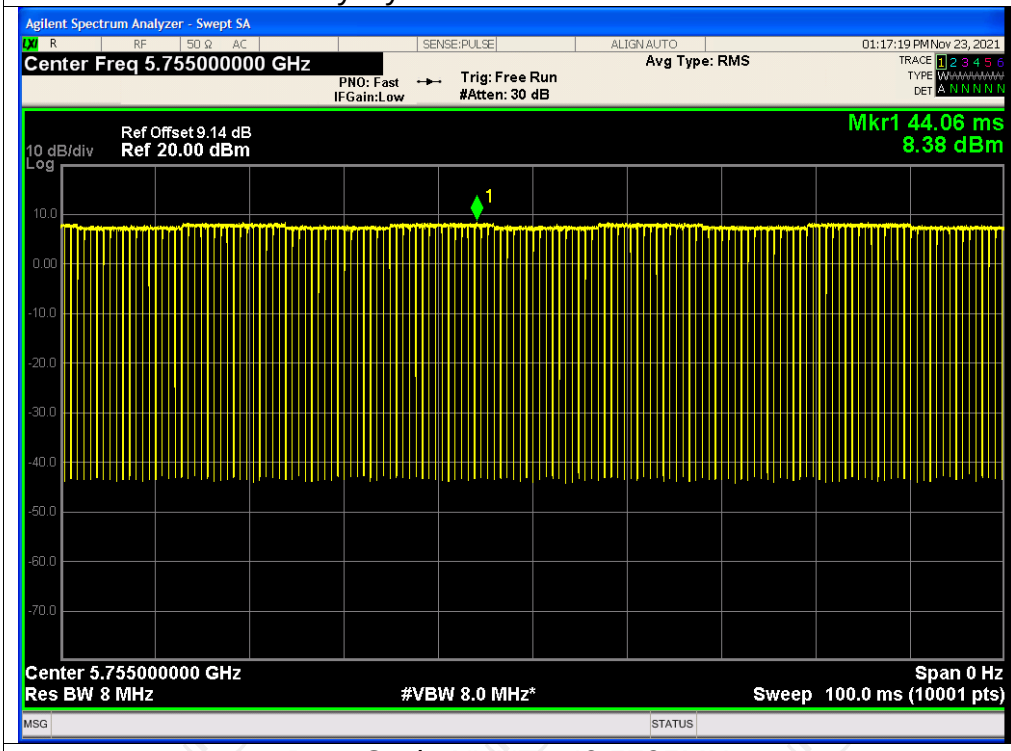
Duty Cycle NVNT n20 5785MHz



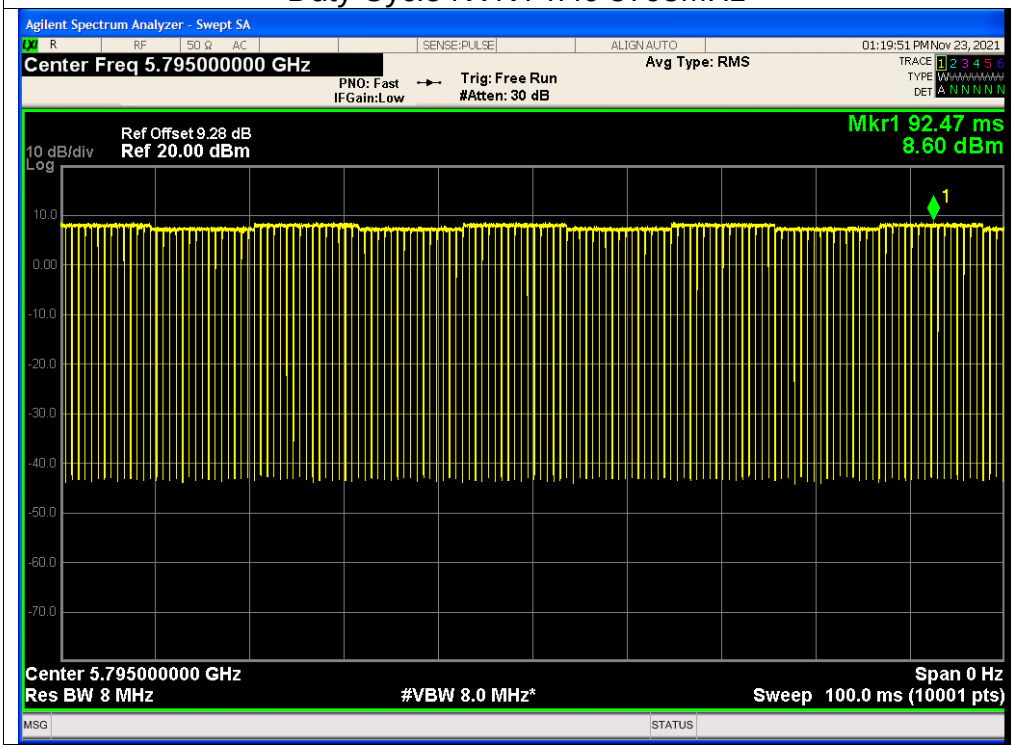
Duty Cycle NVNT n20 5825MHz



Duty Cycle NVNT n40 5755MHz



Duty Cycle NVNT n40 5795MHz



Maximum Conducted Output Power

Band1

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	11.909	0.09	11.999	24	Pass
NVNT	a	5200	11.535	0.09	11.625	24	Pass
NVNT	a	5240	11.615	0.09	11.705	24	Pass
NVNT	ac20	5180	11.560	0.10	11.660	24	Pass
NVNT	ac20	5200	11.106	0.10	11.206	24	Pass
NVNT	ac20	5240	11.338	0.10	11.438	24	Pass
NVNT	ac40	5190	10.911	0.19	11.101	24	Pass
NVNT	ac40	5230	10.719	0.19	10.909	24	Pass
NVNT	ac80	5210	10.338	0.37	10.708	24	Pass
NVNT	n20	5180	11.620	0.10	11.720	24	Pass
NVNT	n20	5200	11.126	0.10	11.226	24	Pass
NVNT	n20	5240	11.305	0.10	11.405	24	Pass
NVNT	n40	5190	11.095	0.19	11.285	24	Pass
NVNT	n40	5230	10.978	0.19	11.168	24	Pass

Band3

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	12.902	0.09	12.992	30	Pass
NVNT	a	5785	13.021	0.09	13.111	30	Pass
NVNT	a	5825	12.307	0.09	12.397	30	Pass
NVNT	ac20	5745	12.514	0.10	12.614	30	Pass
NVNT	ac20	5785	12.489	0.10	12.589	30	Pass
NVNT	ac20	5825	11.979	0.10	12.079	30	Pass
NVNT	ac40	5755	11.903	0.19	12.093	30	Pass
NVNT	ac40	5795	12.312	0.19	12.502	30	Pass
NVNT	ac80	5775	11.859	0.36	12.219	30	Pass
NVNT	n20	5745	12.206	0.10	12.306	30	Pass
NVNT	n20	5785	12.401	0.10	12.501	30	Pass
NVNT	n20	5825	12.103	0.10	12.203	30	Pass
NVNT	n40	5755	12.080	0.19	12.270	30	Pass
NVNT	n40	5795	12.256	0.19	12.446	30	Pass

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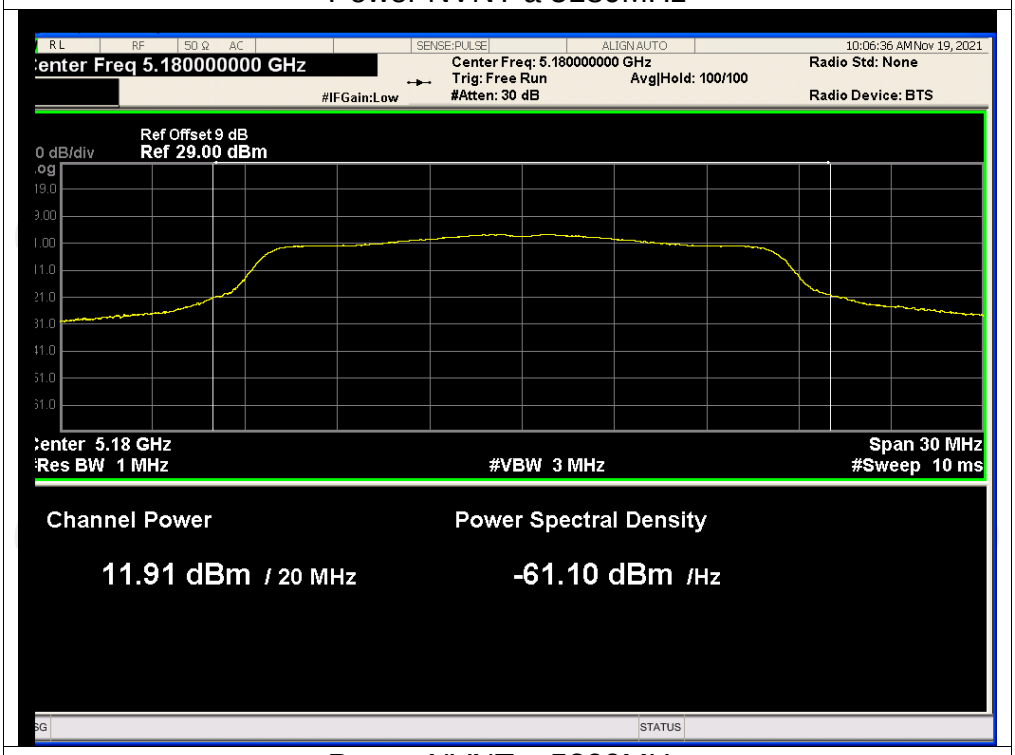
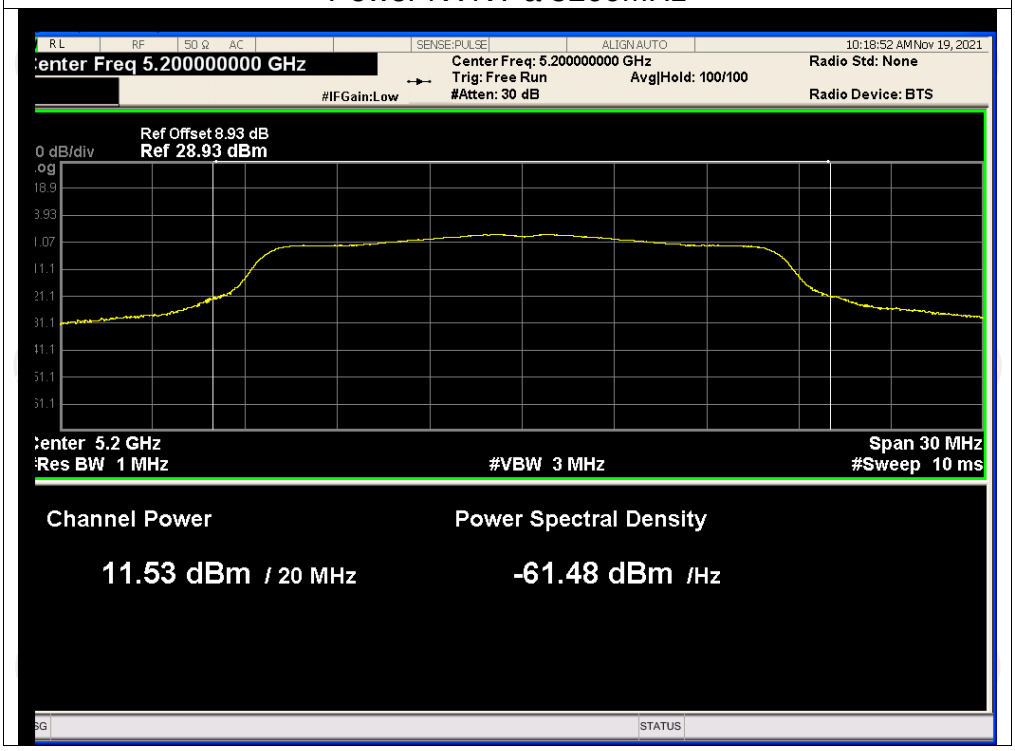
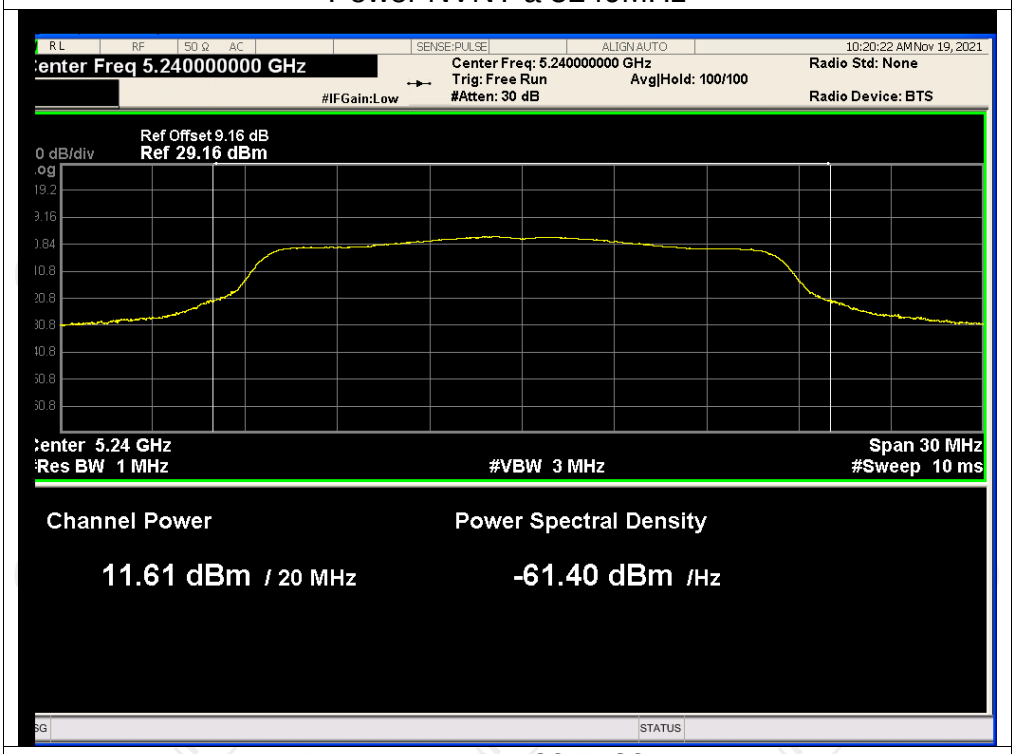
Test Graphs Band1
Power NVNT a 5180MHz



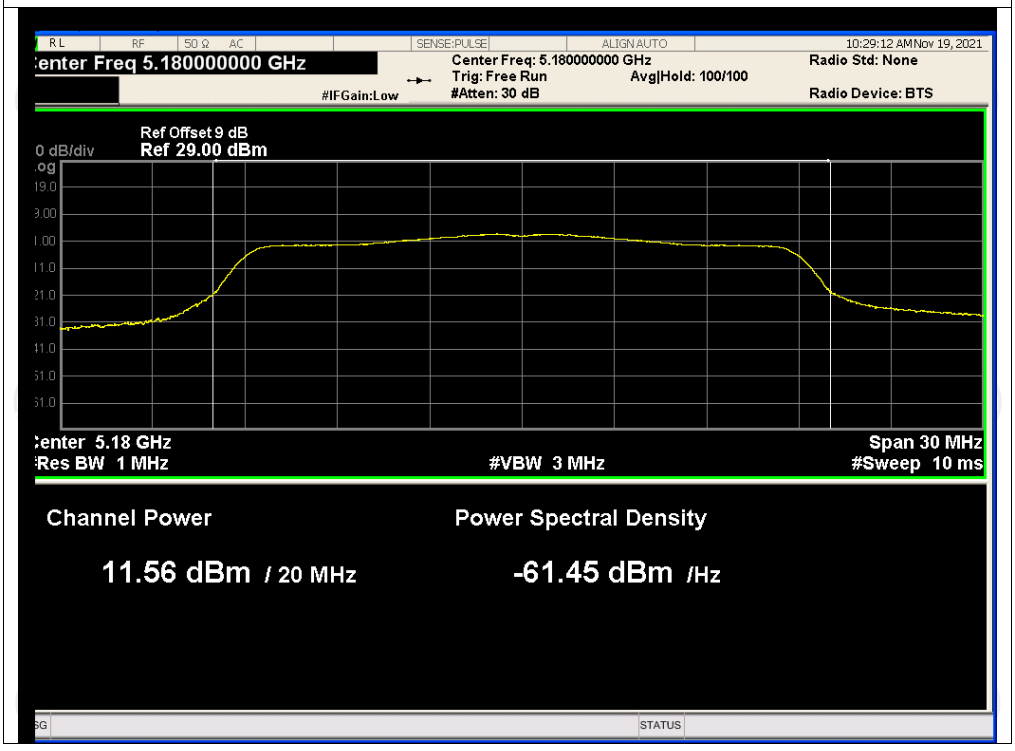
Power NVNT a 5200MHz



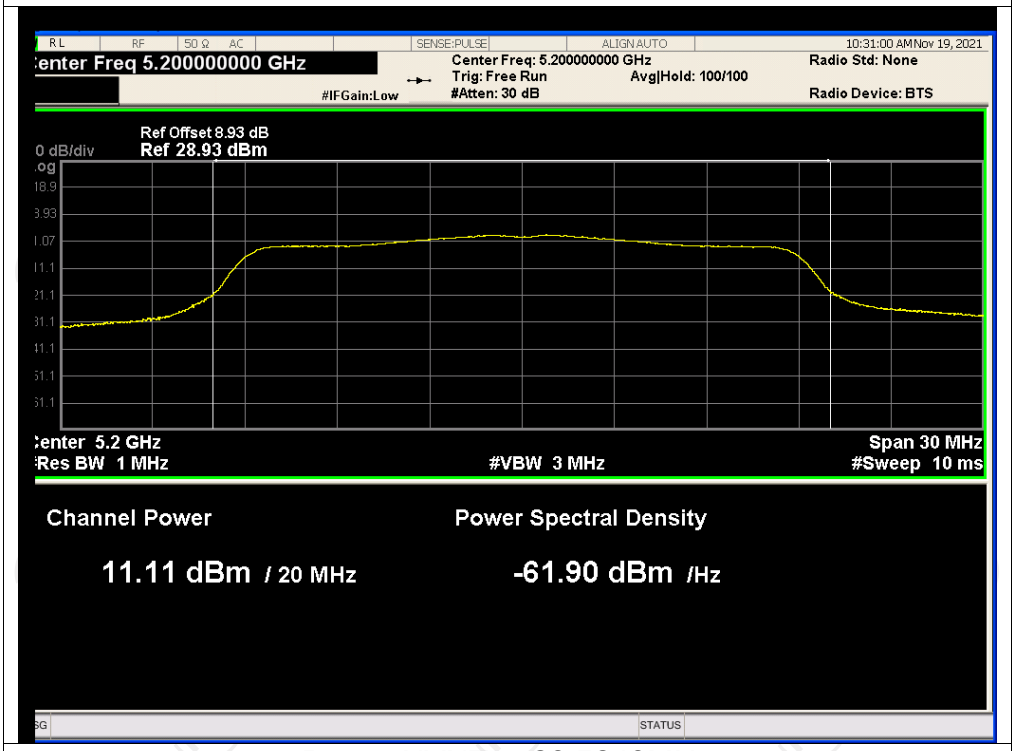
Power NVNT a 5240MHz



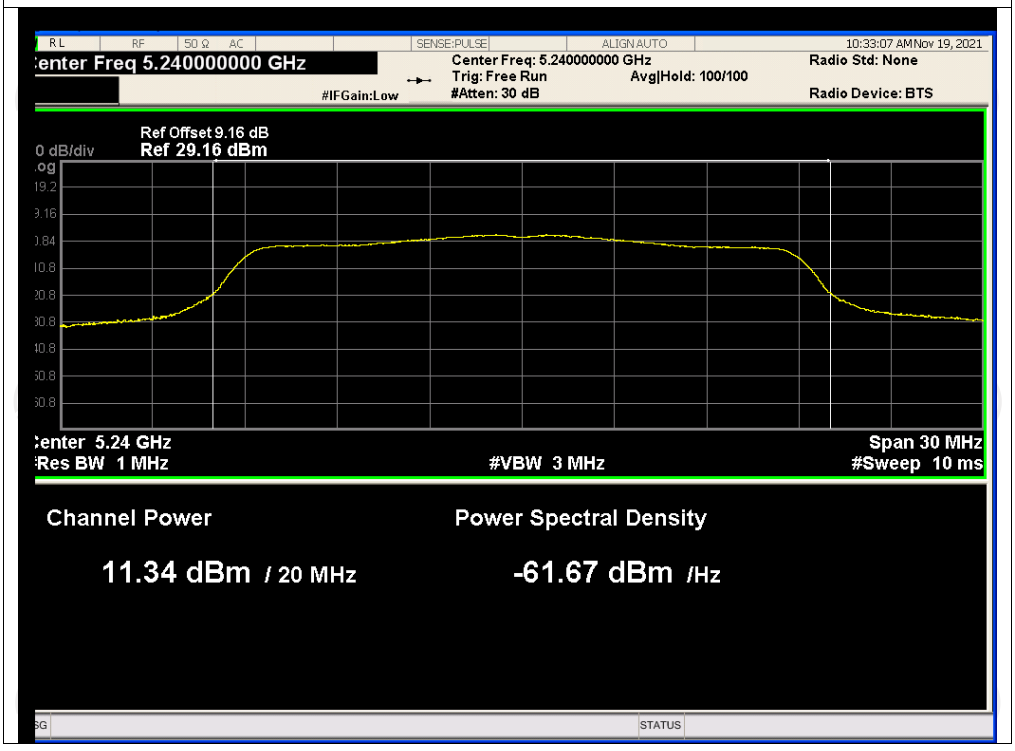
Power NVNT ac20 5180MHz



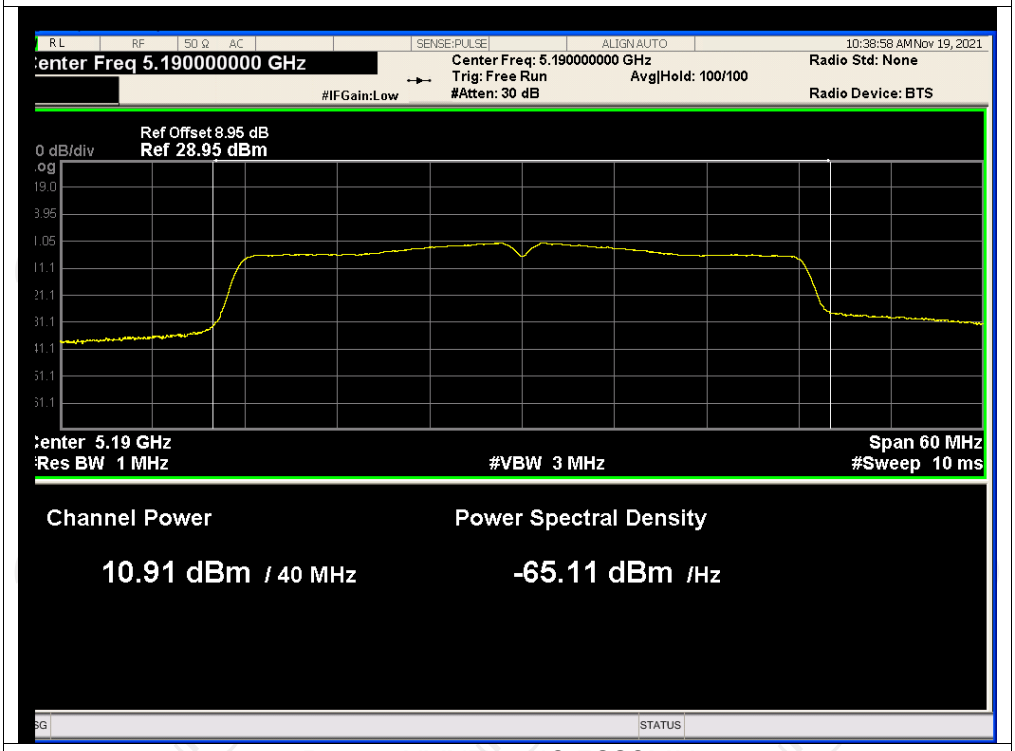
Power NVNT ac20 5200MHz



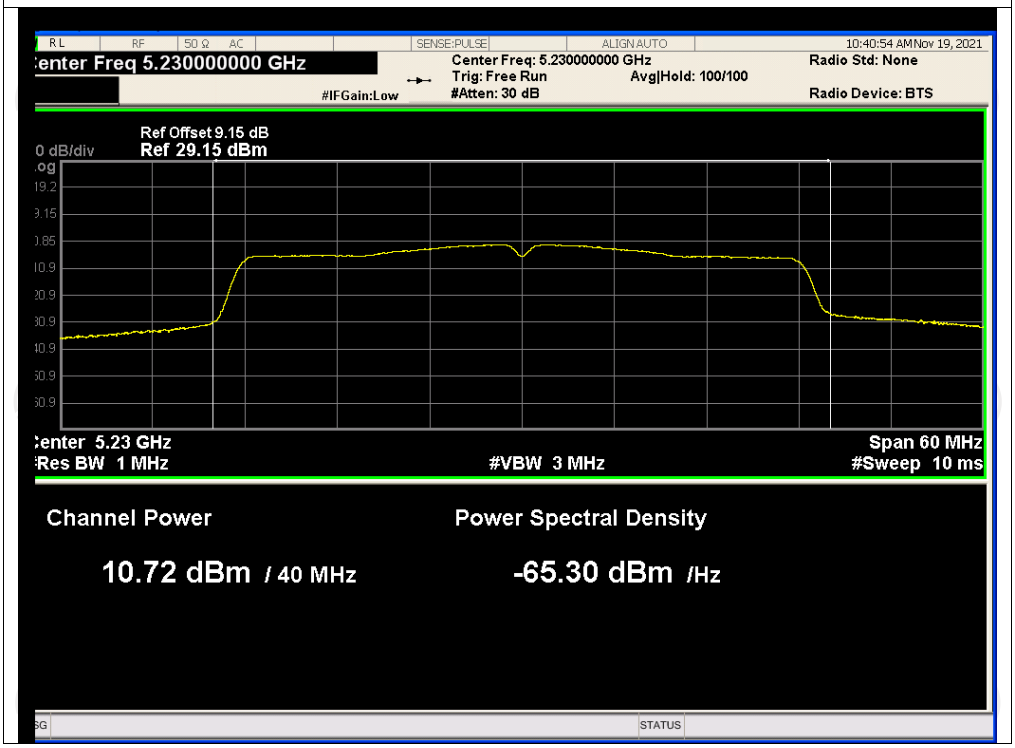
Power NVNT ac20 5240MHz



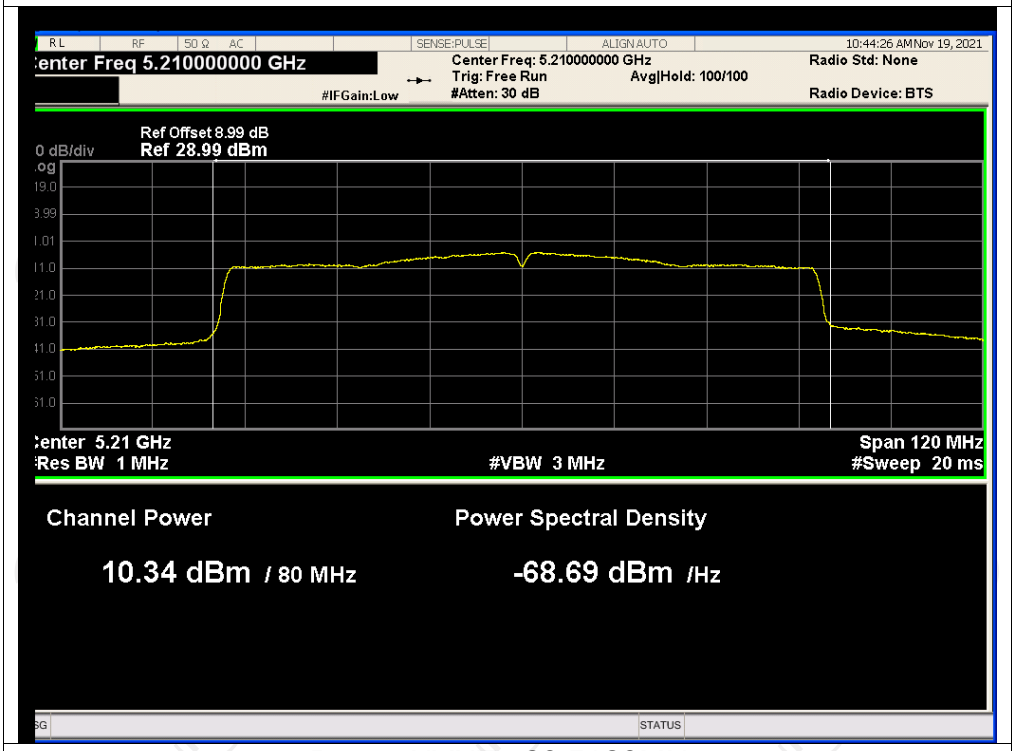
Power NVNT ac40 5190MHz



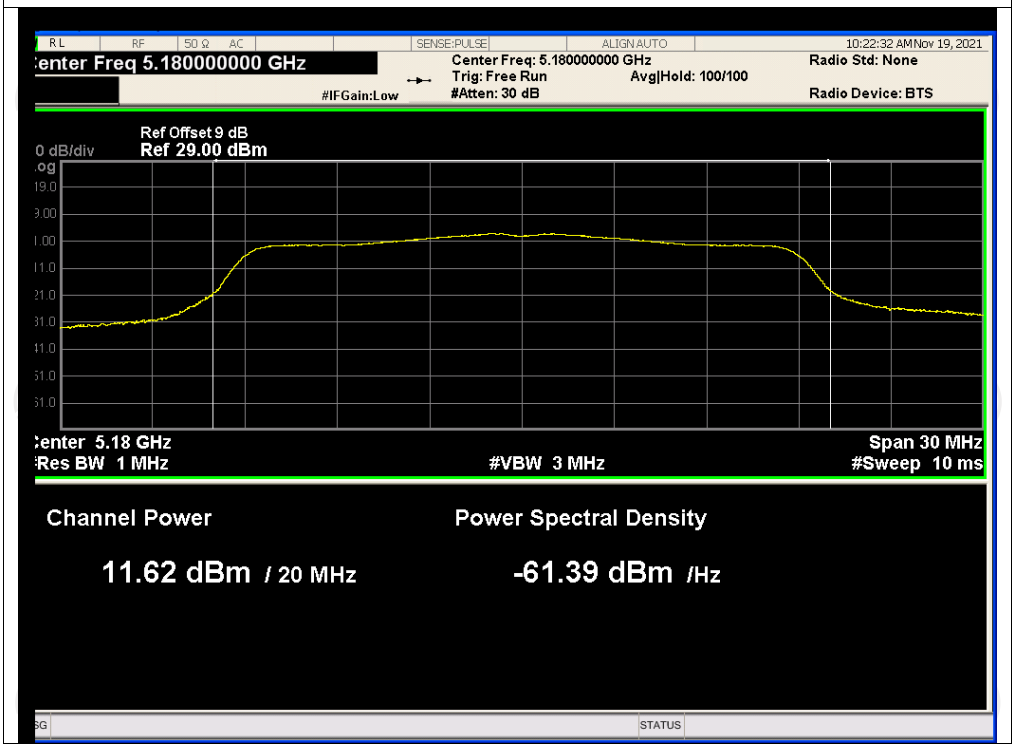
Power NVNT ac40 5230MHz



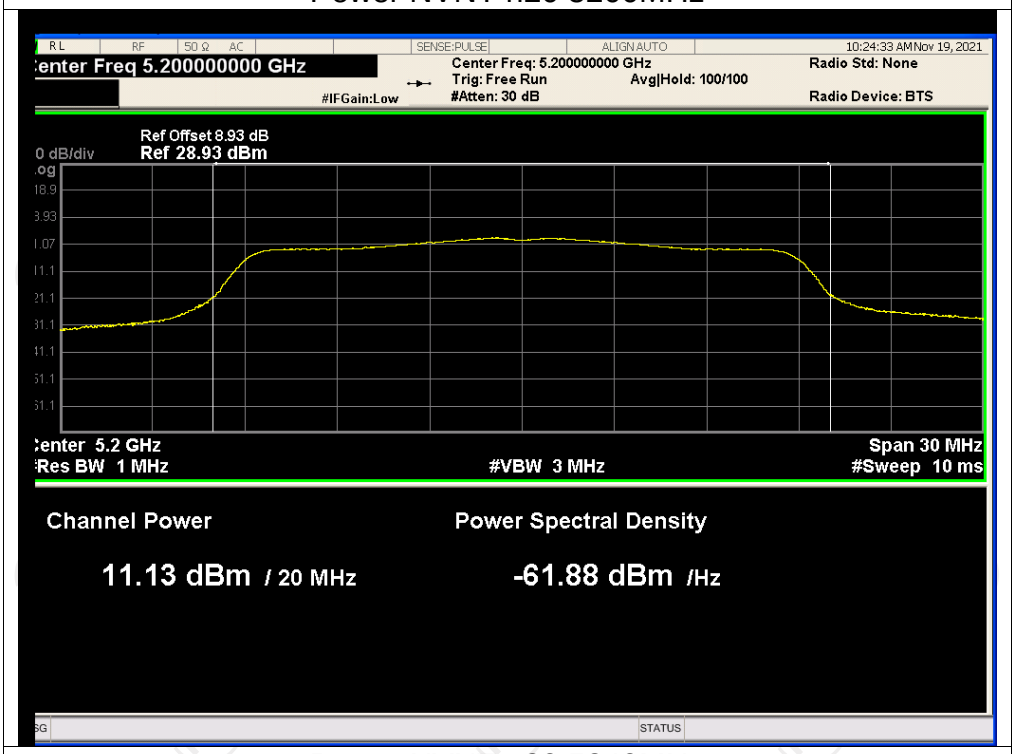
Power NVNT ac80 5210MHz



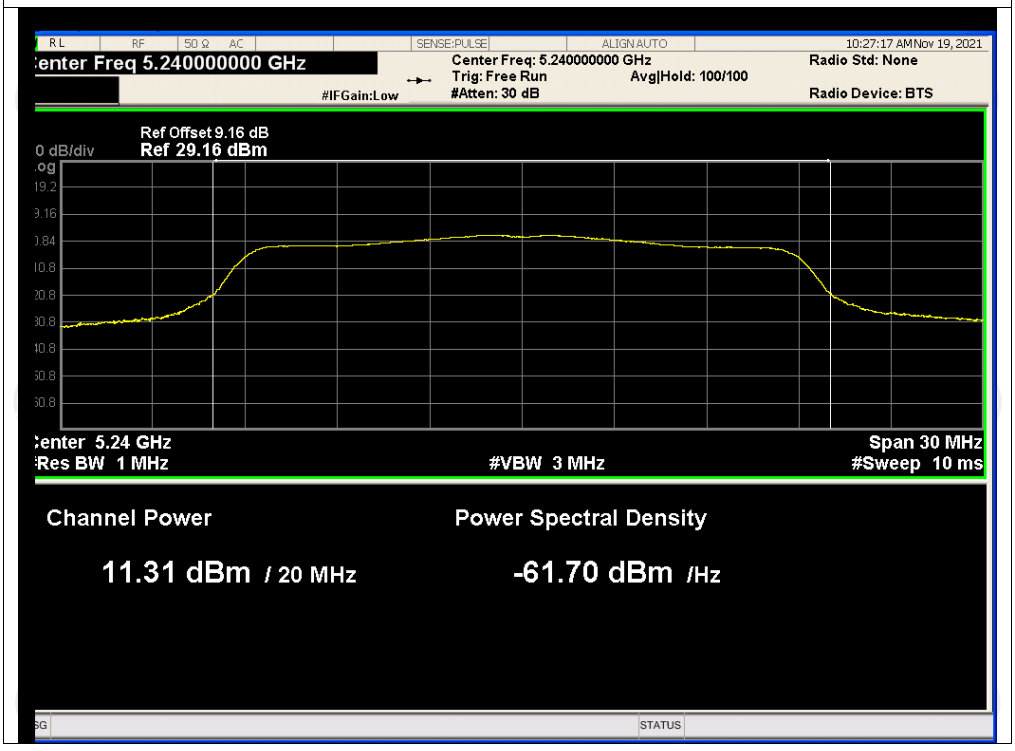
Power NVNT n20 5180MHz



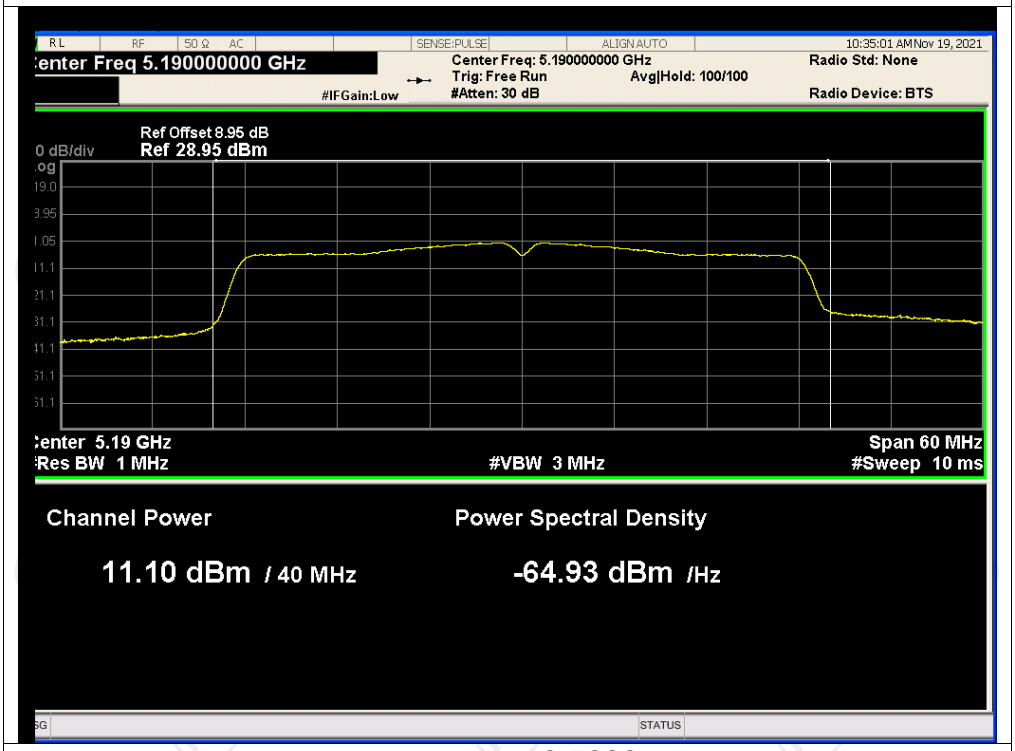
Power NVNT n20 5200MHz



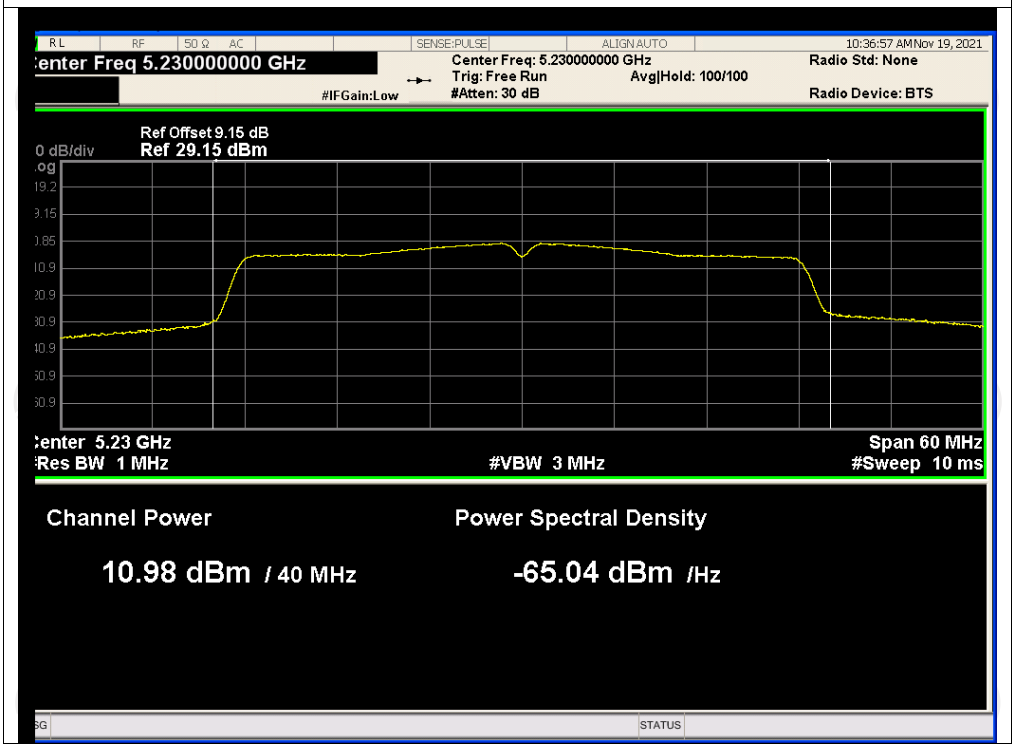
Power NVNT n20 5240MHz



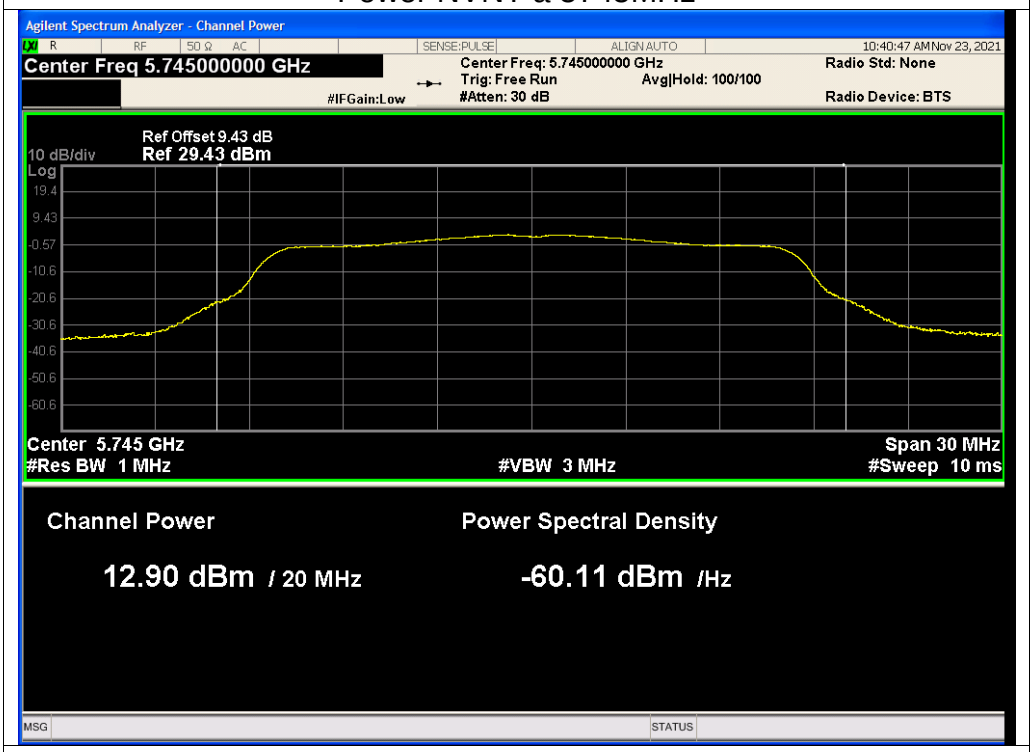
Power NVNT n40 5190MHz



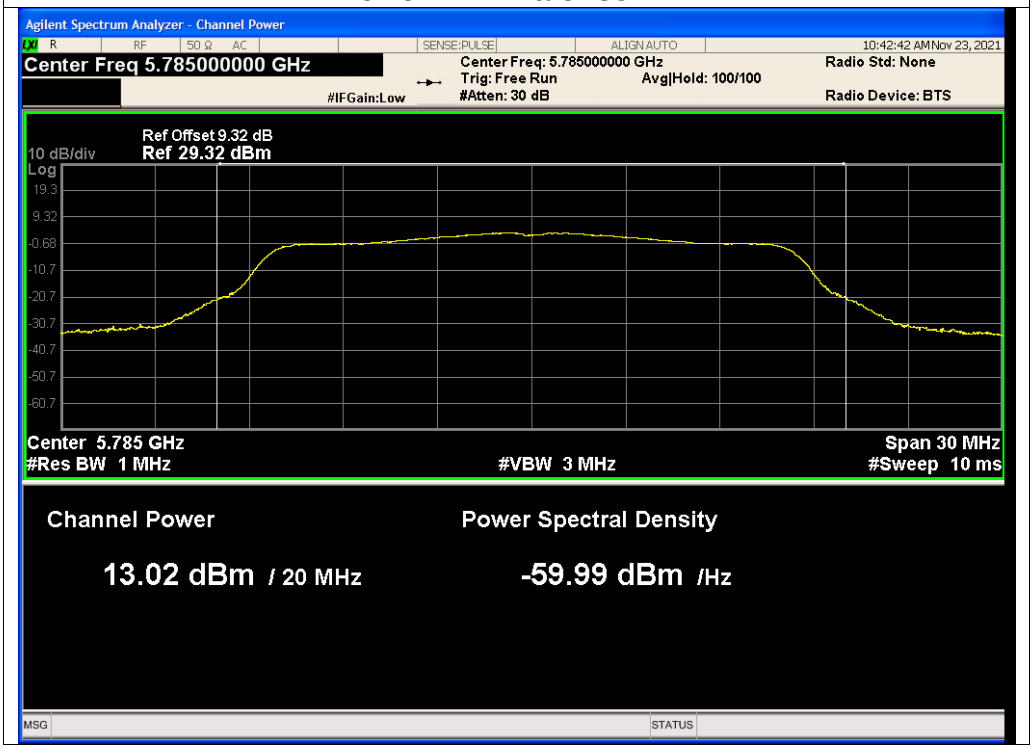
Power NVNT n40 5230MHz



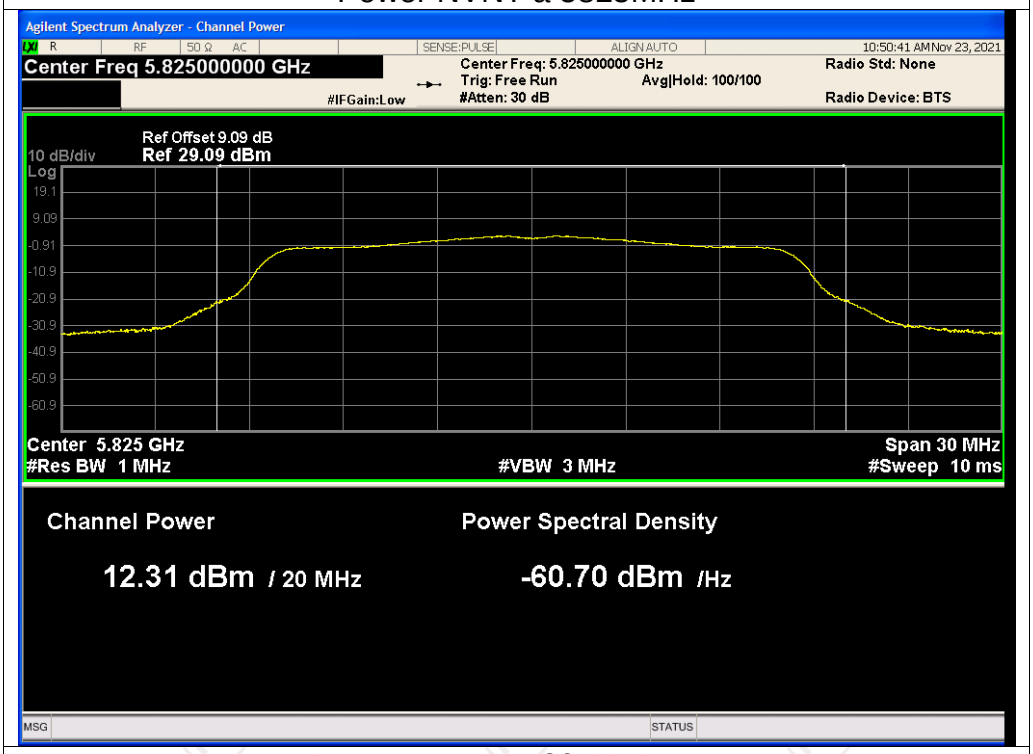
Test Graphs Band3
Power NVNT a 5745MHz



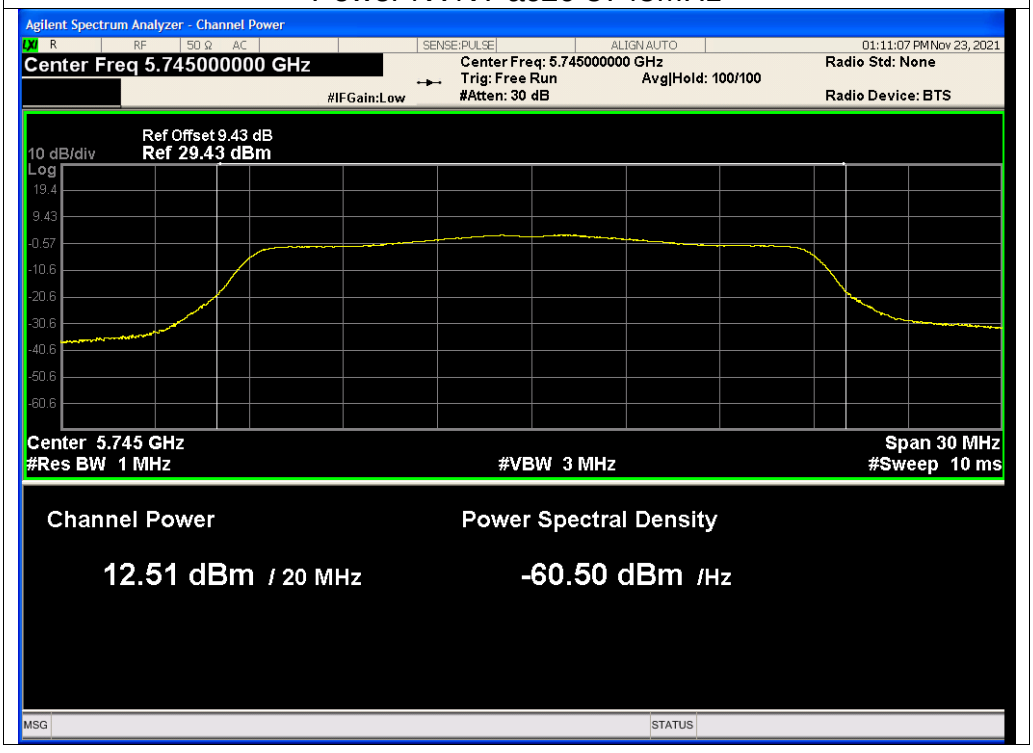
Power NVNT a 5785MHz



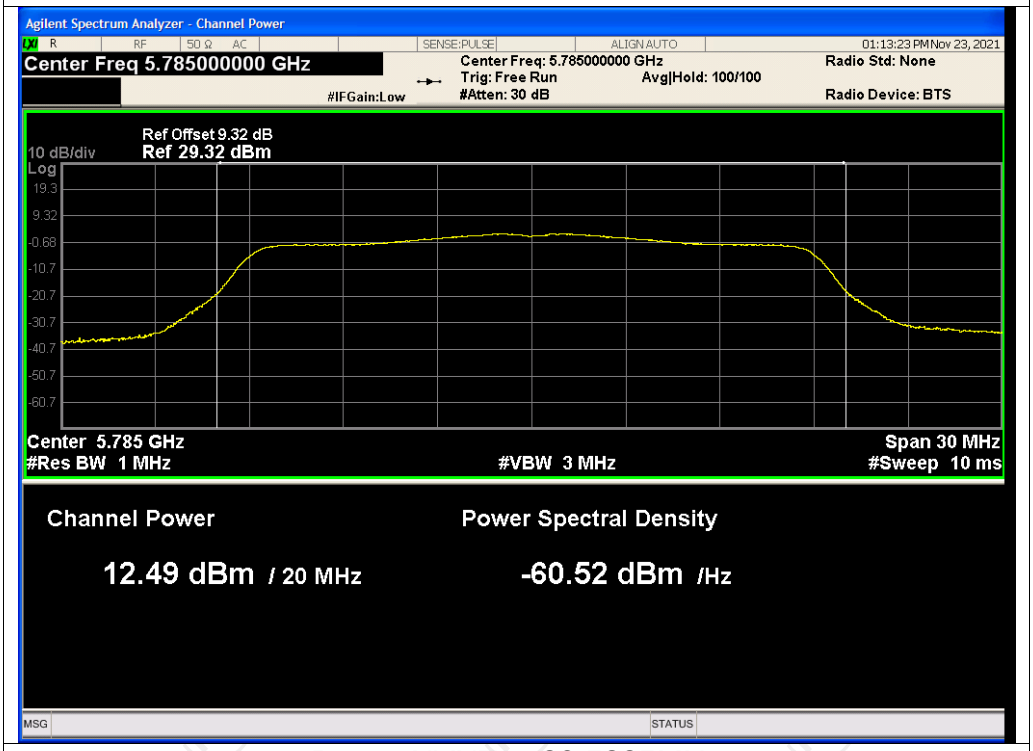
Power NVNT a 5825MHz



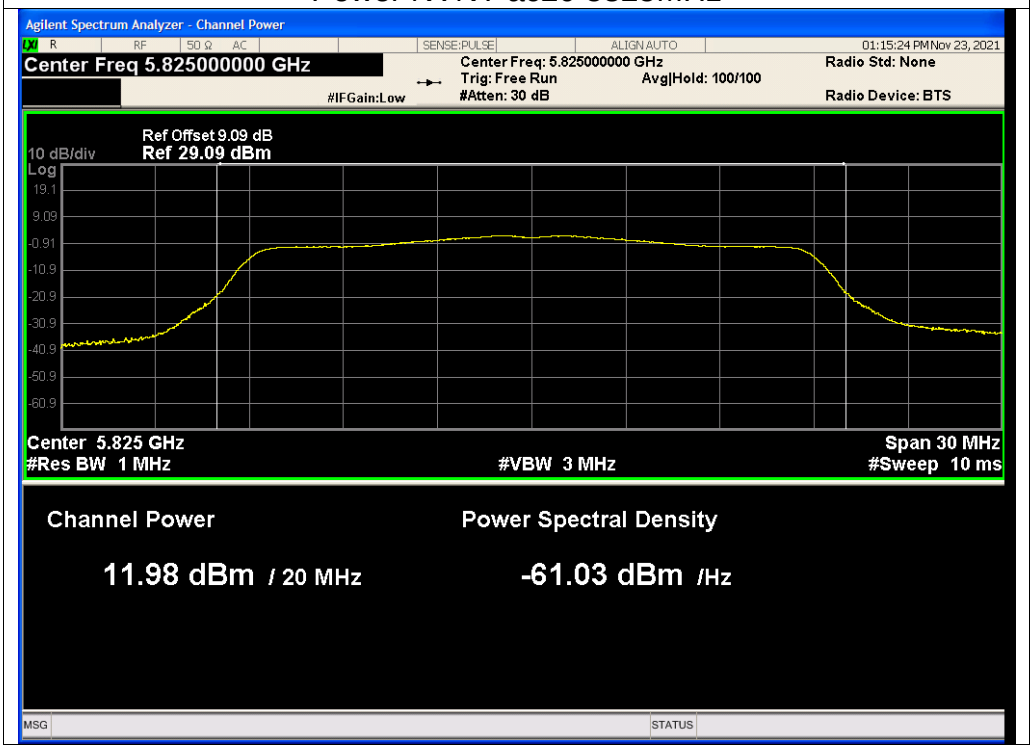
Power NVNT ac20 5745MHz



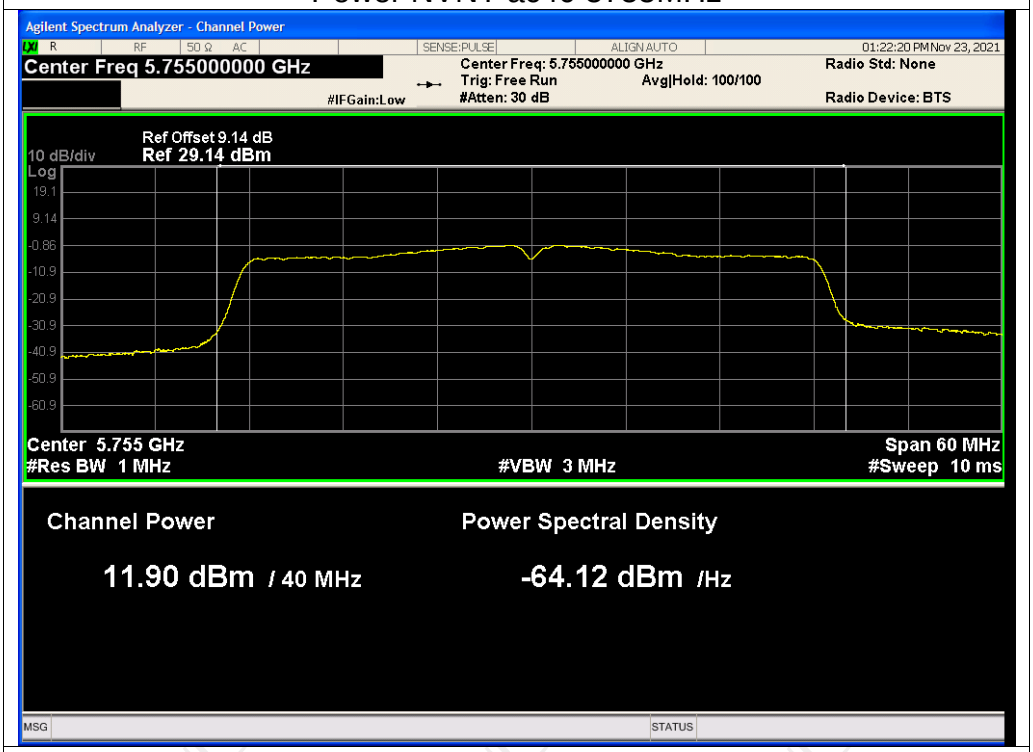
Power NVNT ac20 5785MHz



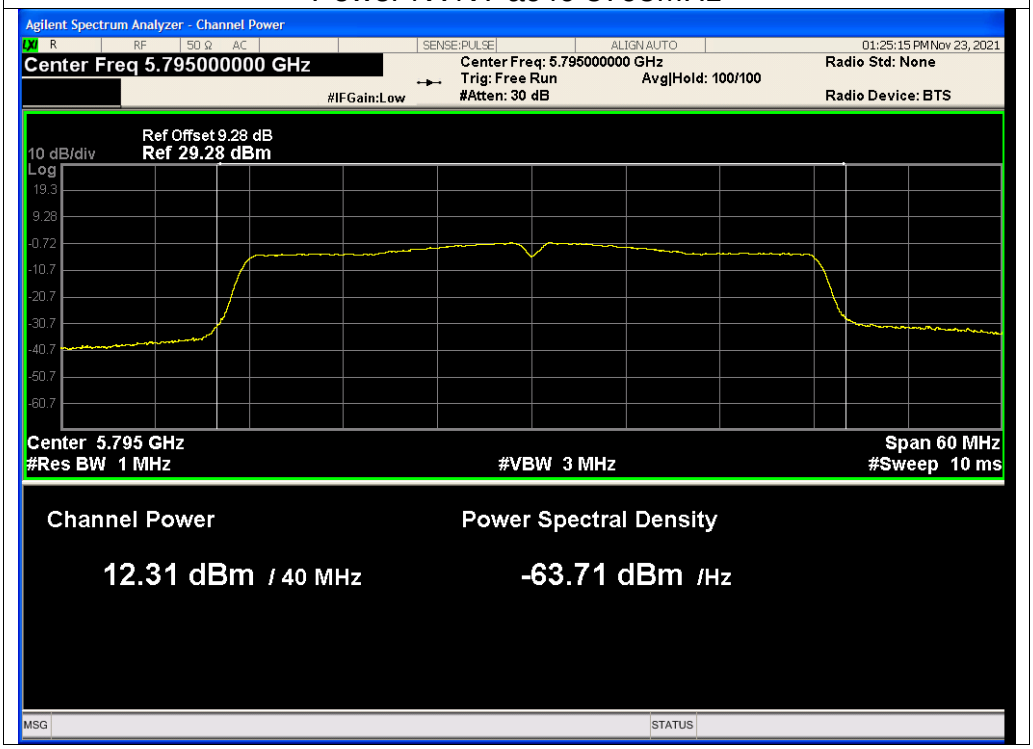
Power NVNT ac20 5825MHz



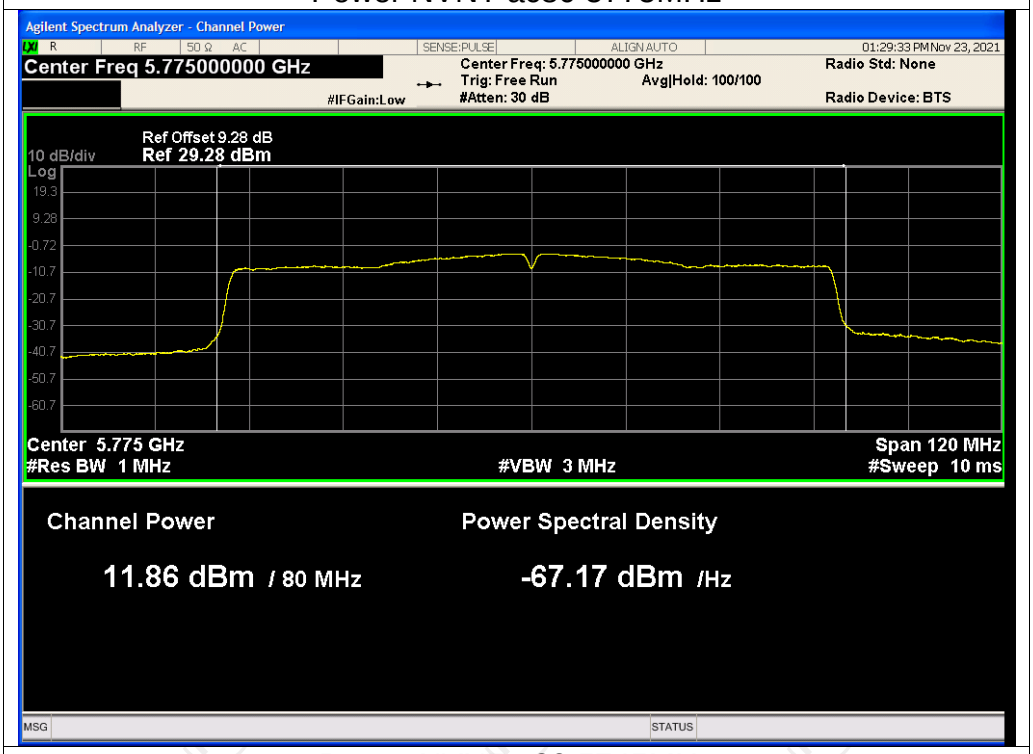
Power NVNT ac40 5755MHz



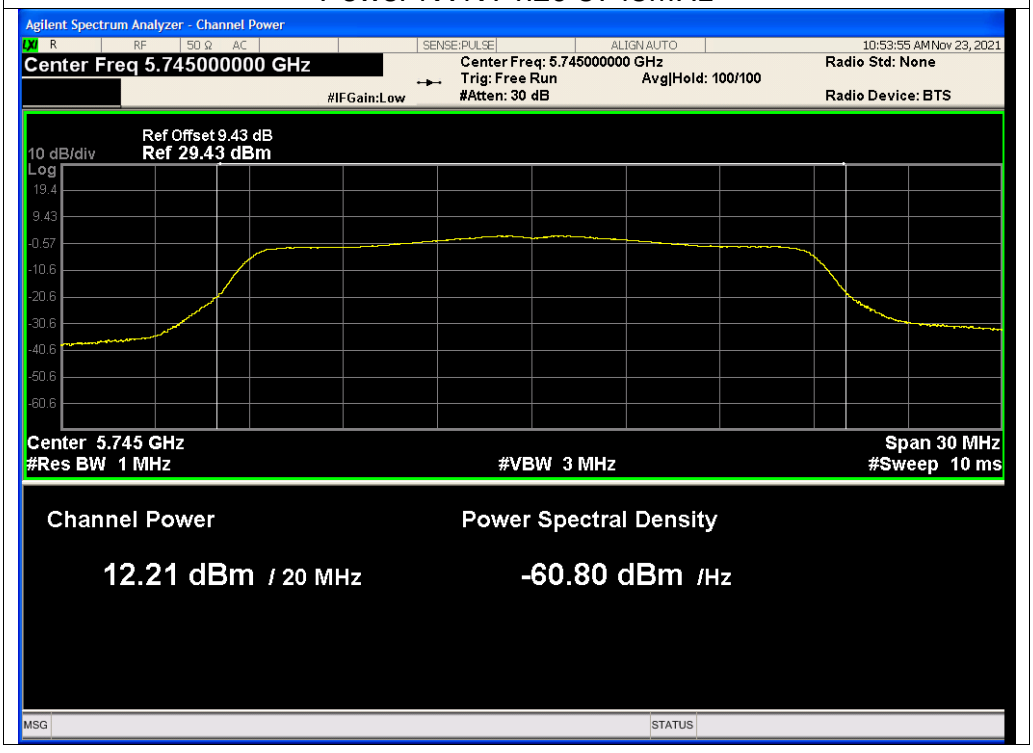
Power NVNT ac40 5795MHz



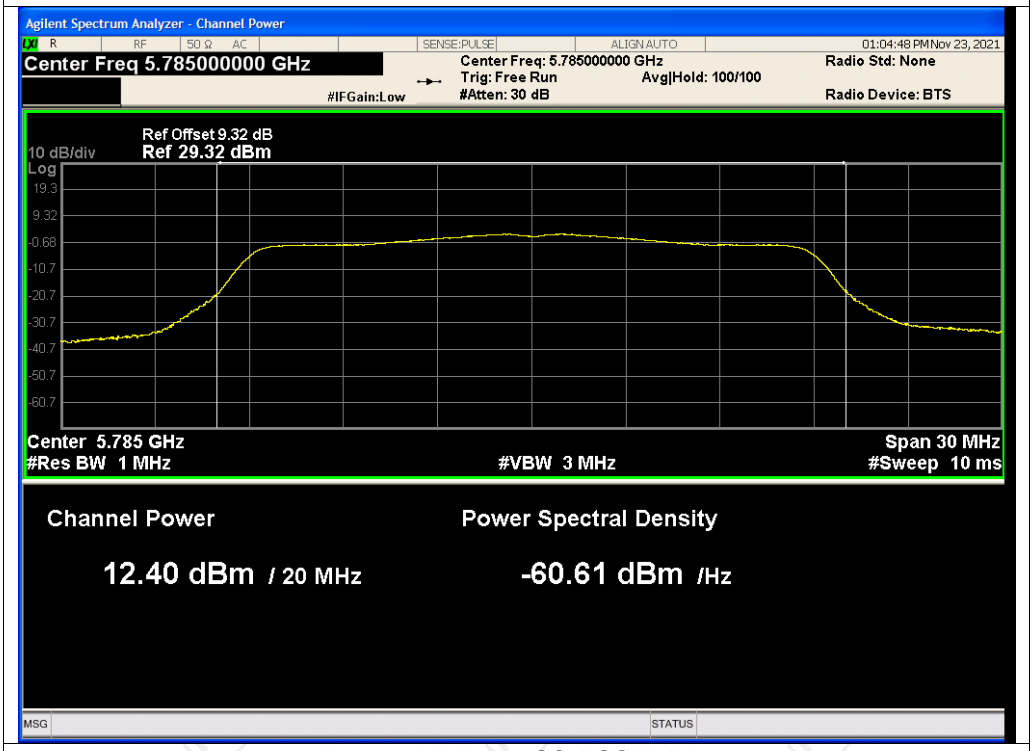
Power NVNT ac80 5775MHz



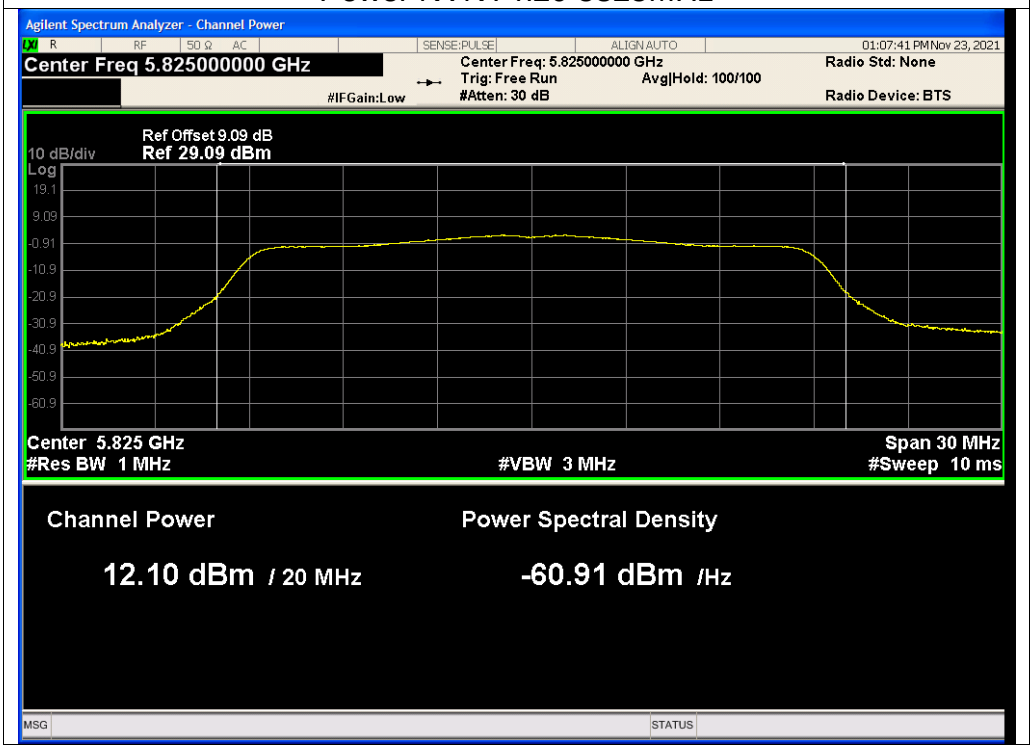
Power NVNT n20 5745MHz



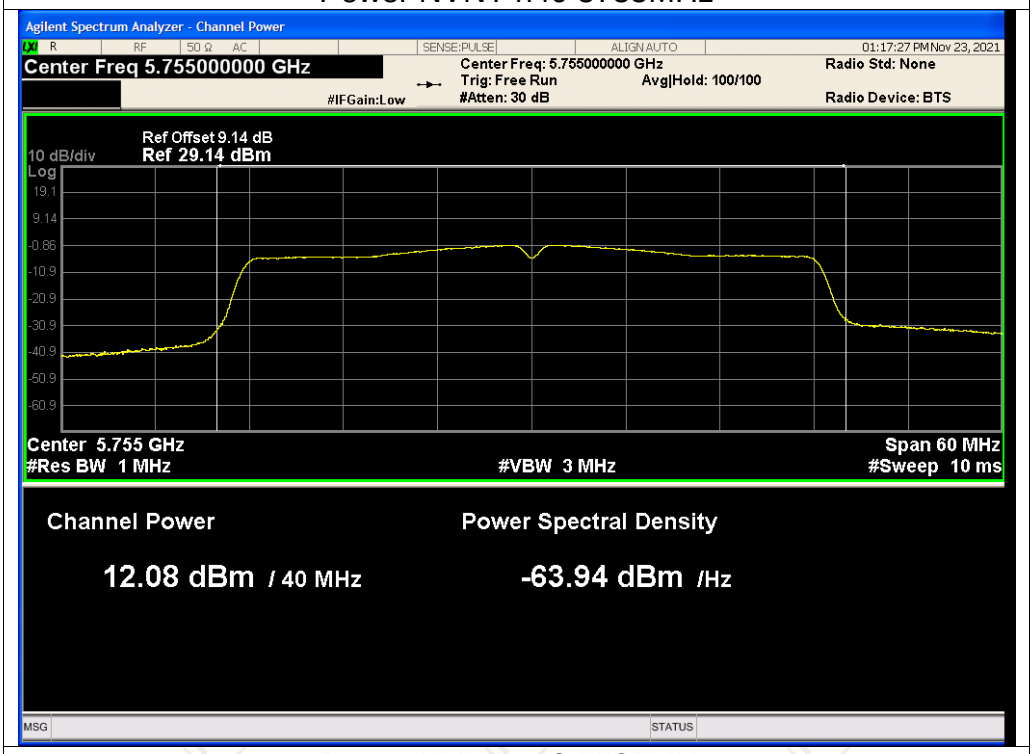
Power NVNT n20 5785MHz



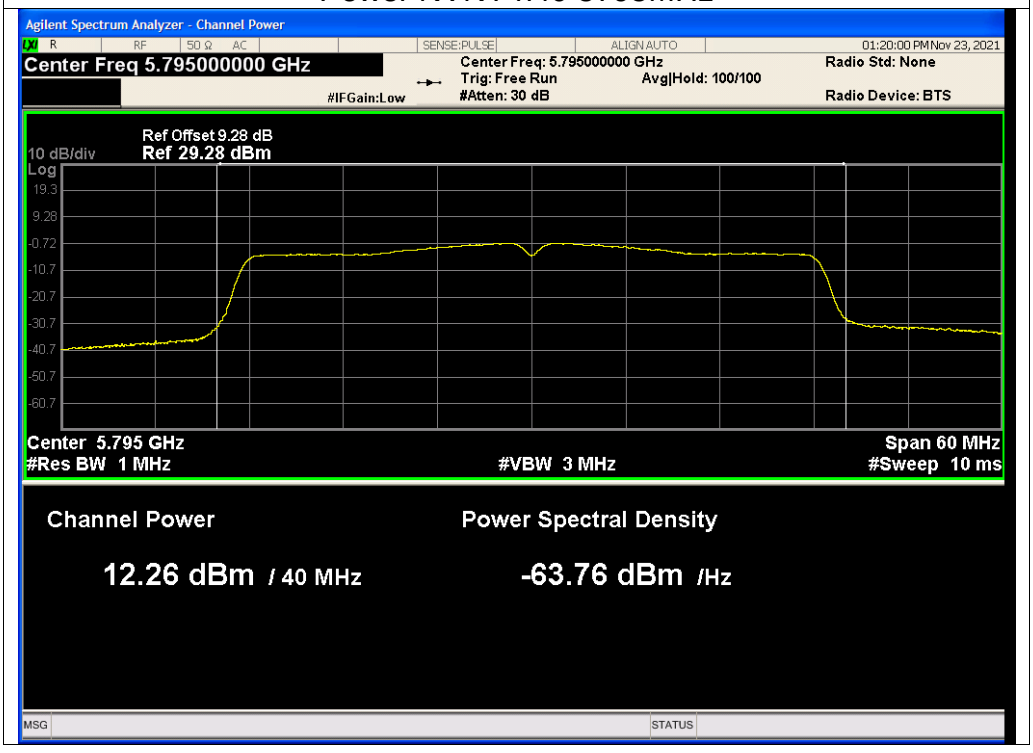
Power NVNT n20 5825MHz



Power NVNT n40 5755MHz



Power NVNT n40 5795MHz



-26dB Bandwidth

Band1

Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	26.575	Pass
NVNT	a	5200	27.475	Pass
NVNT	a	5240	23.953	Pass
NVNT	ac20	5180	27.048	Pass
NVNT	ac20	5200	27.621	Pass
NVNT	ac20	5240	28.055	Pass
NVNT	ac40	5190	50.702	Pass
NVNT	ac40	5230	54.133	Pass
NVNT	ac80	5210	94.263	Pass
NVNT	n20	5180	27.537	Pass
NVNT	n20	5200	28.473	Pass
NVNT	n20	5240	26.746	Pass
NVNT	n40	5190	54.782	Pass
NVNT	n40	5230	54.301	Pass

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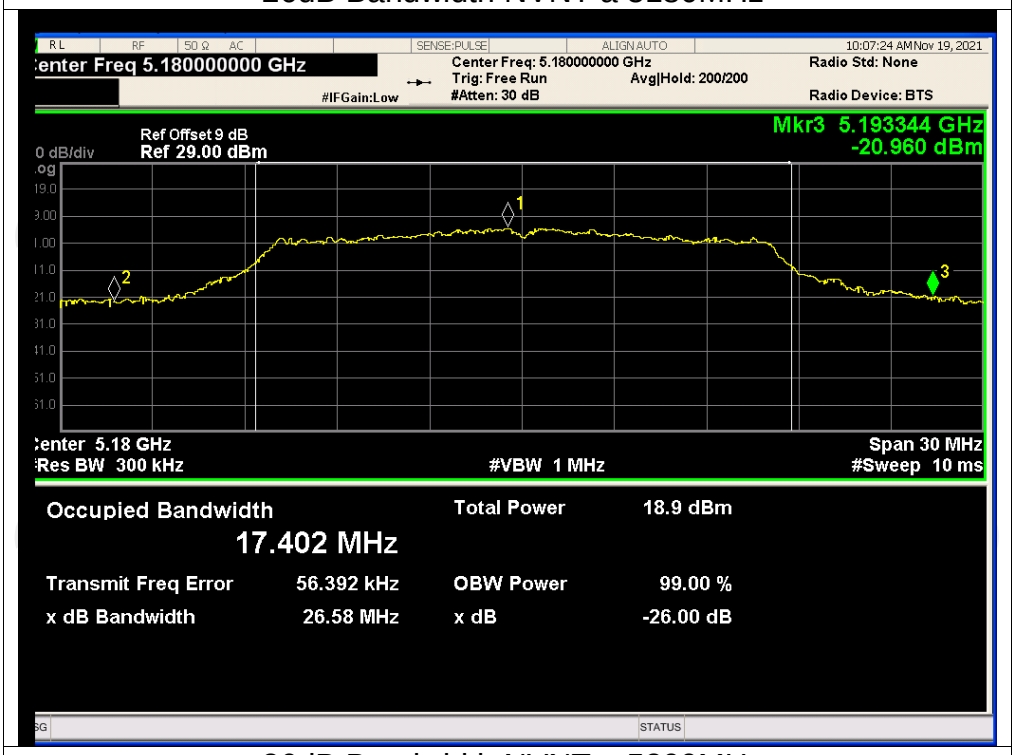
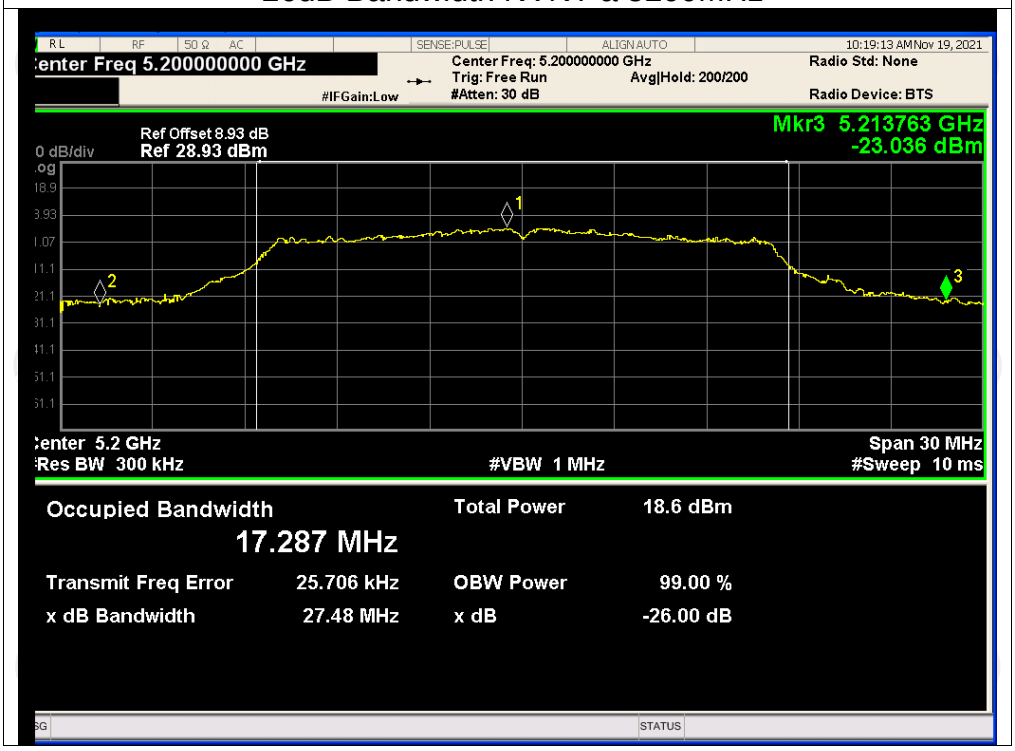
Test Graphs Band1

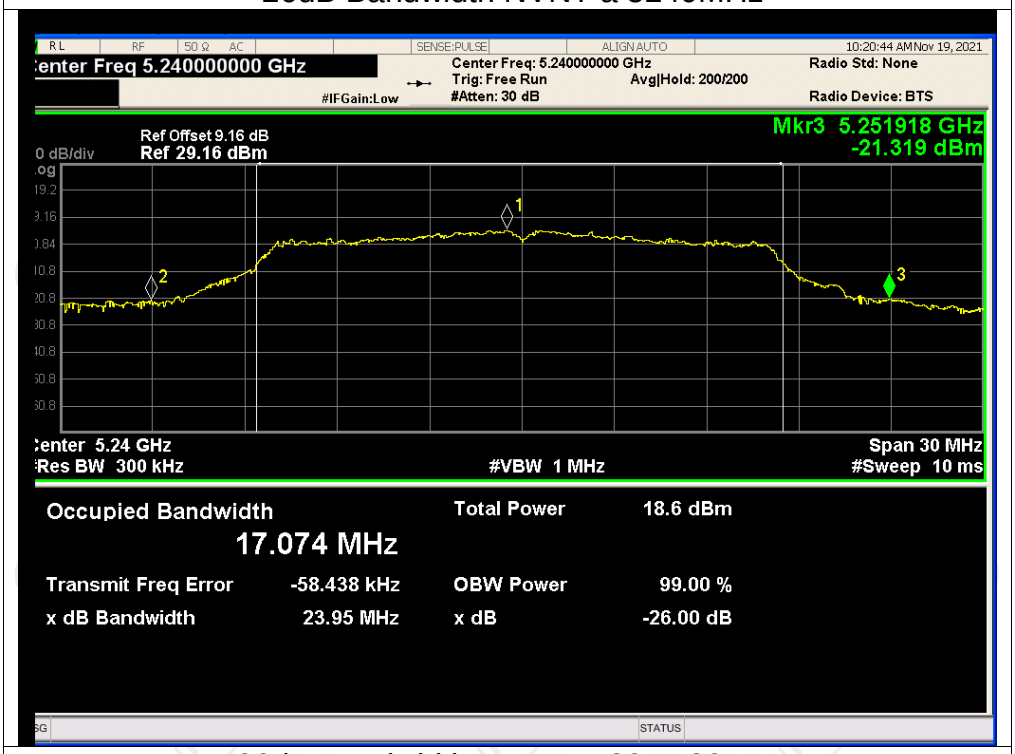
-26dB Bandwidth NVNT a 5180MHz



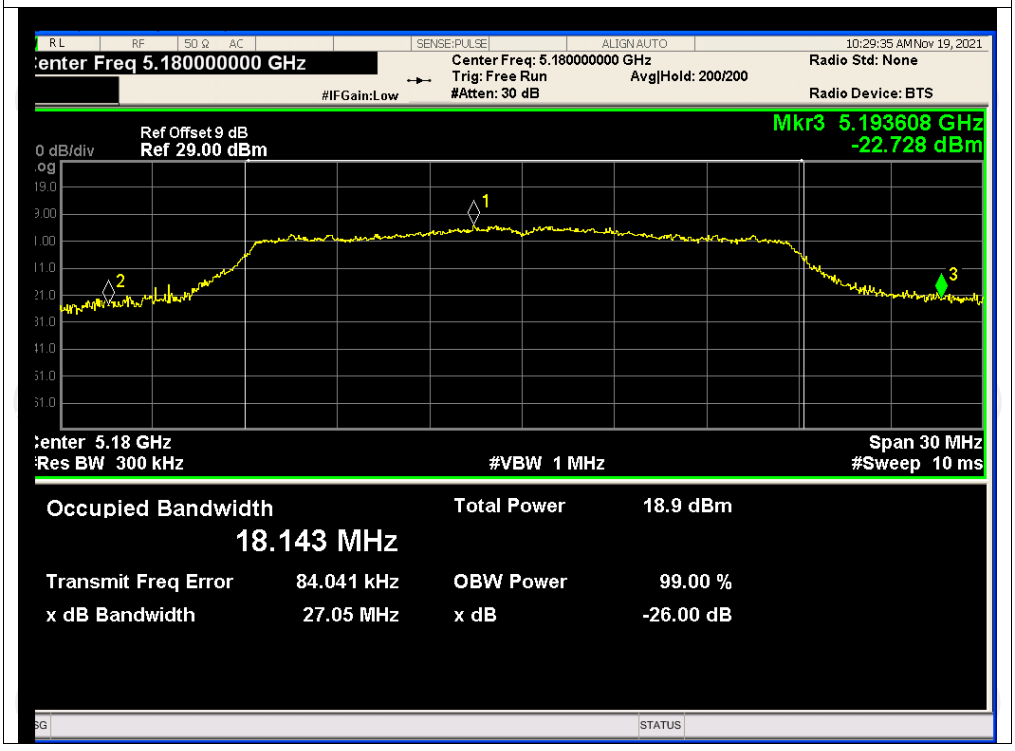
-26dB Bandwidth NVNT a 5200MHz



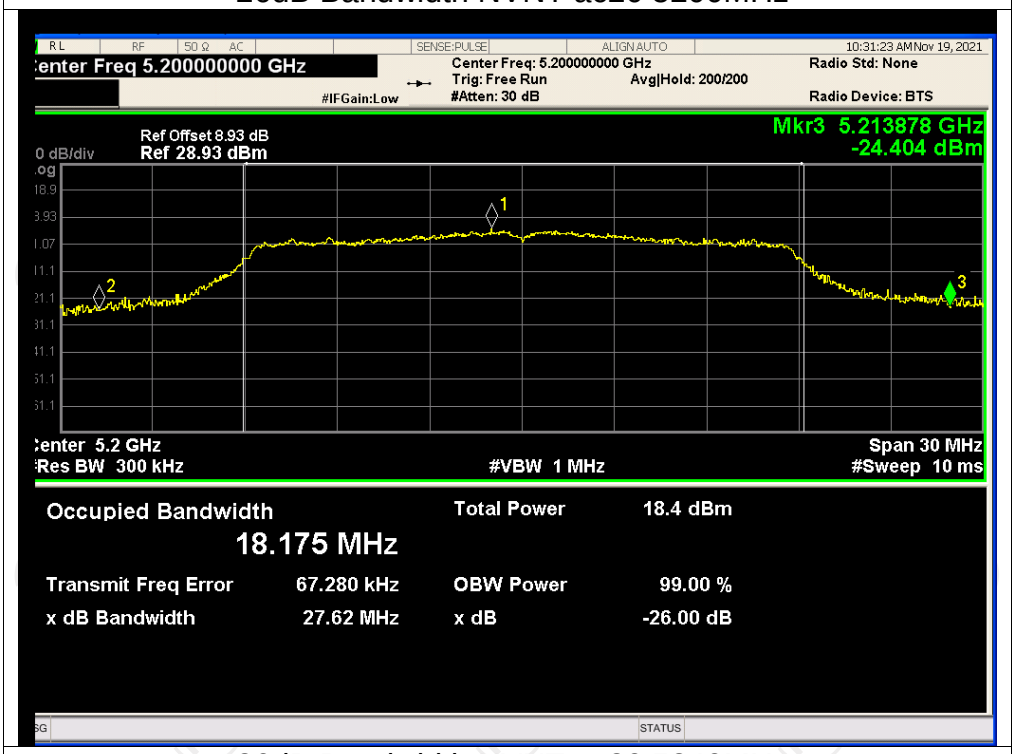
-26dB Bandwidth NVNT a 5240MHz



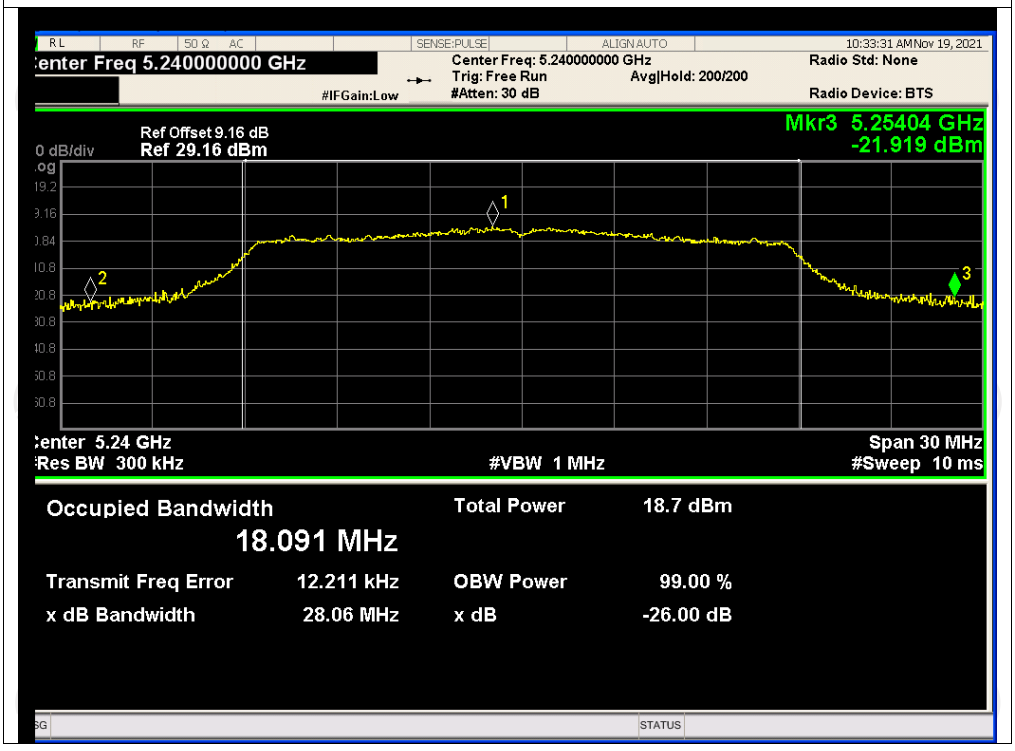
-26dB Bandwidth NVNT ac20 5180MHz



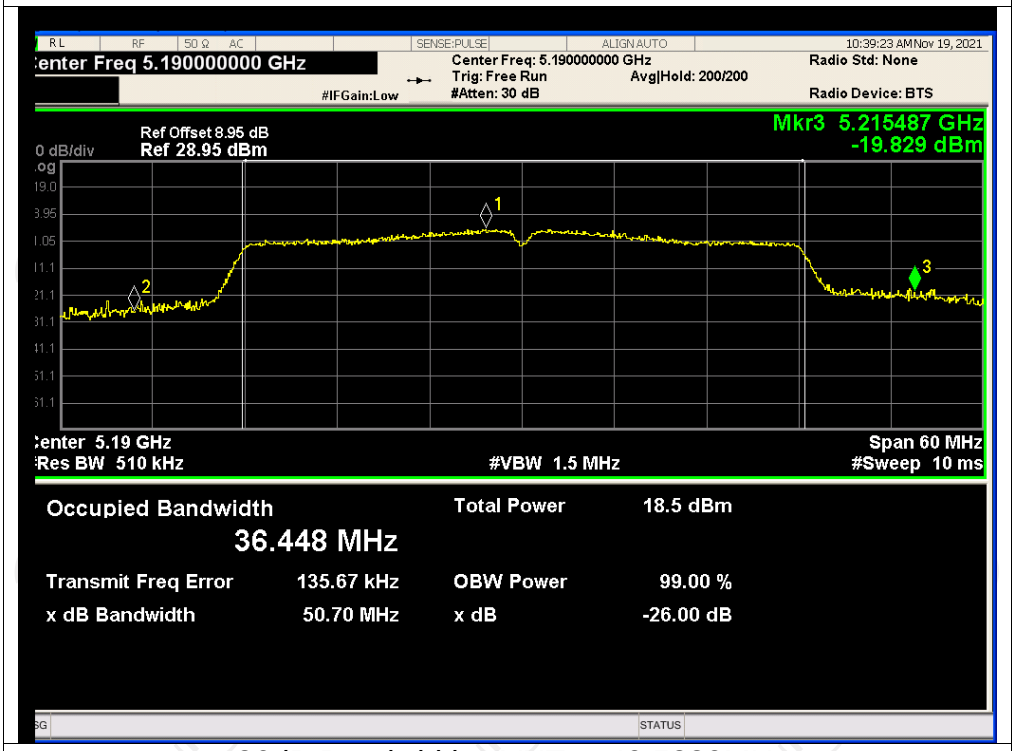
-26dB Bandwidth NVNT ac20 5200MHz



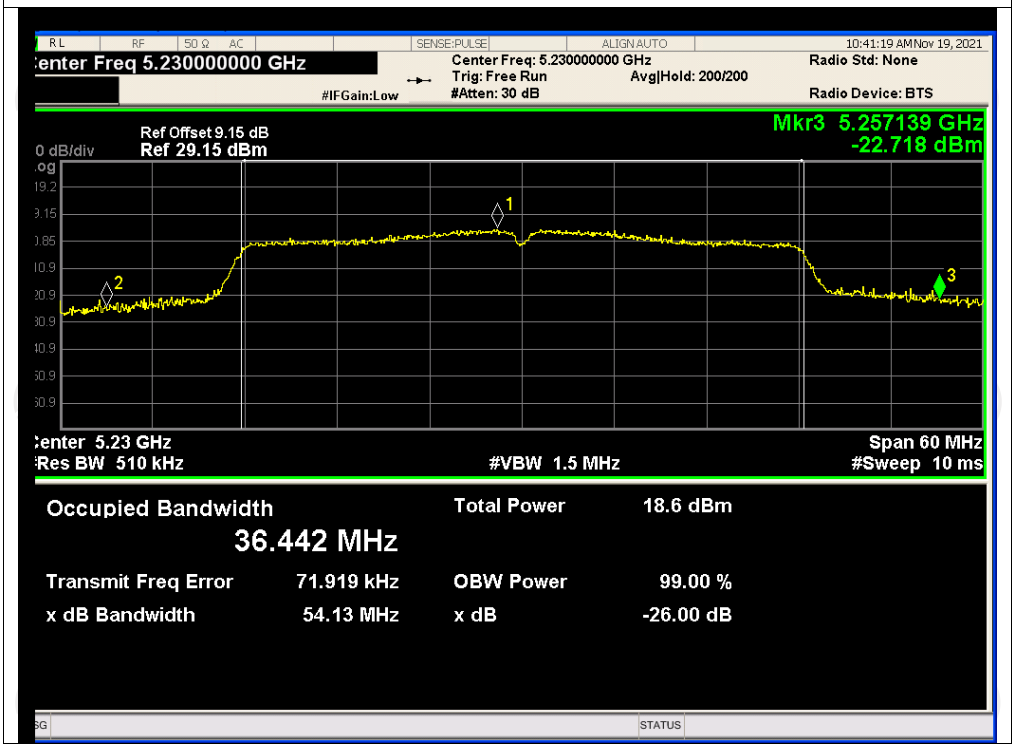
-26dB Bandwidth NVNT ac20 5240MHz



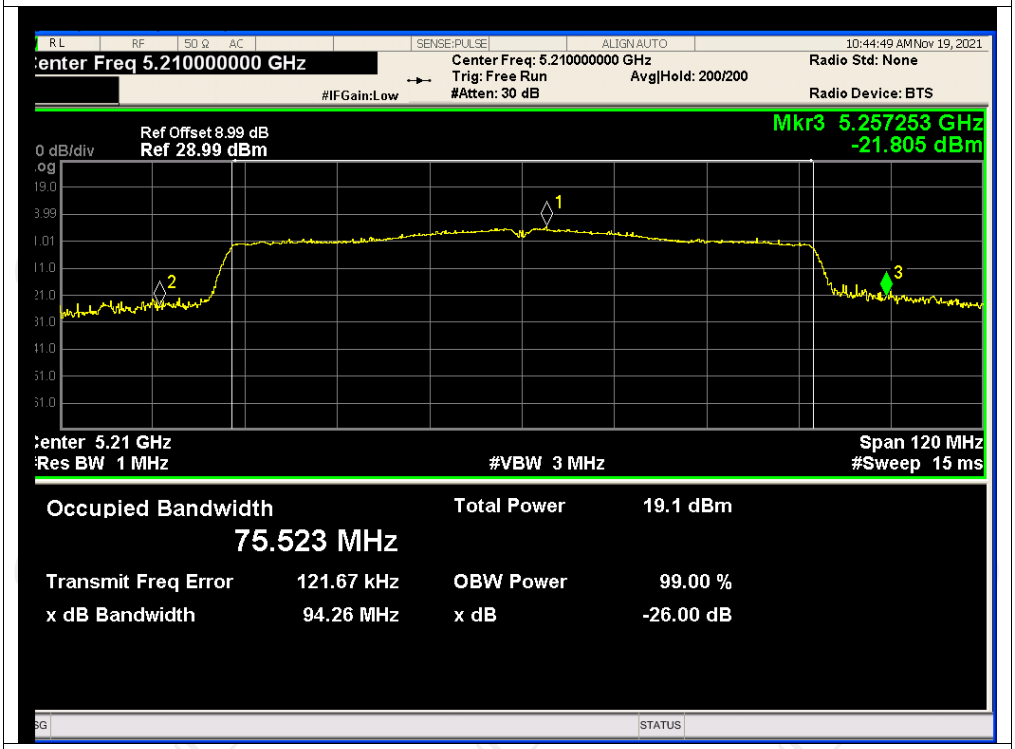
-26dB Bandwidth NVNT ac40 5190MHz



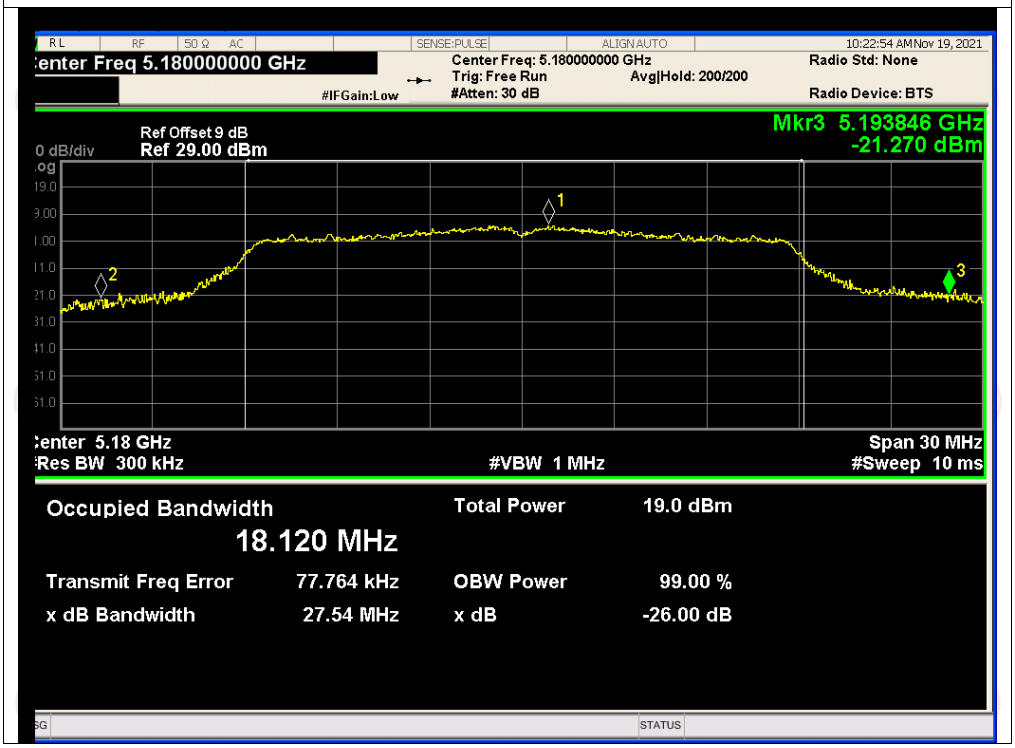
-26dB Bandwidth NVNT ac40 5230MHz



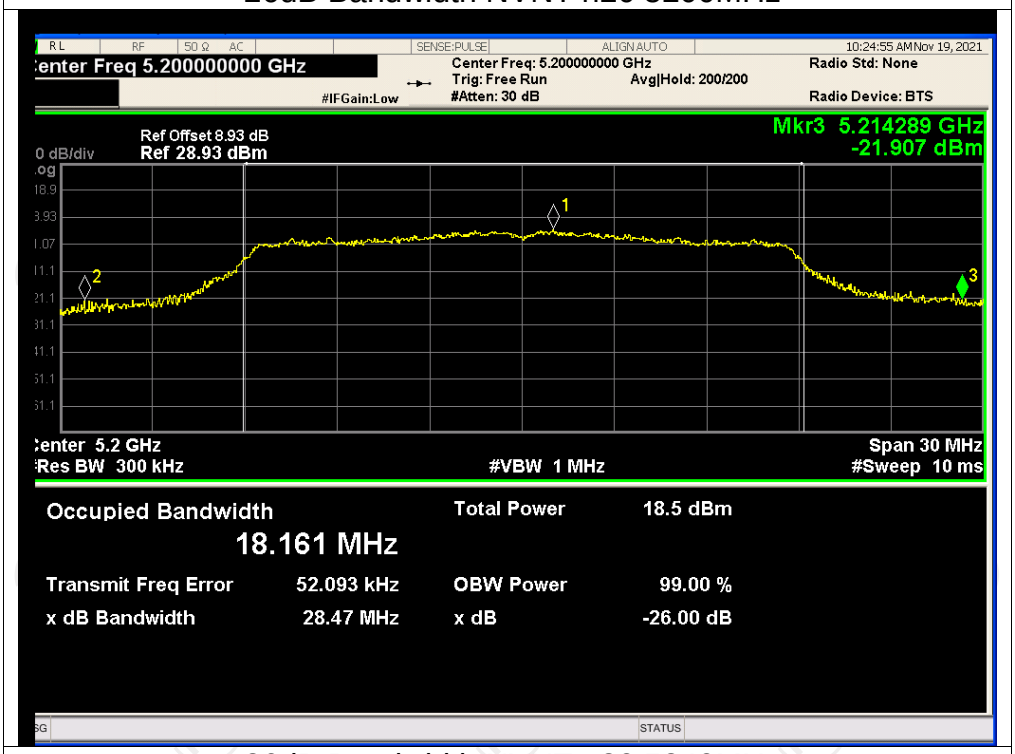
-26dB Bandwidth NVNT ac80 5210MHz



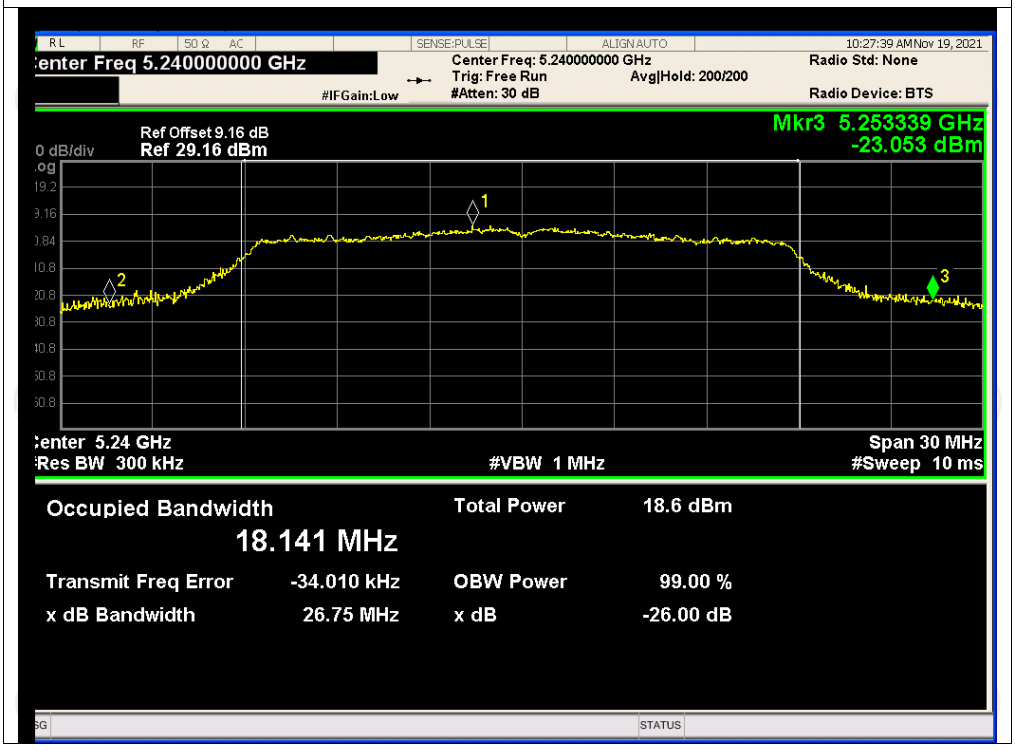
-26dB Bandwidth NVNT n20 5180MHz



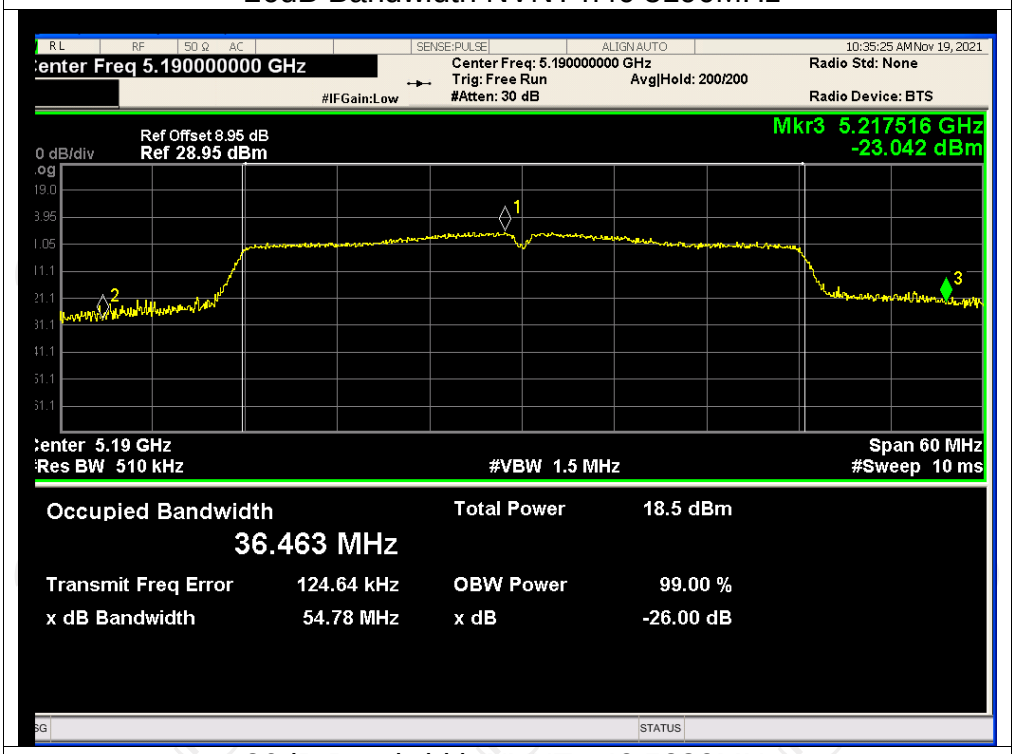
-26dB Bandwidth NVNT n20 5200MHz



-26dB Bandwidth NVNT n20 5240MHz



-26dB Bandwidth NVNT n40 5190MHz



-26dB Bandwidth NVNT n40 5230MHz