

TEST REPORT

FCC ID. :	2AOKU-A-PROMAX	
Test Report No..... :	TCT251204E018	
Date of issue..... :	Dec. 25, 2025	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China	
Applicant's name..... :	SHENZHEN TUGAO INTELLIGENT CO., LTD	
Address..... :	8th Floor, Bldg A, Jinggang Science&Technology Park, Fuyong, Bao'an District, Shenzhen, China	
Manufacturer's name ... :	SHENZHEN TUGAO INTELLIGENT CO., LTD	
Address..... :	8th Floor, Bldg A, Jinggang Science&Technology Park, Fuyong, Bao'an District, 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 ANSI C63.10:2020	
Product Name..... :	Smartphone	
Trade Mark	HOTWAV	
Model/Type reference..... :	A17 Pro Max, A16 Pro Max, A36, A56, A66, A76, A18 Pro Max, A19 Pro Max, A20 Pro Max, A25, A25 Ultra, Note 25 Ultra, S25, S25 Ultra, Note 26 Ultra, A26 Ultra, A27, A27 Pro, Note 17 Pro, Note 17 Max, Note 17 Pro Max	
Rating(s)..... :	Refer to EUT description of page 3	
Date of receipt of test item	Dec. 04, 2025	
Date (s) of performance of test..... :	Dec. 04, 2025 ~ Dec. 25, 2025	
Tested by (+signature) ... :	Brews XU	
Check by (+signature).... :	Beryl ZHAO	
Approved by (+signature):	Tomsin	

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1. General Product Information

1.1. EUT description

Product Name.....:	Smartphone
Model/Type reference.....:	A17 Pro Max
Sample Number.....:	TCT251204E002-0101
Operation Frequency	Band 1: 5180MHz~5240MHz
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.....:	FPC Antenna
Antenna Gain.....:	Band 1: -0.38dBi
Rating(s).....:	Adapter Information: Model: F3-1001 Input: AC 100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2.0A, 10W Rechargeable Li-polymer Battery DC 3.85V

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	A17 Pro Max	☒
Other models	A16 Pro Max, A36, A56, A66, A76, A18 Pro Max, A19 Pro Max, A20 Pro Max, A25, A25 Ultra, Note 25 Ultra, S25, S25 Ultra, Note 26 Ultra, A26 Ultra, A27, A27 Pro, Note 17 Pro, Note 17 Max, Note 17 Pro Max	☐

Note: A17 Pro Max is tested model, other models are derivative models. The models are identical in circuit and PCB layout, different on the model names, camera position, battery cover color, fingerprint lock color, side key color and SIM tray color. So the test data of A17 Pro Max can represent the remaining models.

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	--	--	--	--

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:

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)	N/A
26dB Emission Bandwidth& 99% Occupied Bandwidth	§15.407(a)	PASS
Power Spectral Density	§15.407(a)	PASS
Restricted Bands around fundamental frequency	§15.407(b)	PASS
Radiated Emission	§15.407(b)	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.
5. For the band 5.15-5.25GHz, EUT meet the requirements of 15.407(a)(ii).

3. General Information

3.1. Test environment and mode

Operating Environment:		
Condition	Conducted Emission	Radiated Emission
Temperature:	22.8 °C	23.9 °C
Humidity:	49 % RH	46 % RH
Atmospheric Pressure:	1010 mbar	1010 mbar
Test Software:		
Software Information:	Engineering Mode	
Power Level:	Default	
Test Mode:		
Engineer mode:	Keep the EUT in continuous transmitting by select channel and modulations with max duty cycle.	
The sample was placed 0.8m/1.5m for blow/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 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

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.

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.

- A2LA-No.: 4320.01

SHENZHEN TONGCE TESTING LAB

The testing lab has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.

4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

5. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded 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

6. Test Results and Measurement Data

6.1. Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203 /247(b)(4)
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. 15.247(b)(4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	
E.U.T Antenna:	
The WIFI antenna is FPC antenna which permanently attached, and the best case gain of the antenna is -0.38dBi.	

6.2. Conducted Emission

6.2.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.207														
Test Method:	ANSI C63.10:2020														
Frequency Range:	150 kHz to 30 MHz														
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto														
Limits:	<table><tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBuV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></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>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test Setup:	Reference Plane 40cm E.U.T AC power 80cm LISN Filter AC power EMI Receiver Test table/Insulation plane Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m														
Test Mode:	Charging + Transmitting Mode														
Test Procedure:	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 C63.10:2020 on conducted measurement.														
Test Result:	PASS														

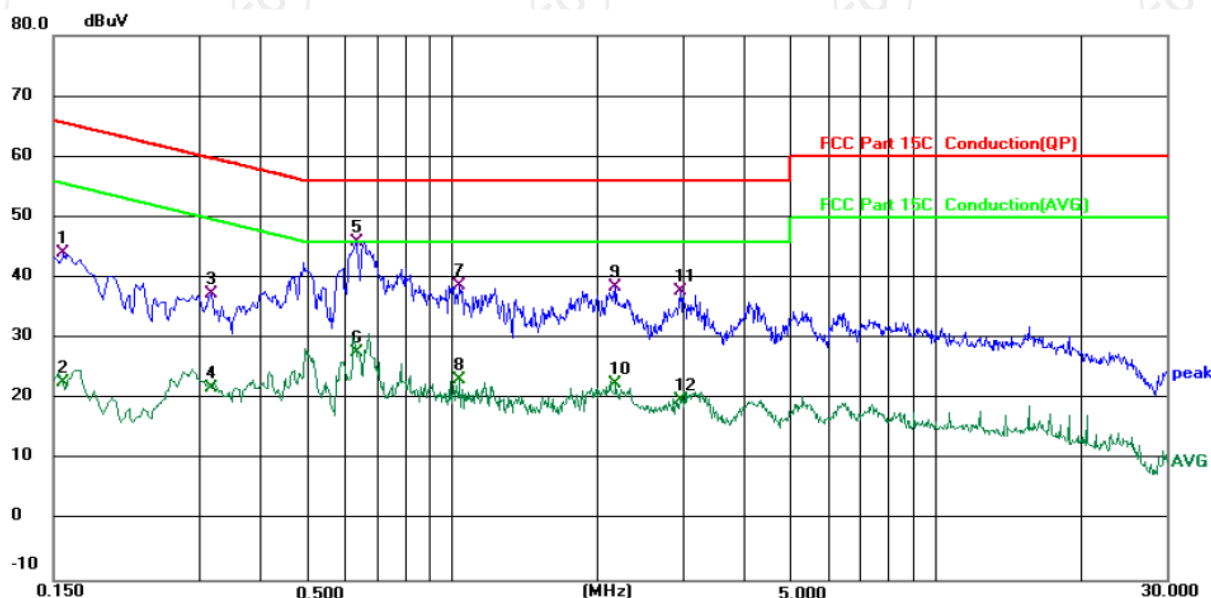
6.2.2. Test Instruments

Conducted Emission Shielding Room Test Site (843)					
Equipment	Manufacturer	Model	Serial Number	Date of Cal.	Due Date
EMI Test Receiver	R&S	ESCI3	100898	Jun. 26, 2025	Jun. 25, 2026
LISN	Schwarzbeck	NSLK 8126	8126453	Jan. 21, 2025	Jan. 20, 2026
Attenuator	N/A	10dB	164080	Jun. 26, 2025	Jun. 25, 2026
Line-5	TCT	CE-05	/	Jun. 26, 2025	Jun. 25, 2026
EMI Test Software	EZ_EMG	EMEC-3A1	1.1.4.2	/	/

6.2.3. 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: 22.8 (°C)

Humidity: 49 %

Limit: FCC Part 15C Conduction(QP)

Power: AC 120 V/60 Hz

No.	Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measure- ment dBμV	Limit dBμV	Over dB	Detector	Comment
1		0.1572	35.48	8.54	44.02	65.61	-21.59	QP	
2		0.1572	14.26	8.54	22.80	55.61	-32.81	AVG	
3		0.3180	28.74	8.54	37.28	59.76	-22.48	QP	
4		0.3180	13.38	8.54	21.92	49.76	-27.84	AVG	
5	*	0.6340	37.46	8.50	45.96	56.00	-10.04	QP	
6		0.6340	19.20	8.50	27.70	46.00	-18.30	AVG	
7		1.0380	30.09	8.53	38.62	56.00	-17.38	QP	
8		1.0380	14.59	8.53	23.12	46.00	-22.88	AVG	
9		2.1819	29.89	8.62	38.51	56.00	-17.49	QP	
10		2.1819	13.79	8.62	22.41	46.00	-23.59	AVG	
11		2.9700	29.16	8.67	37.83	56.00	-18.17	QP	
12		2.9700	11.14	8.67	19.81	46.00	-26.19	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

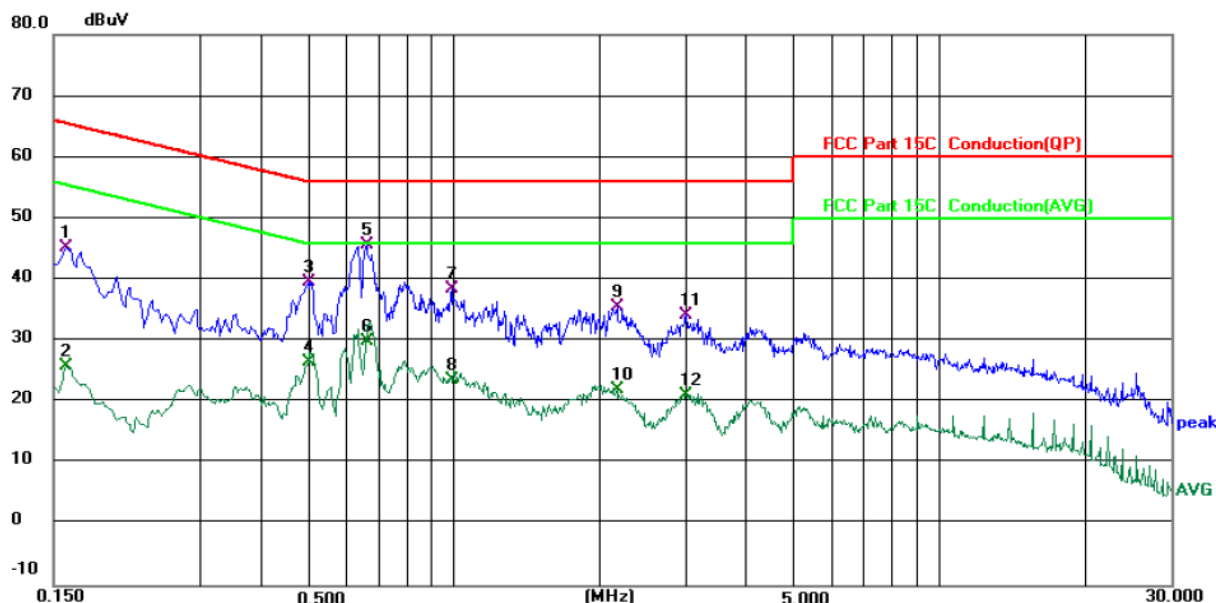
Margin (dB) = Measurement (dBμV) – Limits (dBμV)

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: 22.8 (°C)

Humidity: 49 %

Limit: FCC Part 15C Conduction(QP)

Power: AC 120 V/60 Hz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBμV	dB	dBμV	dBμV	dB		
1		0.1590	36.65	8.54	45.19	65.52	-20.33	QP	
2		0.1590	17.31	8.54	25.85	55.52	-29.67	AVG	
3		0.5020	31.17	8.50	39.67	56.00	-16.33	QP	
4		0.5020	18.02	8.50	26.52	46.00	-19.48	AVG	
5	*	0.6620	37.24	8.50	45.74	56.00	-10.26	QP	
6		0.6620	21.45	8.50	29.95	46.00	-16.05	AVG	
7		0.9939	29.87	8.53	38.40	56.00	-17.60	QP	
8		0.9939	15.22	8.53	23.75	46.00	-22.25	AVG	
9		2.1779	26.91	8.62	35.53	56.00	-20.47	QP	
10		2.1779	13.51	8.62	22.13	46.00	-23.87	AVG	
11		3.0100	25.51	8.67	34.18	56.00	-21.82	QP	
12		3.0100	12.57	8.67	21.24	46.00	-24.76	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.

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 (Highest channel and 802.11ac(VHT20)) was submitted only.

6.3. Maximum Conducted Output Power

6.3.1. Test Specification

Test Requirement:	FCC Part15 E Section 15.407(a)& Part 2 J Section 2.1046	
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E	
Limit:	Frequency Band (MHz)	Limit
	5180 - 5240	24dBm(250mW) for client device
	5260 - 5320	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz
	5470 - 5725	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz
	5745 - 5825	30dBm(1W)
Test Setup:	 Spectrum Analyzer EUT	
Test Mode:	Transmitting mode with modulation	
Test Procedure:	1. The testing follows the Measurement Procedure of KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E, 2, b 2. The RF output of EUT was connected to the spectrum analyzer by RF cable. 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.	
Test Result:	PASS	

6.3.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 26, 2025	Jun. 25, 2026
Power detector box	MWRFTest	MW100-RFCB	MW210531TCT	Jan. 21, 2025	Jan. 20, 2026

6.4. 6dB Emission Bandwidth

6.4.1. Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)& Part 2 J Section 2.1049
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C
Limit:	>500kHz
Test Setup:	 Spectrum Analyzer EUT
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:	N/A

6.5. 26dB Bandwidth and 99% Occupied Bandwidth

6.5.1. Test Specification

Test Requirement:	47 CFR Part 15C Section 15.407 (a)& Part 2 J Section 2.1049
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D
Limit:	No restriction limits
Test Setup:	 Spectrum Analyzer EUT
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) = 1% to 5% of the OBW. Set the Video bandwidth (VBW) = 3 *RBW. In order to make an accurate measurement. 4. Measure and record the results in the test report.
Test Result:	PASS

6.5.2. Test Instruments

Equipment	Manufacturer	Model No.	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 26, 2025	Jun. 25, 2026
Power detector box	MWRFtest	MW100-RFCB	MW210531TCT	Jan. 21, 2025	Jan. 20, 2026

6.6. Power Spectral Density

6.6.1. Test Specification

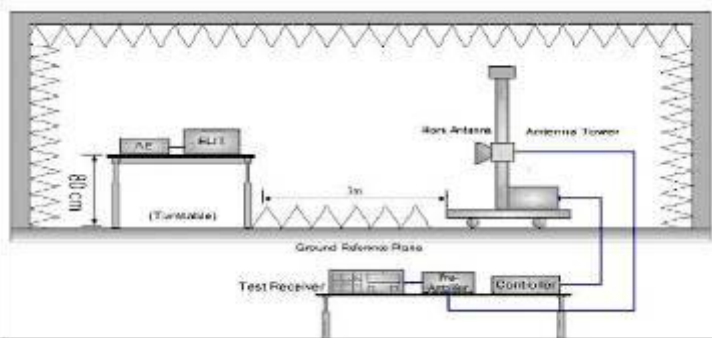
Test Requirement:	FCC Part15 E Section 15.407 (a)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section F
Limit:	$\leq 11.00\text{dBm/MHz}$ for Band 1 5150MHz-5250MHz(client device) $\leq 11.00\text{dBm/MHz}$ for Band 2A&2C 5250-5350&5470-5725 $\leq 30.00\text{dBm/500KHz}$ 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:	 Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth. 2. Set RBW = 510 kHz/1 MHz, VBW $\geq 3 \times \text{RBW}$, Sweep time = Auto, Detector = RMS. 3. Allow the sweeps to continue until the trace stabilizes. 4. Use the peak marker function to determine the maximum amplitude level.
Test Result:	PASS

6.6.2. Test Instruments

Equipment	Manufacturer	Model No.	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 26, 2025	Jun. 25, 2026
Power detector box	MWRFTest	MW100-RFCB	MW210531TCT	Jan. 21, 2025	Jan. 20, 2026

6.7. Band edge

6.7.1. Test Specification

Test Requirement:	FCC CFR47 Part 15E Section 15.407																										
Test Method:	ANSI C63.10:2020																										
Limit:	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>	Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)	< 5650	-27	5850~5855	27~15.6	5650~5700	-27~10	5855~5875	15.6~10	5700~5720	10~15.6	5875~5925	10~-27	5720~5725	15.6~27	> 5925	-27	Detector	Limit@3m	Peak	74dBμV/m	AVG	54dBμV/m
Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)																								
< 5650	-27	5850~5855	27~15.6																								
5650~5700	-27~10	5855~5875	15.6~10																								
5700~5720	10~15.6	5875~5925	10~-27																								
5720~5725	15.6~27	> 5925	-27																								
Detector	Limit@3m																										
Peak	74dBμV/m																										
AVG	54dBμV/m																										
Test Setup:																											
Test Mode:	Transmitting mode with modulation																										
Test Procedure:	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																										

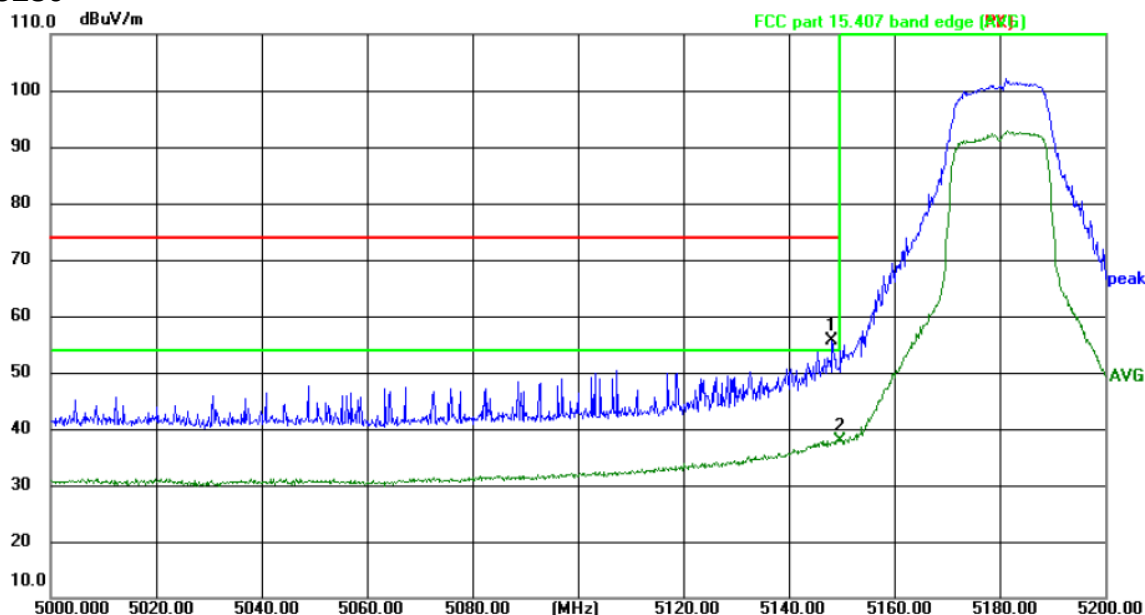
	Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi peak or average method as specified and then reported in a data sheet.
Test Result:	PASS

6.7.2. Test Instruments

Radiated Emission Test Site (966)					
Equipment	Manufacturer	Model	Serial Number	Date of Cal.	Due Date
EMI Test Receiver	R&S	ESCI7	100529	Jan. 21, 2025	Jan. 20, 2026
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 26, 2025	Jun. 25, 2026
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Jan. 21, 2025	Jan. 20, 2026
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Apr. 11, 2025	Apr. 10, 2026
Pre-amplifier	HP	8447D	2727A05017	Jun. 26, 2025	Jun. 25, 2026
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jun. 30, 2025	Jun. 29, 2026
Broadband Antenna	Schwarzbeck	VULB9163	340	Jun. 29, 2025	Jun. 28, 2026
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jun. 29, 2025	Jun. 28, 2026
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Jan. 24, 2025	Jan. 23, 2026
Coaxial cable	SKET	RE-03-D	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-03-M	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-03-L	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-04-D	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-04-M	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-04-L	/	Jun. 27, 2025	Jun. 26, 2026
Antenna Mast	Keleto	RE-AM	/	/	/
EMI Test Software	EZ EMC	FA-03A2 RE+	1.1.4.2	/	/

6.7.3. Test Data

AC20-5180



Site: 3m Anechoic Chamber

Polarization: **Horizontal**

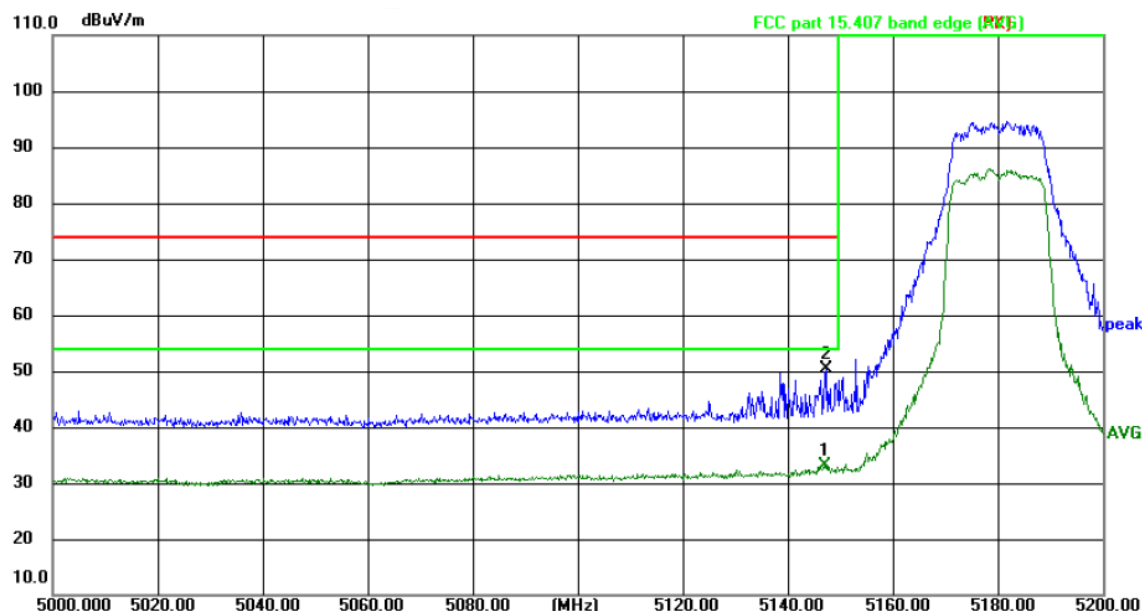
Temperature: 21.9(°C)

Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5148.300	61.72	-6.09	55.63	74.00	-18.37	peak	P	
2 *	5149.800	44.05	-6.09	37.96	54.00	-16.04	AVG	P	



Site: 3m Anechoic Chamber

Polarization: **Vertical**

Temperature: 21.9(°C)

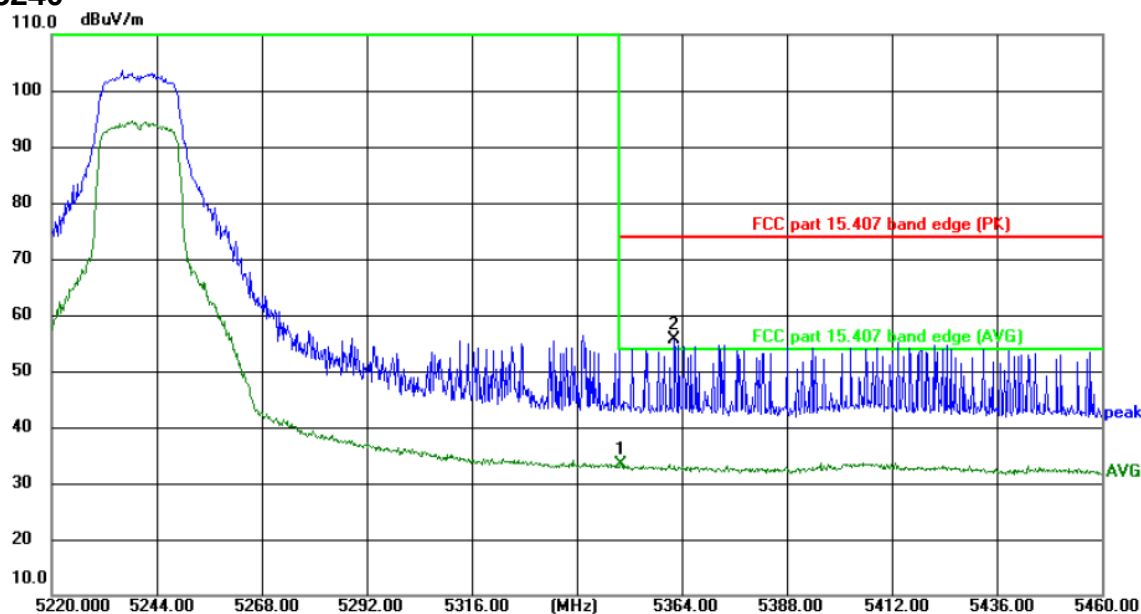
Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5147.100	39.17	-6.11	33.06	54.00	-20.94	AVG	P	
2	5147.400	56.51	-6.11	50.40	74.00	-23.60	peak	P	

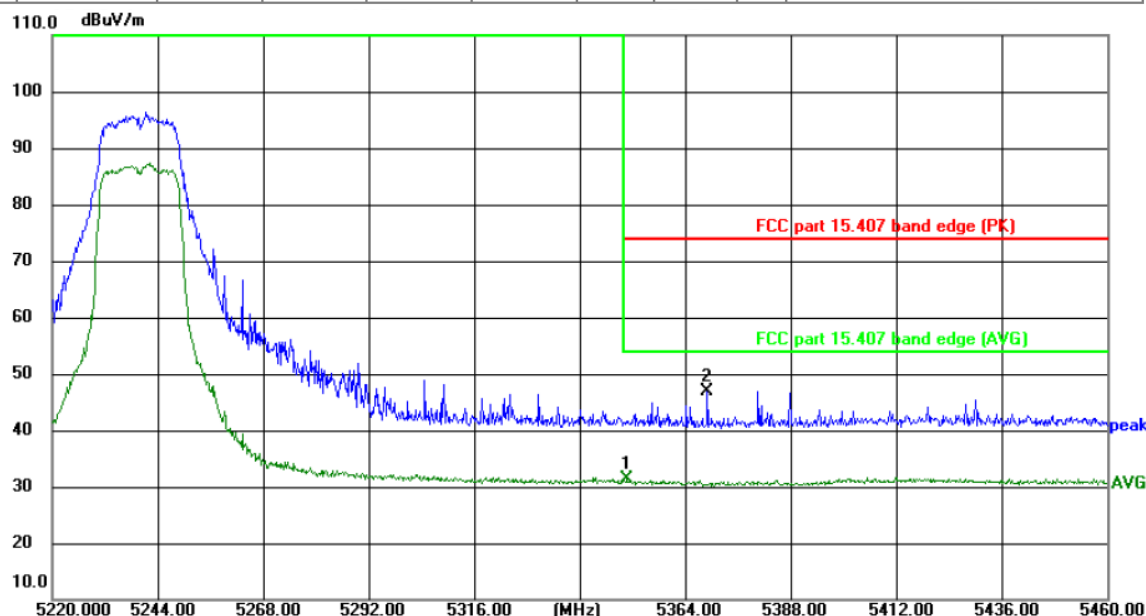
AC20-5240



Site: 3m Anechoic Chamber Polarization: **Horizontal** Temperature: 21.9(°C) Humidity: 40 %

Limit: FCC part 15.407 band edge (PK) Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.320	38.92	-5.64	33.28	54.00	-20.72	AVG	P	
2 *	5362.560	61.22	-5.64	55.58	74.00	-18.42	peak	P	

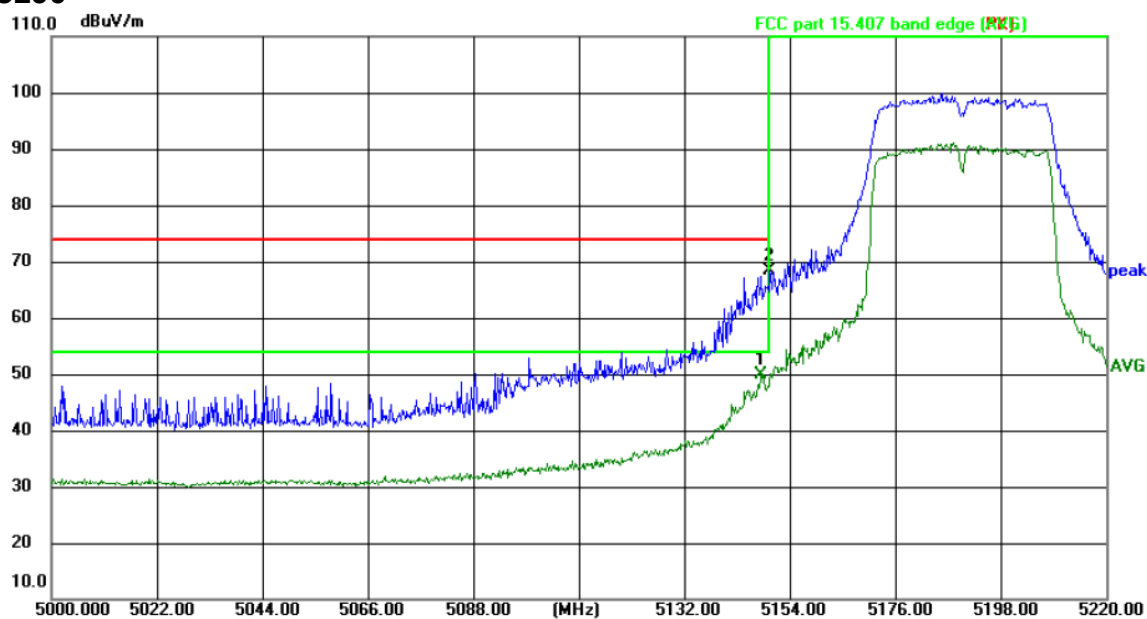


Site: 3m Anechoic Chamber Polarization: **Vertical** Temperature: 21.9(°C) Humidity: 40 %

Limit: FCC part 15.407 band edge (PK) Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5350.920	37.13	-5.64	31.49	54.00	-22.51	AVG	P	
2	5369.280	52.49	-5.63	46.86	74.00	-27.14	peak	P	

AC40-5190



Site: 3m Anechoic Chamber

Polarization: **Horizontal**

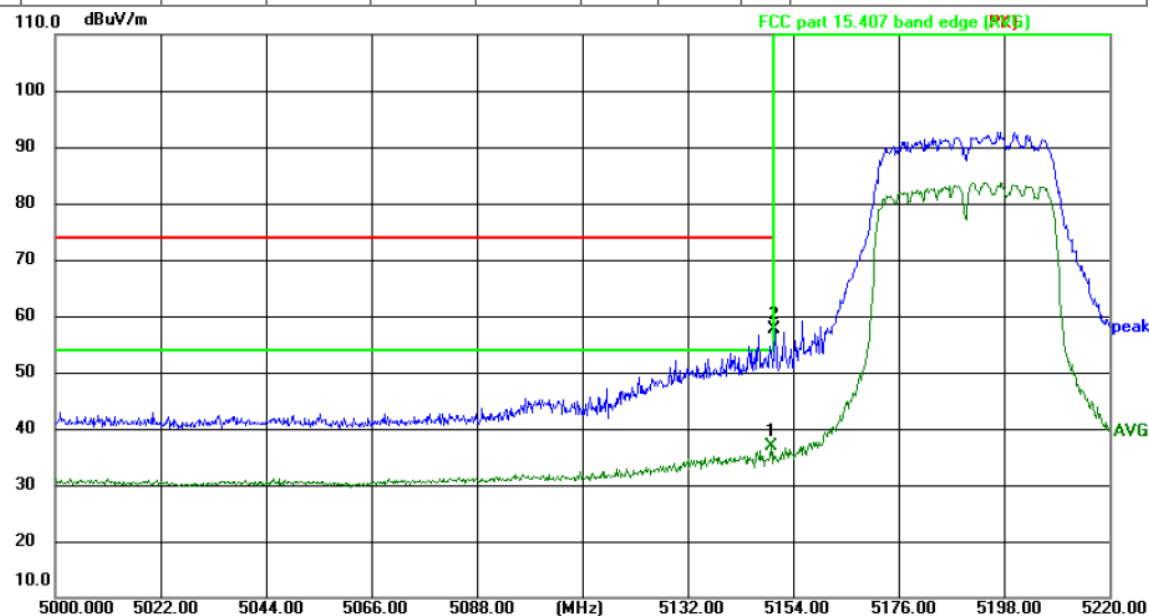
Temperature: 21.9(°C)

Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5148.170	55.95	-6.09	49.86	54.00	-4.14	AVG	P	
2	5149.820	74.46	-6.09	68.37	74.00	-5.63	peak	P	



Site: 3m Anechoic Chamber

Polarization: **Vertical**

Temperature: 21.9(°C)

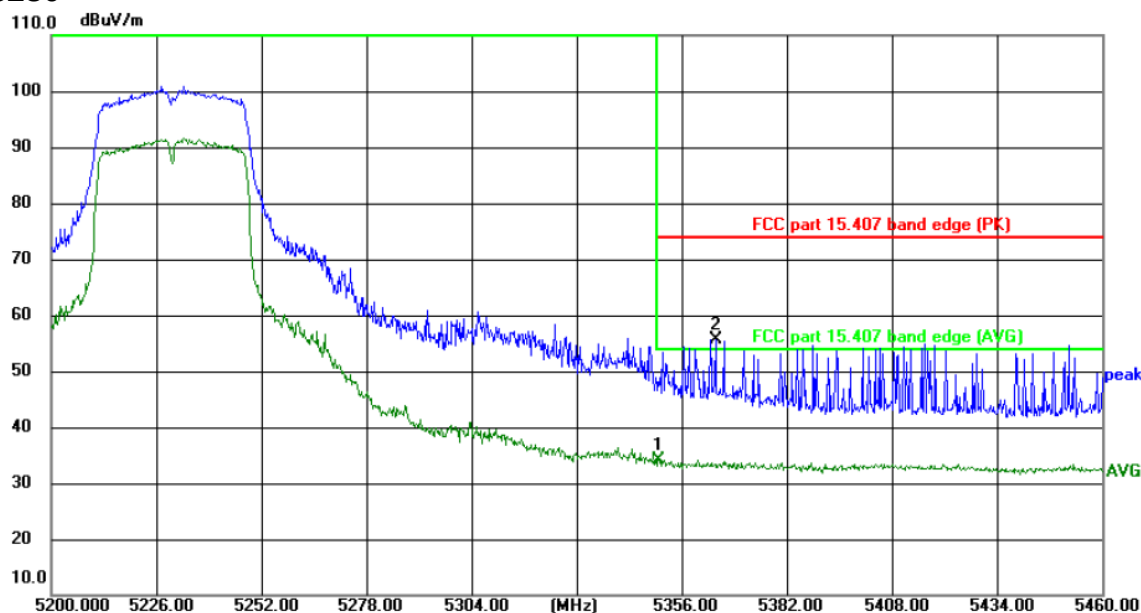
Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5149.490	42.88	-6.09	36.79	54.00	-17.21	AVG	P	
2 *	5150.000	63.66	-6.08	57.58	74.00	-16.42	peak	P	

AC40-5230



Site: 3m Anechoic Chamber

Polarization: **Horizontal**

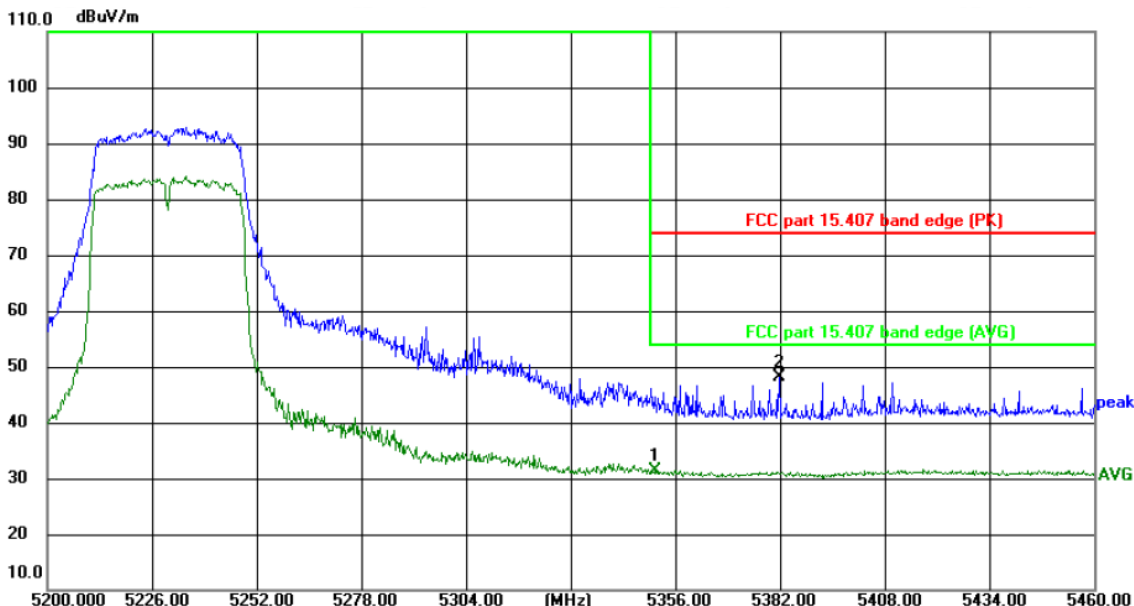
Temperature: 21.9(°C)

Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.410	39.81	-5.64	34.17	54.00	-19.83	AVG	P	
2 *	5364.320	61.18	-5.64	55.54	74.00	-18.46	peak	P	



Site: 3m Anechoic Chamber

Polarization: **Vertical**

Temperature: 21.9(°C)

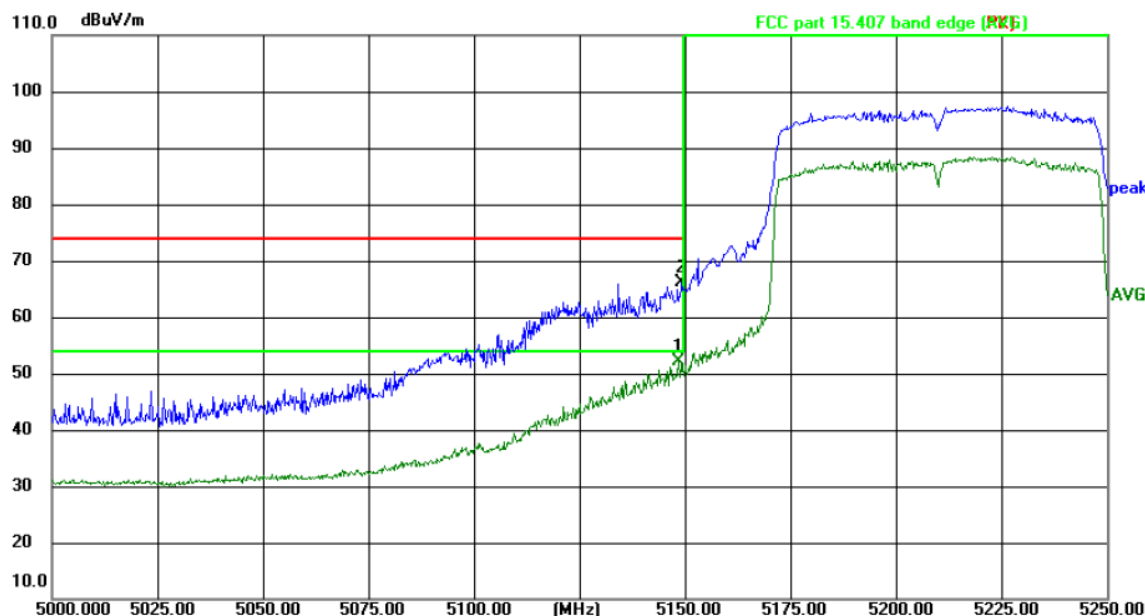
Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5350.930	37.12	-5.64	31.48	54.00	-22.52	AVG	P	
2	5382.000	53.73	-5.62	48.11	74.00	-25.89	peak	P	

AC80-5210



Site: 3m Anechoic Chamber

Polarization: **Horizontal**

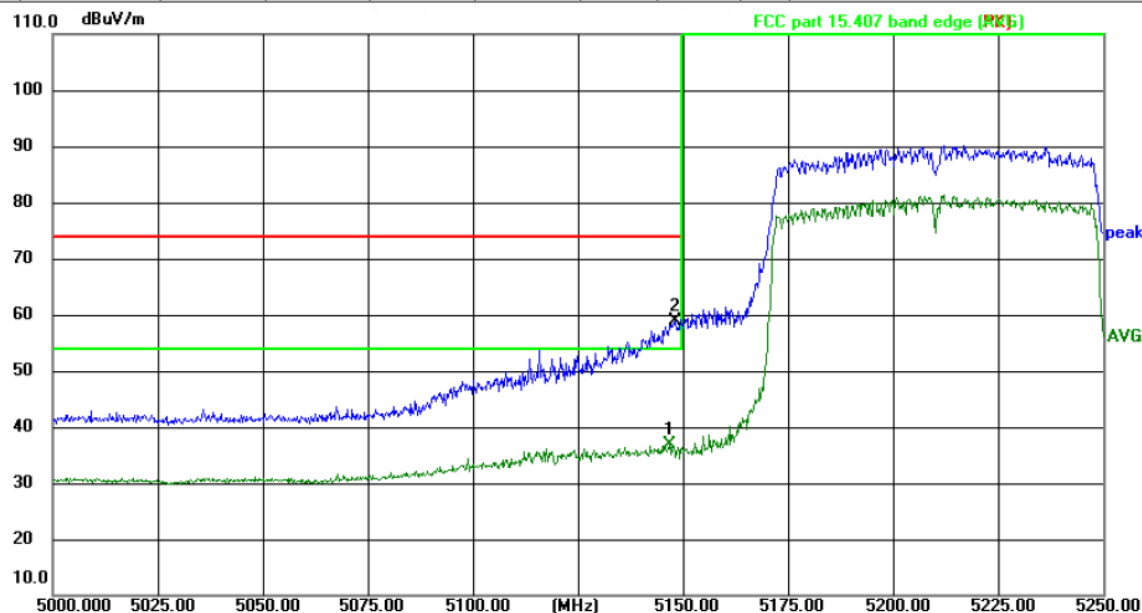
Temperature: 21.9(°C)

Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5148.750	58.25	-6.09	52.16	54.00	-1.84	AVG	P	
2	5149.375	72.18	-6.09	66.09	74.00	-7.91	peak	P	



Site: 3m Anechoic Chamber

Polarization: **Vertical**

Temperature: 21.9(°C)

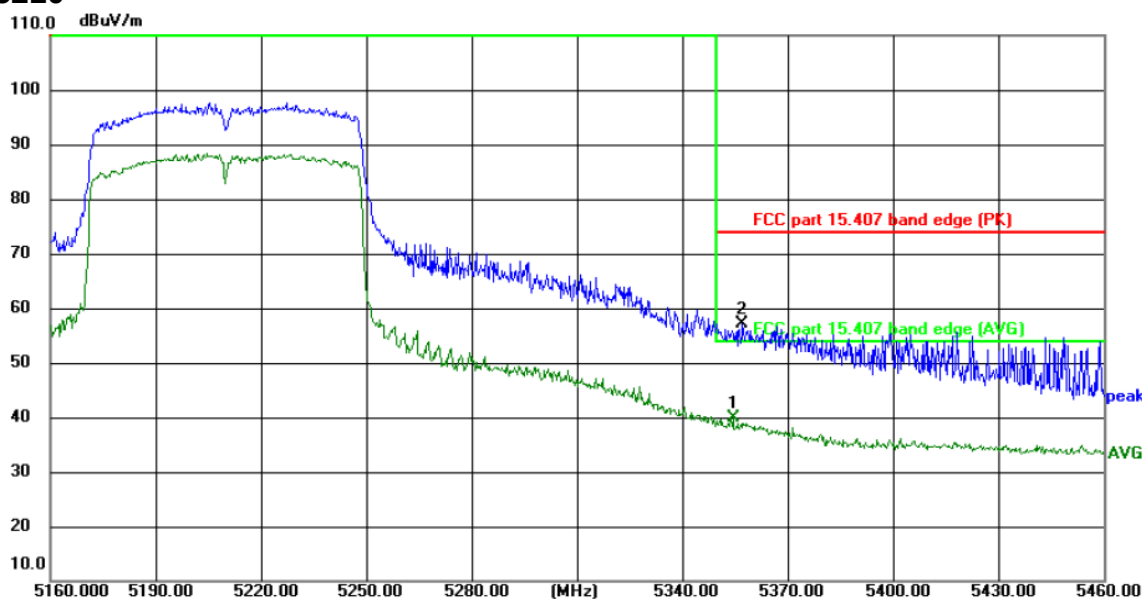
Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5147.000	42.94	-6.11	36.83	54.00	-17.17	AVG	P	
2 *	5148.375	65.06	-6.09	58.97	74.00	-15.03	peak	P	

AC80-5210



Site: 3m Anechoic Chamber

Polarization: **Horizontal**

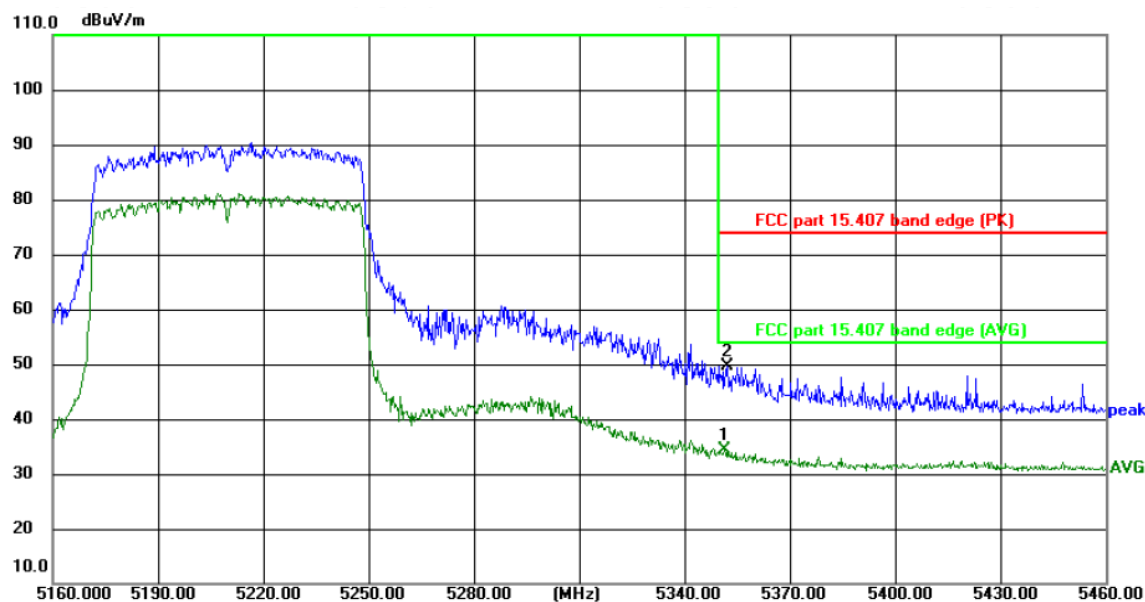
Temperature: 21.9(°C)

Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

Power:DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5354.400	45.43	-5.64	39.79	54.00	-14.21	AVG	P	
2	5357.250	62.85	-5.63	57.22	74.00	-16.78	peak	P	



Site: 3m Anechoic Chamber

Polarization: **Vertical**

Temperature: 21.9(°C)

Humidity: 40 %

Limit: FCC part 15.407 band edge (PK)

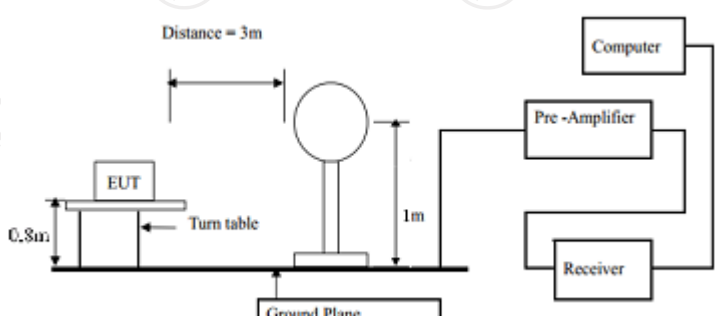
Power:DC 3.85V

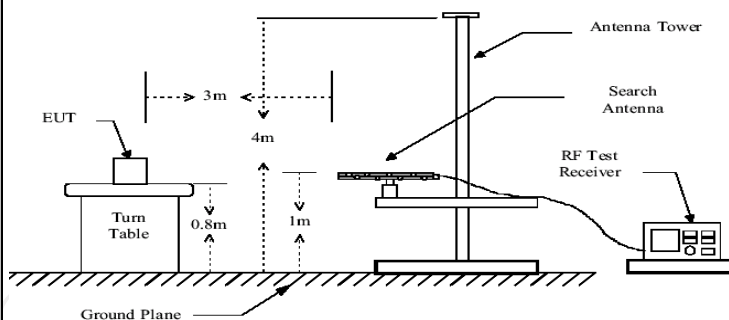
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5351.700	39.95	-5.64	34.31	54.00	-19.69	AVG	P	
2	5352.600	55.19	-5.64	49.55	74.00	-24.45	peak	P	

Note: All modulation (802.11a, 802.11n, 802.11ac) have been tested, only the worst case in 802.11ac be reported.

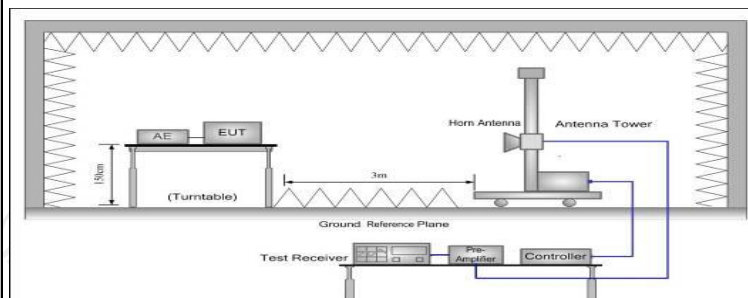
6.8. Unwanted Emissions

6.8.1. Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407 & 15.209 & 15.205				
Test Method:	KDB 789033 D02 v02r01				
Frequency Range:	9kHz to 40GHz				
Measurement Distance:	3 m				
Antenna Polarization:	Horizontal & Vertical				
Operation mode:	Transmitting mode with modulation				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
	150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Peak		1MHz	10Hz	Average Value	
Limit:	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, In restricted bands:				
	Frequency		Detector		Limit@3m
	Above 1G		Peak		74dBµV/m
			AVG		54dBµV/m
	Frequency		Field Strength (microvolts/meter)	Measurement Distance (meters)	
	0.009-0.490		2400/F(KHz)	300	
	0.49 -1.705		24000/F(KHz)	3	
	1.705-30		30	30	
	30-88		100	3	
	88-216		150	3	
216-960		200	3		
Above 960		500	3		
Test setup:	In un-restricted bands: 68.2dBuV/m				
	For radiated emissions below 30MHz				
Test setup:					
	30MHz to 1GHz				



Above 1GHz



Test Procedure:

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 rotatable 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.

Test results:

PASS

6.8.2. Test Instruments

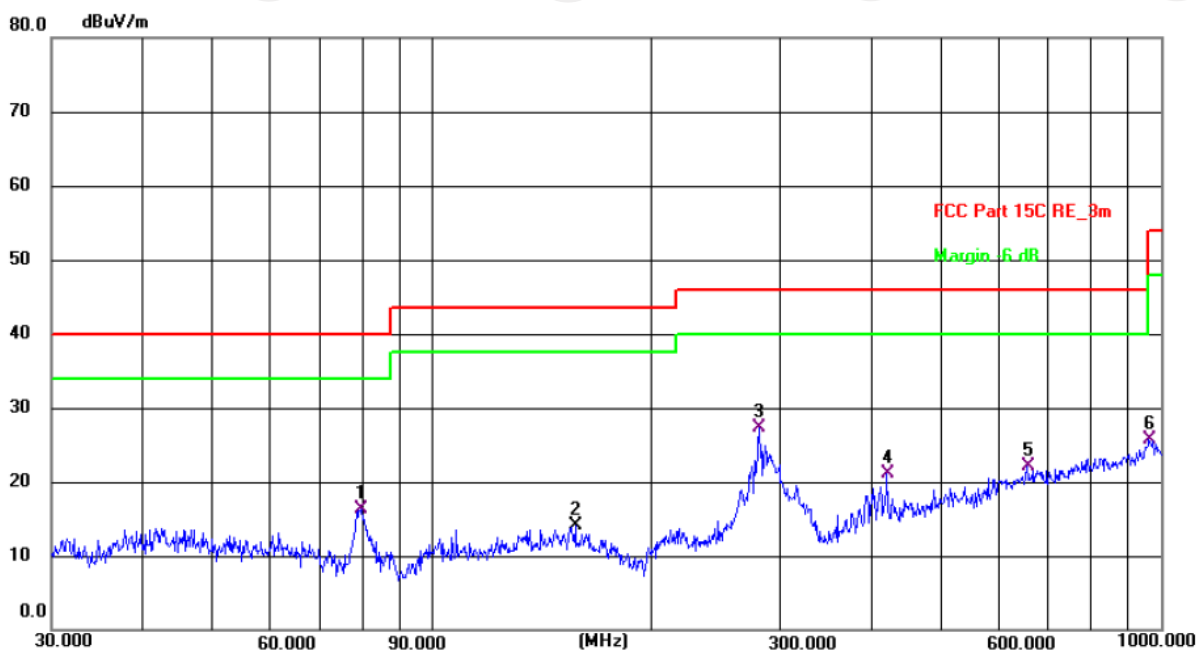
Radiated Emission Test Site (966)					
Equipment	Manufacturer	Model	Serial Number	Date of Cal.	Due Date
EMI Test Receiver	R&S	ESCI7	100529	Jan. 21, 2025	Jan. 20, 2026
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 26, 2025	Jun. 25, 2026
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Jan. 21, 2025	Jan. 20, 2026
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Apr. 11, 2025	Apr. 10, 2026
Pre-amplifier	HP	8447D	2727A05017	Jun. 26, 2025	Jun. 25, 2026
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jun. 30, 2025	Jun. 29, 2026
Broadband Antenna	Schwarzbeck	VULB9163	340	Jun. 29, 2025	Jun. 28, 2026
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jun. 29, 2025	Jun. 28, 2026
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Jan. 24, 2025	Jan. 23, 2026
Coaxial cable	SKET	RE-03-D	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-03-M	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-03-L	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-04-D	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-04-M	/	Jun. 27, 2025	Jun. 26, 2026
Coaxial cable	SKET	RE-04-L	/	Jun. 27, 2025	Jun. 26, 2026
Antenna Mast	Keleto	RE-AM	/	/	/
EMI Test Software	EZ EMC	FA-03A2 RE+	1.1.4.2	/	/

6.8.3. Test Data

Please refer to following diagram for individual

Below 1GHz

Horizontal:



Site 3m Anechoic Chamber2

Polarization: **Horizontal**

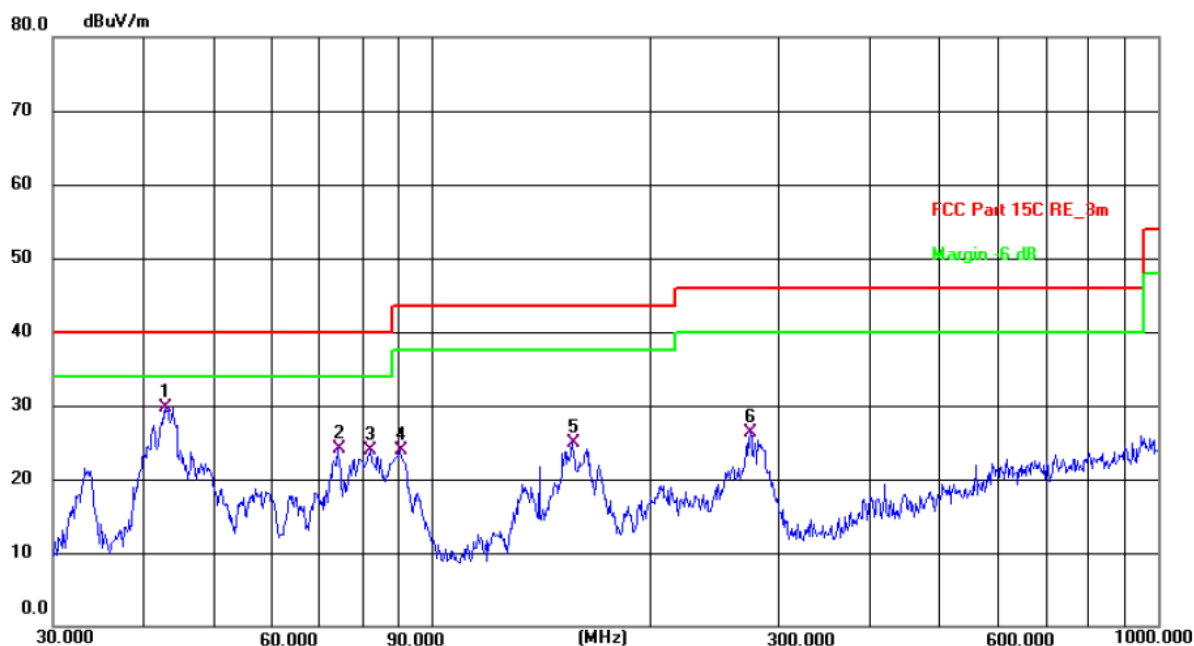
Temperature: 23.9(C) Humidity: 46 %

Limit: FCC Part 15C RE_3m

Power: DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	79.9402	38.59	-22.25	16.34	40.00	-23.66	QP	P	
2	157.4207	31.18	-16.98	14.20	43.50	-29.30	QP	P	
3 *	281.6240	45.16	-17.93	27.23	46.00	-18.77	QP	P	
4	421.6878	35.36	-14.34	21.02	46.00	-24.98	QP	P	
5	655.0926	30.80	-8.77	22.03	46.00	-23.97	QP	P	
6	963.0061	30.49	-4.78	25.71	54.00	-28.29	QP	P	

Vertical:



Site 3m Anechoic Chamber2

Polarization: **Vertical**

Temperature: 23.9(C) Humidity: 46 %

Limit: FCC Part 15C RE_3m

Power: DC 3.85V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	42.9373	48.23	-18.60	29.63	40.00	-10.37	QP	P	
2	74.3629	44.87	-20.85	24.02	40.00	-15.98	QP	P	
3	82.2506	46.36	-22.55	23.81	40.00	-16.19	QP	P	
4	90.4580	46.18	-22.32	23.86	43.50	-19.64	QP	P	
5	155.9784	41.77	-16.85	24.92	43.50	-18.58	QP	P	
6	274.1938	44.57	-18.29	26.28	46.00	-19.72	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 (Highest channel and 802.11ac(VHT20)) was submitted only.

3. Measurement (dBuV) = 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 (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	38.72	---	1.78	40.50	---	68.2	---	-27.70
15540	H	39.65	---	5.21	44.86	---	74	54	-9.14
---	H	---	---	---	---	---	---	---	---
10360	V	38.96	---	1.78	40.74	---	68.2	---	-27.46
15540	V	40.57	---	5.21	45.78	---	74	54	-8.22
---	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	39.99	---	1.83	41.82	---	68.2	---	-26.38
15600	H	40.44	---	5.23	45.67	---	74	54	-8.33
---	H	---	---	---	---	---	---	---	---
10400	V	40.78	---	1.83	42.61	---	68.2	---	-25.59
15600	V	41.85	---	5.23	47.08	---	74	54	-6.92
---	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	38.87	---	1.85	40.72	---	68.2	---	-27.48
15720	H	40.25	---	5.25	45.50	---	74	54	-8.50
---	H	---	---	---	---	---	---	---	---
10480	V	38.77	---	1.85	40.62	---	68.2	---	-27.58
15720	V	41.36	---	5.25	46.61	---	74	54	-7.39
---	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	42.38	---	1.78	44.16	---	68.2	---	-24.04
15540	H	40.74	---	5.21	45.95	---	74	54	-8.05
---	H	---	---	---	---	---	---	---	---
10360	V	42.85	---	1.78	44.63	---	68.2	---	-23.57
15540	V	41.94	---	5.21	47.15	---	74	54	-6.85
---	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	40.83	---	1.83	42.66	---	68.2	---	-25.54
15600	H	41.97	---	5.23	47.20	---	74	54	-6.80
---	H	---	---	---	---	---	---	---	---
10400	V	41.08	---	1.83	42.91	---	68.2	---	-25.29
15600	V	39.54	---	5.23	44.77	---	74	54	-9.23
---	V	---	---	---	---	---	---	---	---

11n(HT20) 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	42.26	---	1.85	44.11	---	68.2	---	-24.09
15720	H	41.55	---	5.25	46.80	---	74	54	-7.20
---	H	---	---	---	---	---	---	---	---
10480	V	40.83	---	1.85	42.68	---	68.2	---	-25.52
15720	V	39.75	---	5.25	45.00	---	74	54	-9.00
---	V	---	---	---	---	---	---	---	---

11n(HT40) 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	39.92	---	1.80	41.72	---	68.2	---	-26.48
15570	H	41.64	---	5.22	46.86	---	74	54	-7.14
---	H	---	---	---	---	---	---	---	---
10380	V	40.94	---	1.80	42.74	---	68.2	---	-25.46
15570	V	39.67	---	5.22	44.89	---	74	54	-9.11
---	V	---	---	---	---	---	---	---	---

11n(HT40) 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	42.17	---	1.85	44.02	---	68.2	---	-24.18
15690	H	39.76	---	5.08	44.84	---	74	54	-9.16
---	H	---	---	---	---	---	---	---	---
10460	V	41.89	---	1.85	43.74	---	68.2	---	-24.46
15690	V	41.06	---	5.08	46.14	---	74	54	-7.86
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) 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	40.77	---	1.78	42.55	---	68.2	---	-25.65
15540	H	39.69	---	5.21	44.90	---	74	54	-9.10
---	H	---	---	---	---	---	---	---	---
10360	V	39.04	---	1.78	40.82	---	68.2	---	-27.38
15540	V	40.22	---	5.21	45.43	---	74	54	-8.57
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) 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	39.66	---	1.83	41.49	---	68.2	---	-26.71
15600	H	40.74	---	5.23	45.97	---	74	54	-8.03
---	H	---	---	---	---	---	---	---	---
10400	V	39.54	---	1.83	41.37	---	68.2	---	-26.83
15600	V	39.81	---	5.23	45.04	---	74	54	-8.96
---	V	---	---	---	---	---	---	---	---

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	37.94	---	1.85	39.79	---	68.2	---	-28.41
15720	H	39.52	---	5.25	44.77	---	74	54	-9.23
---	H	---	---	---	---	---	---	---	---
10480	V	38.58	---	1.85	40.43	---	68.2	---	-27.77
15720	V	39.97	---	5.25	45.22	---	74	54	-8.78
---	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	40.94	---	1.80	42.74	---	68.2	---	-25.46
15570	H	39.52	---	5.22	44.74	---	74	54	-9.26
---	H	---	---	---	---	---	---	---	---
10380	V	39.27	---	1.80	41.07	---	68.2	---	-27.13
15570	V	39.58	---	5.22	44.80	---	74	54	-9.20
---	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	39.11	---	1.85	40.96	---	68.2	---	-27.24
15690	H	39.63	---	5.08	44.71	---	74	54	-9.29
---	H	---	---	---	---	---	---	---	---
10460	V	40.23	---	1.85	42.08	---	68.2	---	-26.12
15690	V	40.72	---	5.08	45.80	---	74	54	-8.20
---	V	---	---	---	---	---	---	---	---

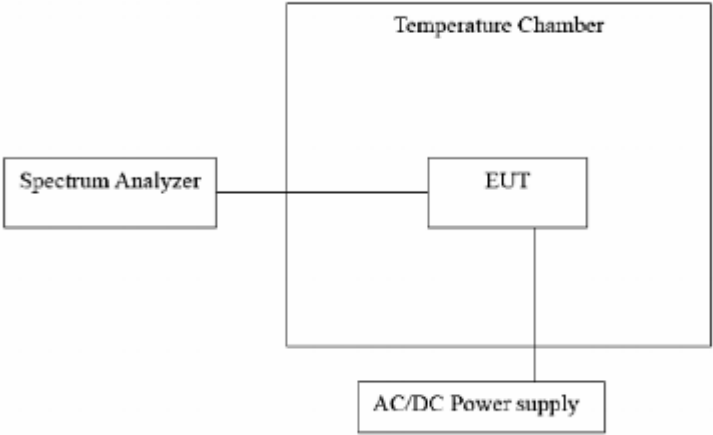
11ac(VHT80) CH42:5210MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10420	H	42.24	---	1.84	44.08	---	68.2	---	-24.12
15630	H	39.96	---	5.17	45.13	---	74	54	-8.87
---	H	---	---	---	---	---	---	---	---
10420	V	41.85	---	1.84	43.69	---	68.2	---	-24.51
15630	V	40.29	---	5.17	45.46	---	74	54	-8.54
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Where the maximized peak measured value complies with the average limit, so it is unnecessary to perform an average measurement.
3. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
6. 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.

6.9. Frequency Stability Measurement

6.9.1. Test Specification

Test Requirement:	FCC Part15 Section 15.407(g) &Part2 J Section 2.1055
Test Method:	ANSI C63.10:2020
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:	 <pre> graph LR SA[Spectrum Analyzer] --- EUT[EUT] subgraph TC [Temperature Chamber] EUT end EUT --- P[AC/DC Power supply] </pre>
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.

6.9.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 26, 2025	Jun. 25, 2026
DC power supply	Kingrang	KR3005K	/	Jun. 26, 2025	Jun. 25, 2026
Programable tempratuce and humidity chamber	JQ	JQ-2000	510101234	Jun. 26, 2025	Jun. 25, 2026

Test plots as follows:

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5180
Temperature (°C)	Voltage(V _{DC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.85V	5179.98	-20000	PASS
35		5180	0	PASS
25		5179.98	-20000	PASS
15		5180	0	PASS
5		5179.98	-20000	PASS
0		5179.98	-20000	PASS
25	3.27V	5180	0	PASS
	3.85V	5179.98	-20000	PASS
	4.43V	5180	0	PASS

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5200
Temperature (°C)	Voltage(V _{DC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.85V	5200	0	PASS
35		5200	0	PASS
25		5200	0	PASS
15		5200	0	PASS
5		5200	0	PASS
0		5200	0	PASS
25	3.27V	5200	0	PASS
	3.85V	5200	0	PASS
	4.43V	5199.98	-20000	PASS

Test mode:		802.11ac(VHT20)	Frequency(MHz):	5240
Temperature (°C)	Voltage(V _{DC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.85V	5240	0	PASS
35		5240.02	20000	PASS
25		5240	0	PASS
15		5239.98	-20000	PASS
5		5239.98	-20000	PASS
0		5239.98	-20000	PASS
25	3.27V	5239.98	-20000	PASS
	3.85V	5239.98	-20000	PASS
	4.43V	5240	0	PASS

Test mode:		802.11ac(VHT40)	Frequency(MHz):	5190
Temperature (°C)	Voltage(V _{DC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.85V	5190	0	PASS
35		5190	0	PASS
25		5190	0	PASS
15		5190	0	PASS
5		5190	0	PASS
0		5190	0	PASS
25	3.27V	5190	0	PASS
	3.85V	5190	0	PASS
	4.43V	5190	0	PASS

Test mode:		802.11ac(VHT40)	Frequency(MHz):	5230
Temperature (°C)	Voltage(V _{DC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.85V	5230	0	PASS
35		5230	0	PASS
25		5230	0	PASS
15		5230.04	40000	PASS
5		5230	0	PASS
0		5230	0	PASS
25	3.27V	5230	0	PASS
	3.85V	5229.96	-40000	PASS
	4.43V	5230	0	PASS

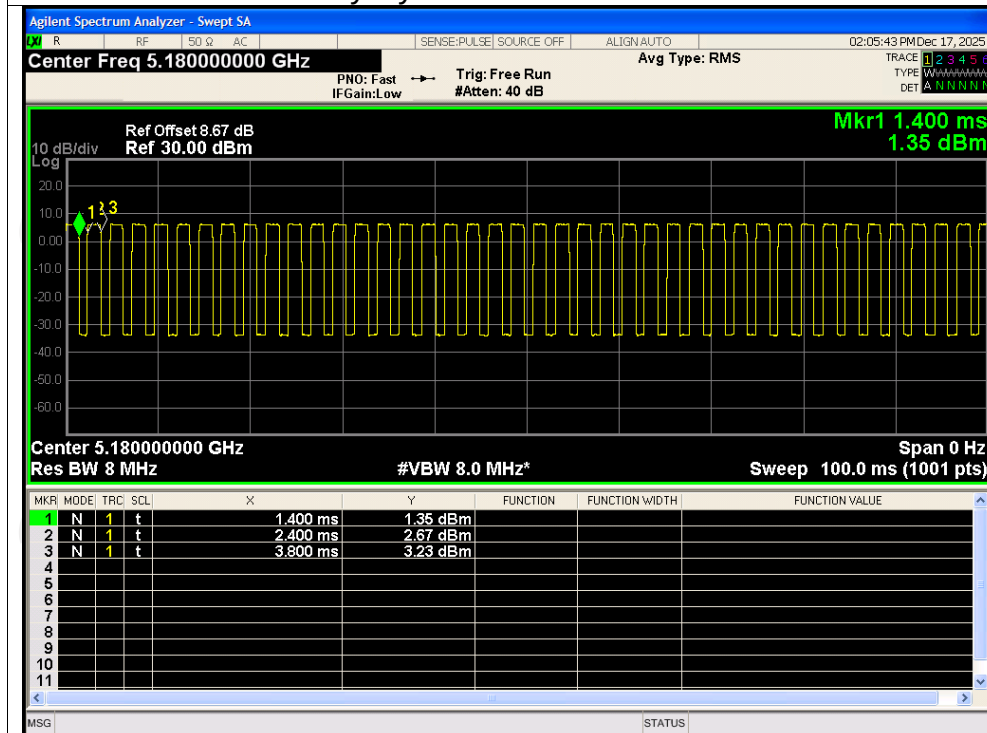
Test mode:		802.11ac(VHT80)	Frequency(MHz):	5210
Temperature (°C)	Voltage(V _{DC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.85V	5210	0	PASS
35		5210	0	PASS
25		5210	0	PASS
15		5210	0	PASS
5		5210	0	PASS
0		5210	0	PASS
25	3.27V	5210	0	PASS
	3.85V	5210	0	PASS
	4.43V	5210	0	PASS

Appendix A: Test Result of Conducted Test

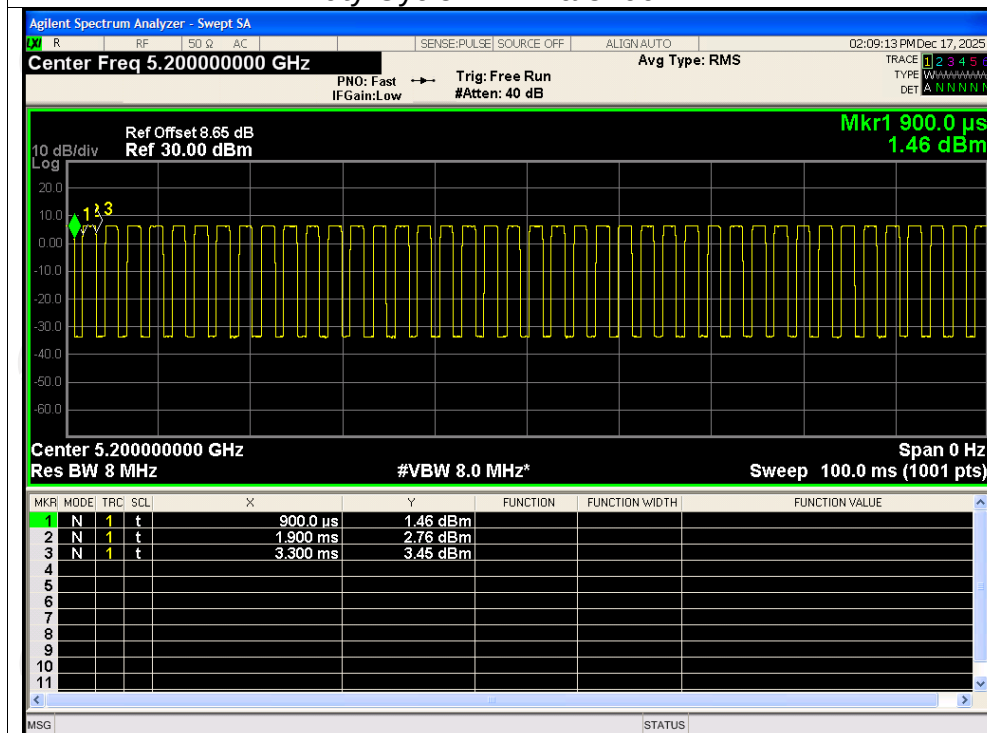
Duty Cycle				
Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	62.24	2.06
NVNT	a	5200	62.24	2.06
NVNT	a	5240	62.34	2.05
NVNT	n20	5180	85.11	0.70
NVNT	n20	5200	85.21	0.69
NVNT	n20	5240	85.31	0.69
NVNT	n40	5190	84.42	0.74
NVNT	n40	5230	84.42	0.74
NVNT	ac20	5180	84.22	0.75
NVNT	ac20	5200	85.21	0.69
NVNT	ac20	5240	85.31	0.69
NVNT	ac40	5190	84.42	0.74
NVNT	ac40	5230	84.42	0.74
NVNT	ac80	5210	83.22	0.80

Test Graphs

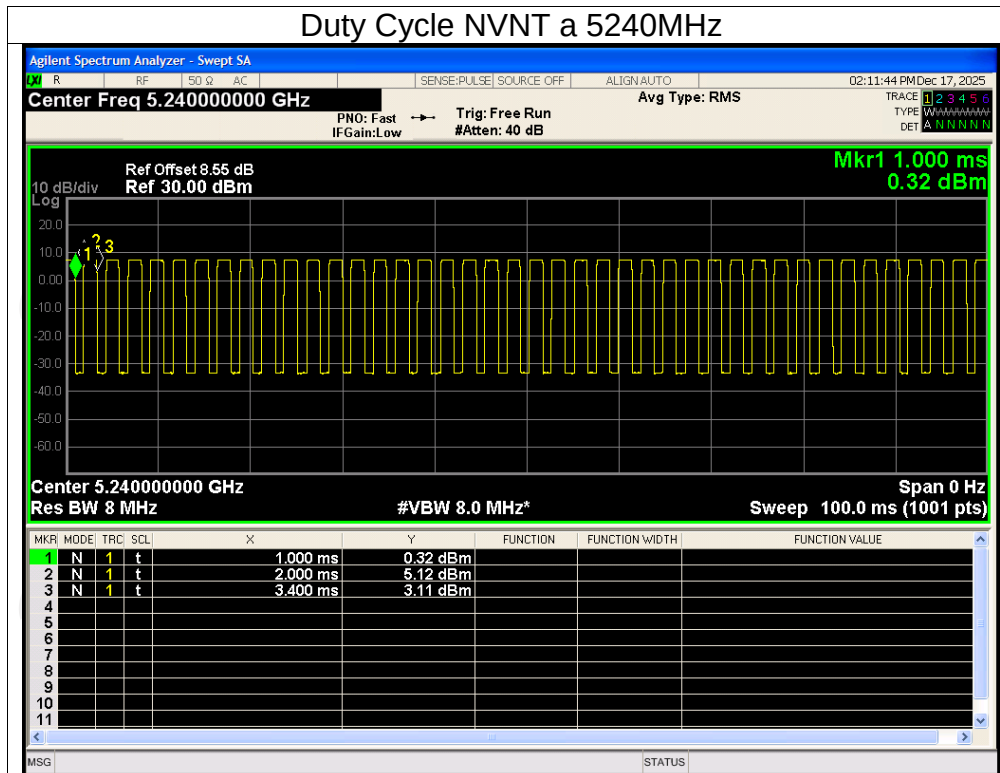
Duty Cycle NVNT a 5180MHz



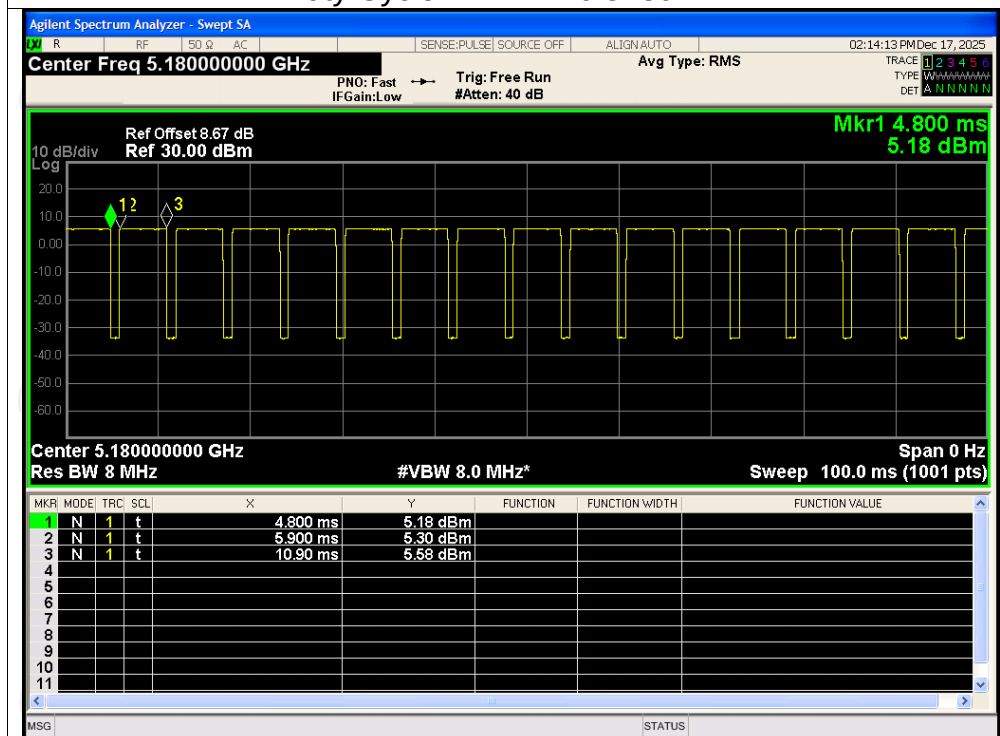
Duty Cycle NVNT a 5200MHz



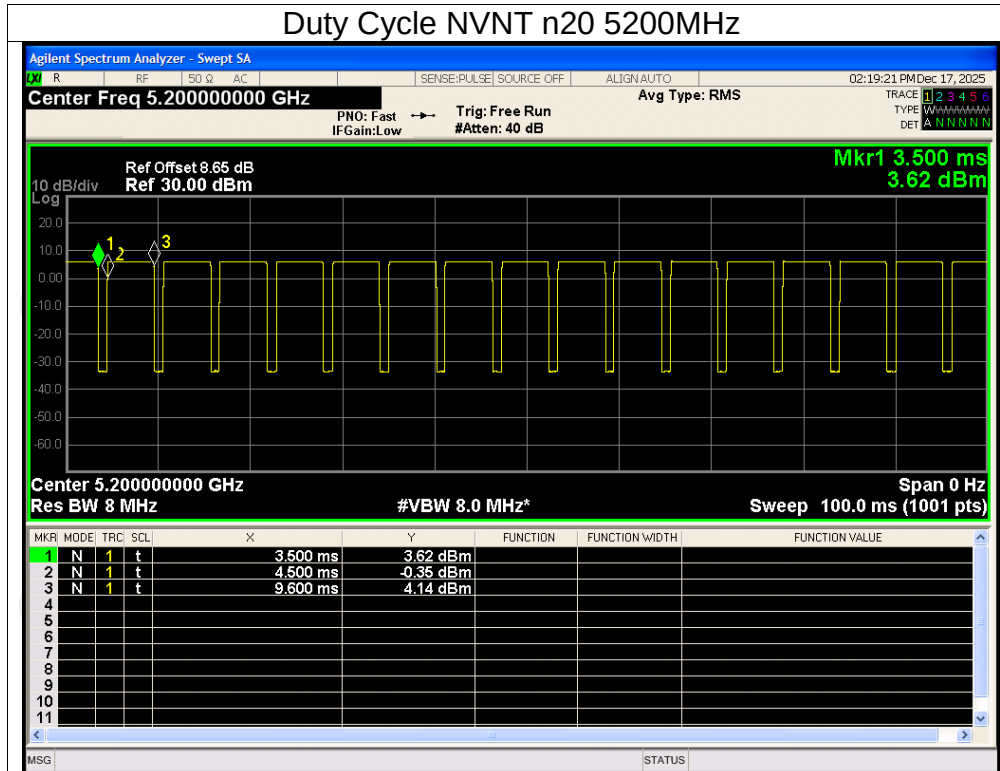
Duty Cycle NVNT a 5240MHz



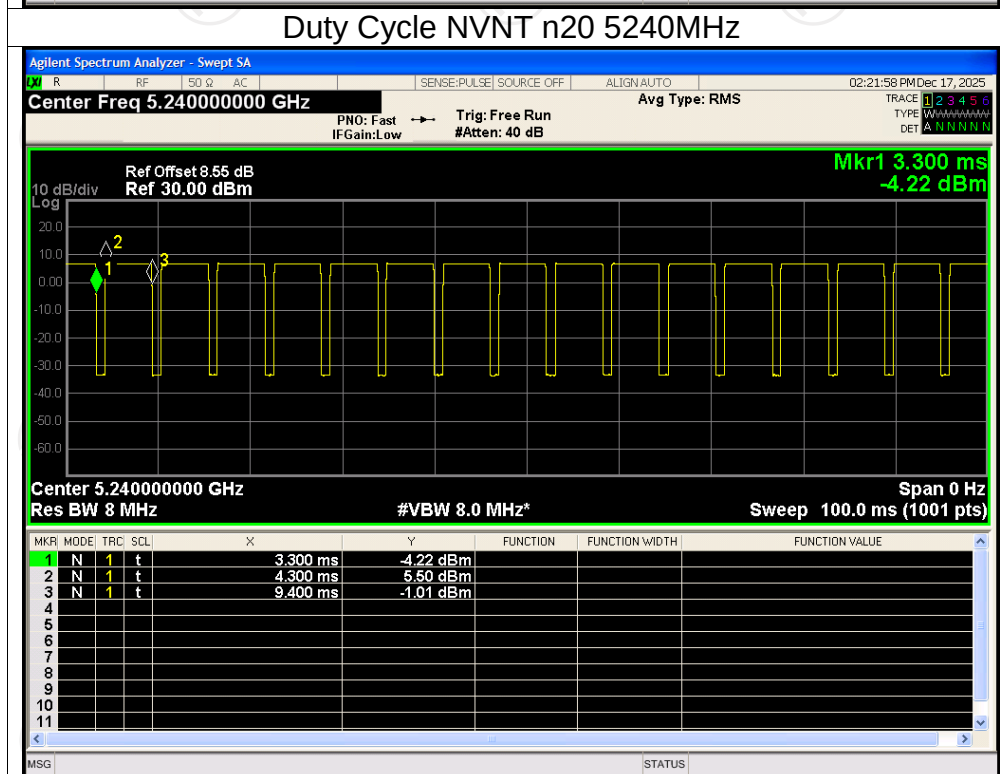
Duty Cycle NVNT n20 5180MHz



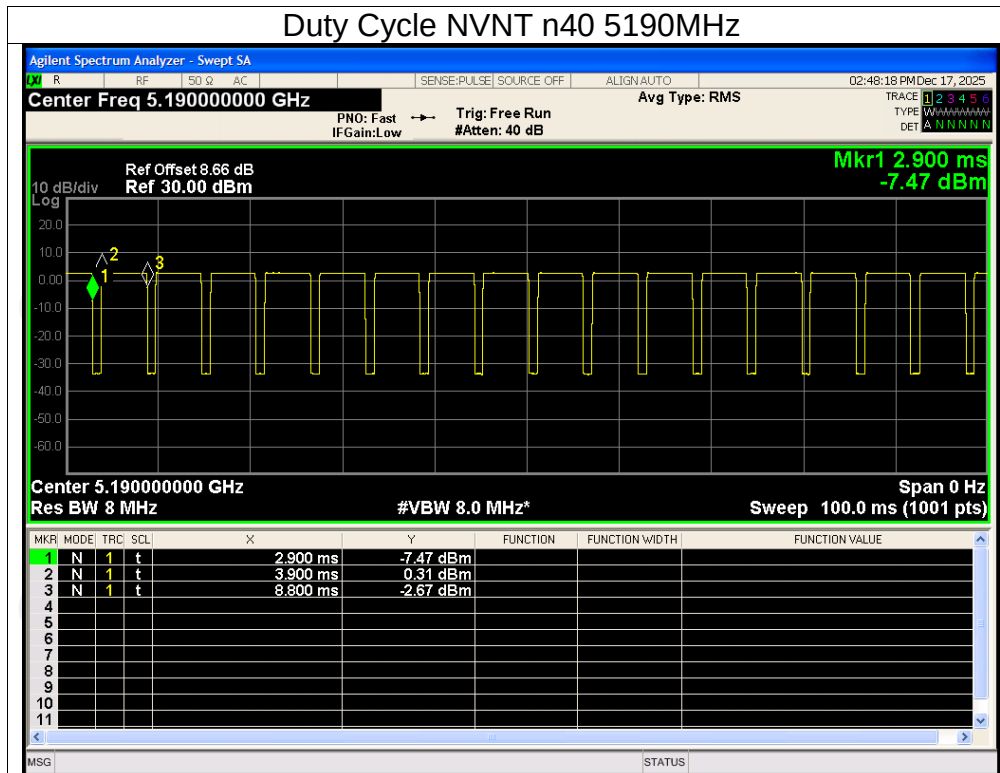
Duty Cycle NVNT n20 5200MHz



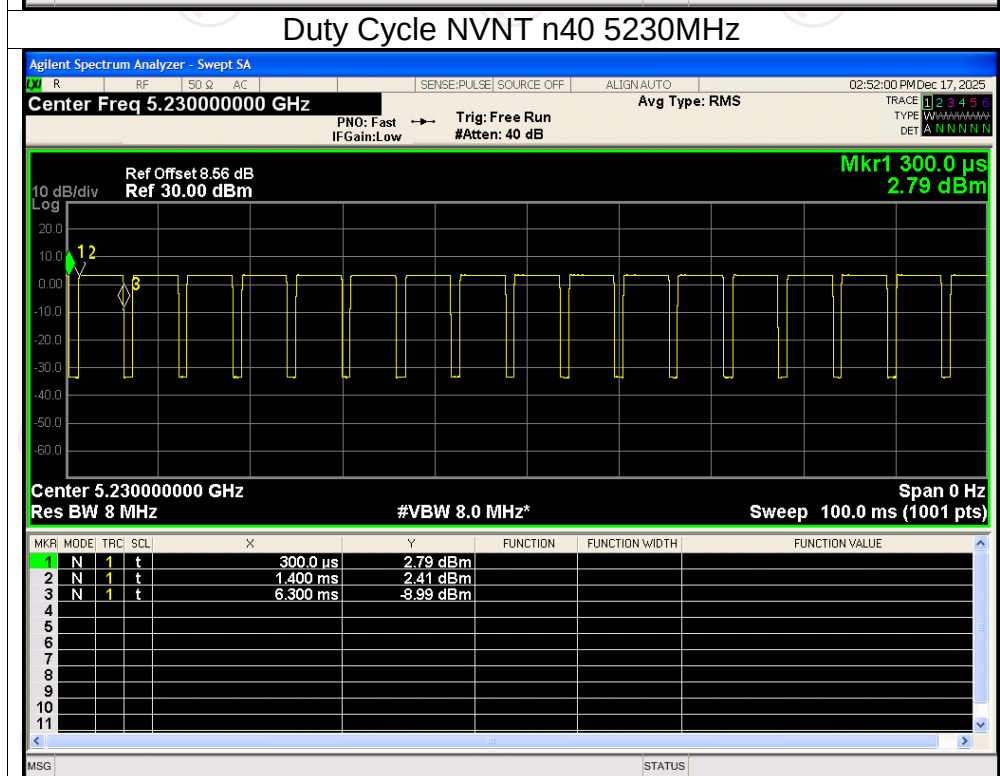
Duty Cycle NVNT n20 5240MHz



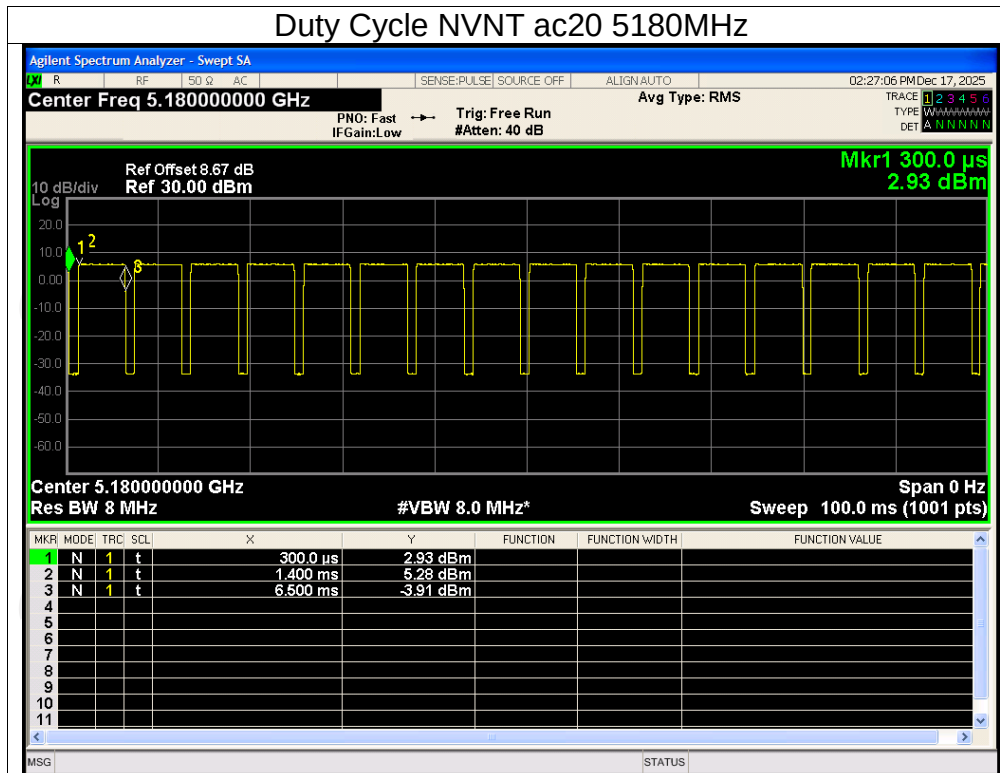
Duty Cycle NVNT n40 5190MHz



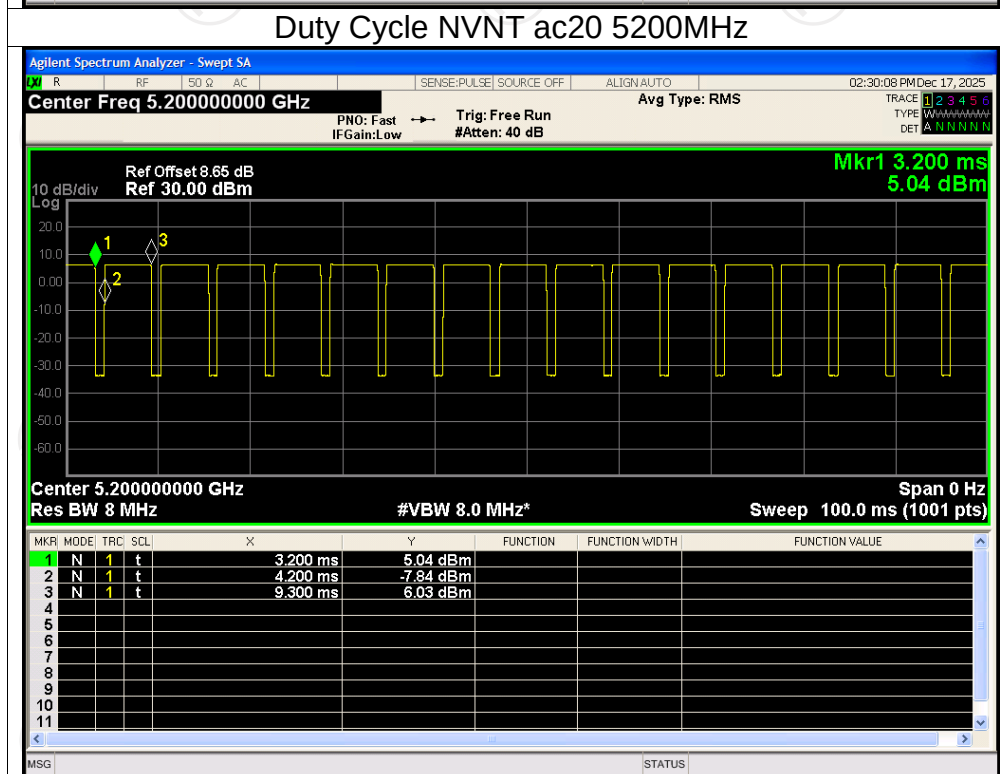
Duty Cycle NVNT n40 5230MHz



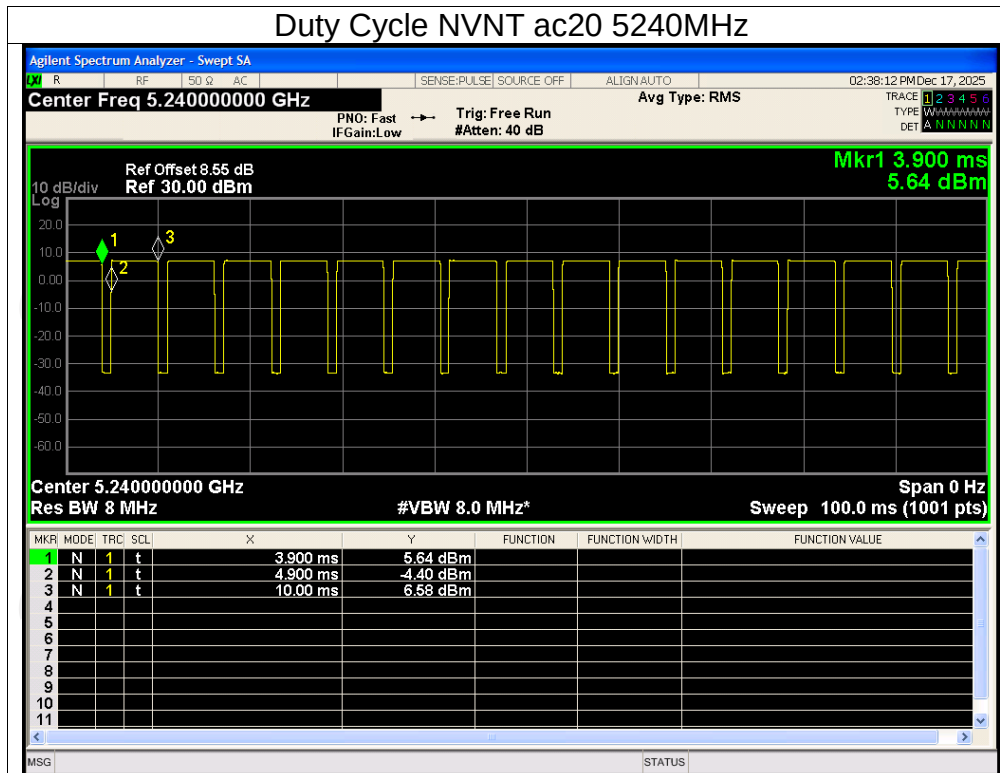
Duty Cycle NVNT ac20 5180MHz



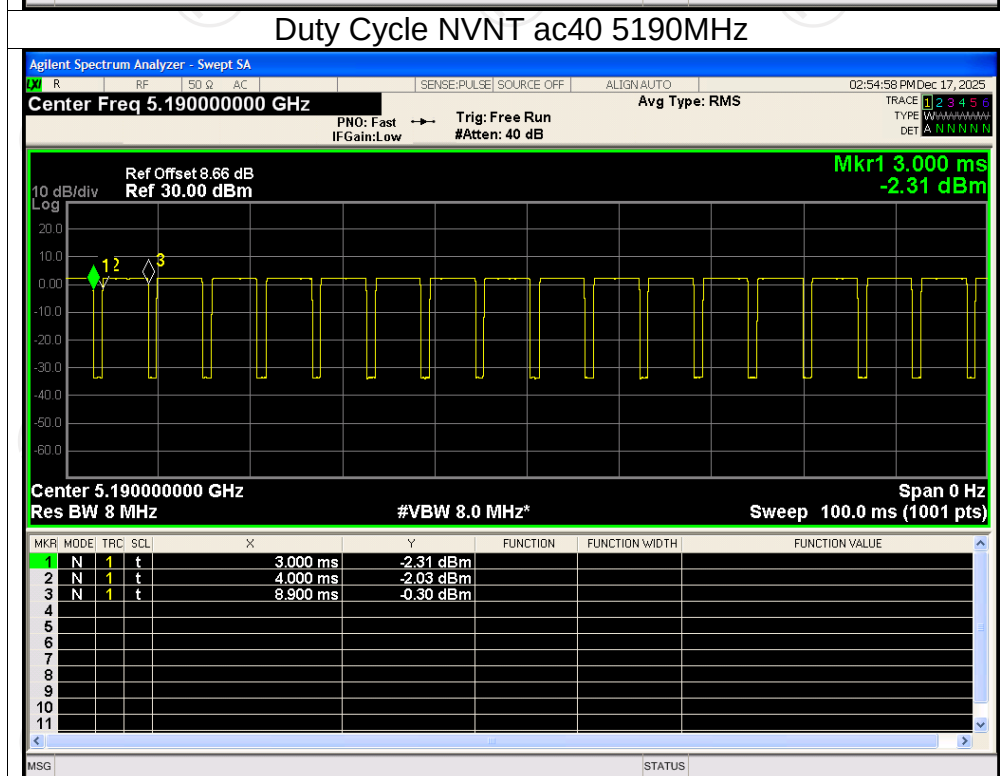
Duty Cycle NVNT ac20 5200MHz



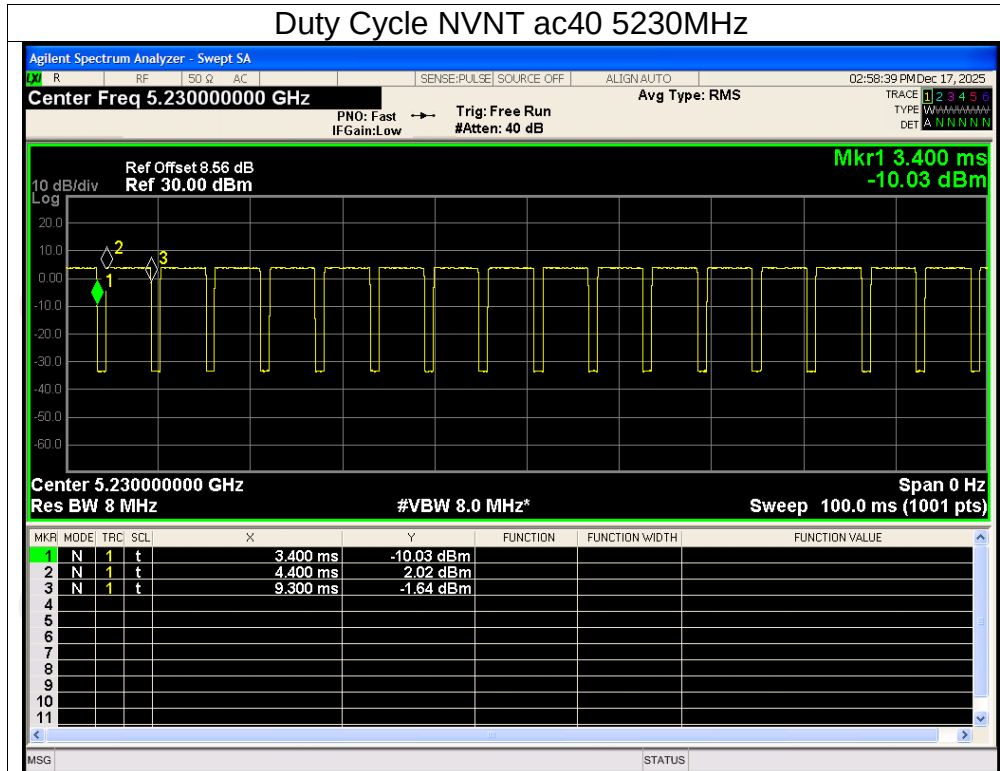
Duty Cycle NVNT ac20 5240MHz



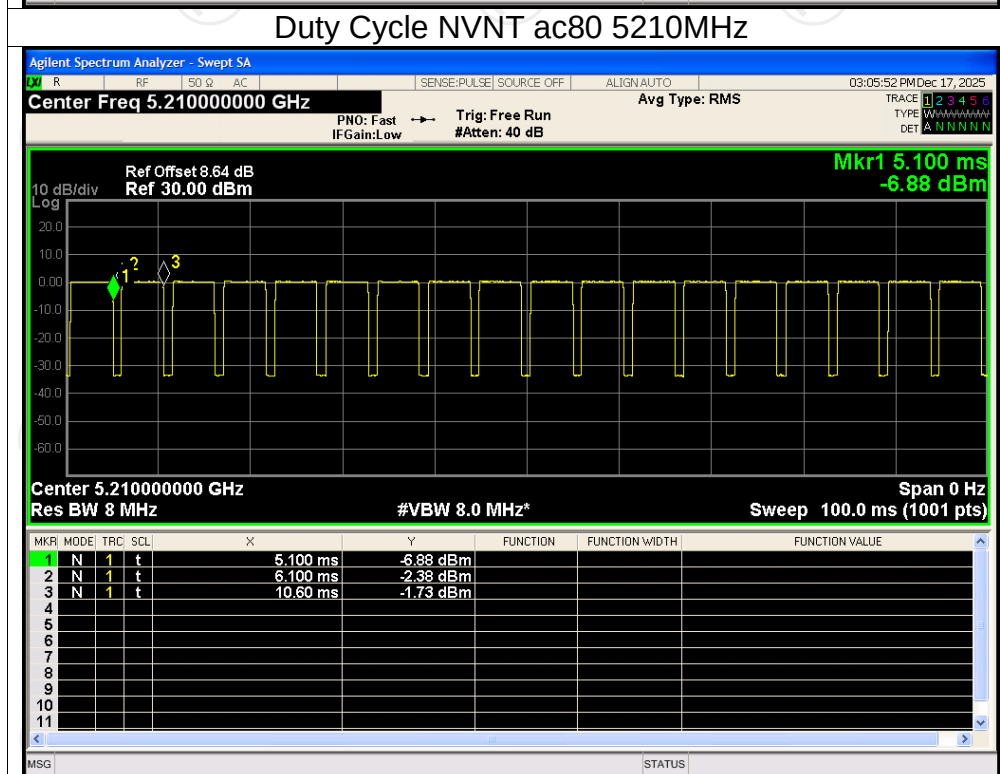
Duty Cycle NVNT ac40 5190MHz



Duty Cycle NVNT ac40 5230MHz



Duty Cycle NVNT ac80 5210MHz

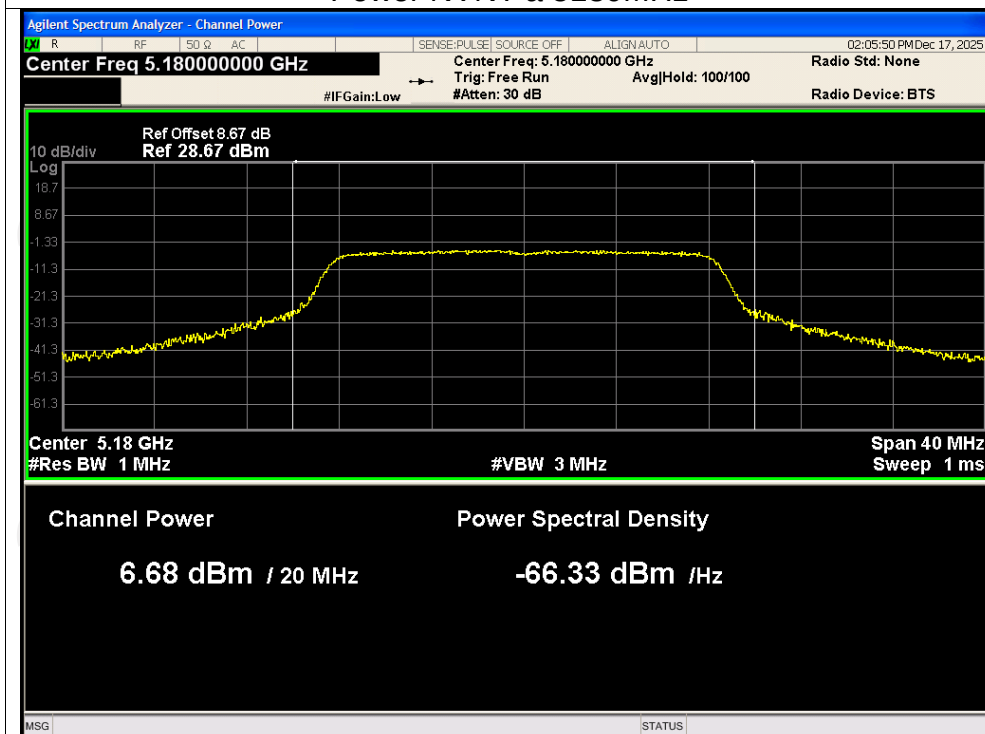


Maximum Conducted Output Power

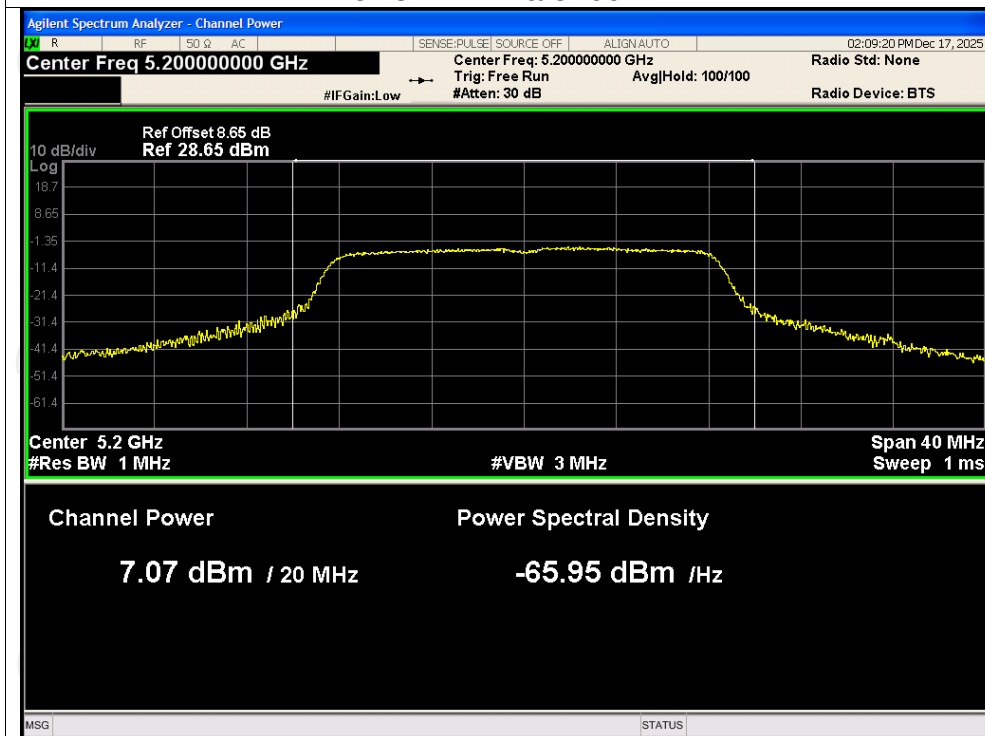
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	6.68	2.06	8.74	24	Pass
NVNT	a	5200	7.07	2.06	9.13	24	Pass
NVNT	a	5240	8.03	2.05	10.08	24	Pass
NVNT	n20	5180	8.19	0.70	8.89	24	Pass
NVNT	n20	5200	8.95	0.69	9.64	24	Pass
NVNT	n20	5240	9.30	0.69	9.99	24	Pass
NVNT	n40	5190	8.82	0.74	9.56	24	Pass
NVNT	n40	5230	9.03	0.74	9.77	24	Pass
NVNT	ac20	5180	8.26	0.75	9.01	24	Pass
NVNT	ac20	5200	8.80	0.69	9.49	24	Pass
NVNT	ac20	5240	9.62	0.69	10.31	24	Pass
NVNT	ac40	5190	8.10	0.74	8.84	24	Pass
NVNT	ac40	5230	9.33	0.74	10.07	24	Pass
NVNT	ac80	5210	9.33	0.80	10.13	24	Pass

Test Graphs

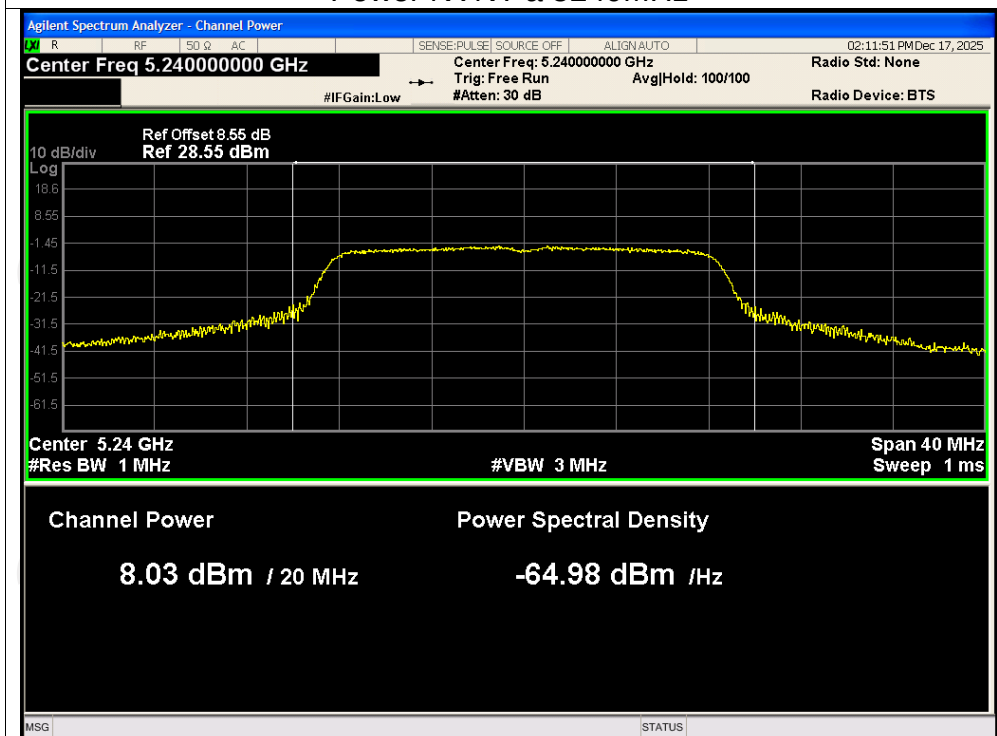
Power NVNT a 5180MHz



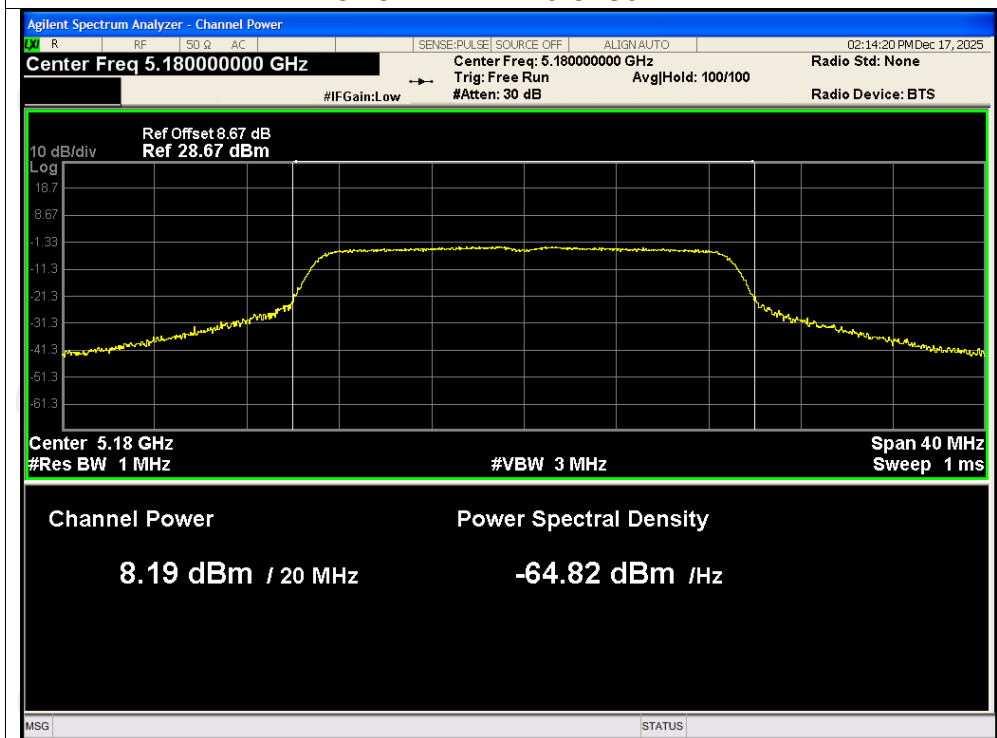
Power NVNT a 5200MHz



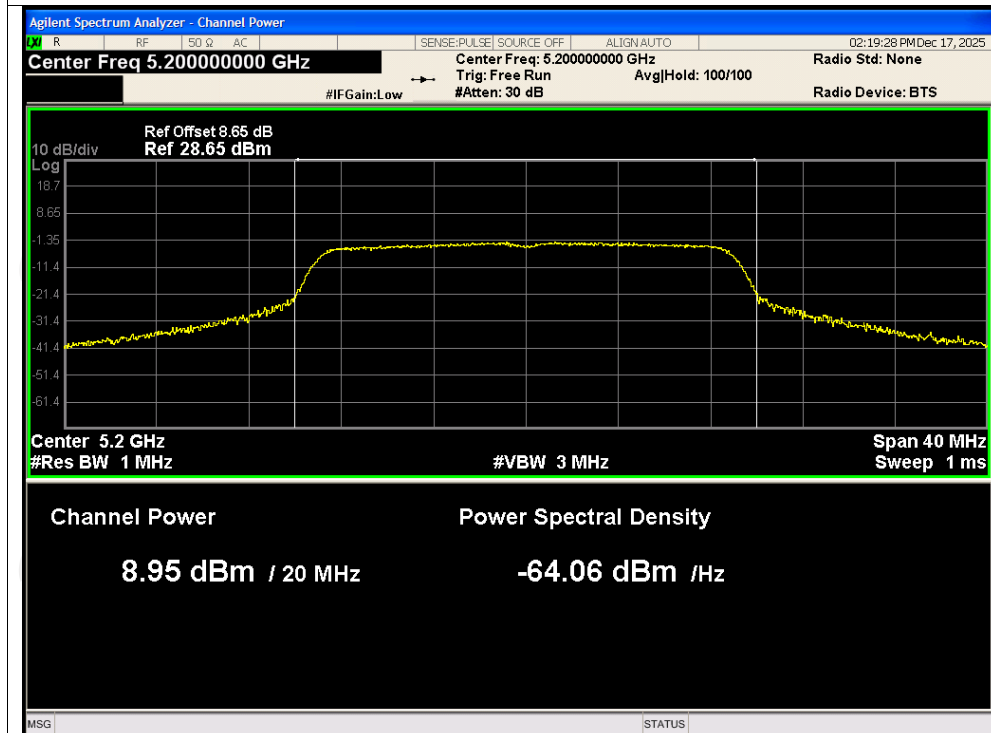
Power NVNT a 5240MHz



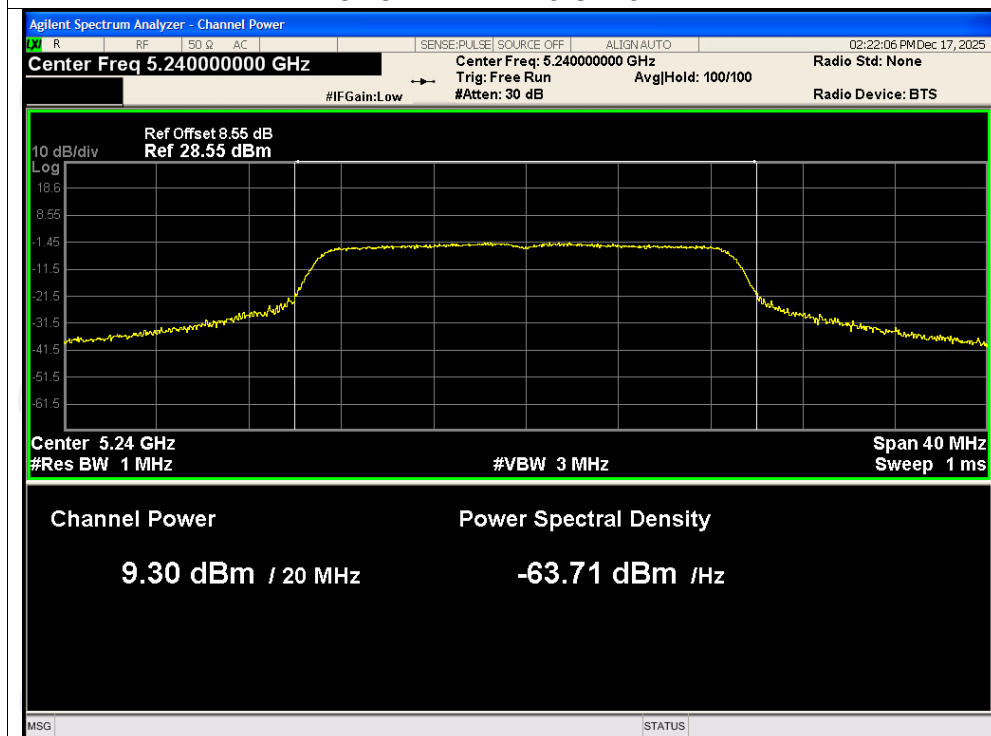
Power NVNT n20 5180MHz



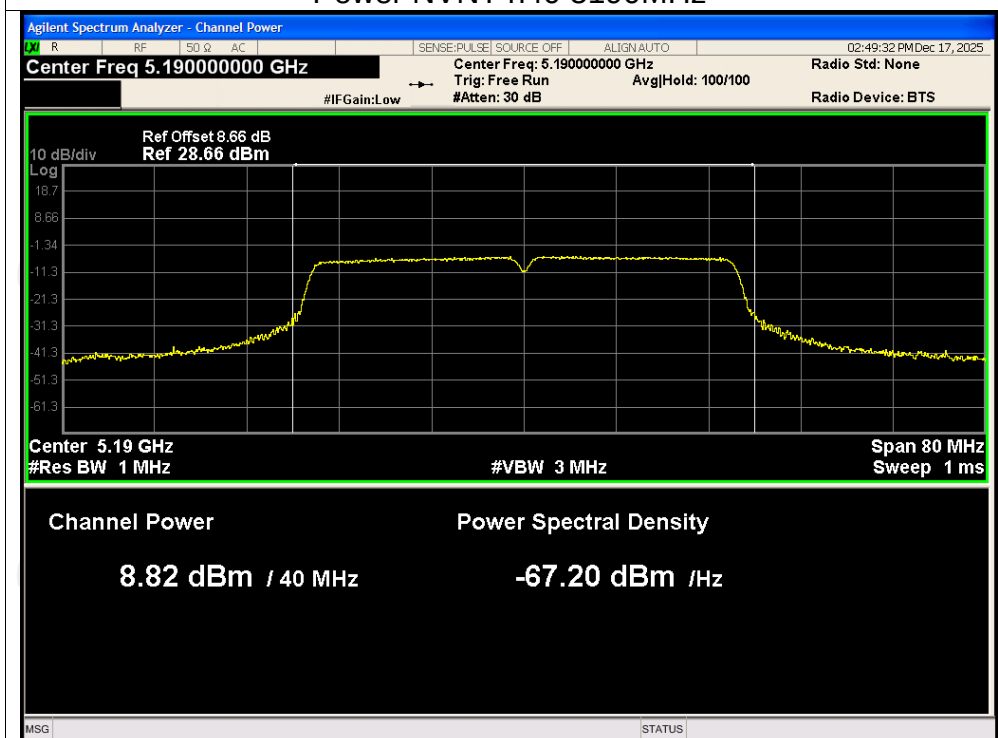
Power NVNT n20 5200MHz



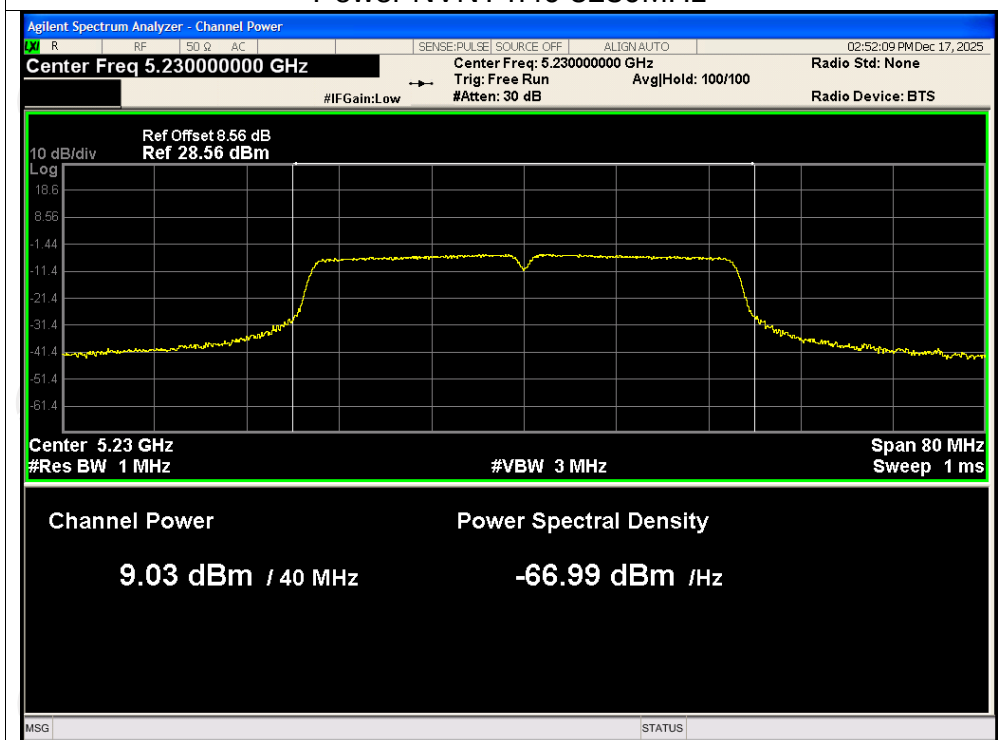
Power NVNT n20 5240MHz



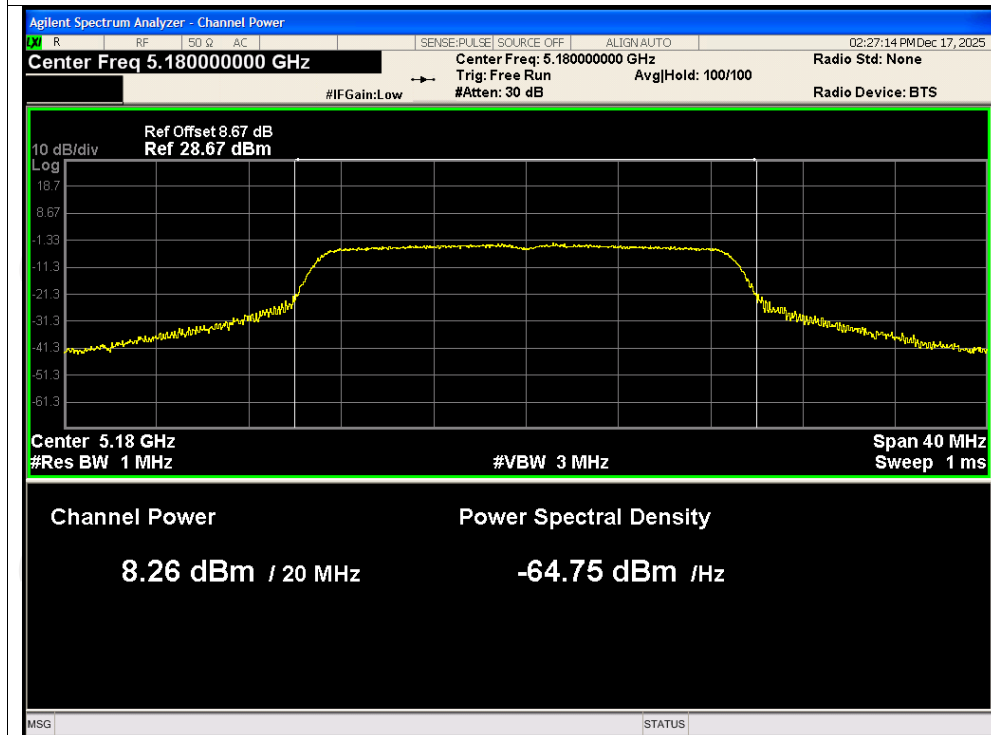
Power NVNT n40 5190MHz



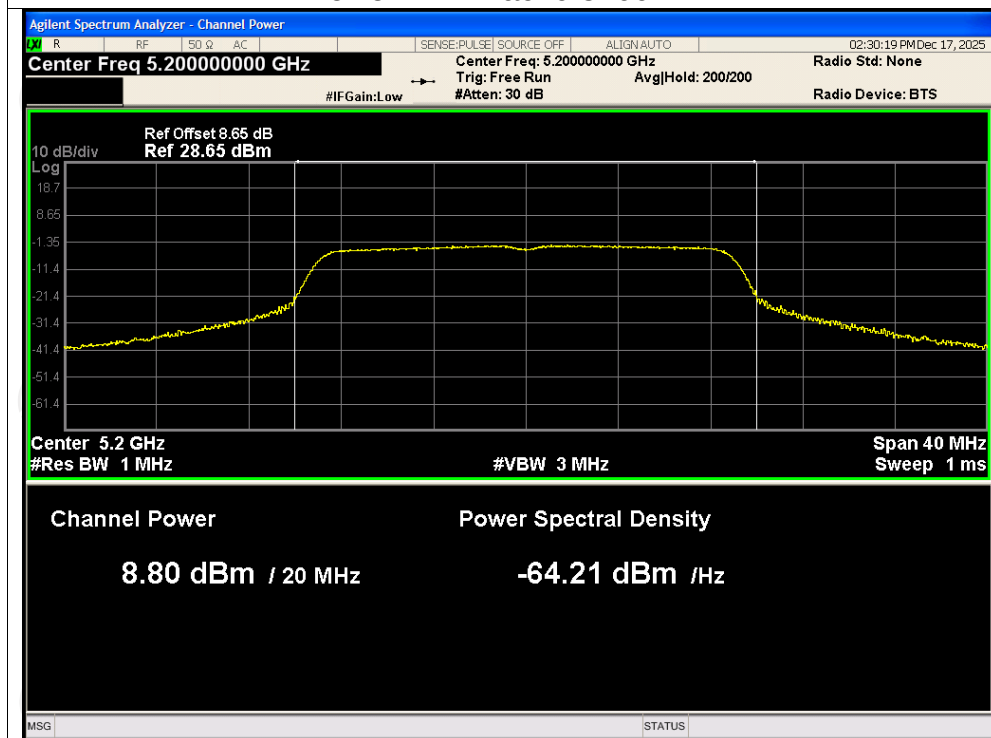
Power NVNT n40 5230MHz



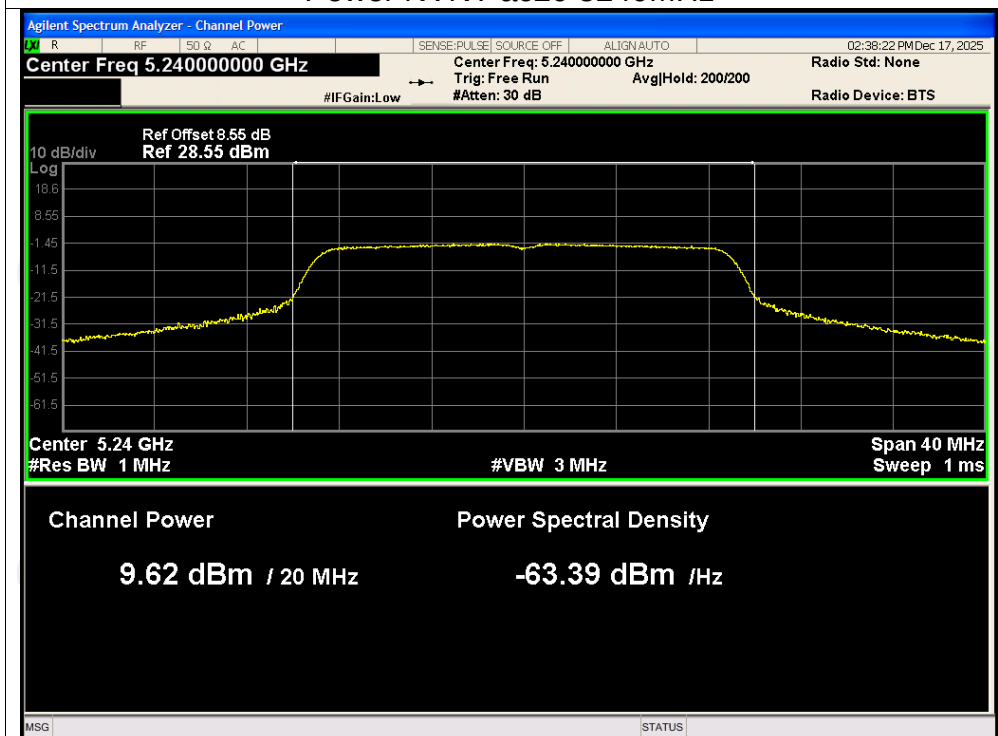
Power NVNT ac20 5180MHz



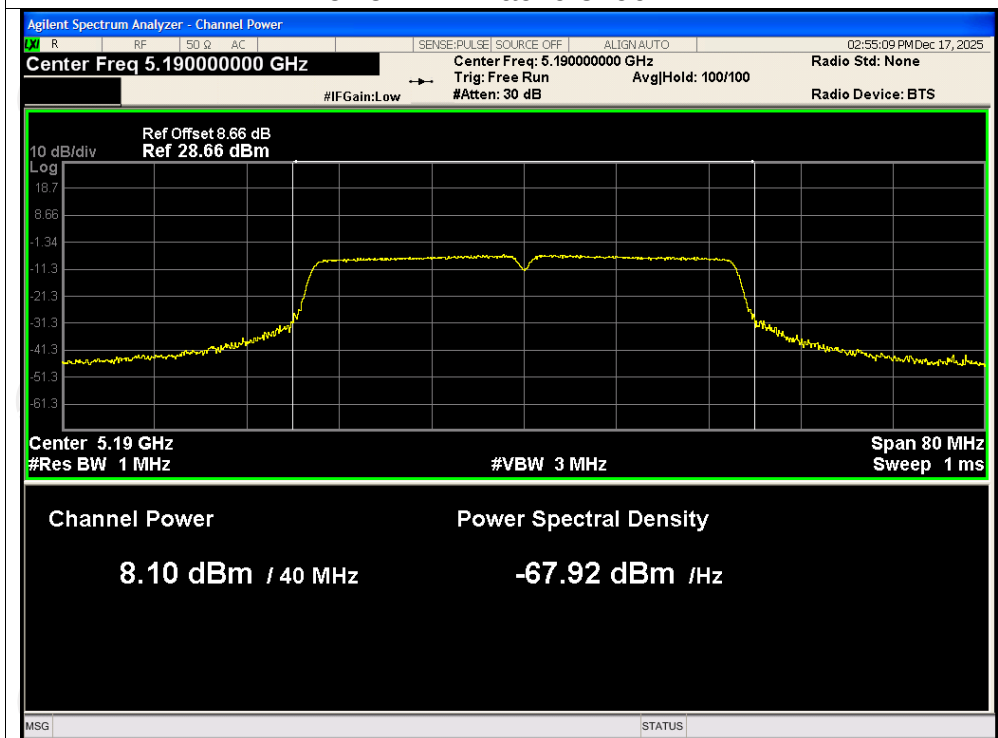
Power NVNT ac20 5200MHz



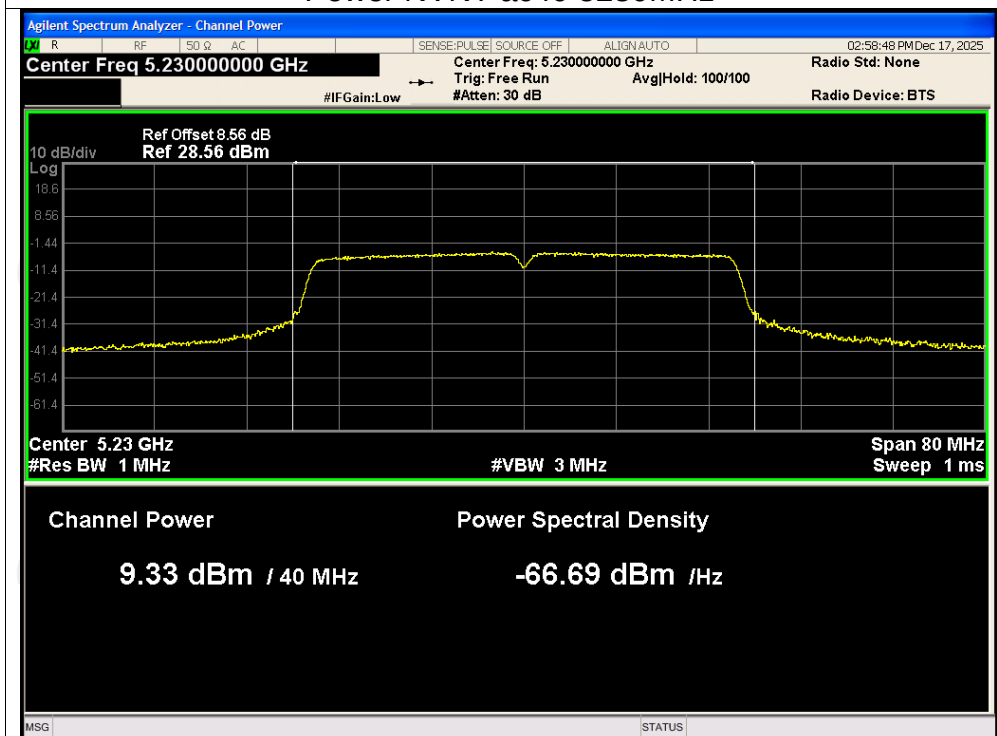
Power NVNT ac20 5240MHz



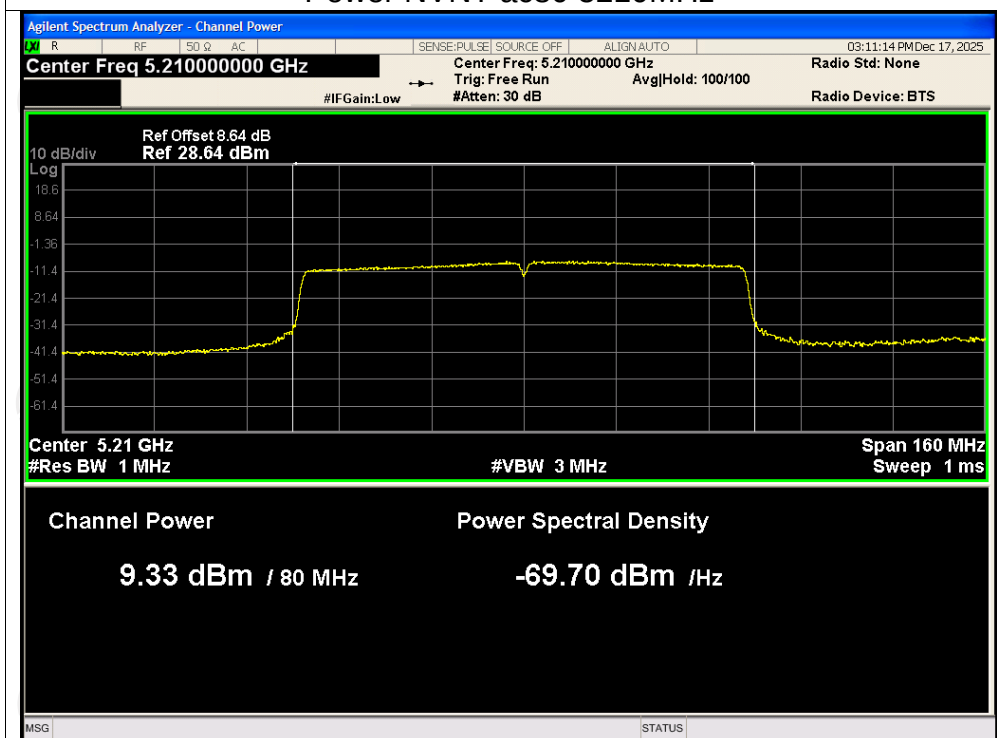
Power NVNT ac40 5190MHz



Power NVNT ac40 5230MHz



Power NVNT ac80 5210MHz

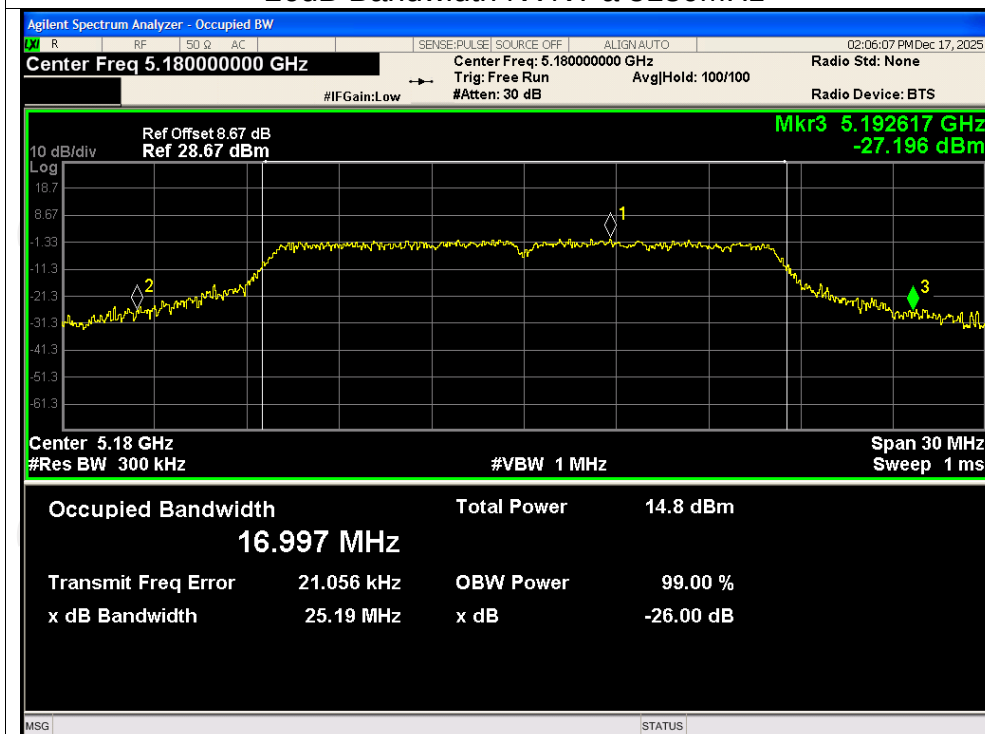


-26dB Bandwidth

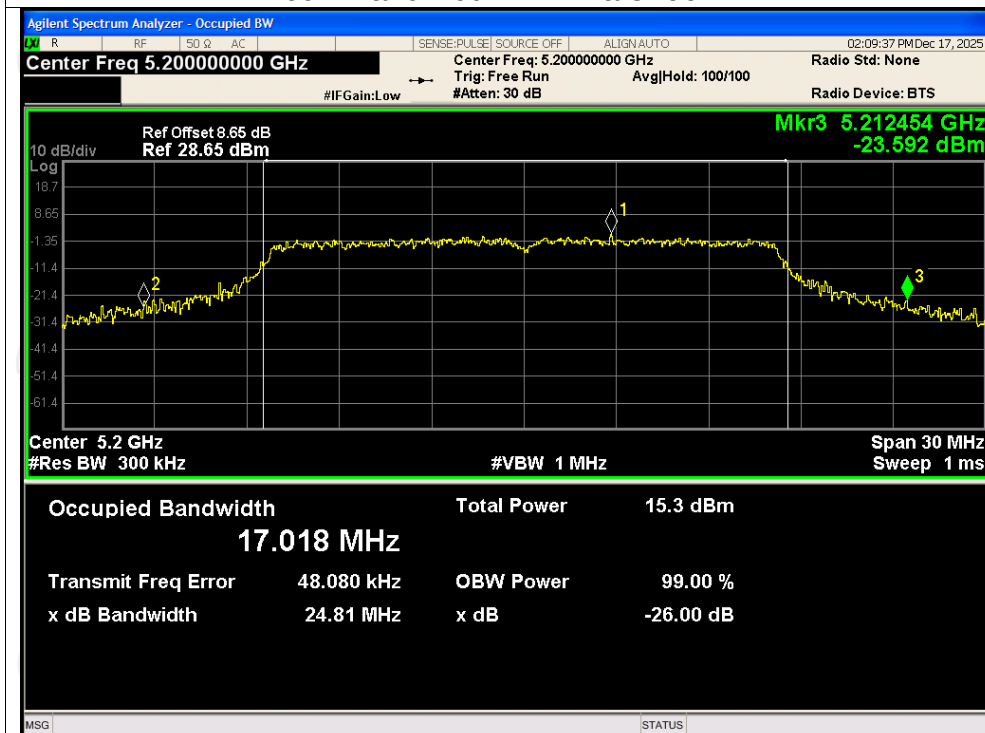
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	25.19	/	Pass
NVNT	a	5200	24.81	/	Pass
NVNT	a	5240	25.49	/	Pass
NVNT	n20	5180	26.20	/	Pass
NVNT	n20	5200	27.42	/	Pass
NVNT	n20	5240	28.15	/	Pass
NVNT	n40	5190	48.07	/	Pass
NVNT	n40	5230	52.73	/	Pass
NVNT	ac20	5180	25.92	/	Pass
NVNT	ac20	5200	26.92	/	Pass
NVNT	ac20	5240	28.10	/	Pass
NVNT	ac40	5190	51.28	/	Pass
NVNT	ac40	5230	49.66	/	Pass
NVNT	ac80	5210	106.9	/	Pass

Test Graphs

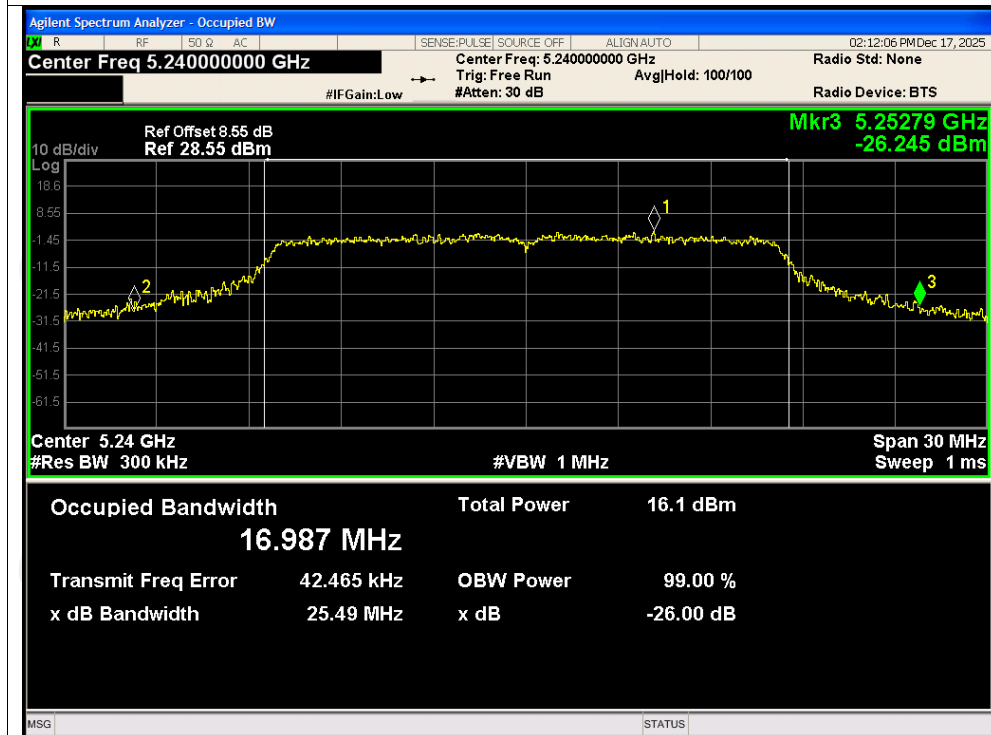
-26dB Bandwidth NVNT a 5180MHz



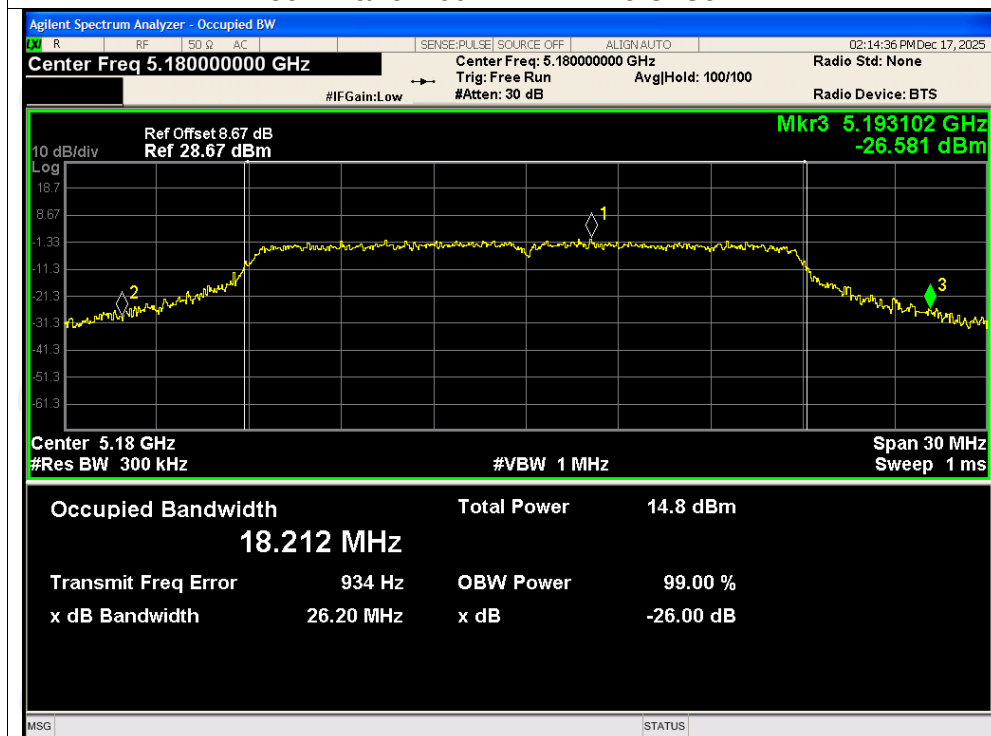
-26dB Bandwidth NVNT a 5200MHz



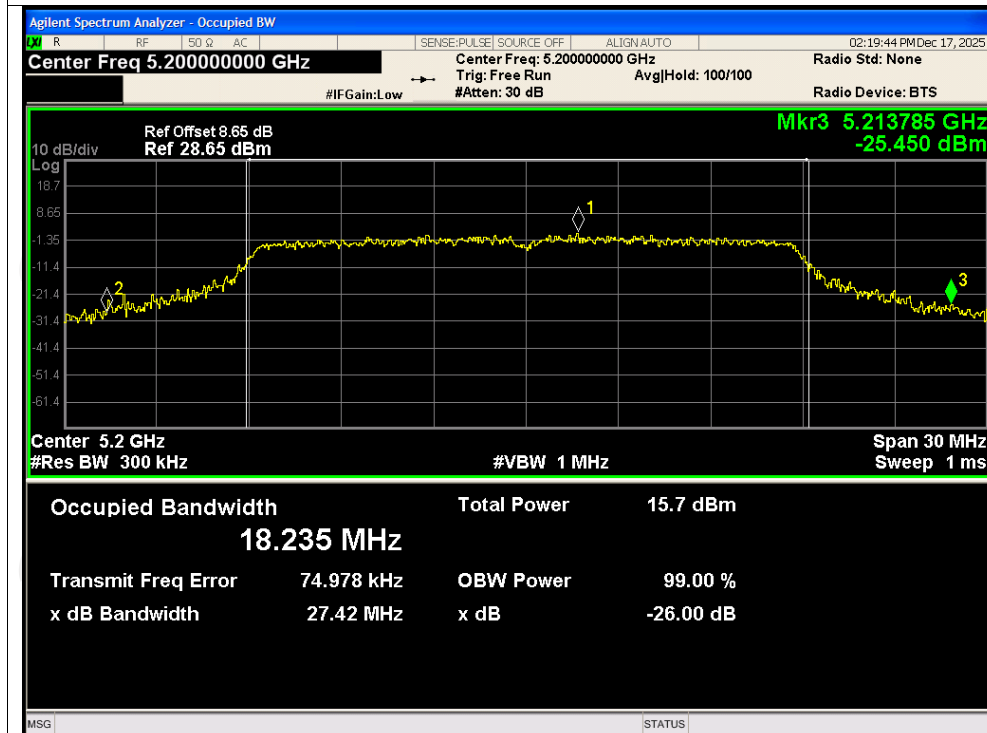
-26dB Bandwidth NVNT a 5240MHz



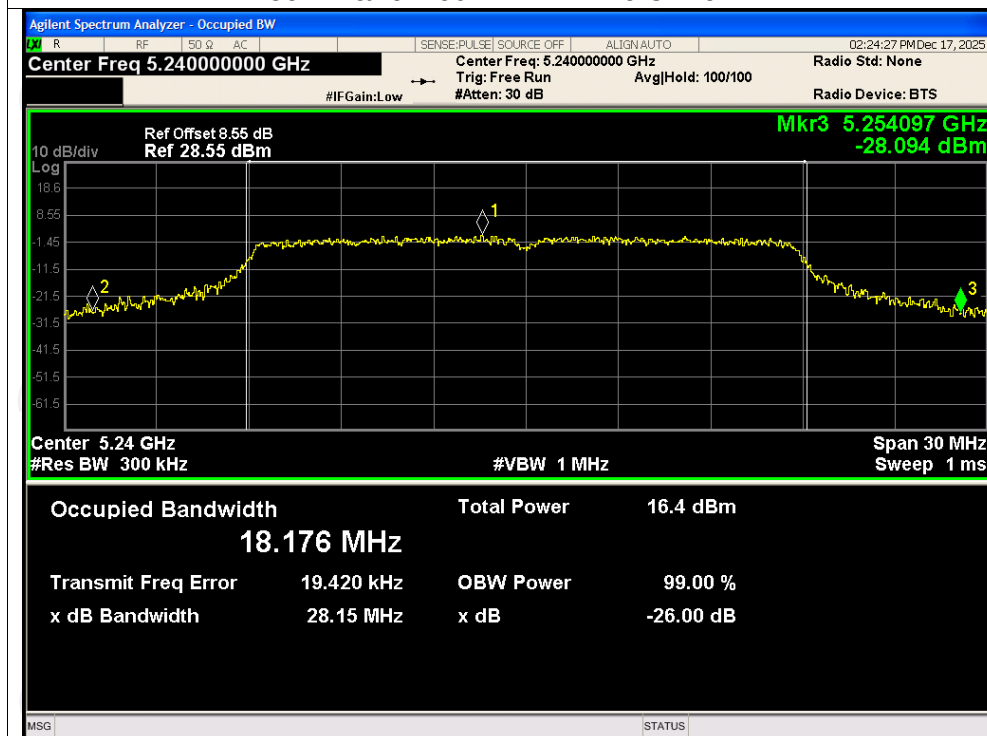
-26dB Bandwidth NVNT n20 5180MHz



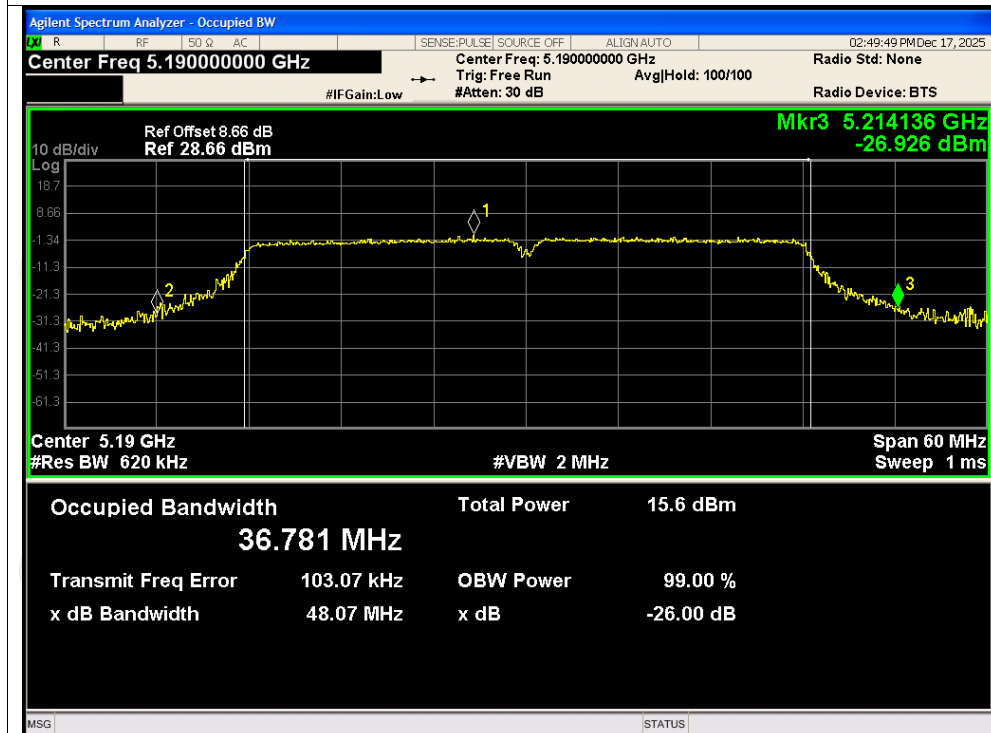
-26dB Bandwidth NVNT n20 5200MHz



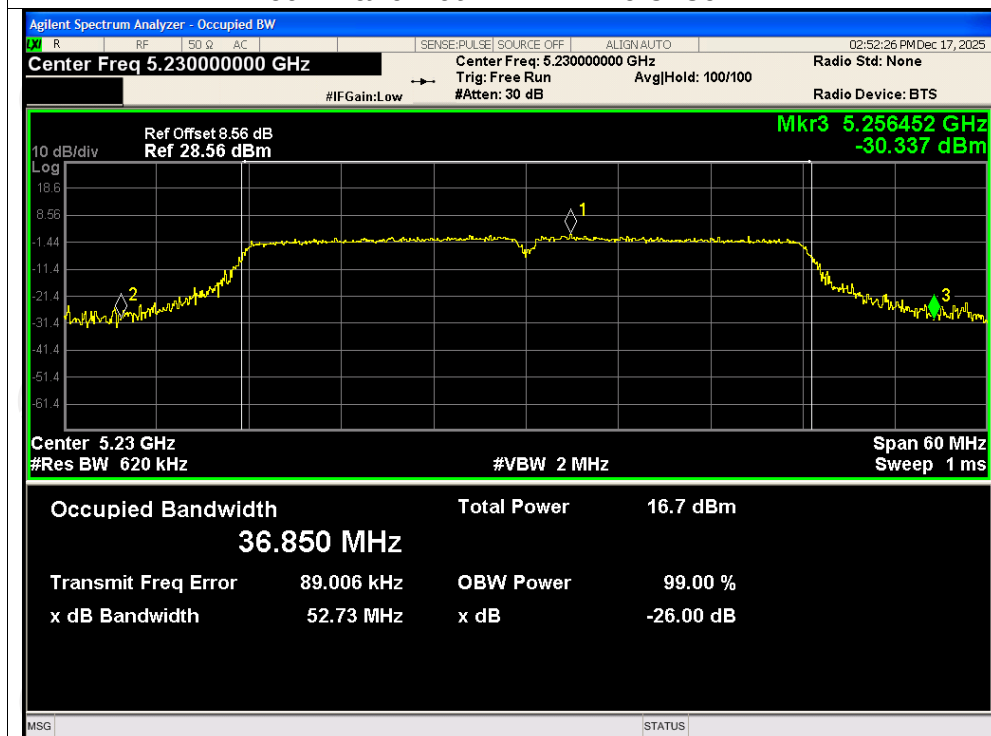
-26dB Bandwidth NVNT n20 5240MHz



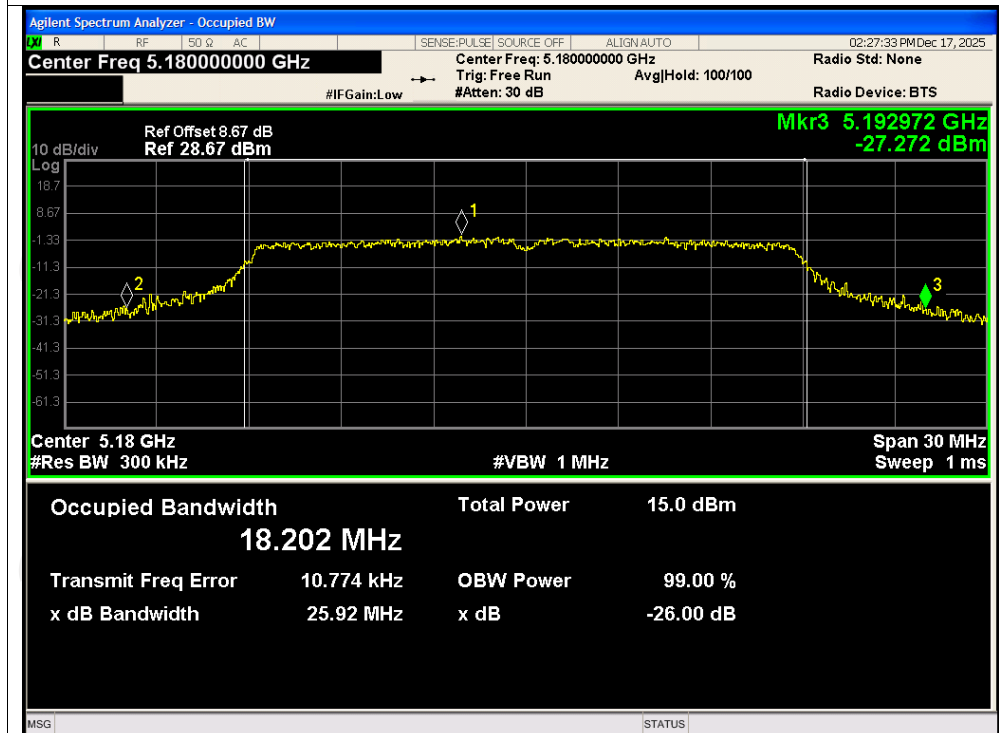
-26dB Bandwidth NVNT n40 5190MHz



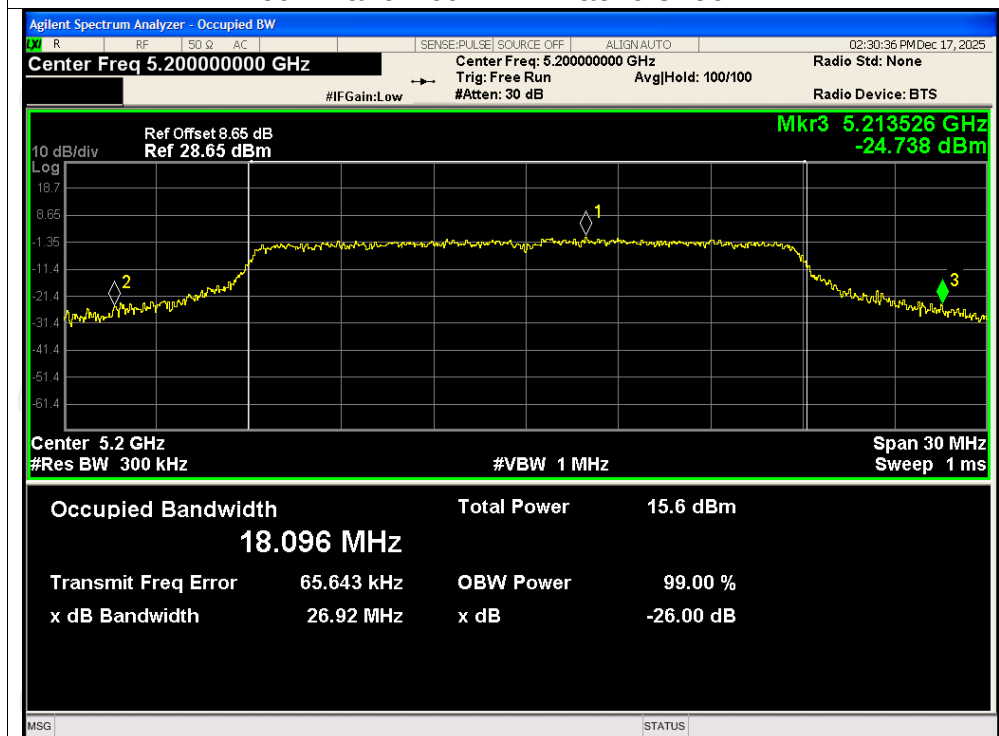
-26dB Bandwidth NVNT n40 5230MHz



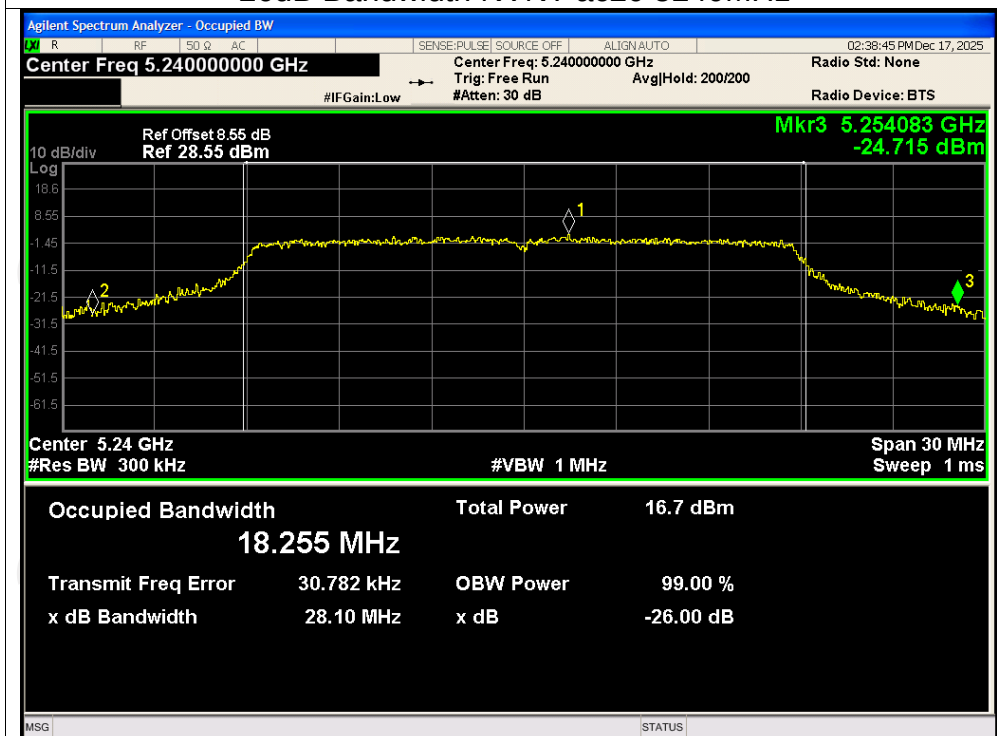
-26dB Bandwidth NVNT ac20 5180MHz



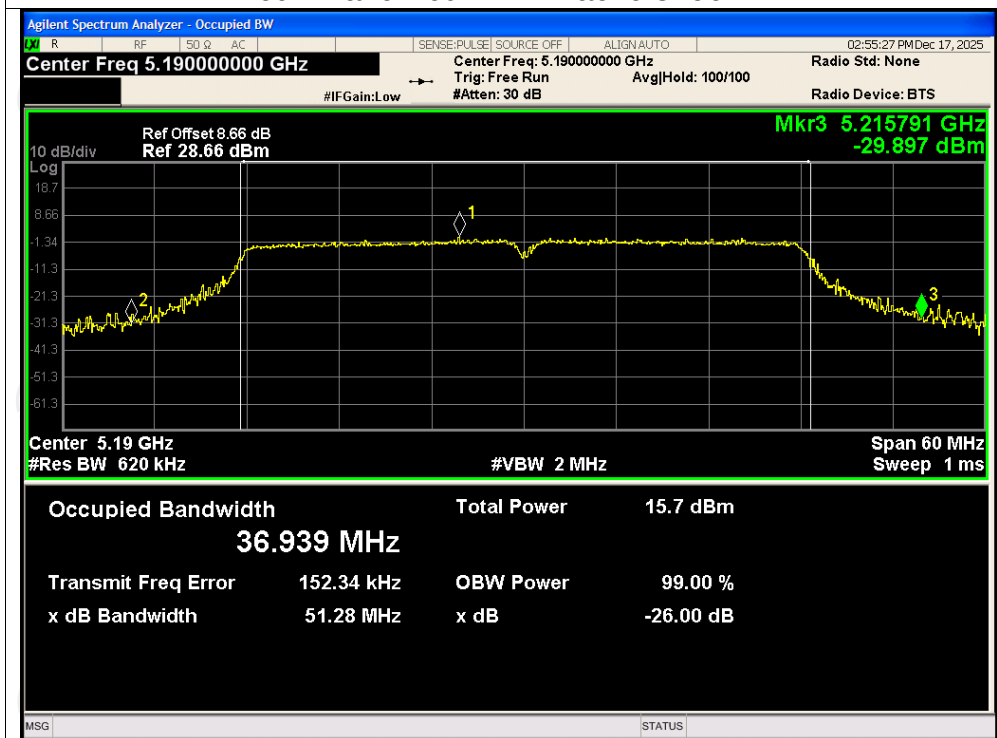
-26dB Bandwidth NVNT ac20 5200MHz



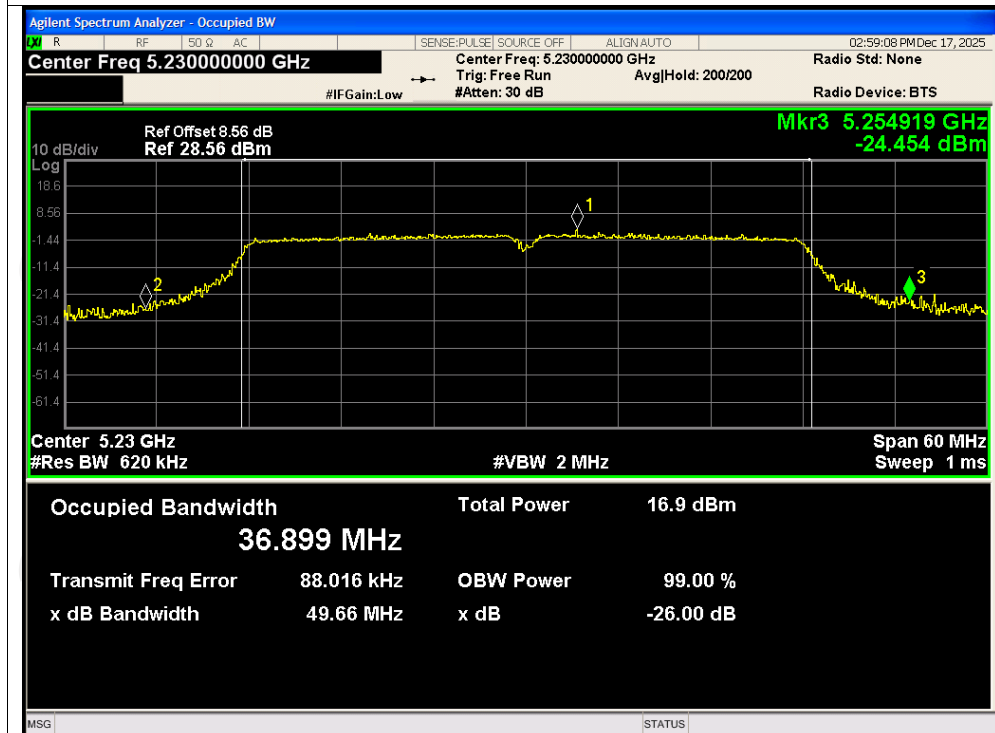
-26dB Bandwidth NVNT ac20 5240MHz



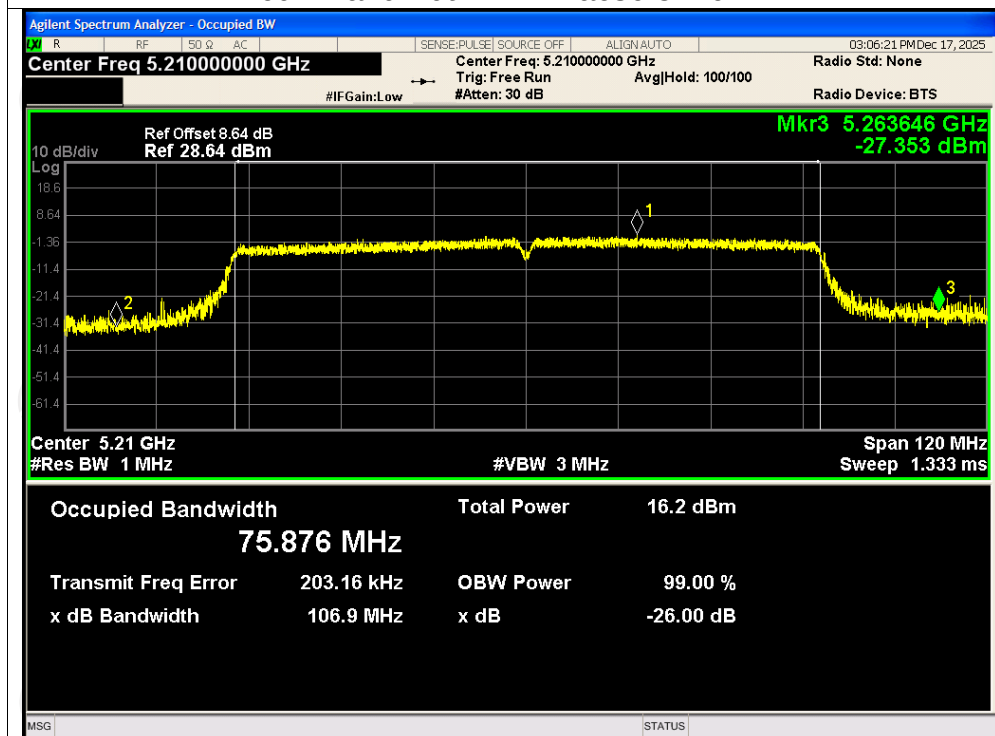
-26dB Bandwidth NVNT ac40 5190MHz



-26dB Bandwidth NVNT ac40 5230MHz



-26dB Bandwidth NVNT ac80 5210MHz

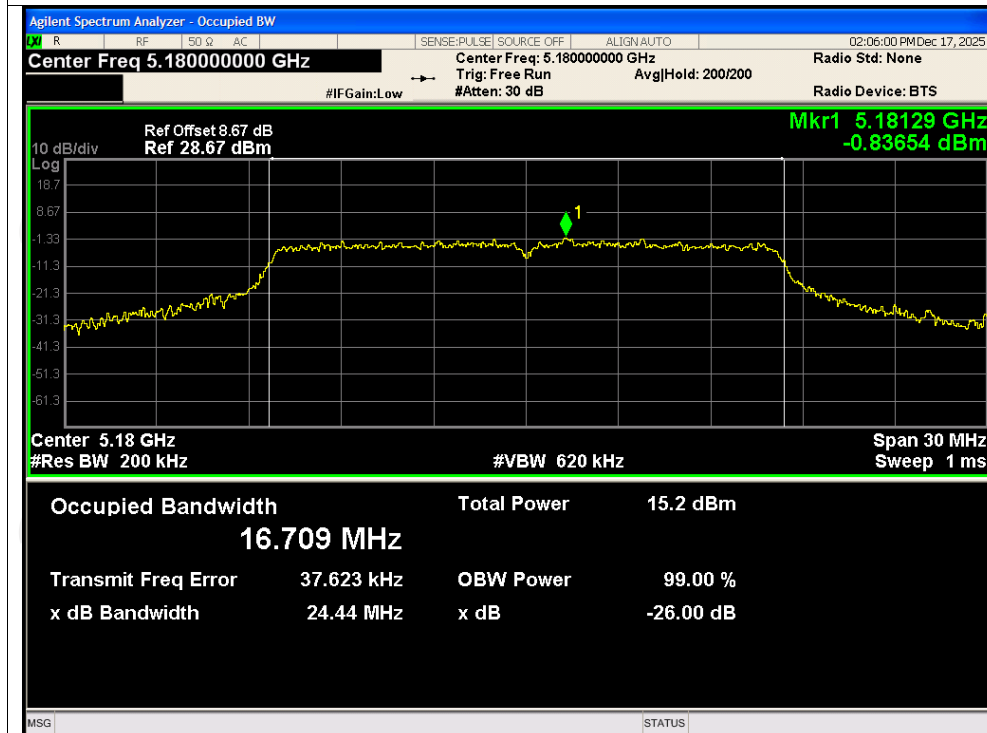


Occupied Channel Bandwidth

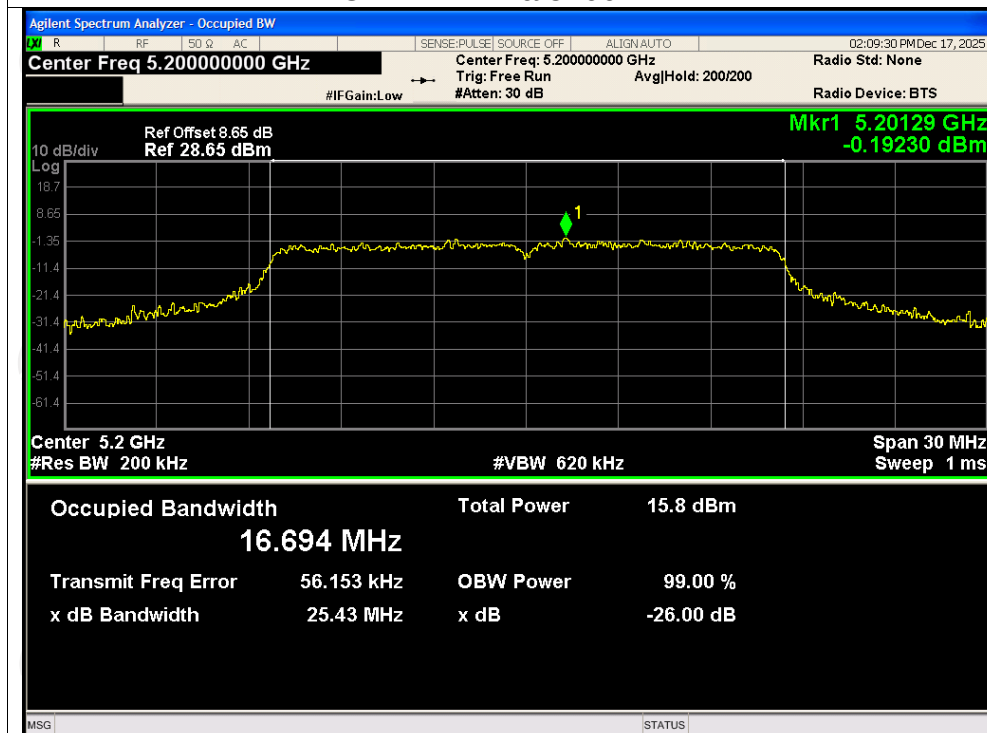
Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5180	16.709
NVNT	a	5200	16.694
NVNT	a	5240	16.697
NVNT	n20	5180	17.908
NVNT	n20	5200	17.888
NVNT	n20	5240	18.004
NVNT	n40	5190	36.536
NVNT	n40	5230	36.501
NVNT	ac20	5180	17.911
NVNT	ac20	5200	17.899
NVNT	ac20	5240	17.955
NVNT	ac40	5190	36.517
NVNT	ac40	5230	36.545
NVNT	ac80	5210	75.796

Test Graphs

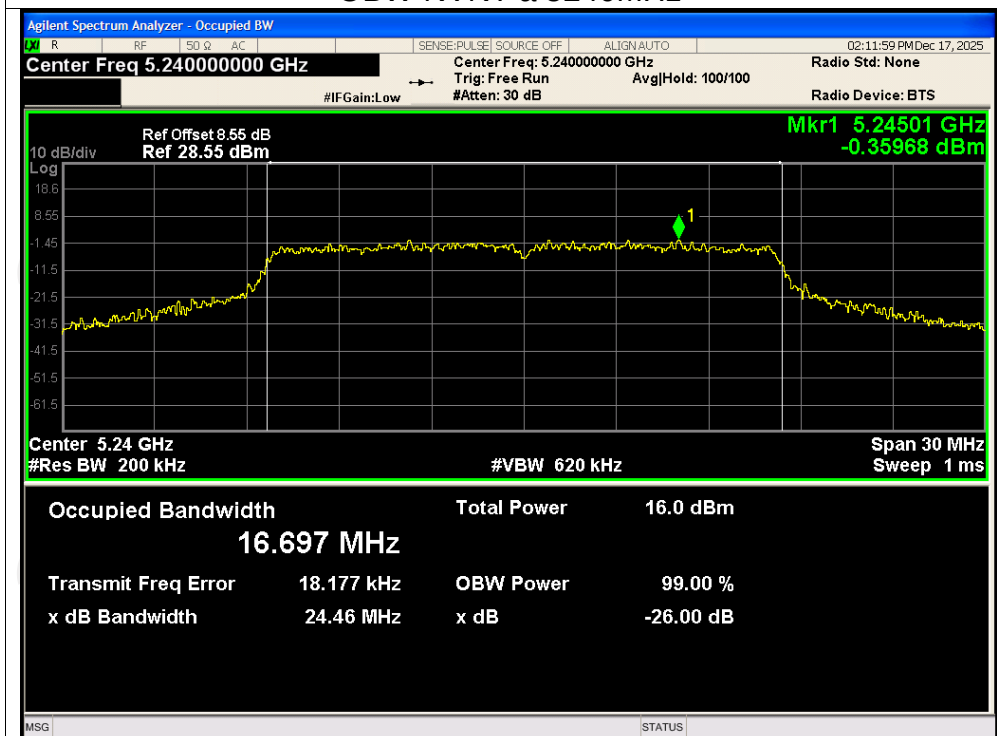
OBW NVNT a 5180MHz



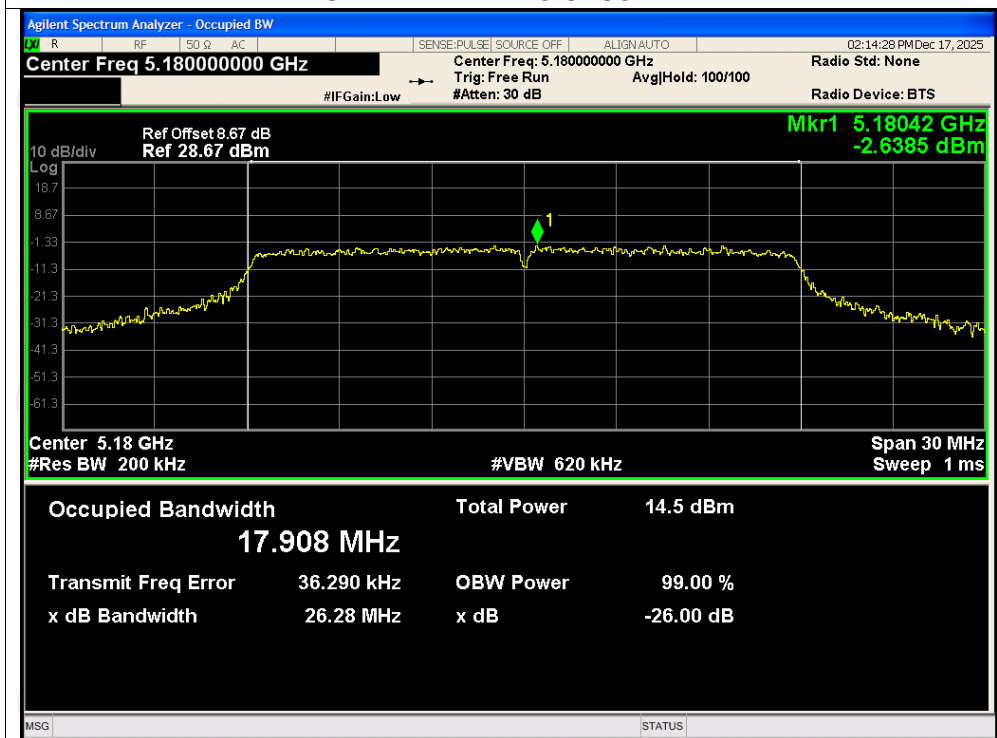
OBW NVNT a 5200MHz



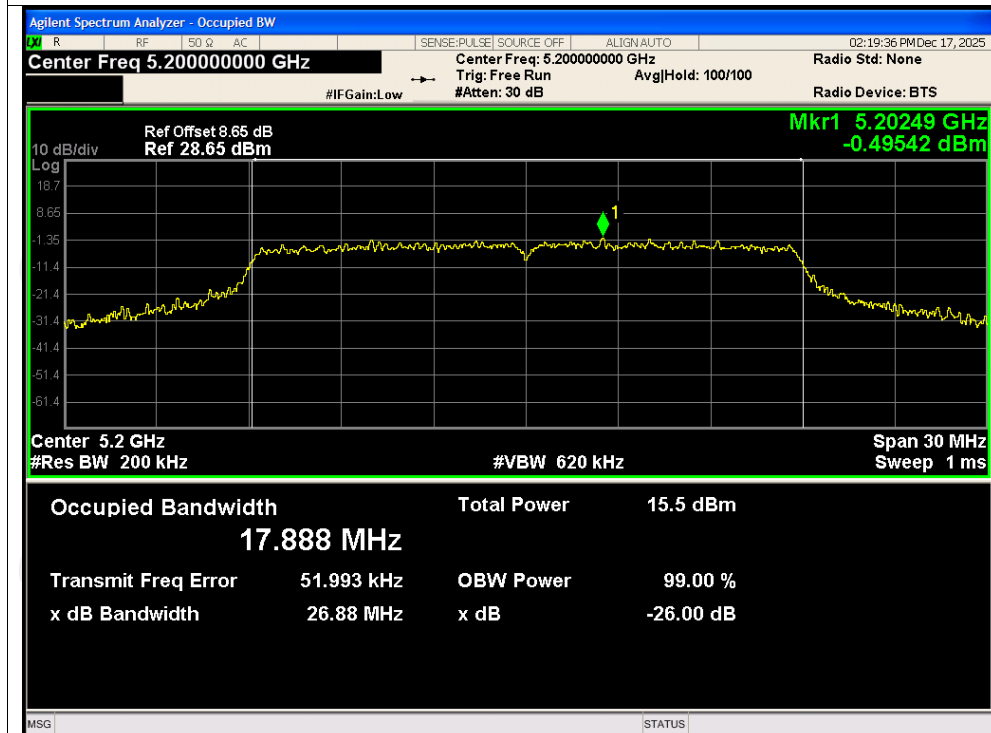
OBW NVNT a 5240MHz



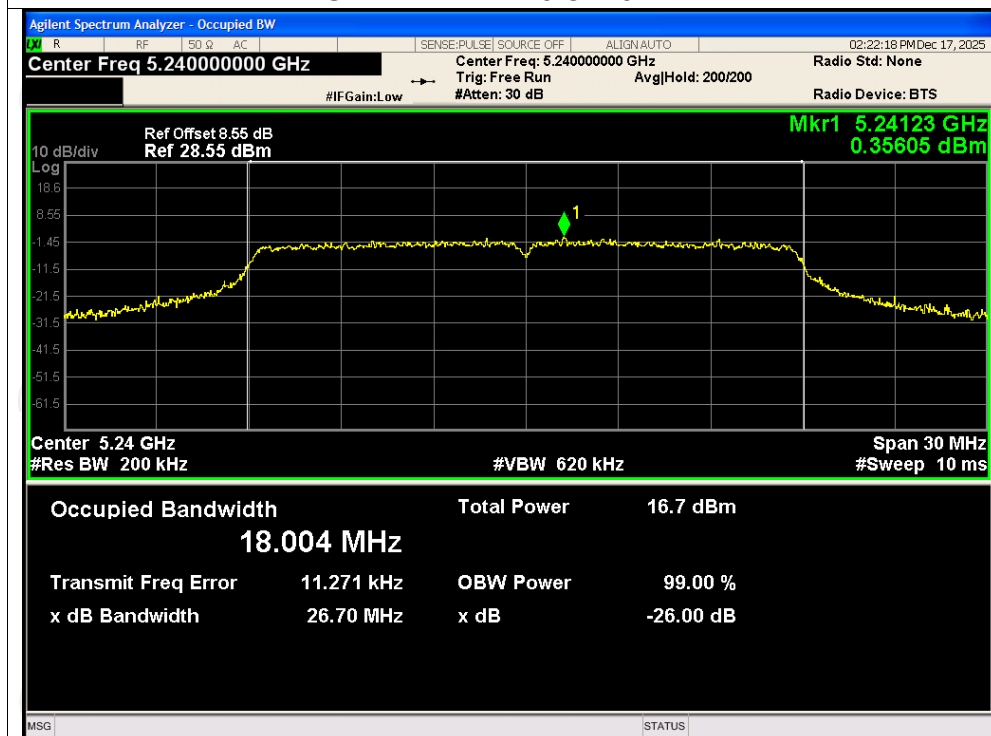
OBW NVNT n20 5180MHz



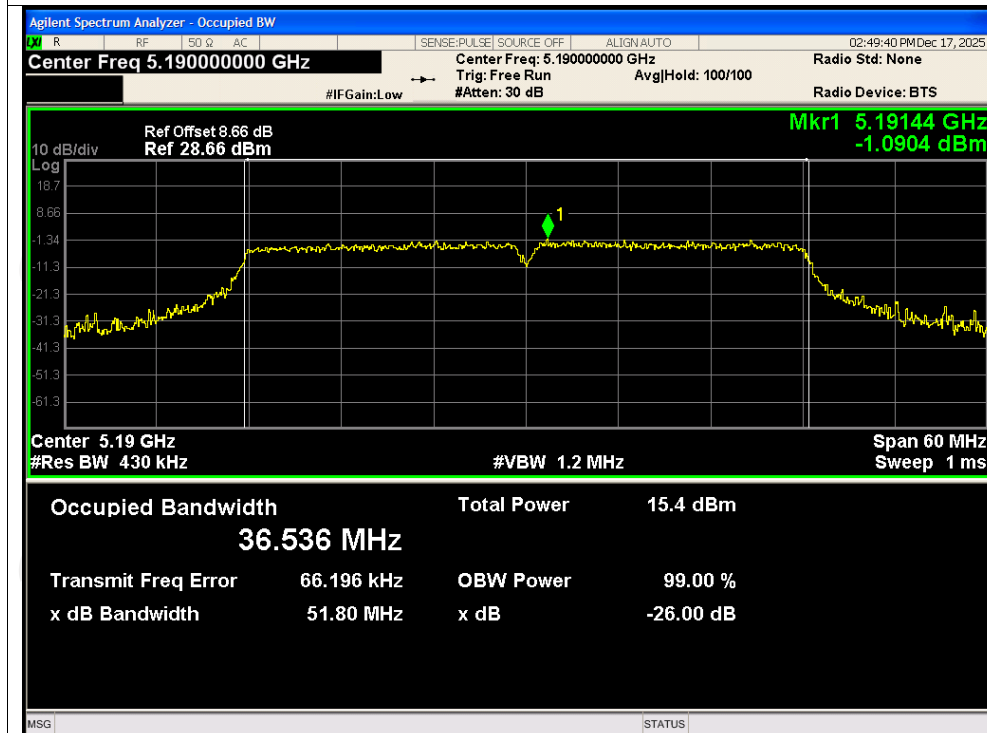
OBW NVNT n20 5200MHz



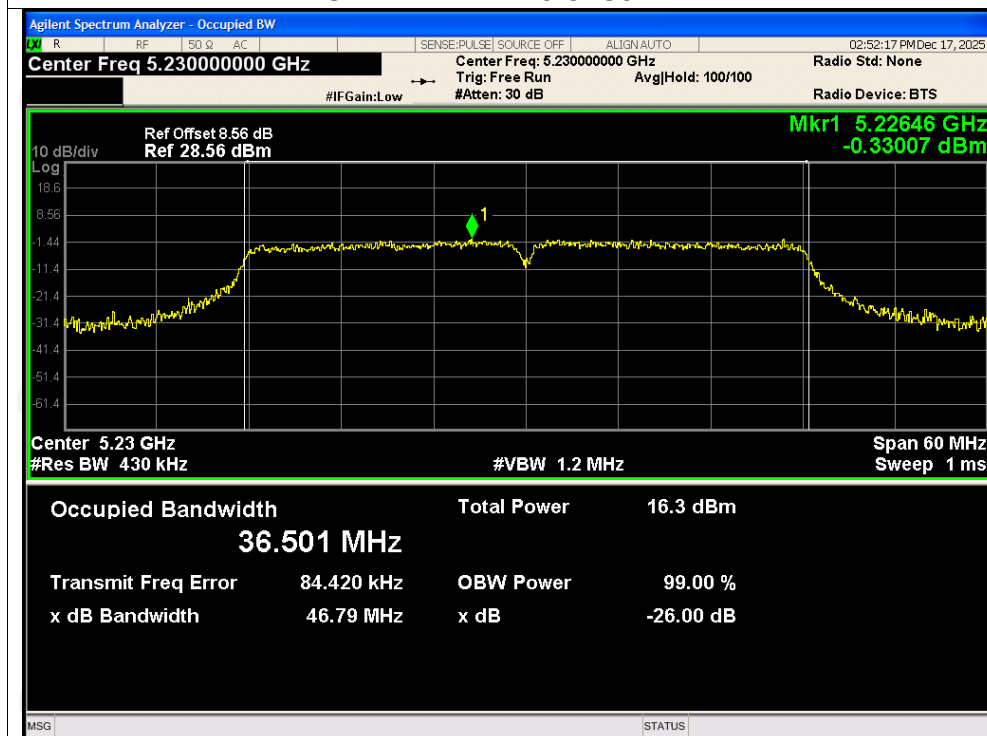
OBW NVNT n20 5240MHz



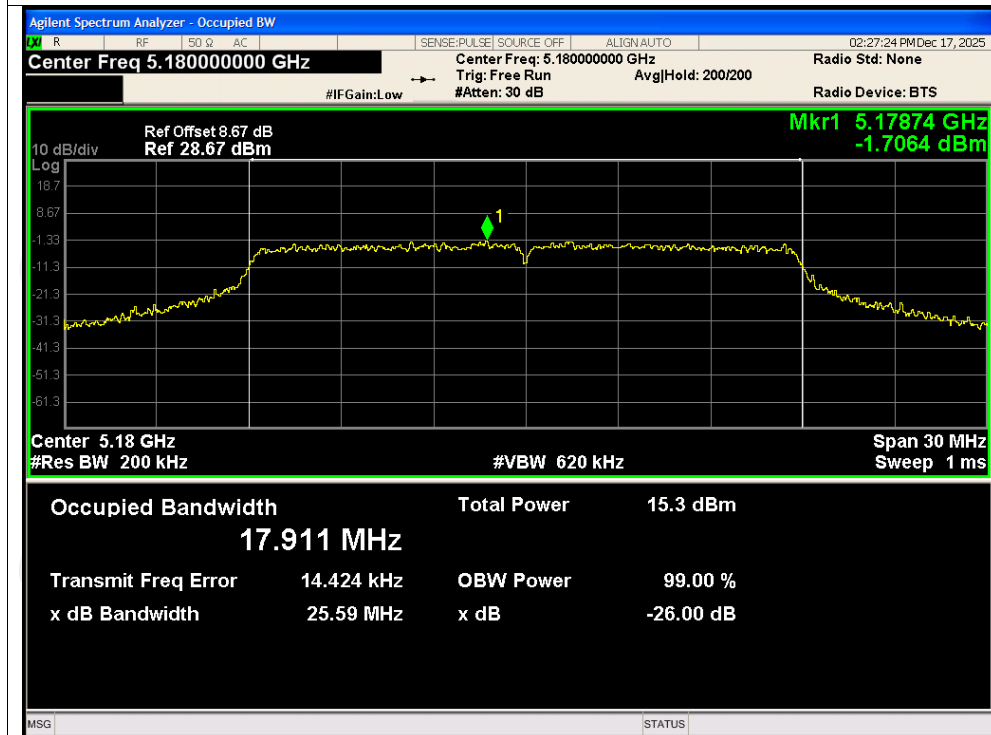
OBW NVNT n40 5190MHz



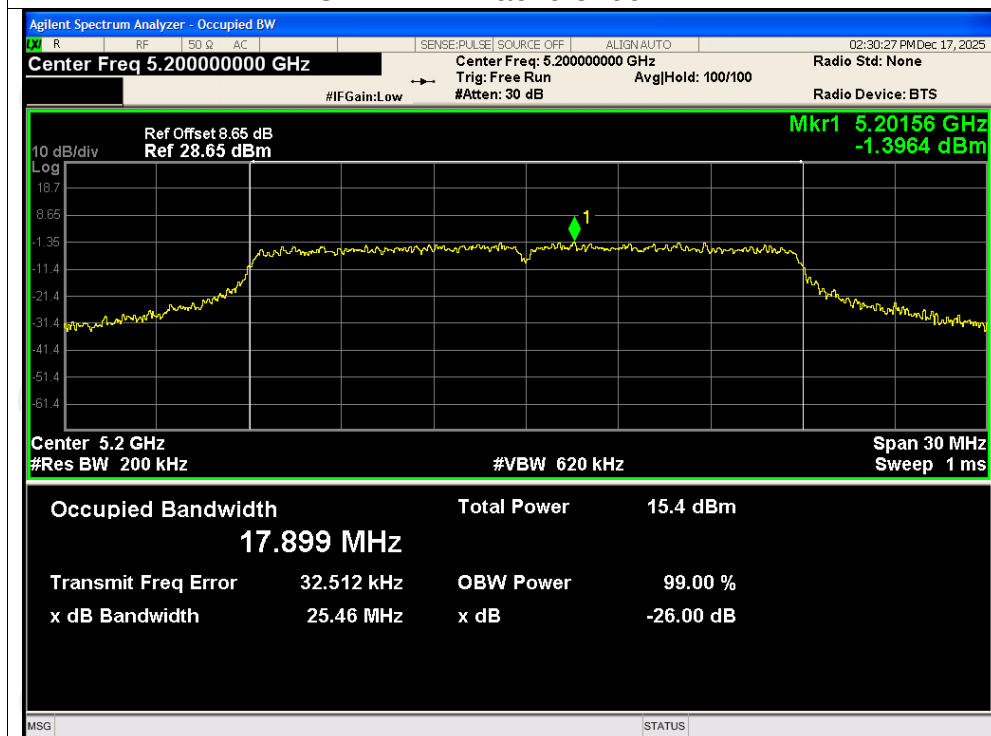
OBW NVNT n40 5230MHz



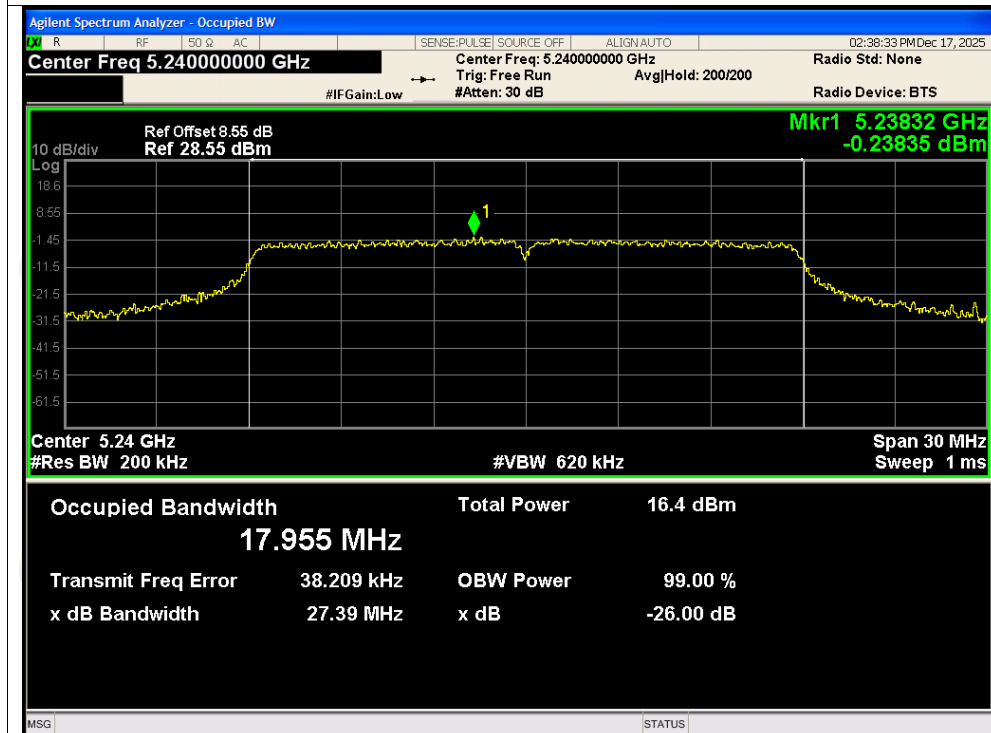
OBW NVNT ac20 5180MHz



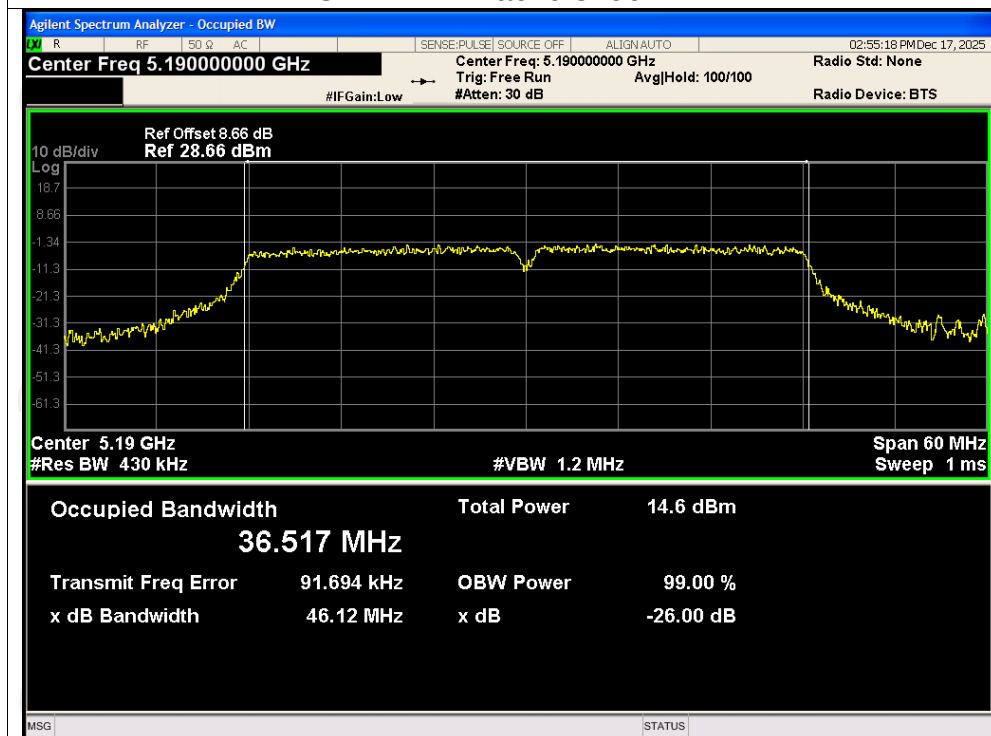
OBW NVNT ac20 5200MHz



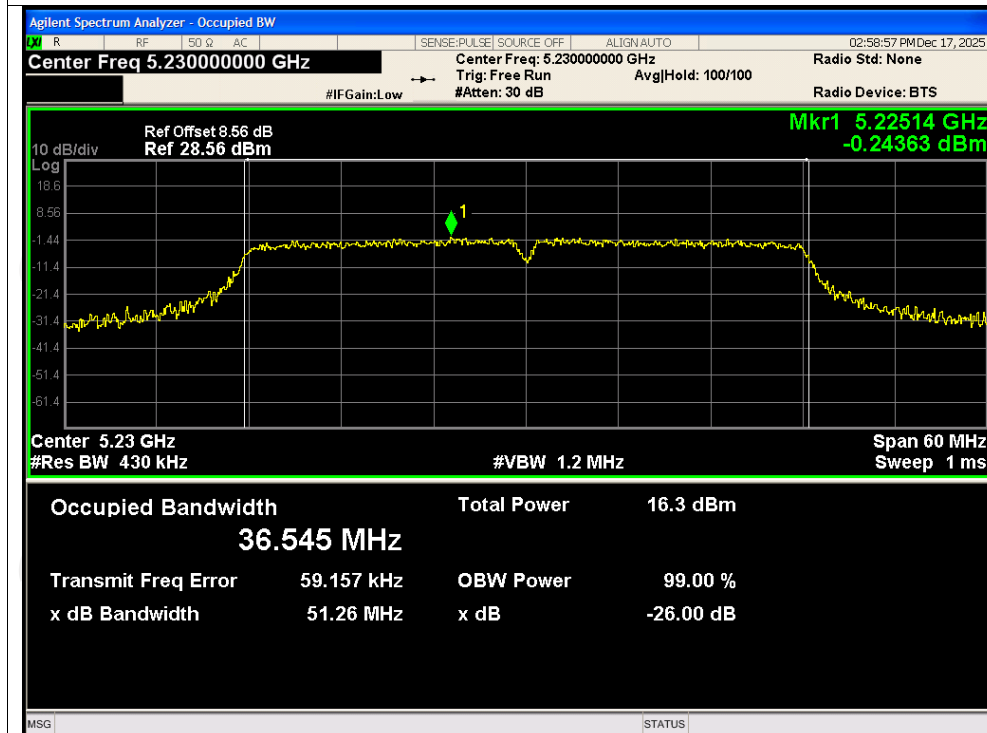
OBW NVNT ac20 5240MHz



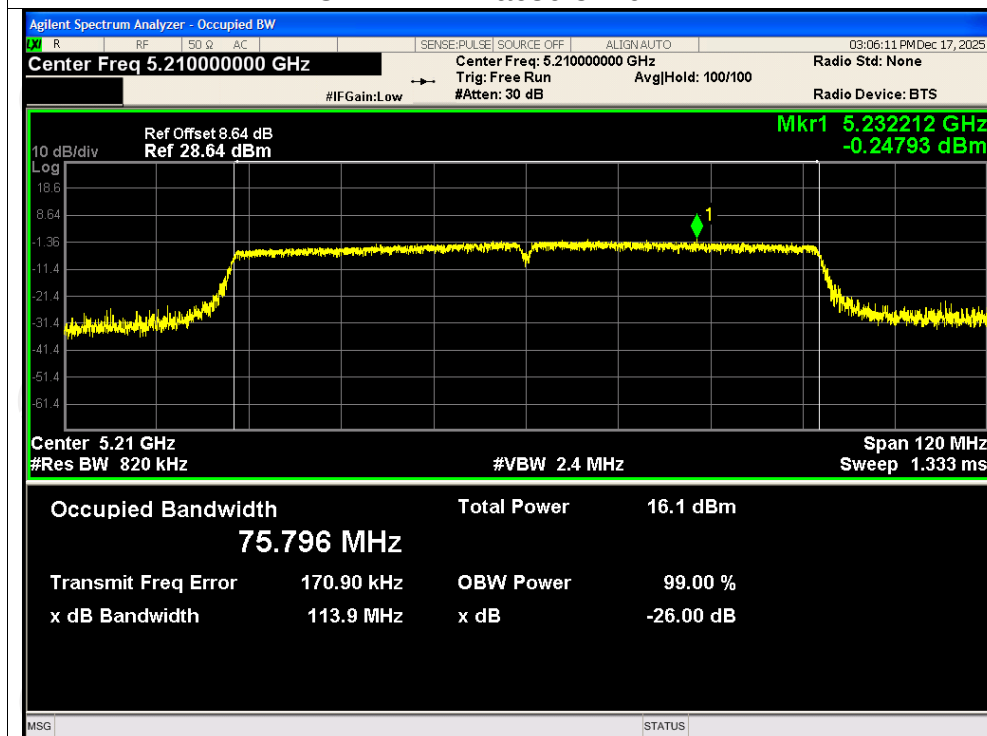
OBW NVNT ac40 5190MHz



OBW NVNT ac40 5230MHz



OBW NVNT ac80 5210MHz

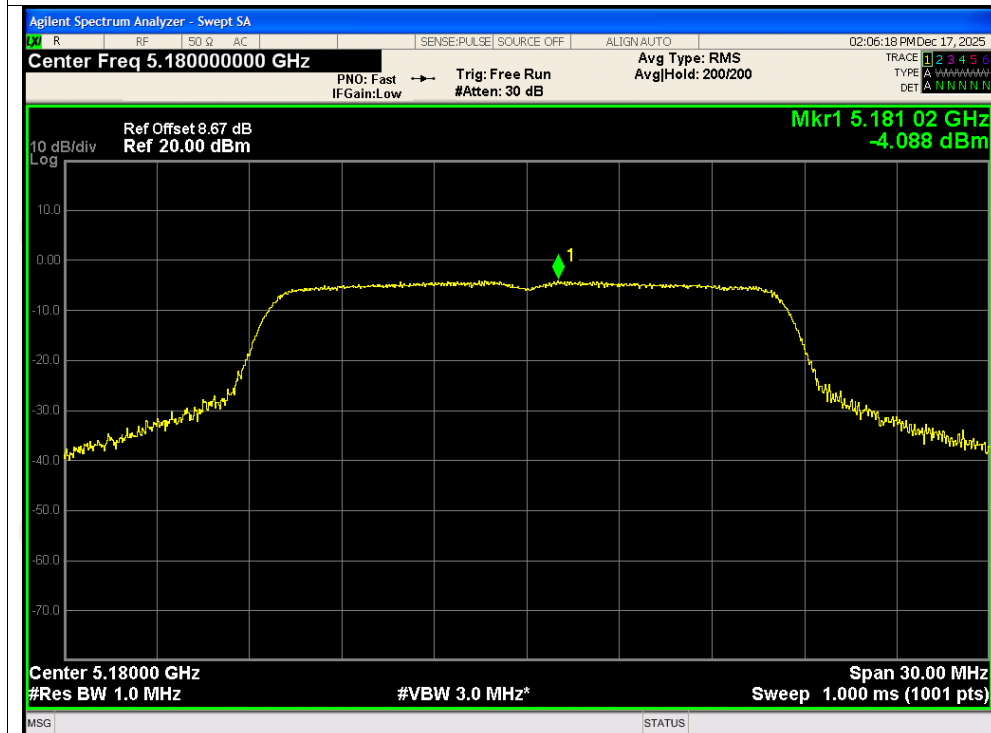


Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	-4.09	2.06	-2.03	11	Pass
NVNT	a	5200	-3.57	2.06	-1.51	11	Pass
NVNT	a	5240	-2.83	2.05	-0.78	11	Pass
NVNT	n20	5180	-3.21	0.70	-2.51	11	Pass
NVNT	n20	5200	-2.39	0.69	-1.70	11	Pass
NVNT	n20	5240	-1.56	0.69	-0.87	11	Pass
NVNT	n40	5190	-5.99	0.74	-5.25	11	Pass
NVNT	n40	5230	-4.64	0.74	-3.90	11	Pass
NVNT	ac20	5180	-2.84	0.75	-2.09	11	Pass
NVNT	ac20	5200	-2.38	0.69	-1.69	11	Pass
NVNT	ac20	5240	-1.69	0.69	-1.00	11	Pass
NVNT	ac40	5190	-5.65	0.74	-4.91	11	Pass
NVNT	ac40	5230	-4.69	0.74	-3.95	11	Pass
NVNT	ac80	5210	-6.98	0.80	-6.18	11	Pass

Test Graphs

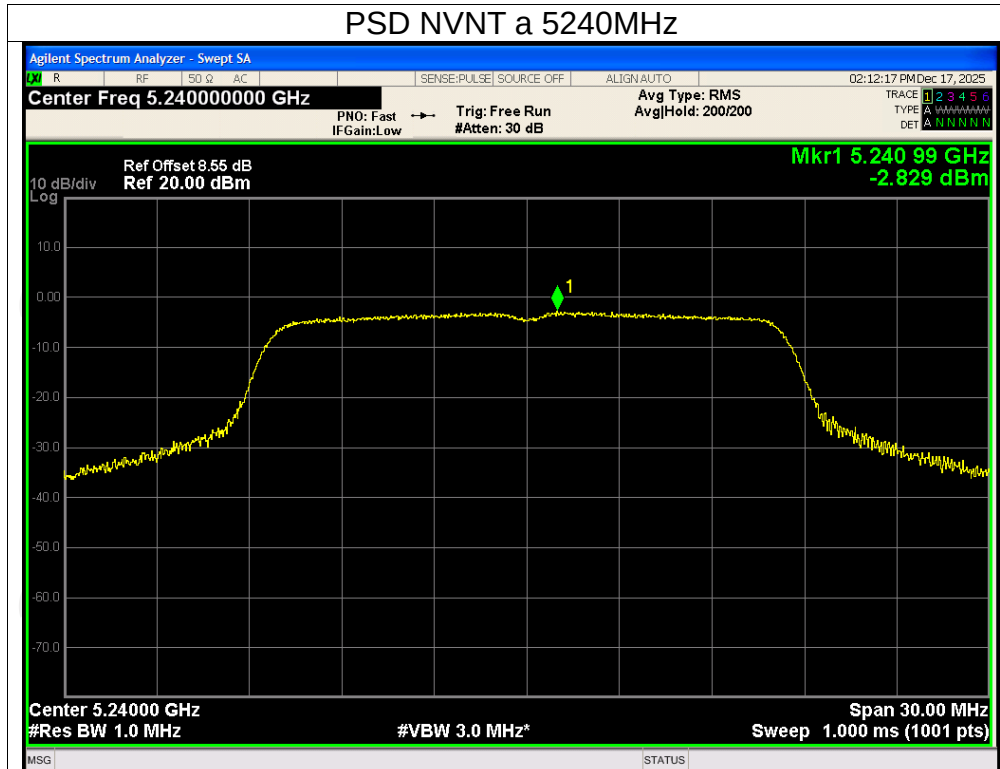
PSD NVNT a 5180MHz



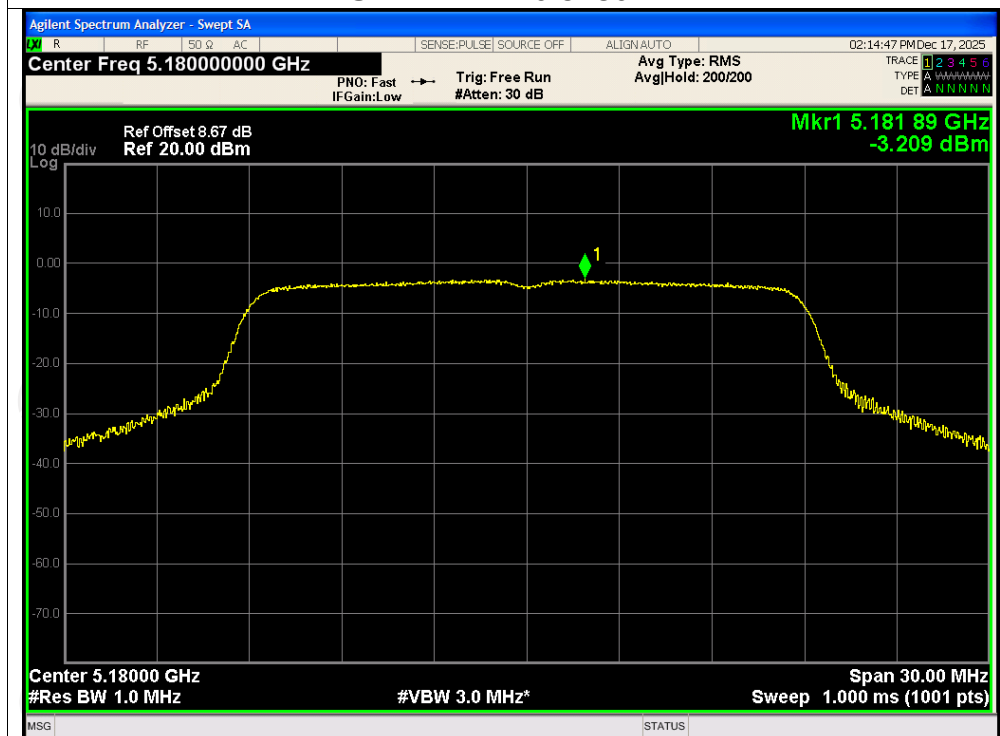
PSD NVNT a 5200MHz

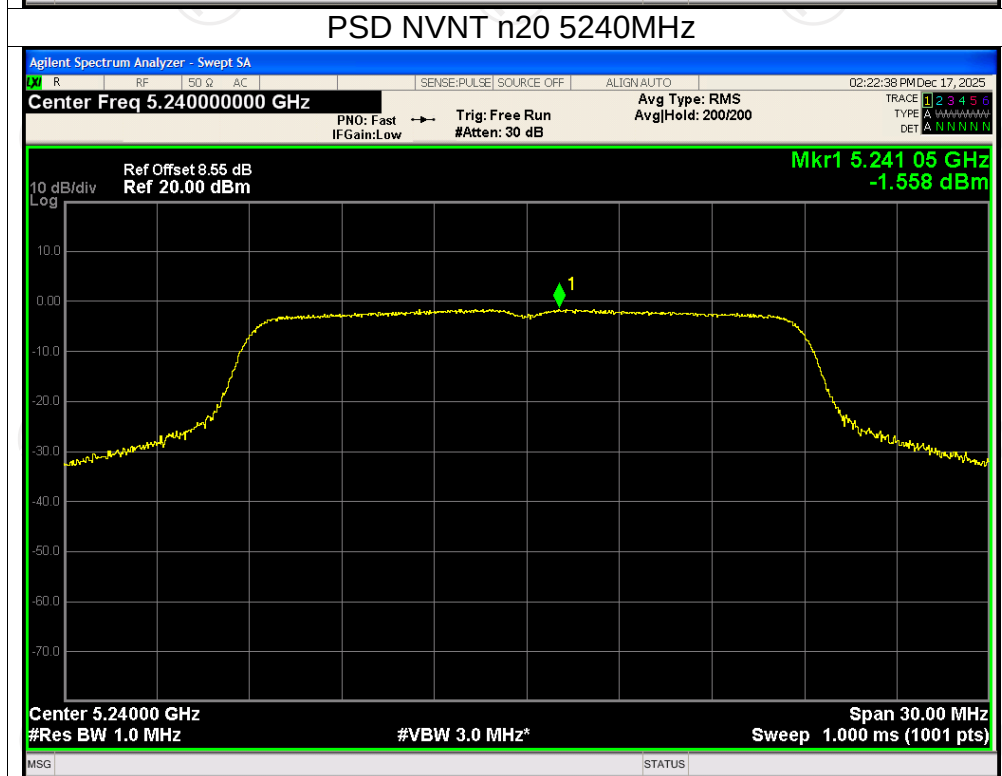
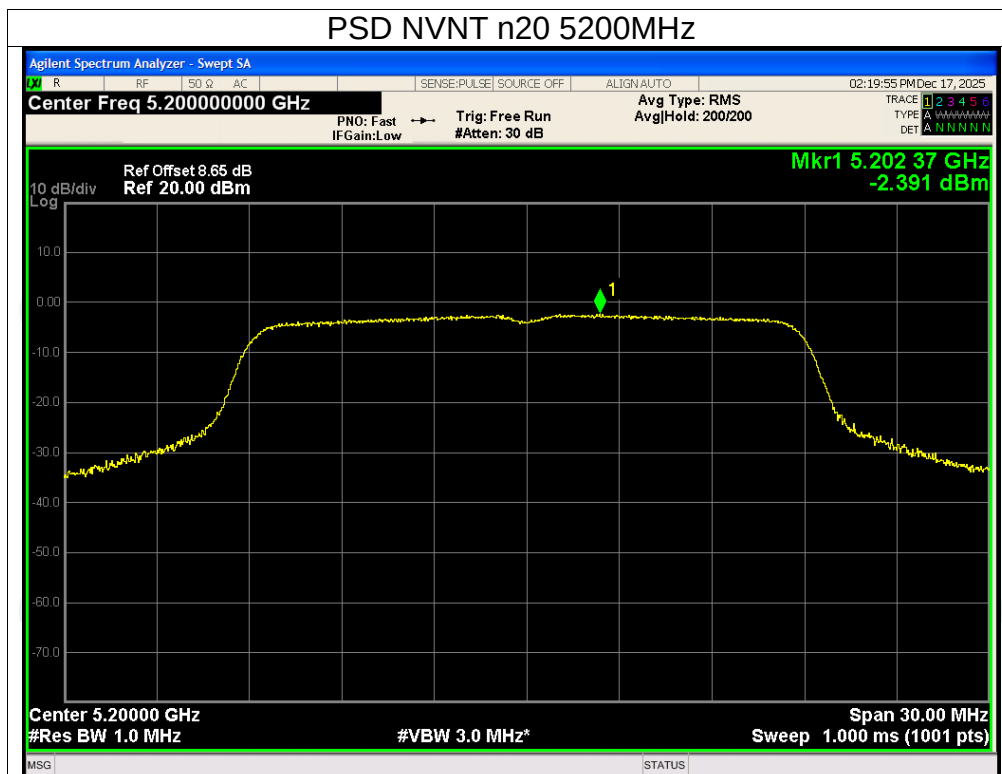


PSD NVNT a 5240MHz

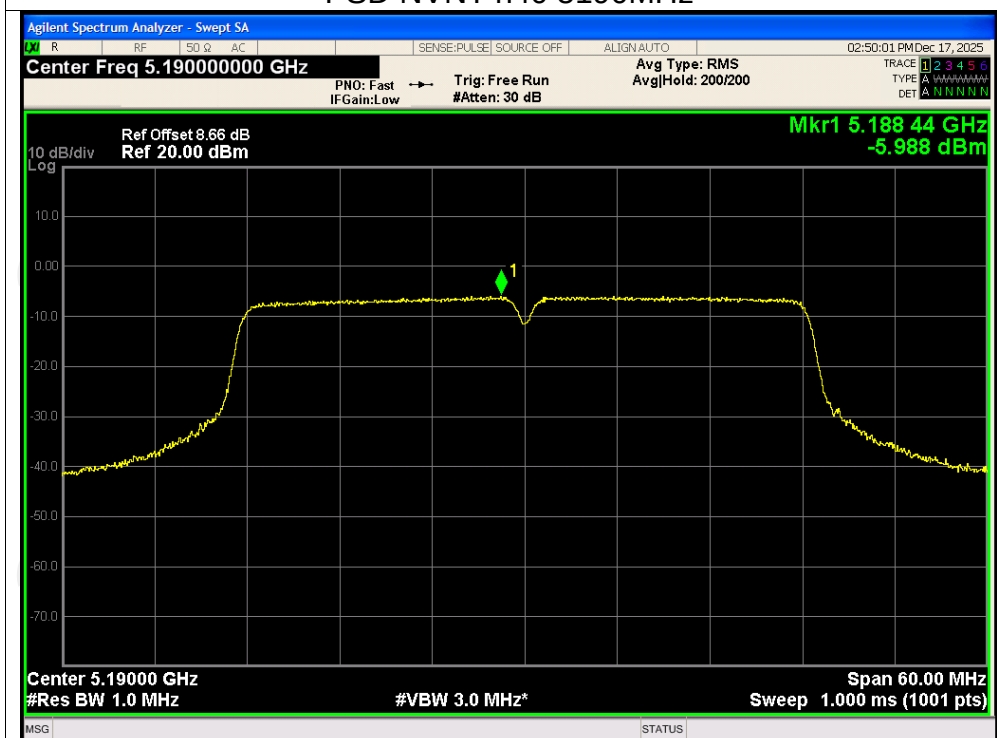


PSD NVNT n20 5180MHz

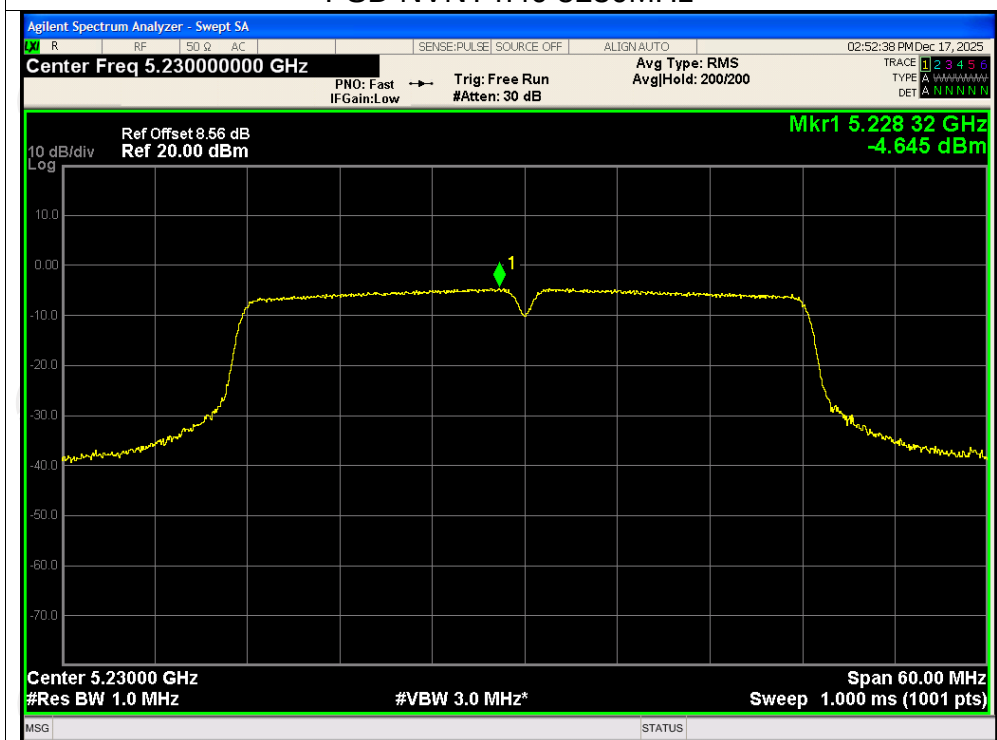




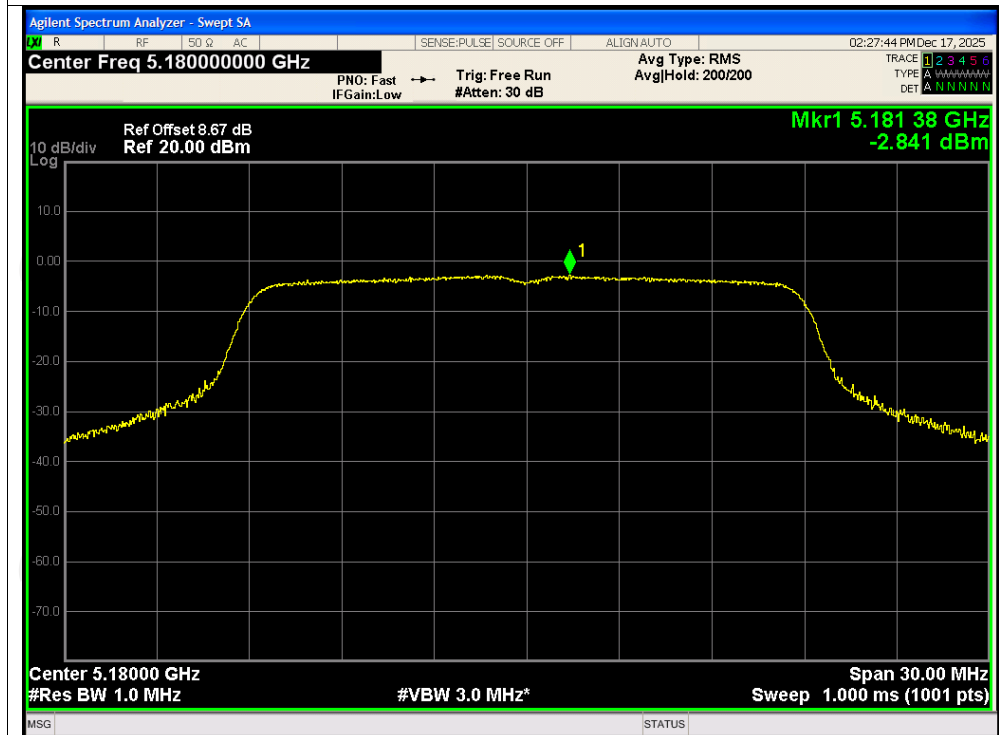
PSD NVNT n40 5190MHz



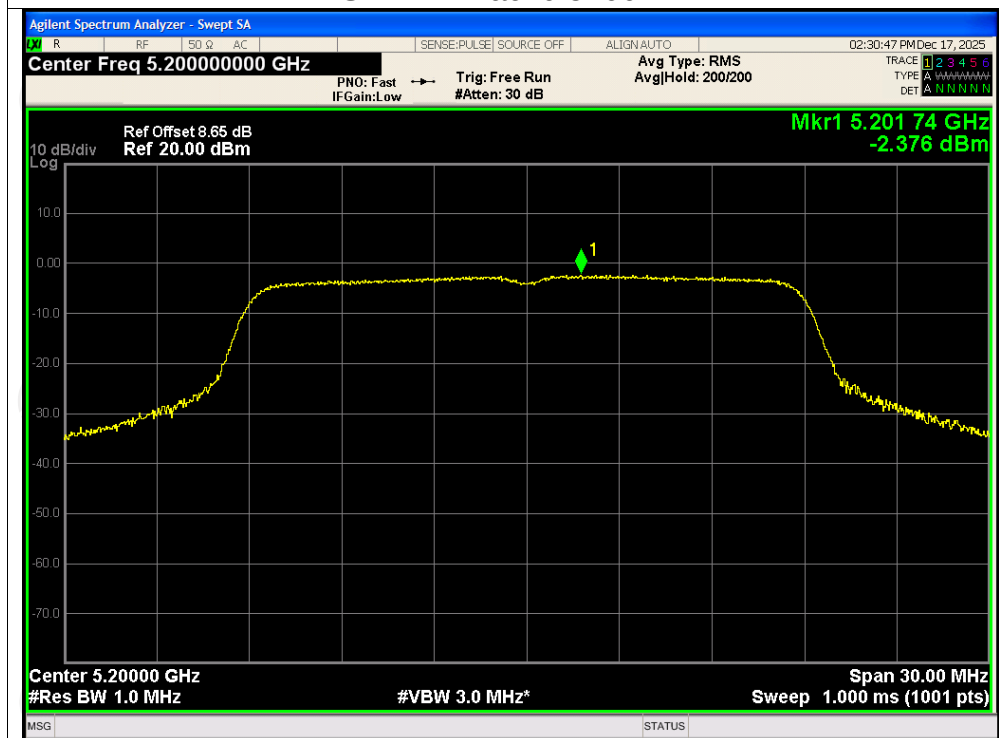
PSD NVNT n40 5230MHz



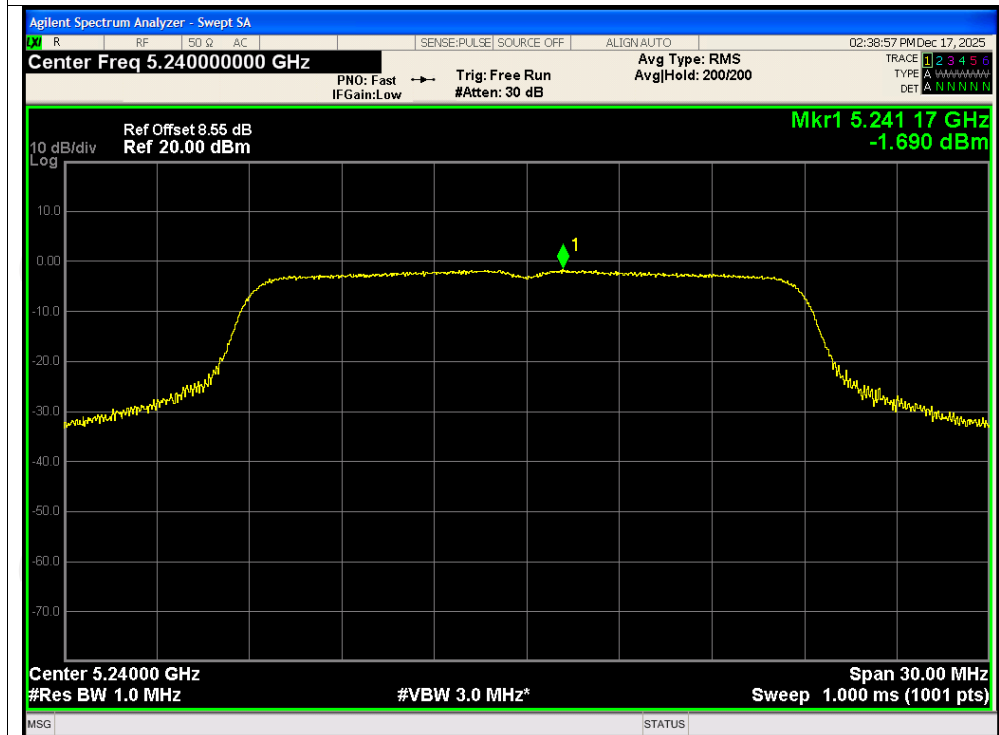
PSD NVNT ac20 5180MHz



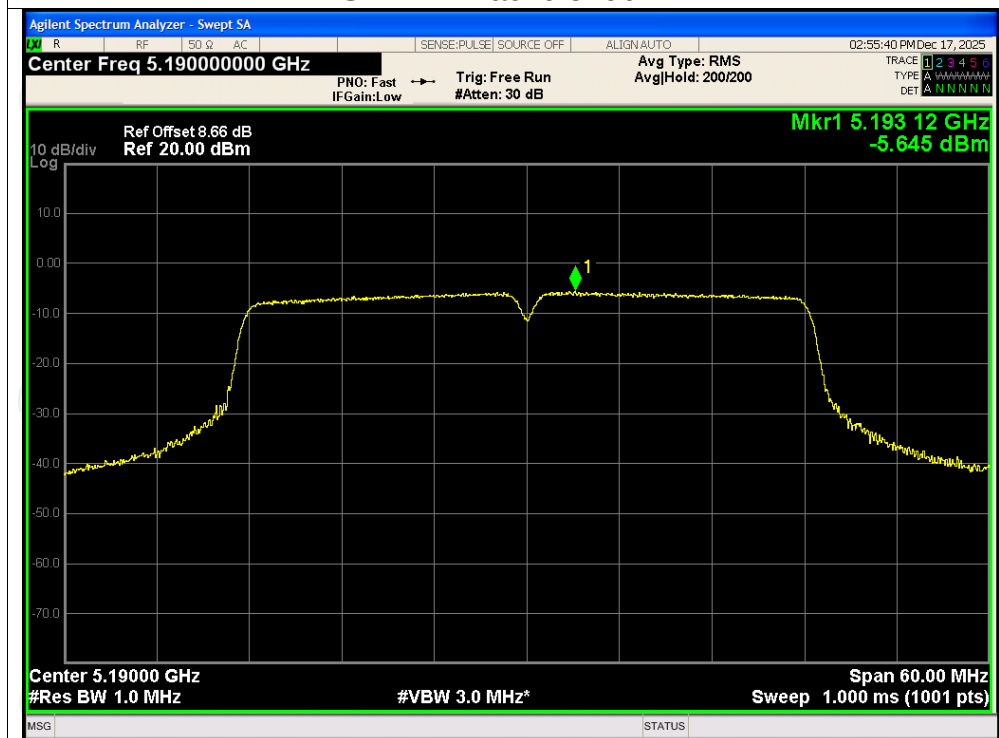
PSD NVNT ac20 5200MHz



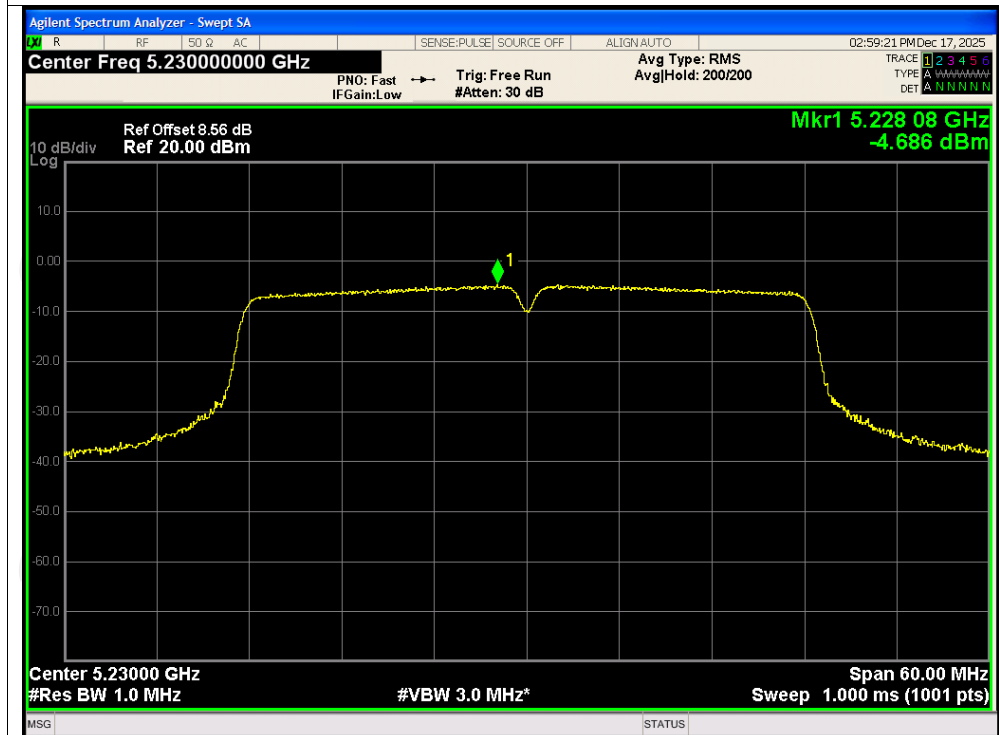
PSD NVNT ac20 5240MHz



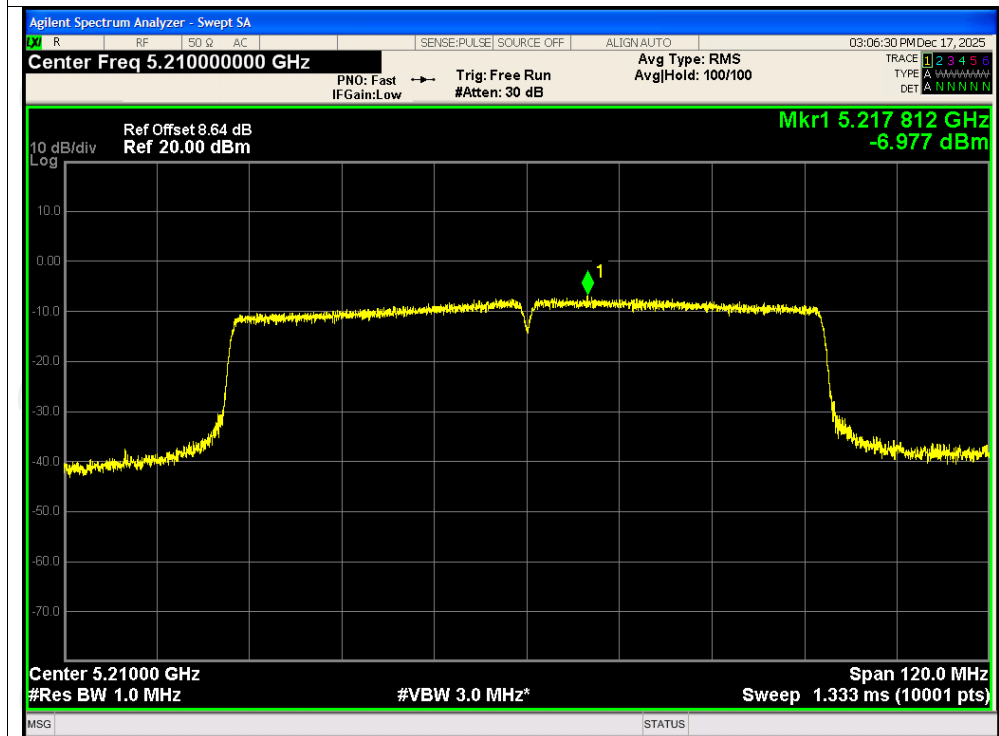
PSD NVNT ac40 5190MHz



PSD NVNT ac40 5230MHz



PSD NVNT ac80 5210MHz



Appendix B: Photographs of Test Setup

Please refer to document Appendix No.: TCT251204E002-A

Appendix C: Photographs of EUT

Please refer to document Appendix No.: TCT251204E002-B & TCT251204E002-C

*******END OF REPORT*******