

TEST REPORT

FCC ID. :	2BOQM-X9	
Test Report No..... :	TCT250410E076	
Date of issue..... :	May 06, 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 Lesheng Acoustics Technology Co., Ltd	
Address..... :	C1406, Building BC, Huizhi R&D Center, Longteng Community, Xixiang Street, Bao'an District, Shenzhen, China	
Manufacturer's name ... :	Shenzhen Lesheng Acoustics Technology Co., Ltd	
Address..... :	C1406, Building BC, Huizhi R&D Center, Longteng Community, Xixiang Street, Bao'an District, Shenzhen, China	
Standard(s)	FCC CFR Title 47 Part 15 Subpart E Section 15.407 KDB 662911 D01 Multiple Transmitter Output v02r01 KDB 789033 D02 General U-NII Test Procedures New Rules v02r01	
Product Name..... :	DAC & Headphone Amplifier	
Trade Mark	LUXSIN	
Model/Type reference..... :	X9	
Rating(s)..... :	AC 120V/60Hz	
Date of receipt of test item	Apr. 10, 2025	
Date (s) of performance of test..... :	Apr. 10, 2025 ~ May 06, 2025	
Tested by (+signature) ... :	Yannie ZHONG	
Check by (+signature).... :	Beryl ZHAO	
Approved by (+signature):	Tomsin	

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1. General Product Information

1.1. EUT description

Product Name.....:	DAC & Headphone Amplifier
Model/Type reference.....:	X9
Sample Number.....:	TCT250410E060-0101
Operation Frequency	Band 1: 5180 MHz ~ 5240 MHz
Channel Bandwidth.....:	802.11a: 20MHz 802.11n: 20MHz, 40MHz
Modulation Technology	Orthogonal Frequency Division Multiplexing (OFDM)
Modulation Type.....:	64QAM, 16QAM, BPSK, QPSK
Antenna Type.....:	Black Rubber Antenna
Antenna Gain.....:	3.29dBi
Rating(s).....:	AC 120V/60Hz

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

None.

1.3. Test Frequency

Band 1

20MHz		40MHz	
Channel	Frequency	Channel	Frequency
36	5180	38	5190
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)	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(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:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010 mbar
Test Software:	
Software Information:	ADB
Power Level:	Default
Test Mode:	
Engineer mode:	Keep the EUT in continuous transmitting by select channel
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

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.

- IC - Registration No.: 10668A

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Innovation, Science and Economic Development Canada for radio equipment testing.

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

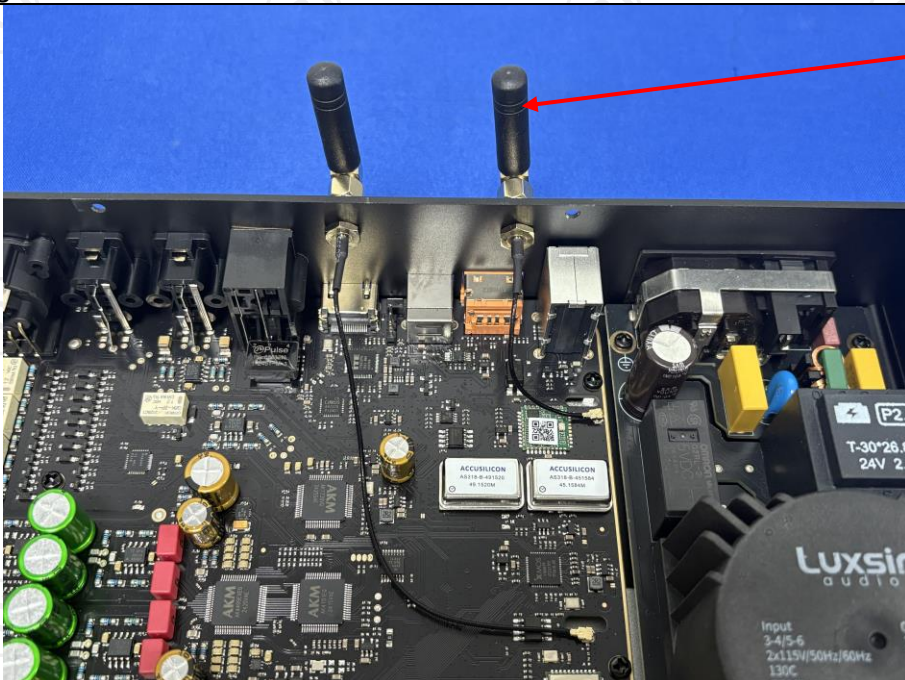
4.3. Measurement Uncertainty

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

5. Test Results and Measurement Data

5.1. Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
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 EUT antenna is black rubber antenna which permanently attached, and the maximum gain of the antenna is 3.29dBi.	
	

5.2. Conducted Emission

5.2.1. 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 Test table/Insulation plane 80cm EMI Receiver Filter AC power Remark: E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m														
Test Mode:	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														

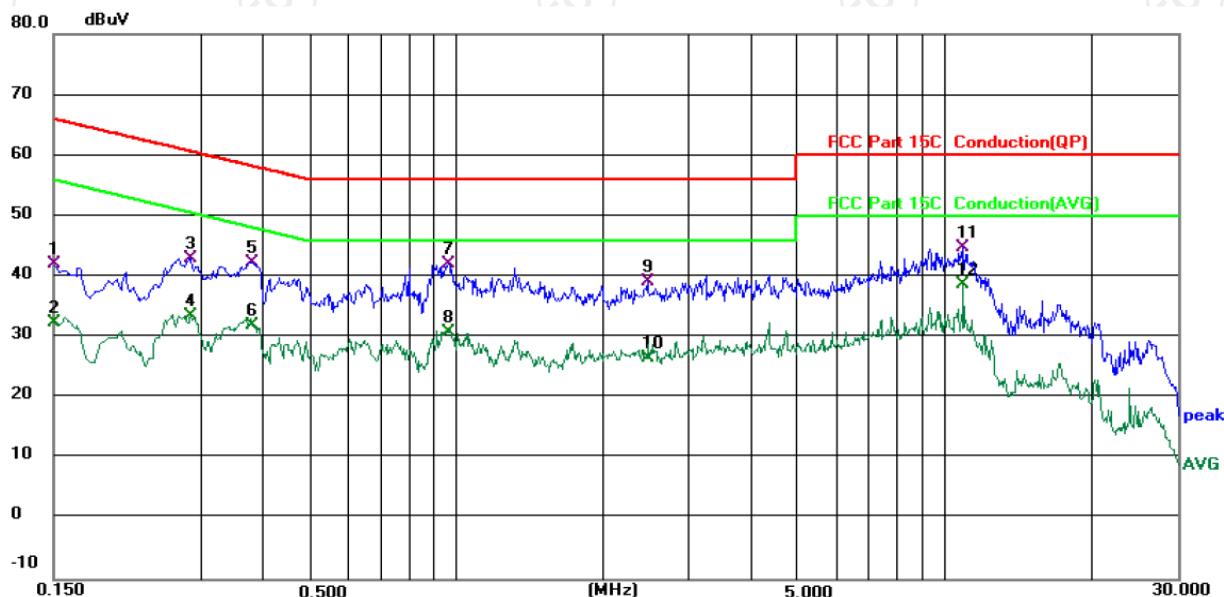
5.2.2. Test Instruments

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. 27, 2024	Jun. 26, 2025
LISN	Schwarzbeck	NSLK 8126	8126453	Jan. 21, 2025	Jan. 20, 2026
Attenuator	N/A	10dB	164080	Jun. 27, 2024	Jun. 26, 2025
Line-5	TCT	CE-05	/	Jun. 27, 2024	Jun. 26, 2025
EMI Test Software	EZ_EMG	EMEC-3A1	1.1.4.2	/	/

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: 22.8 (°C)

Humidity: 49 %

Limit: FCC Part 15C Conduction(QP)

Power: AC 120 V/60 Hz

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1500	32.19	9.96	42.15	66.00	-23.85	QP	
2		0.1500	22.56	9.96	32.52	56.00	-23.48	AVG	
3		0.2857	33.14	9.94	43.08	60.65	-17.57	QP	
4		0.2857	23.49	9.94	33.43	50.65	-17.22	AVG	
5		0.3820	32.49	9.92	42.41	58.24	-15.83	QP	
6		0.3820	21.97	9.92	31.89	48.24	-16.35	AVG	
7		0.9657	32.05	9.94	41.99	56.00	-14.01	QP	
8		0.9657	21.00	9.94	30.94	46.00	-15.06	AVG	
9		2.4620	29.23	10.04	39.27	56.00	-16.73	QP	
10		2.4620	16.49	10.04	26.53	46.00	-19.47	AVG	
11		10.9100	34.56	10.31	44.87	60.00	-15.13	QP	
12	*	10.9100	28.31	10.31	38.62	50.00	-11.38	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

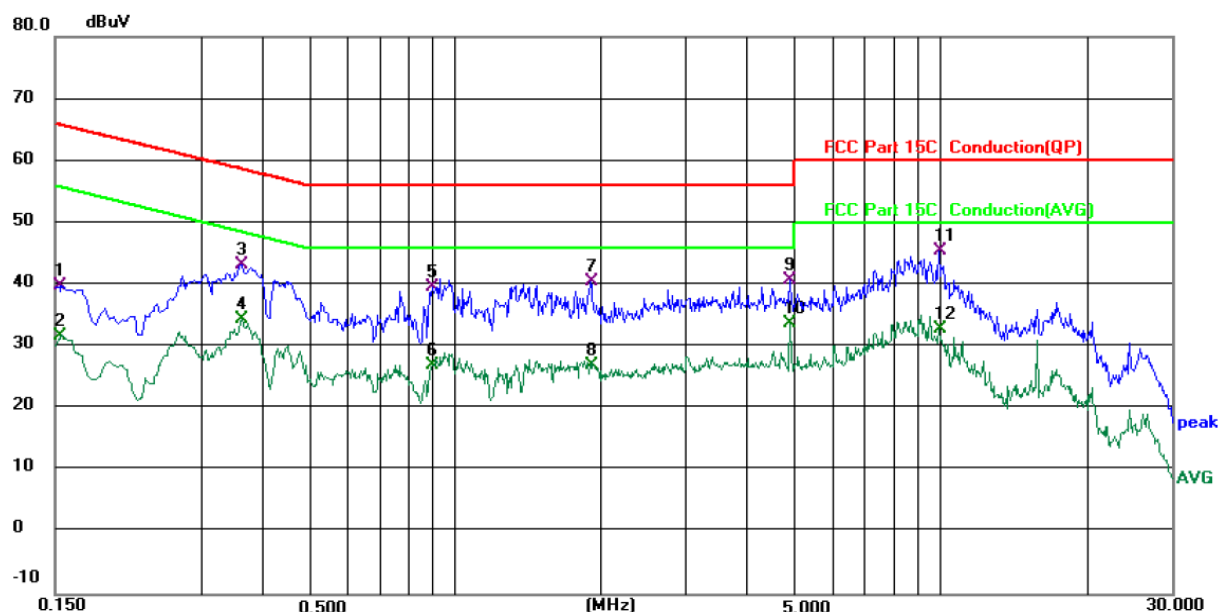
Margin (dB) = Measurement (dBμV) – Limits (dBμV)

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. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1532	29.89	9.94	39.83	65.82	-25.99	QP	
2		0.1532	21.74	9.94	31.68	55.82	-24.14	AVG	
3		0.3618	33.25	9.94	43.19	58.69	-15.50	QP	
4		0.3618	24.50	9.94	34.44	48.69	-14.25	AVG	
5		0.9020	29.60	9.96	39.56	56.00	-16.44	QP	
6		0.9020	16.97	9.96	26.93	46.00	-19.07	AVG	
7		1.9058	30.51	10.02	40.53	56.00	-15.47	QP	
8		1.9058	16.89	10.02	26.91	46.00	-19.09	AVG	
9		4.9100	30.69	10.15	40.84	56.00	-15.16	QP	
10	*	4.9100	23.63	10.15	33.78	46.00	-12.22	AVG	
11		9.9338	35.10	10.34	45.44	60.00	-14.56	QP	
12		9.9338	22.56	10.34	32.90	50.00	-17.10	AVG	

Note:

1. Freq. = Emission frequency in MHz

Reading level (dBuV) = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)

Limit (dBuV) = Limit stated in standard

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

Q.P. =Quasi-Peak

AVG =average

* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

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

5.3. Maximum Conducted Output Power

5.3.1. Test Specification

Test Requirement:	FCC Part15 E Section 15.407(a)& Part 2 J Section 2.1046										
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E										
Limit:	<table border="1"> <thead> <tr> <th>Frequency Band (MHz)</th><th>Limit</th></tr> </thead> <tbody> <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> </tbody> </table>	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)
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, 3, a 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. 5. Measure the conducted output power and record the results in the test report.										
Test Result:	PASS										
Remark:	Conducted output power= measurement power +10log(1/x) X is duty cycle=1, so 10log(1/1)=0 Conducted output power= measurement power										

5.3.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 27, 2024	Jun. 26, 2025
Power detector box	MWRFtest	MW100-RFCB	MW210531TCT	Jan. 21, 2025	Jan. 20, 2026

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:	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:	PASS

5.4.2. Test Instruments

Equipment	Manufacturer	Model No.	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 27, 2024	Jun. 26, 2025
Power detector box	MWRFtest	MW100-RFCB	MW210531TCT	Jan. 21, 2025	Jan. 20, 2026

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:	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

5.5.2. Test Instruments

Equipment	Manufacturer	Model No.	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 27, 2024	Jun. 26, 2025
Power detector box	MWRFTest	MW100-RFCB	MW210531TCT	Jan. 21, 2025	Jan. 20, 2026

5.6. Power Spectral Density

5.6.1. Test Specification

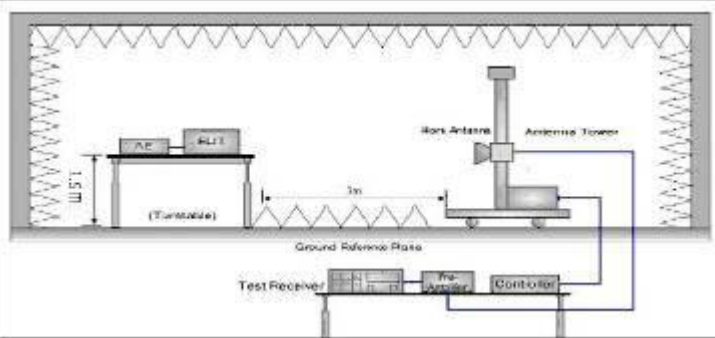
Test Requirement:	FCC Part15 E Section 15.407 (a)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section F
Limit:	≤11.00dBm/MHz for Band 1 5150MHz-5250MHz(client device) ≤11.00dBm/MHz for Band 2A&2C 5250-5350&5470-5725 ≤30.00dBm/500KHz for Band 3 5725MHz-5850MHz
Test Setup:	 Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	- Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth. - Set RBW = 510 kHz/1 MHz, VBW ≥ 3*RBW, Sweep time = Auto, Detector = RMS. - Allow the sweeps to continue until the trace stabilizes. - Use the peak marker function to determine the maximum amplitude level.
Test Result:	PASS

5.6.2. Test Instruments

Equipment	Manufacturer	Model No.	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 27, 2024	Jun. 26, 2025
Power detector box	MWRFtest	MW100-RFCB	MW210531TCT	Jan. 21, 2025	Jan. 20, 2026

5.7. Band edge

5.7.1. 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:			
	Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)
	< 5650	-27	5850~5855	27~15.6
	650~5700	-27~10	5855~5875	15.6~10
	5700~5720	10~15.6	5875~5925	10~-27
	5720~5725	15.6~27	> 5925	-27
	E[dBμV/m] = EIRP[dBm] + 95.2 @3m			
In restricted band:				
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			

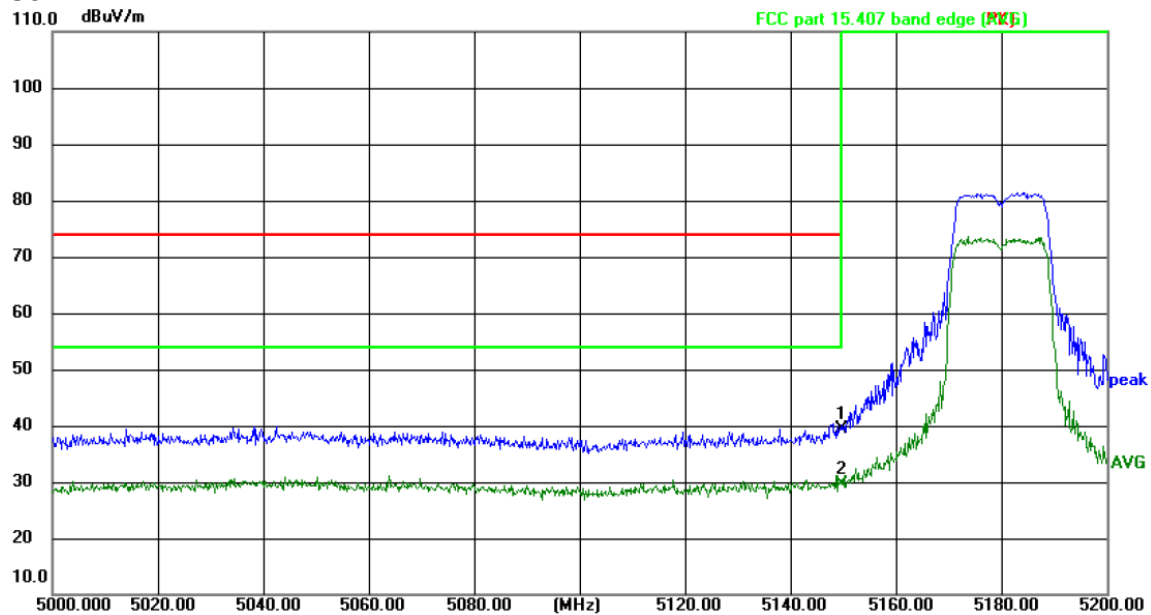
	Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, 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)					
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. 27, 2024	Jun. 26, 2025
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Jan. 21, 2025	Jan. 20, 2026
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Jan. 21, 2025	Jan. 20, 2026
Pre-amplifier	HP	8447D	2727A05017	Jun. 27, 2024	Jun. 26, 2025
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jun. 27, 2024	Jun. 26, 2025
Broadband Antenna	Schwarzbeck	VULB9163	340	Jun. 29, 2024	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jun. 29, 2024	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Jan. 23, 2025	Jan. 22, 2026
Coaxial cable	SKET	RE-03-D	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-03-M	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-03-L	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-04-D	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-04-M	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-04-L	/	Jun. 27, 2024	Jun. 26, 2025
Antenna Mast	Keleto	RE-AM	/	/	/
EMI Test Software	EZ_EMCC	FA-03A2 RE+	1.1.4.2	/	/

5.7.3. Test Data

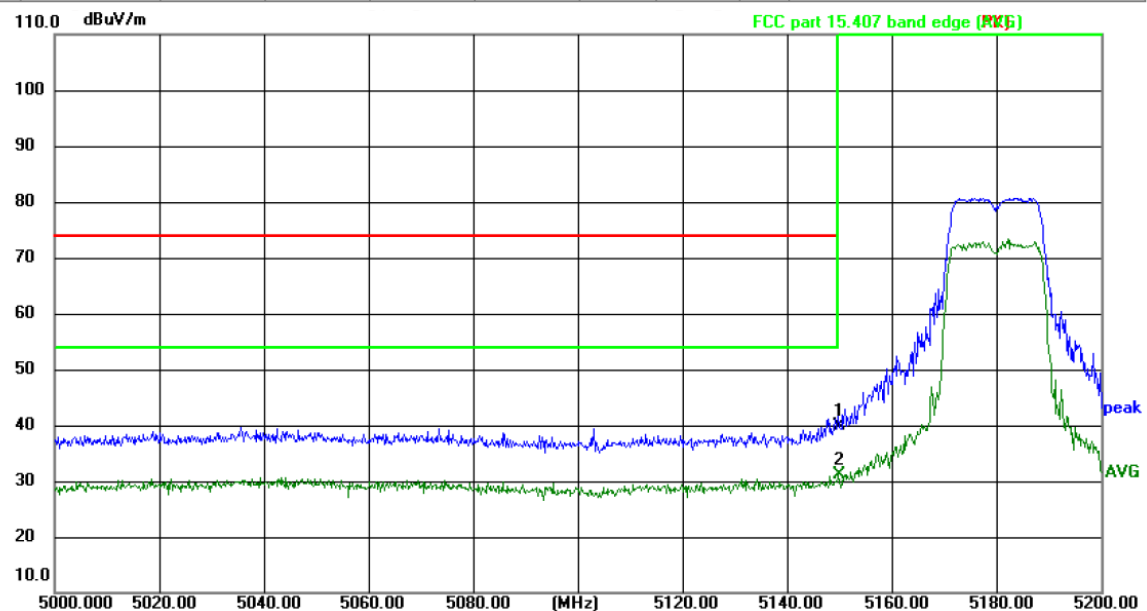
N20-5180



Site: 3m Anechoic Chamber Polarization: **Horizontal** Temperature: 24.8(°C) Humidity: 51 %

Limit: FCC part 15.407 band edge (PK) 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	5150.000	47.40	-8.07	39.33	74.00	-34.67	peak	P	
2 *	5150.000	37.73	-8.07	29.66	54.00	-24.34	AVG	P	

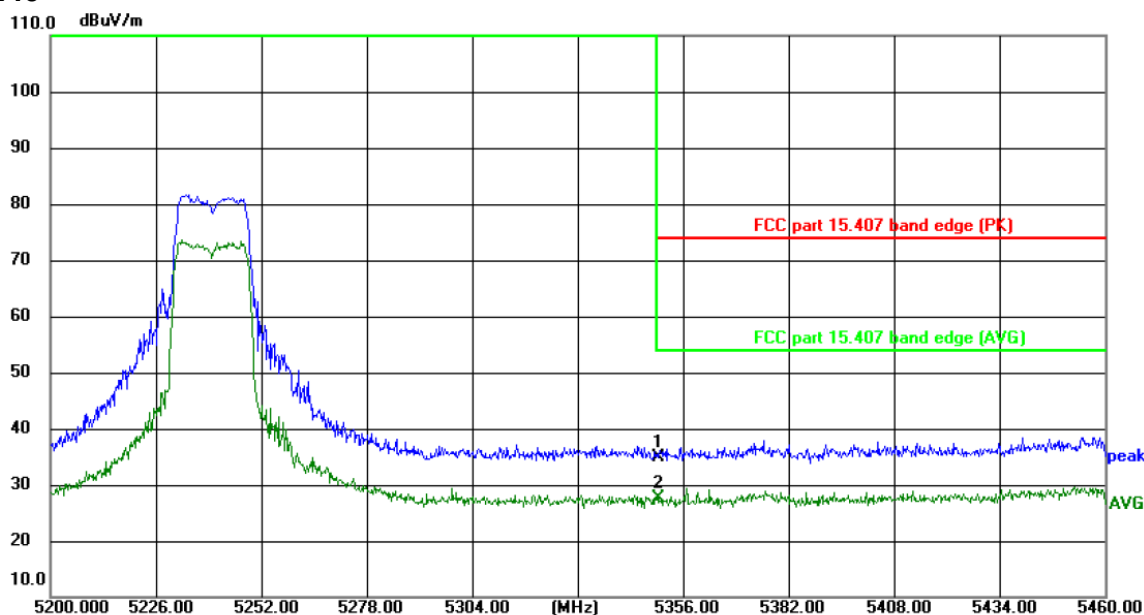


Site: 3m Anechoic Chamber Polarization: **Vertical** Temperature: 24.8(°C) Humidity: 51 %

Limit: FCC part 15.407 band edge (PK) 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	5150.000	47.93	-8.07	39.86	74.00	-34.14	peak	P	
2 *	5150.000	39.15	-8.07	31.08	54.00	-22.92	AVG	P	

N20-5240



Site: 3m Anechoic Chamber

Polarization: **Horizontal**

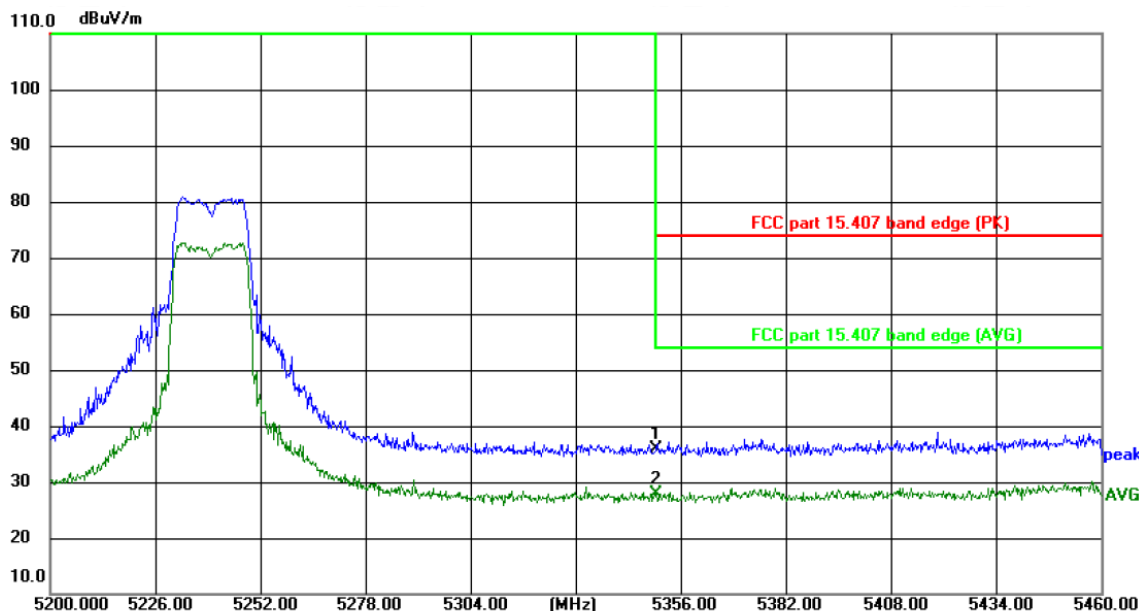
Temperature: 24.8(°C)

Humidity: 51 %

Limit: FCC part 15.407 band edge (PK)

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	5350.000	43.50	-8.67	34.83	74.00	-39.17	peak	P	
2 *	5350.000	36.18	-8.67	27.51	54.00	-26.49	AVG	P	



Site: 3m Anechoic Chamber

Polarization: **Vertical**

Temperature: 24.8(°C)

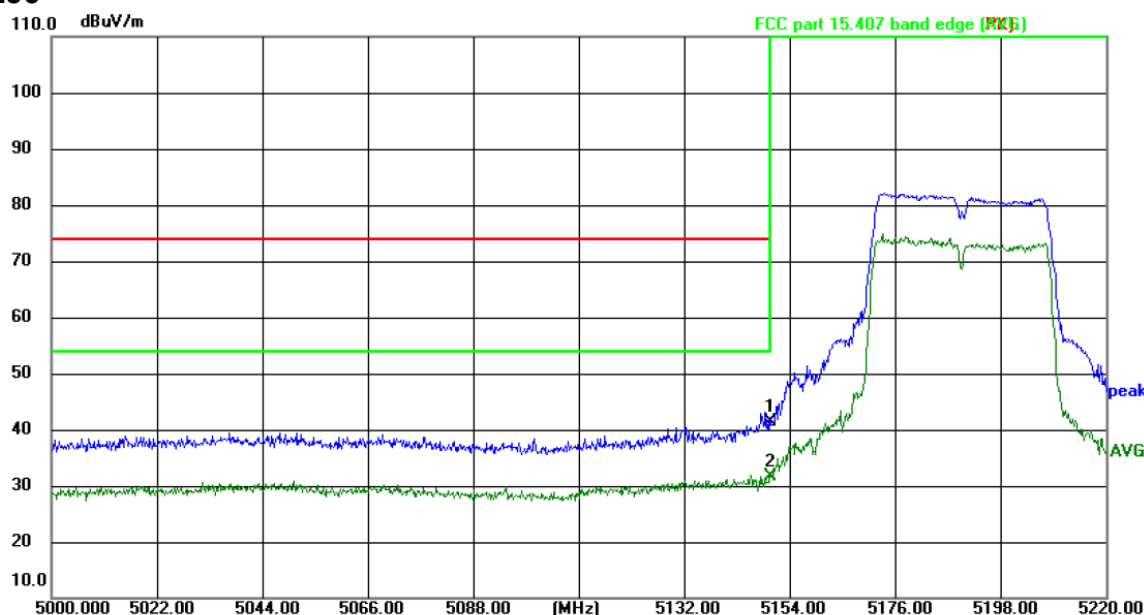
Humidity: 51 %

Limit: FCC part 15.407 band edge (PK)

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	5350.000	44.67	-8.67	36.00	74.00	-38.00	peak	P	
2 *	5350.000	36.49	-8.67	27.82	54.00	-26.18	AVG	P	

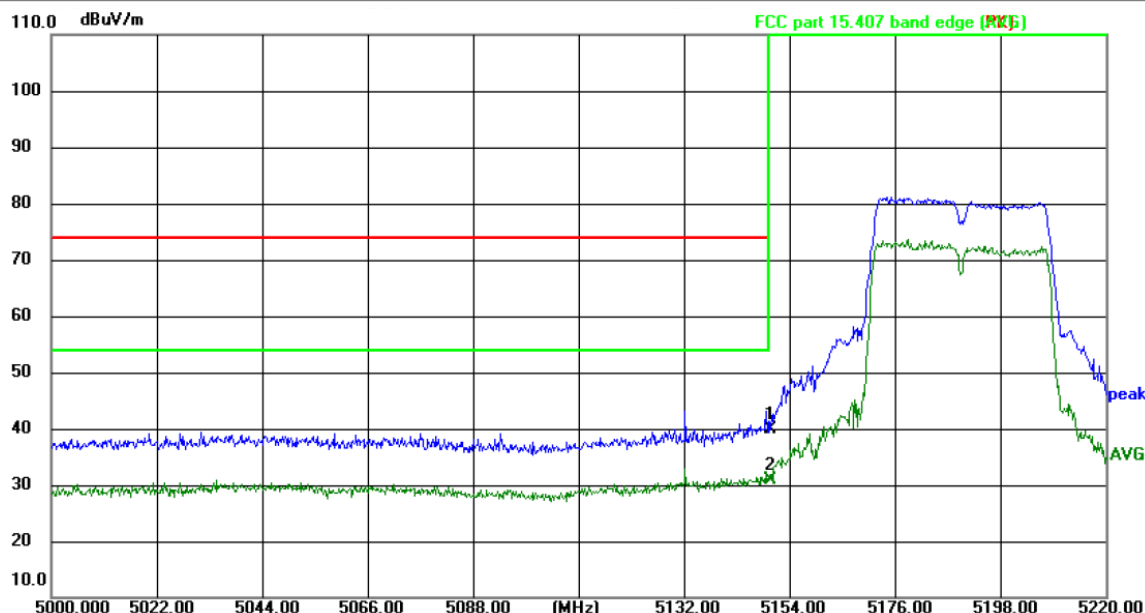
N40-5190



Site: 3m Anechoic Chamber Polarization: **Horizontal** Temperature: 24.8(°C) Humidity: 51 %

Limit: FCC part 15.407 band edge (PK) 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	5150.000	49.50	-8.07	41.43	74.00	-32.57	peak	P	
2 *	5150.000	39.75	-8.07	31.68	54.00	-22.32	AVG	P	

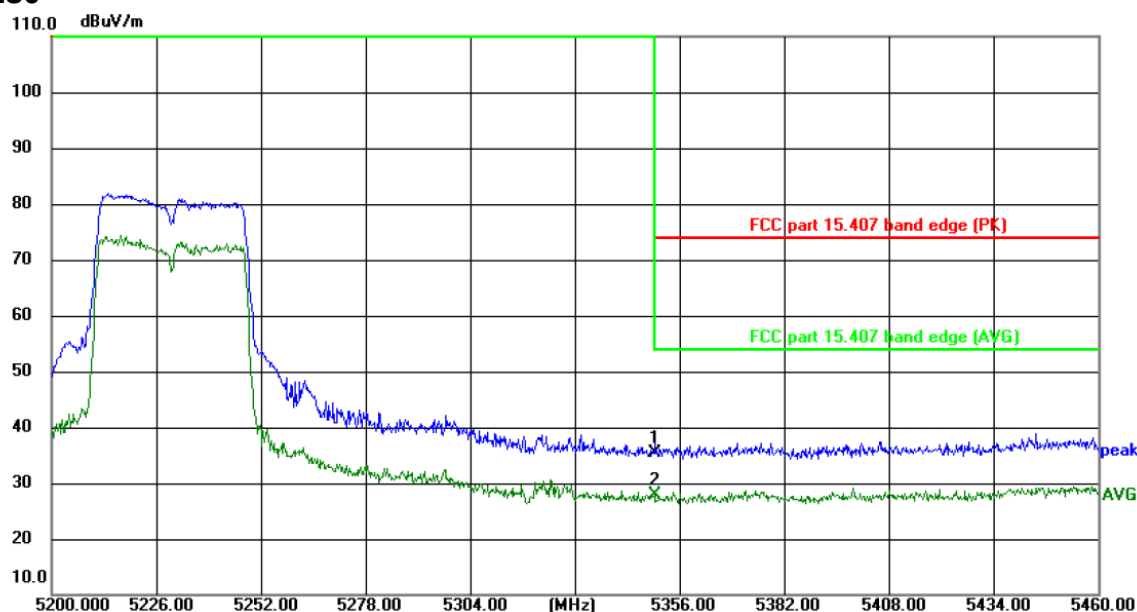


Site: 3m Anechoic Chamber Polarization: **Vertical** Temperature: 24.8(°C) Humidity: 51 %

Limit: FCC part 15.407 band edge (PK) 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	5150.000	47.88	-8.07	39.81	74.00	-34.19	peak	P	
2 *	5150.000	38.92	-8.07	30.85	54.00	-23.15	AVG	P	

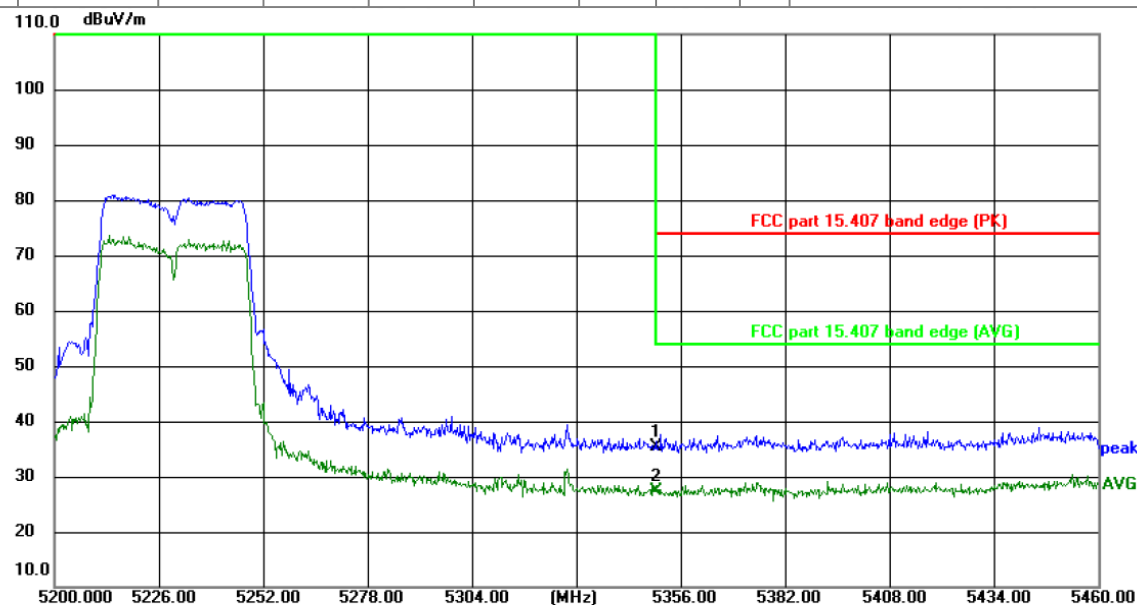
N40-5230



Site: 3m Anechoic Chamber Polarization: **Horizontal** Temperature: 24.8(°C) Humidity: 51 %

Limit: FCC part 15.407 band edge (PK) 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	5350.000	43.98	-8.67	35.31	74.00	-38.69	peak	P	
2 *	5350.000	36.59	-8.67	27.92	54.00	-26.08	AVG	P	



Site: 3m Anechoic Chamber Polarization: **Vertical** Temperature: 24.8(°C) Humidity: 51 %

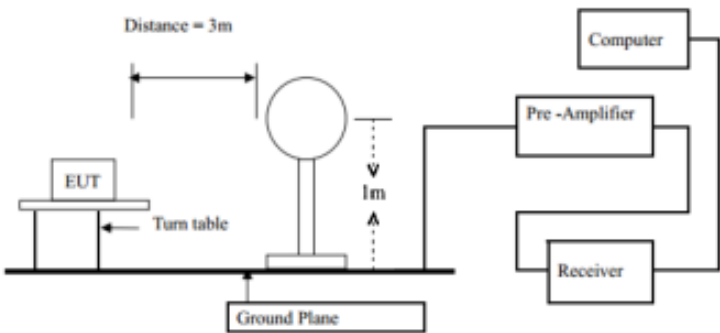
Limit: FCC part 15.407 band edge (PK) Power: AC 120 V/60 Hz

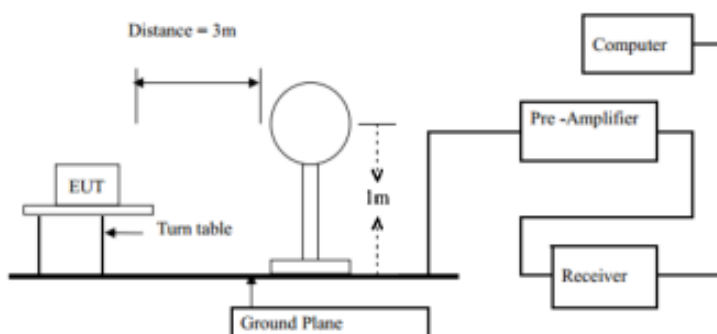
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.000	44.00	-8.67	35.33	74.00	-38.67	peak	P	
2 *	5350.000	36.03	-8.67	27.36	54.00	-26.64	AVG	P	

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

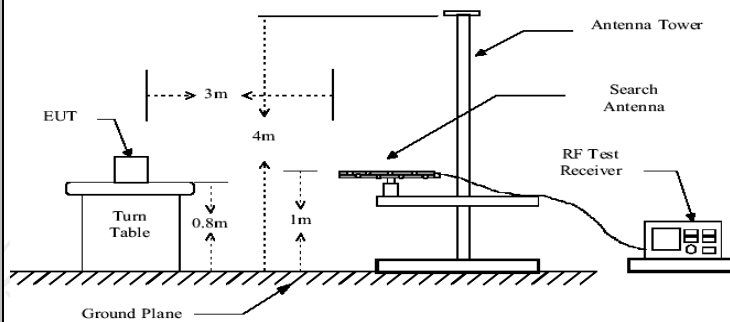
5.8. Unwanted Emissions

5.8.1. Test Specification

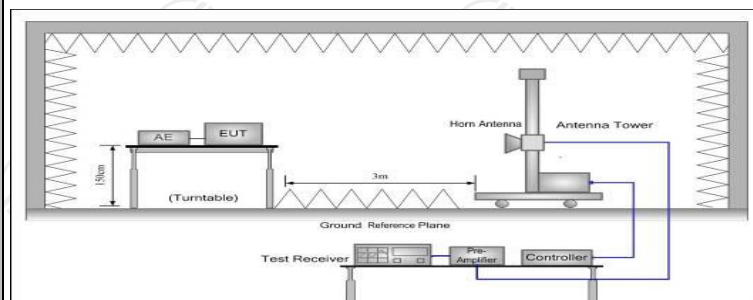
Test Requirement:	FCC CFR47 Part 15 Section 15.407 & 15.209 & 15.205				
Test Method:	KDB 789033 D02 v02r01				
Frequency Range:	9kHz to 40GHz				
Measurement Distance:	3 m				
Antenna Polarization:	Horizontal & Vertical				
Operation mode:	Transmitting mode with modulation				
Receiver Setup:	Frequency	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
	0.490-1.705		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				
					



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 rotating 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 results:

PASS

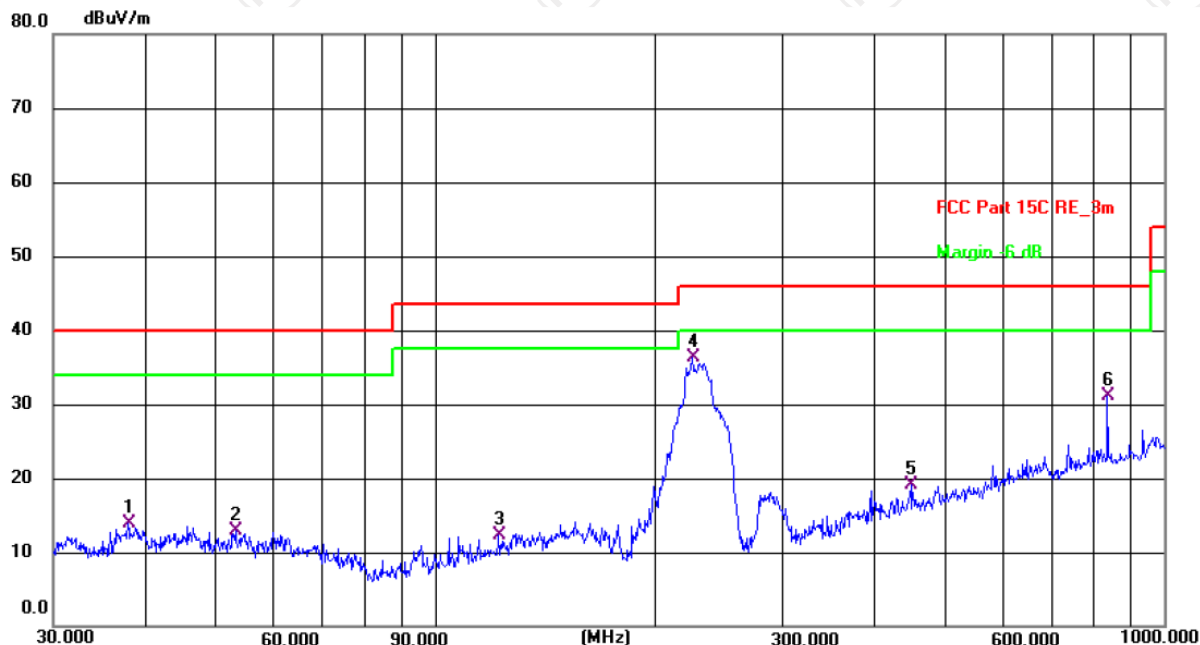
5.8.2. Test Instruments

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. 27, 2024	Jun. 26, 2025
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Jan. 21, 2025	Jan. 20, 2026
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Jan. 21, 2025	Jan. 20, 2026
Pre-amplifier	HP	8447D	2727A05017	Jun. 27, 2024	Jun. 26, 2025
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jun. 27, 2024	Jun. 26, 2025
Broadband Antenna	Schwarzbeck	VULB9163	340	Jun. 29, 2024	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jun. 29, 2024	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Jan. 23, 2025	Jan. 22, 2026
Coaxial cable	SKET	RE-03-D	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-03-M	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-03-L	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-04-D	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-04-M	/	Jun. 27, 2024	Jun. 26, 2025
Coaxial cable	SKET	RE-04-L	/	Jun. 27, 2024	Jun. 26, 2025
Antenna Mast	Keleto	RE-AM	/	/	/
EMI Test Software	EZ_EMCC	FA-03A2 RE+	1.1.4.2	/	/

5.8.3. Test Data

Please refer to following diagram for individual
Below 1GHz

Horizontal:



Site 3m Anechoic Chamber2

Polarization: **Horizontal**

Temperature: 24.3(C)

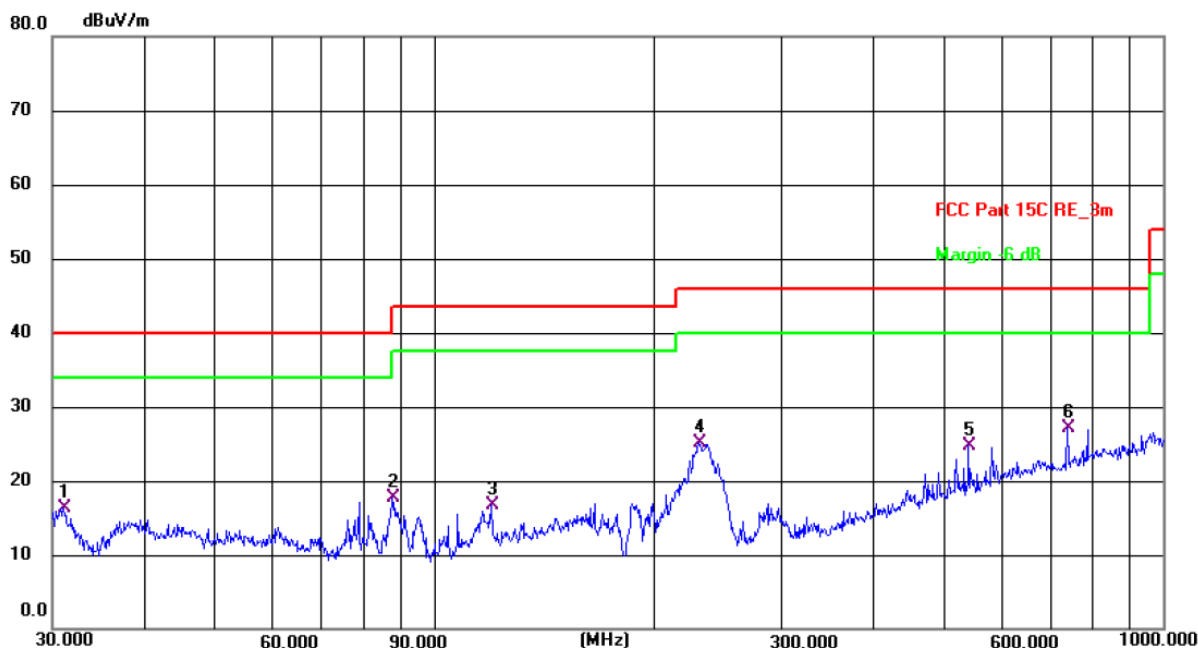
Humidity: 52 %

Limit: FCC Part 15C 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	37.9450	32.75	-18.80	13.95	40.00	-26.05	QP	P	
2	53.3179	31.83	-18.91	12.92	40.00	-27.08	QP	P	
3	122.4040	31.44	-19.17	12.27	43.50	-31.23	QP	P	
4 *	225.3080	56.81	-20.52	36.29	46.00	-9.71	QP	P	
5	449.5558	32.74	-13.54	19.20	46.00	-26.80	QP	P	
6	836.2443	37.70	-6.54	31.16	46.00	-14.84	QP	P	

Vertical:



Site 3m Anechoic Chamber2

Polarization: **Vertical**

Temperature: 24.3(C) Humidity: 52 %

Limit: FCC Part 15C 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	31.0706	35.88	-19.59	16.29	40.00	-23.71	QP	P	
2	87.7248	40.02	-22.30	17.72	40.00	-22.28	QP	P	
3	119.8556	36.09	-19.43	16.66	43.50	-26.84	QP	P	
4	230.9068	45.44	-20.29	25.15	46.00	-20.85	QP	P	
5	541.3724	36.40	-11.64	24.76	46.00	-21.24	QP	P	
6 *	739.6604	35.07	-7.95	27.12	46.00	-18.88	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))) and the worst case Mode (Lowest 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 (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	38.42	---	1.78	40.2	---	68.2	---	-28
15540	H	39.91	---	5.21	45.12	---	74	54	-8.88
---	H	---	---	---	---	---	---	---	---
10360	V	38.59	---	1.78	40.37	---	68.2	---	-27.83
15540	V	40.67	---	5.21	45.88	---	74	54	-8.12
---	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	39.88	---	1.83	41.71	---	68.2	---	-26.49
15600	H	40.16	---	5.23	45.39	---	74	54	-8.61
---	H	---	---	---	---	---	---	---	---
10400	V	40.42	---	1.83	42.25	---	68.2	---	-25.95
15600	V	41.05	---	5.23	46.28	---	74	54	-7.72
---	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	38.14	---	1.85	39.99	---	68.2	---	-28.21
15720	H	39.78	---	5.25	45.03	---	74	54	-8.97
---	H	---	---	---	---	---	---	---	---
10480	V	38.54	---	1.85	40.39	---	68.2	---	-27.81
15720	V	40.63	---	5.25	45.88	---	74	54	-8.12
---	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	41.73	---	1.78	43.51	---	68.2	---	-24.69
15540	H	40.88	---	5.21	46.09	---	74	54	-7.91
---	H	---	---	---	---	---	---	---	---
10360	V	42.05	---	1.78	43.83	---	68.2	---	-24.37
15540	V	41.42	---	5.21	46.63	---	74	54	-7.37
---	V	---	---	---	---	---	---	---	---

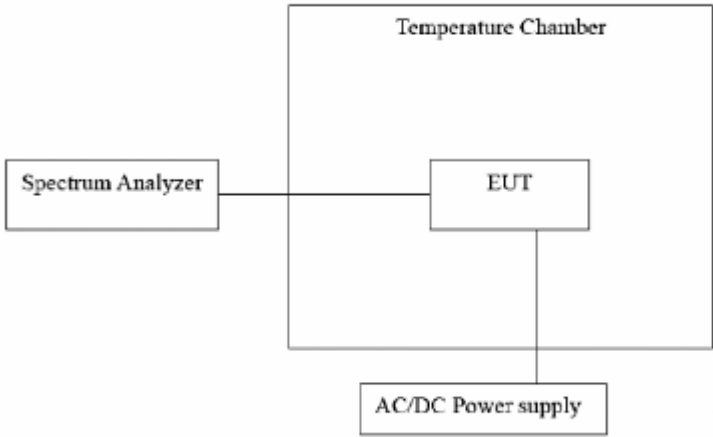
11n(HT20) CH40: 5200MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10400	H	40.72	---	1.83	42.55	---	68.2	---	-25.65
15600	H	41.18	---	5.23	46.41	---	74	54	-7.59
---	H	---	---	---	---	---	---	---	---
10400	V	40.21	---	1.83	42.04	---	68.2	---	-26.16
15600	V	39.94	---	5.23	45.17	---	74	54	-8.83
---	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	41.63	---	1.85	43.48	---	68.2	---	-24.72
15720	H	41.54	---	5.25	46.79	---	74	54	-7.21
---	H	---	---	---	---	---	---	---	---
10480	V	40.27	---	1.85	42.12	---	68.2	---	-26.08
15720	V	40.04	---	5.25	45.29	---	74	54	-8.71
---	V	---	---	---	---	---	---	---	---
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	42.81	---	1.80	44.61	---	68.2	---	-23.59
15570	H	41.72	---	5.22	46.94	---	74	54	-7.06
---	H	---	---	---	---	---	---	---	---
10380	V	41.03	---	1.80	42.83	---	68.2	---	-25.37
15570	V	39.27	---	5.22	44.49	---	74	54	-9.51
---	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	41.71	---	1.85	43.56	---	68.2	---	-24.64
15690	H	39.06	---	5.08	44.14	---	74	54	-9.86
---	H	---	---	---	---	---	---	---	---
10460	V	41.44	---	1.85	43.29	---	68.2	---	-24.91
15690	V	40.41	---	5.08	45.49	---	74	54	-8.51
---	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: 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), the worst case (11n) was found and test data was shown in this report.

5.9.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Date of Cal.	Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 27, 2024	Jun. 26, 2025
DC power supply	Kingrang	KR3005K	/	Jun. 27, 2024	Jun. 26, 2025
Programable tempratuce and humidity chamber	JQ	JQ-2000	510101234	Jun. 27, 2024	Jun. 26, 2025

Test plots as follows:

Test mode:		802.11n(HT20)	Frequency(MHz):	5180
Temperature (°C)	Voltage(V _{AC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120V	5179.98	-20000	PASS
35		5180	0	PASS
25		5180	0	PASS
15		5179.98	-20000	PASS
5		5180	0	PASS
0		5180	0	PASS
25	102V	5180	0	PASS
	120V	5180	0	PASS
	138V	5180	0	PASS

Test mode:		802.11n(HT20)	Frequency(MHz):	5240
Temperature (°C)	Voltage(V _{AC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120V	5240	0	PASS
35		5240.02	20000	PASS
25		5239.98	-20000	PASS
15		5240	0	PASS
5		5240.02	20000	PASS
0		5240.02	20000	PASS
25	102V	5240.02	20000	PASS
	120V	5240.02	20000	PASS
	138V	5240	0	PASS

Test mode:		802.11n(HT40)	Frequency(MHz):	5190
Temperature (°C)	Voltage(V _{AC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120V	5190	0	PASS
35		5190	0	PASS
25		5190	0	PASS
15		5190	0	PASS
5		5189.96	-40000	PASS
0		5189.96	-40000	PASS
25	102V	5190	0	PASS
	120V	5190	0	PASS
	138V	5190	0	PASS

Test mode:		802.11n(HT40)	Frequency(MHz):	5230
Temperature (°C)	Voltage(V _{AC})	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120V	5230	0	PASS
35		5230	0	PASS
25		5229.96	-40000	PASS
15		5230	0	PASS
5		5230	0	PASS
0		5230	0	PASS
25	102V	5230	0	PASS
	120V	5230	0	PASS
	138V	5230	0	PASS

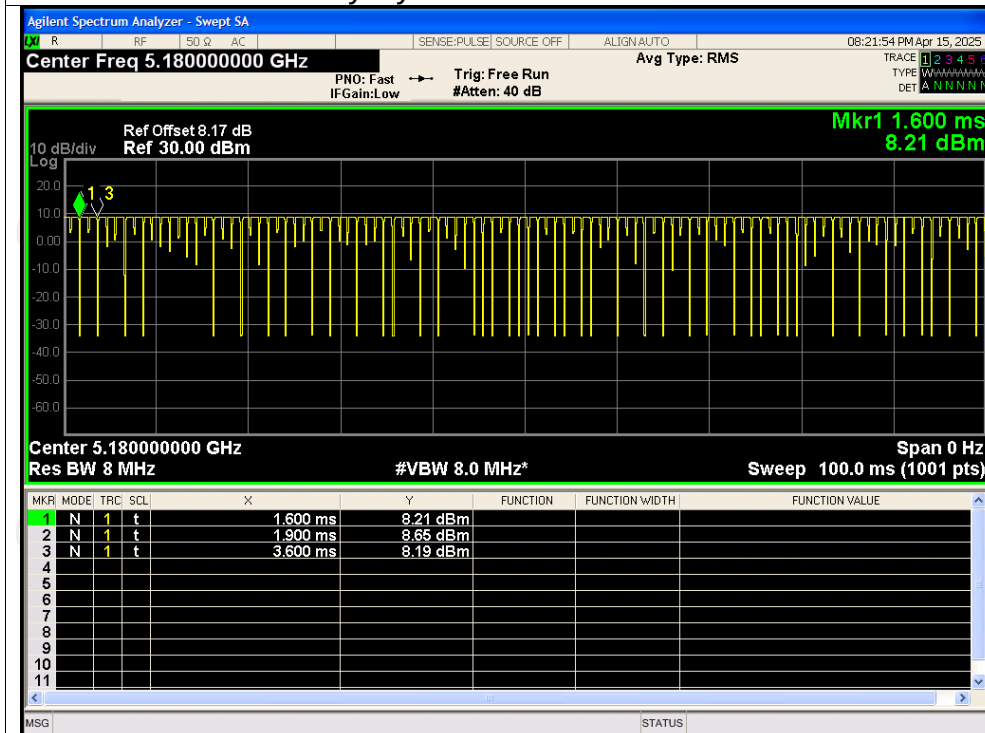
Appendix A: Test Result of Conducted Test

Duty Cycle

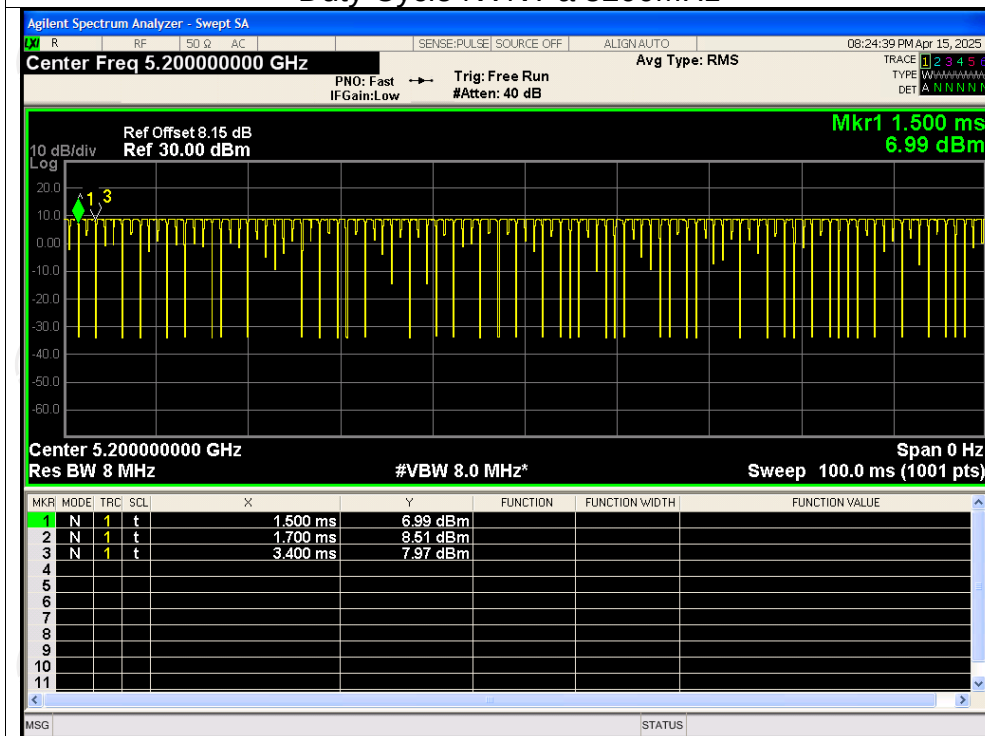
Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	95.10	0.22
NVNT	a	5200	95.20	0.21
NVNT	a	5240	94.91	0.23
NVNT	n20	5180	95.90	0.18
NVNT	n20	5200	95.50	0.2
NVNT	n20	5240	95.80	0.19
NVNT	n40	5190	92.21	0.35
NVNT	n40	5230	91.21	0.40

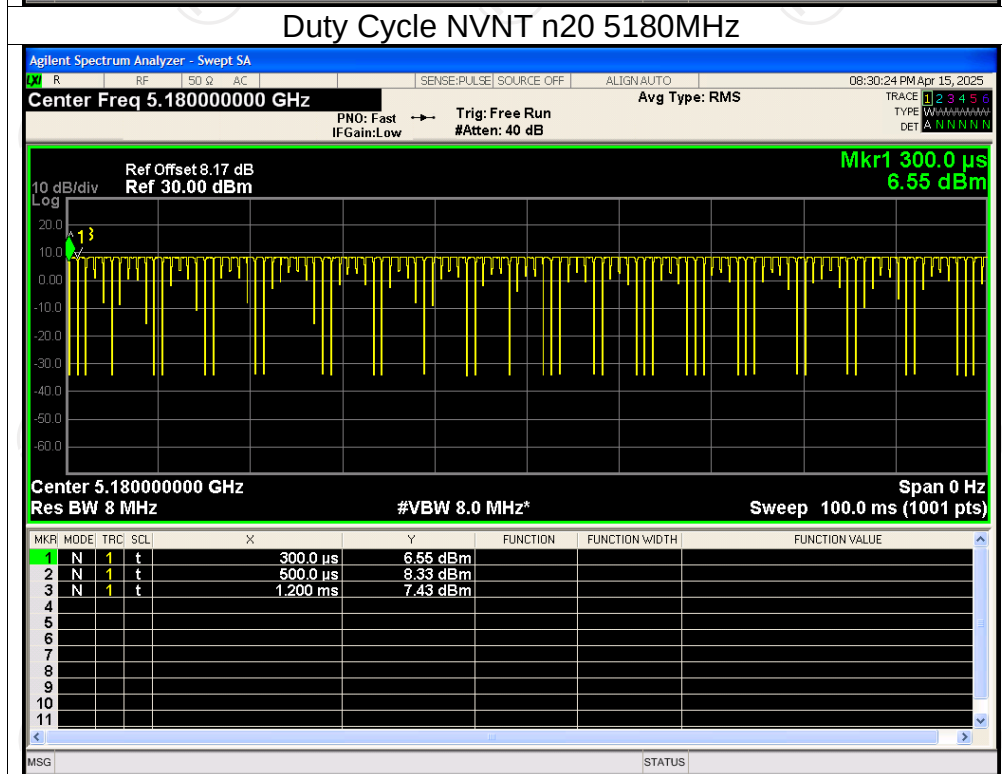
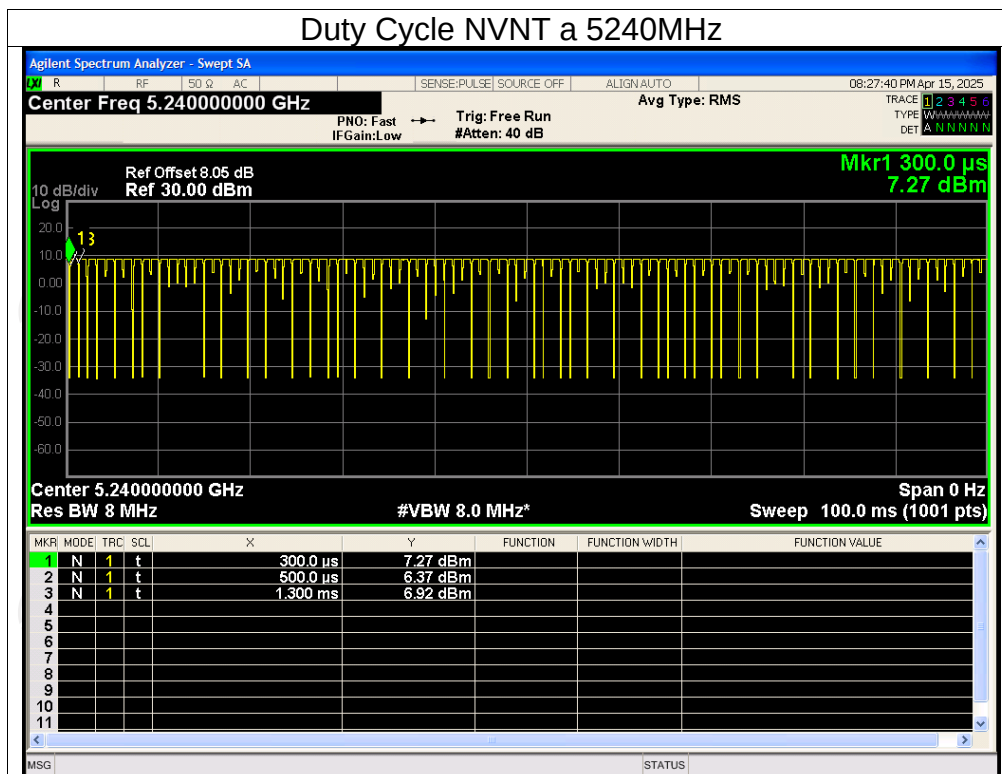
Test Graphs

Duty Cycle NVNT a 5180MHz

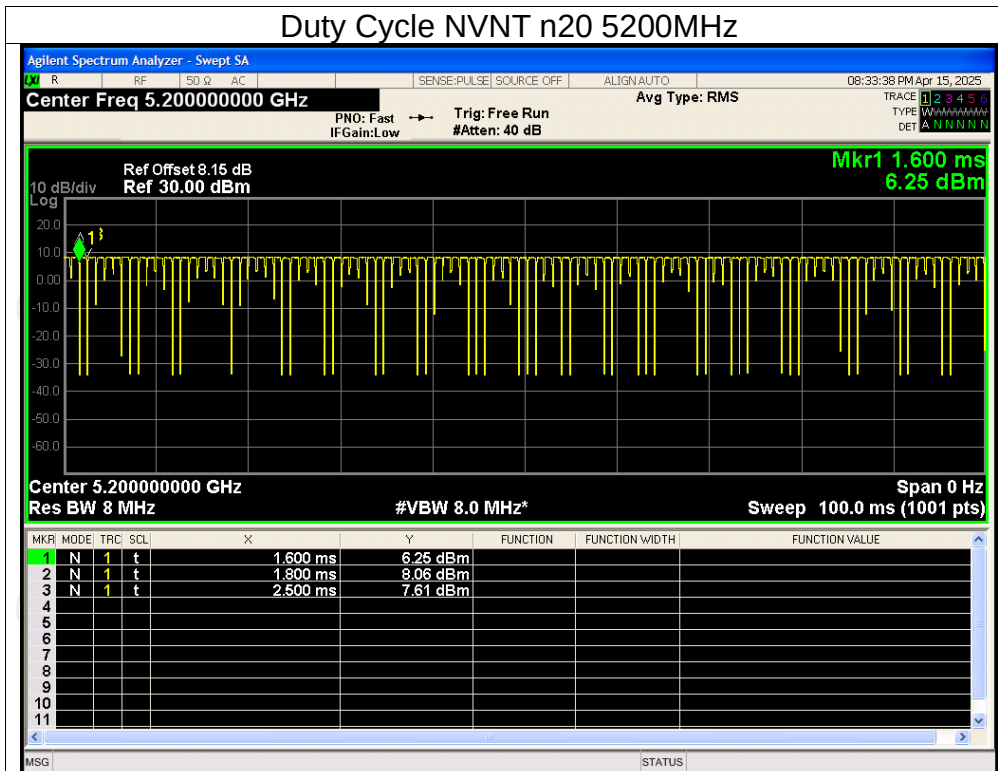


Duty Cycle NVNT a 5200MHz

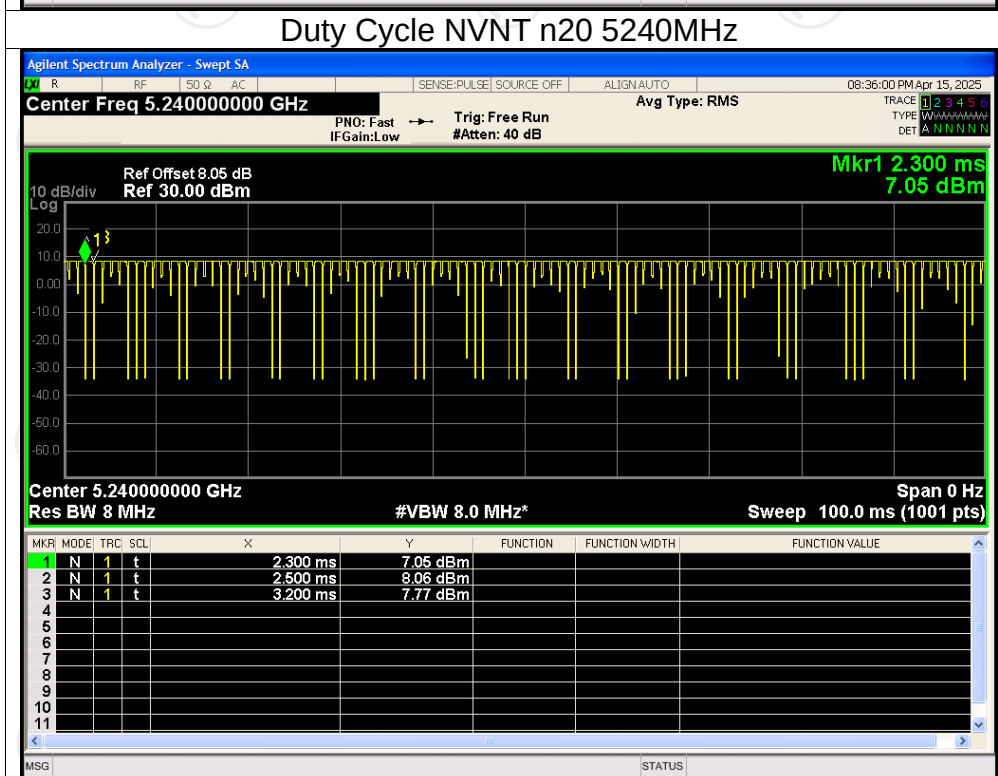




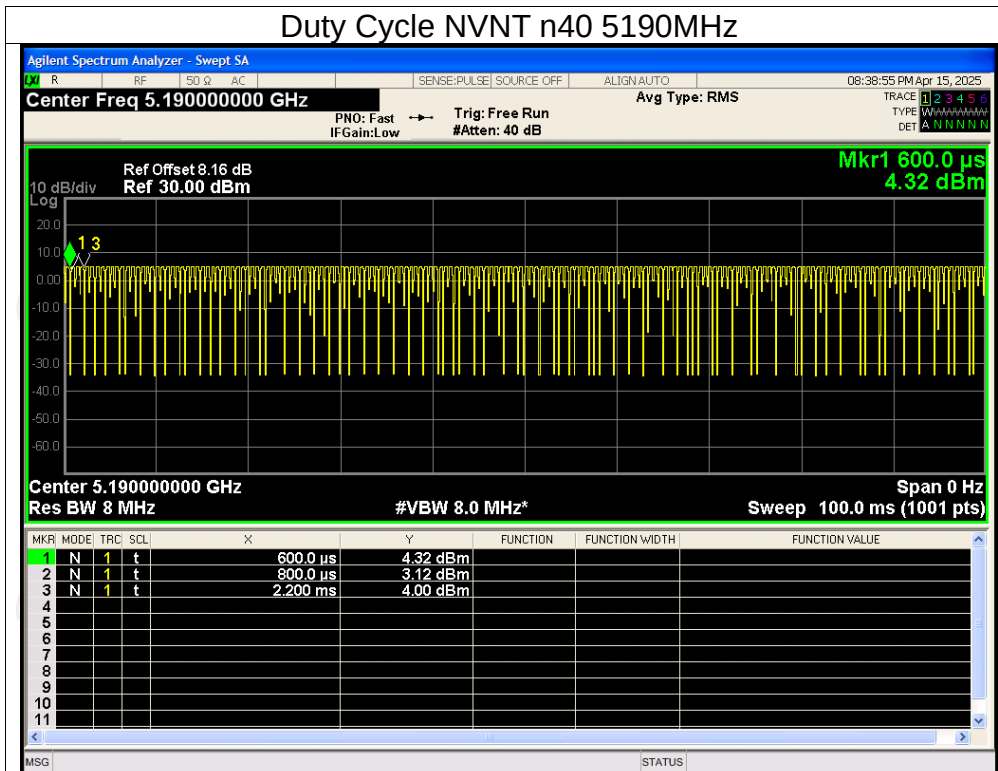
Duty Cycle NVNT n20 5200MHz



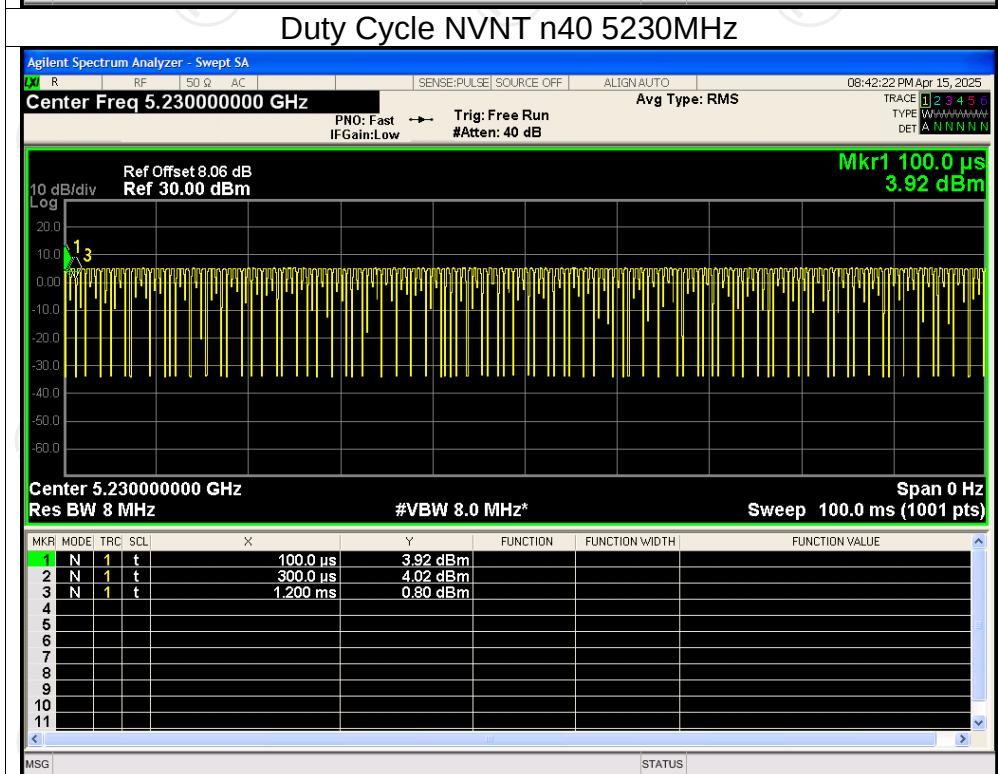
Duty Cycle NVNT n20 5240MHz



Duty Cycle NVNT n40 5190MHz



Duty Cycle NVNT n40 5230MHz

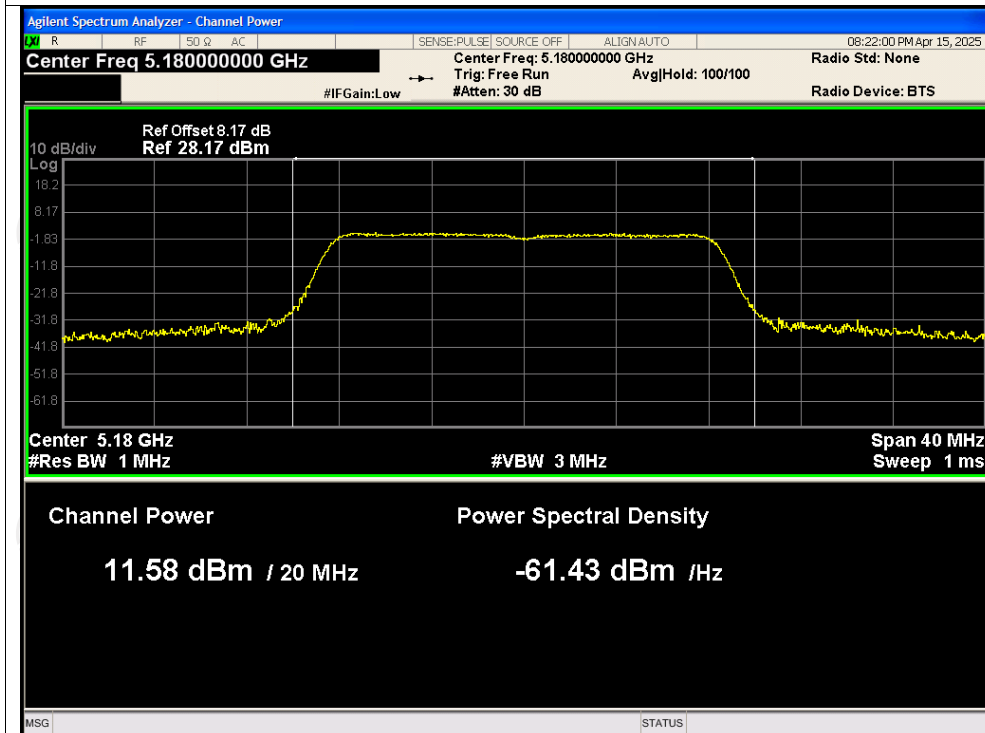


Maximum Conducted Output Power

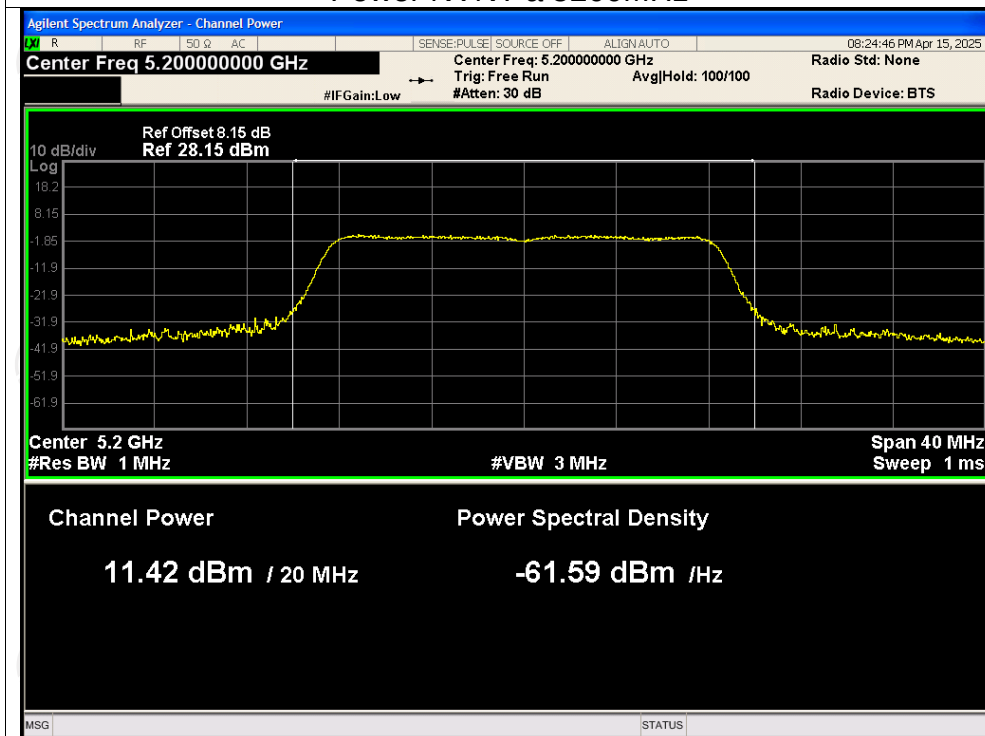
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	11.58	0.22	11.80	24	Pass
NVNT	a	5200	11.42	0.21	11.63	24	Pass
NVNT	a	5240	11.44	0.23	11.67	24	Pass
NVNT	n20	5180	11.36	0.18	11.54	24	Pass
NVNT	n20	5200	11.15	0.20	11.35	24	Pass
NVNT	n20	5240	11.43	0.19	11.62	24	Pass
NVNT	n40	5190	11.22	0.35	11.57	24	Pass
NVNT	n40	5230	11.22	0.40	11.62	24	Pass

Test Graphs

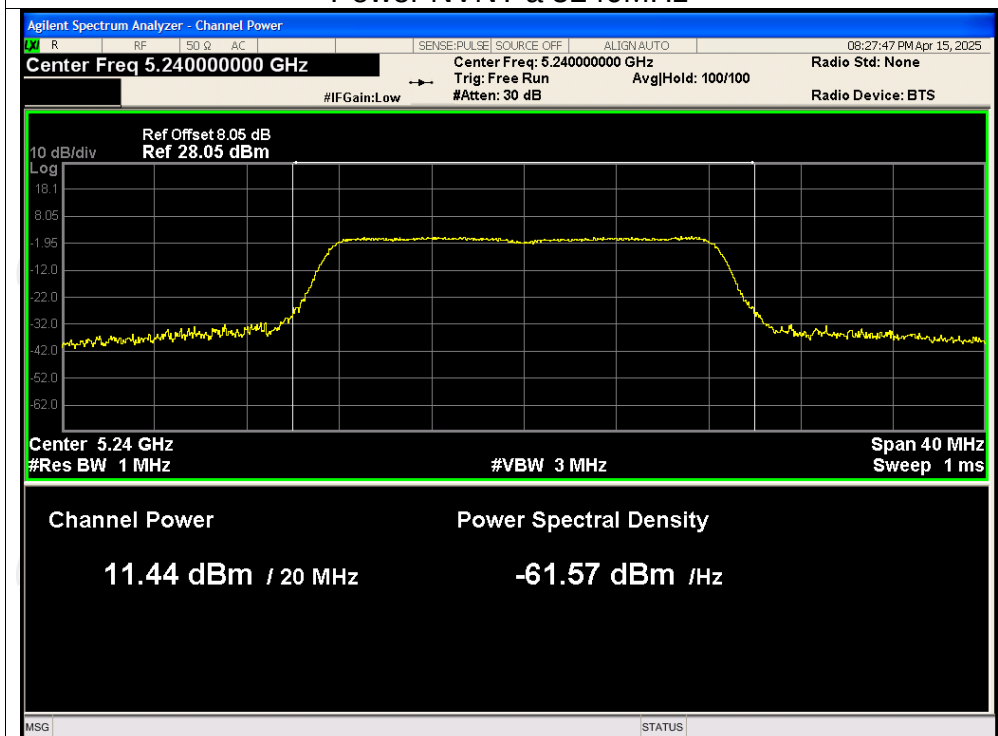
Power NVNT a 5180MHz



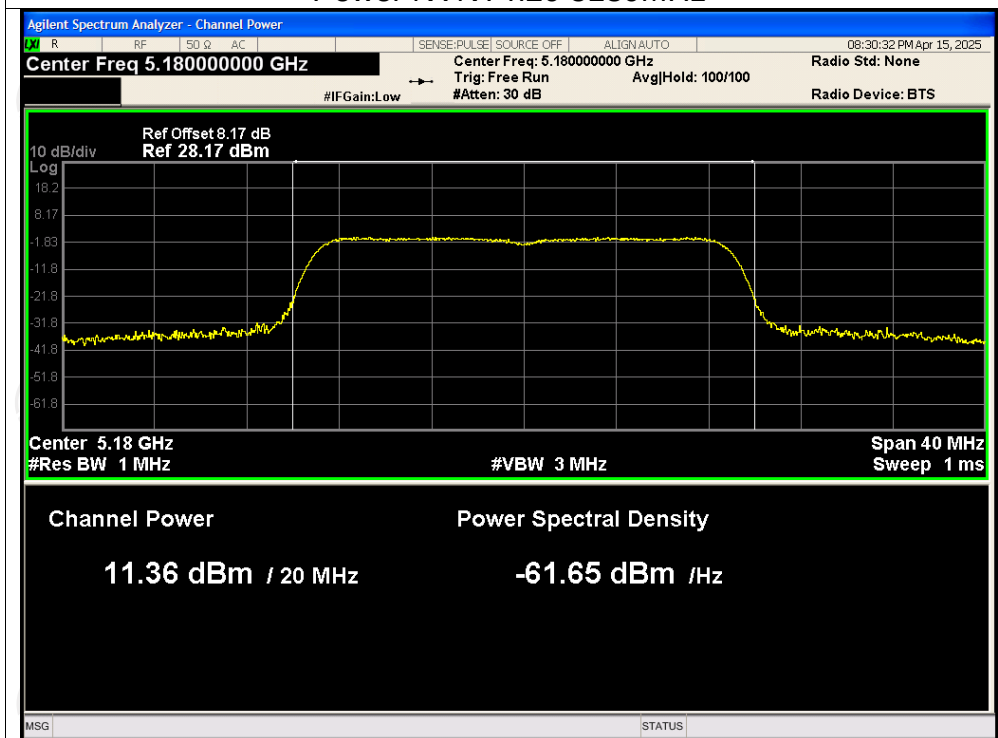
Power NVNT a 5200MHz



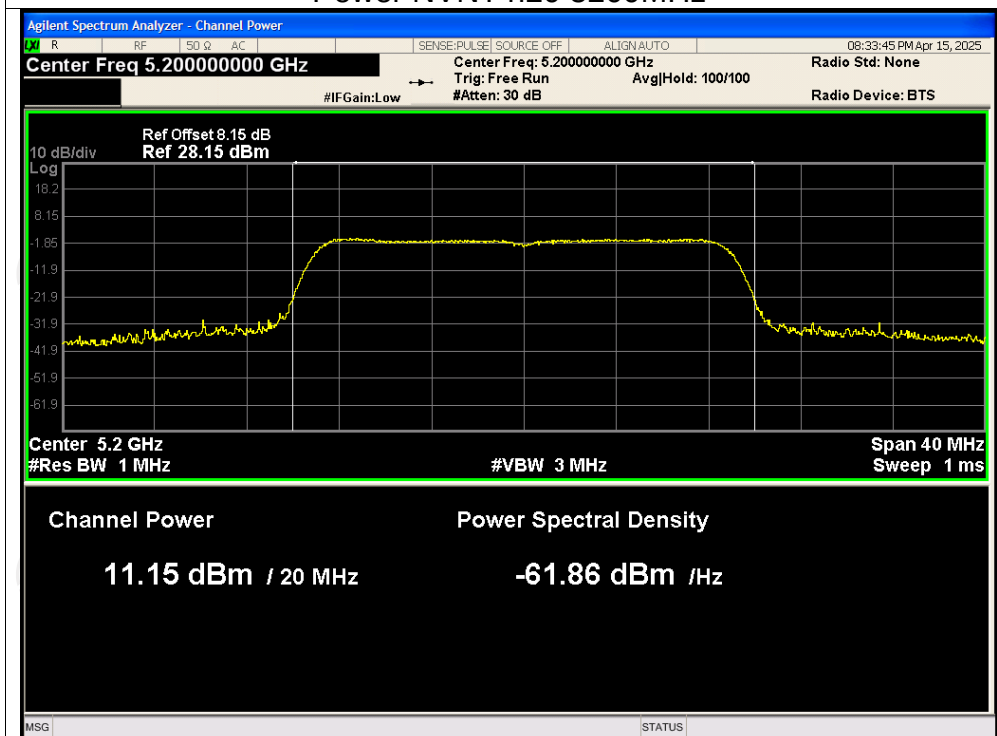
Power NVNT a 5240MHz



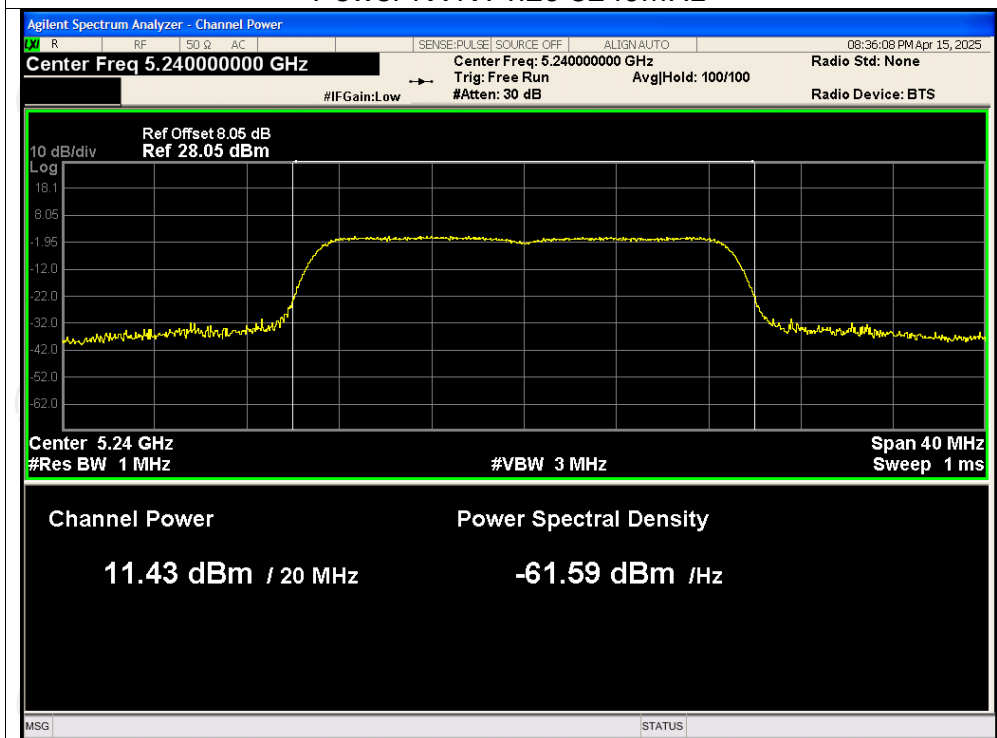
Power NVNT n20 5180MHz



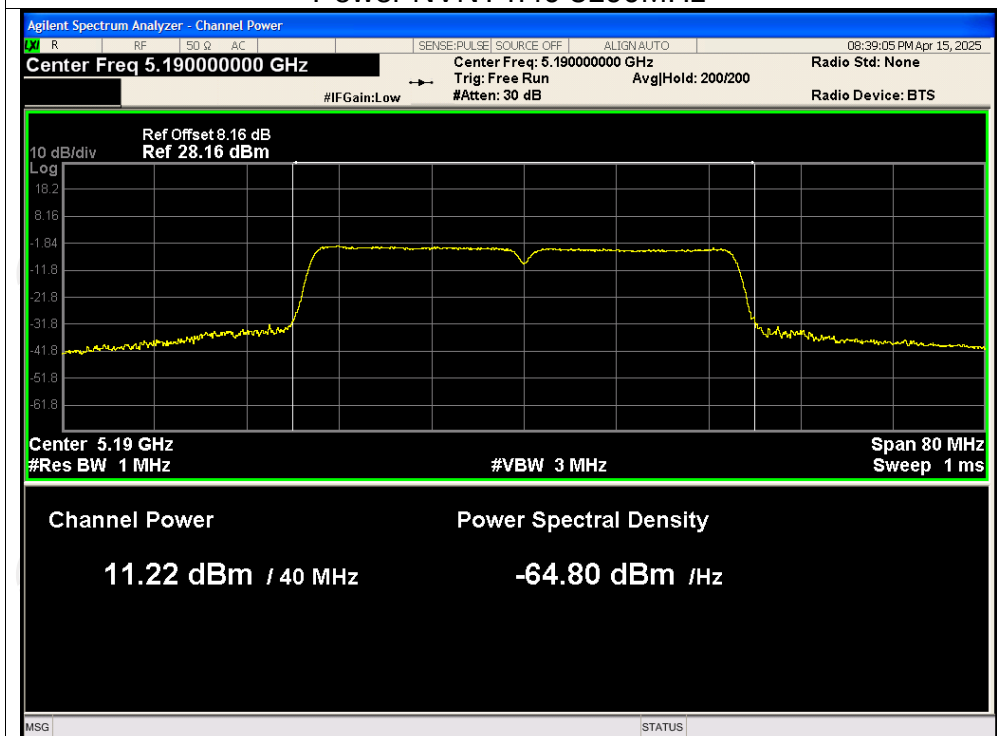
Power NVNT n20 5200MHz



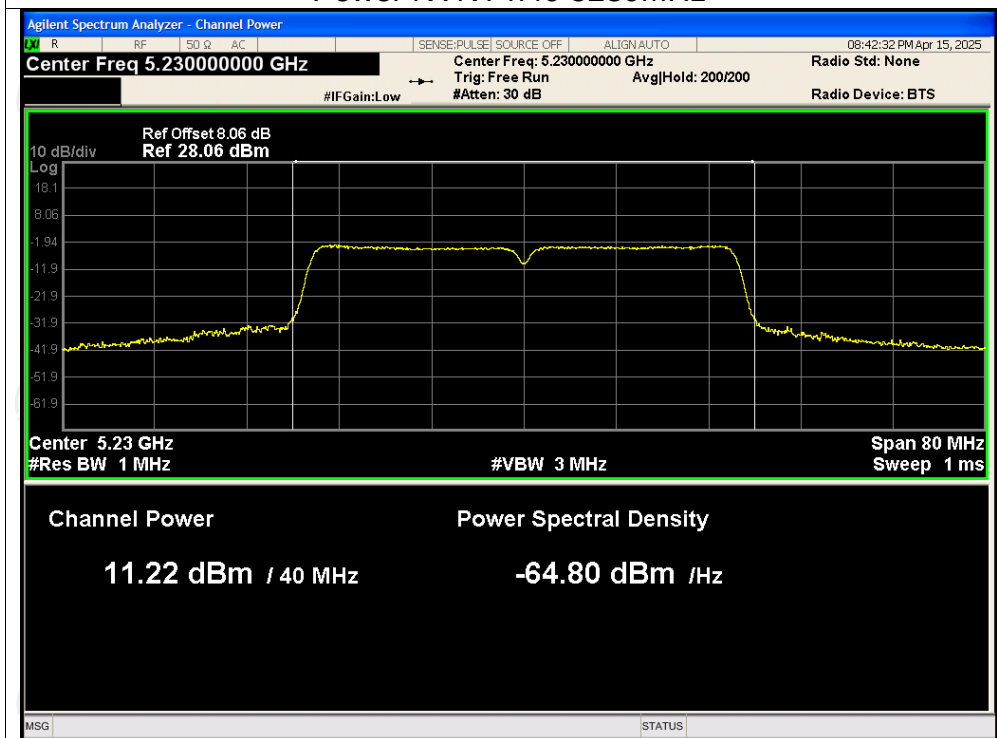
Power NVNT n20 5240MHz



Power NVNT n40 5190MHz



Power NVNT n40 5230MHz

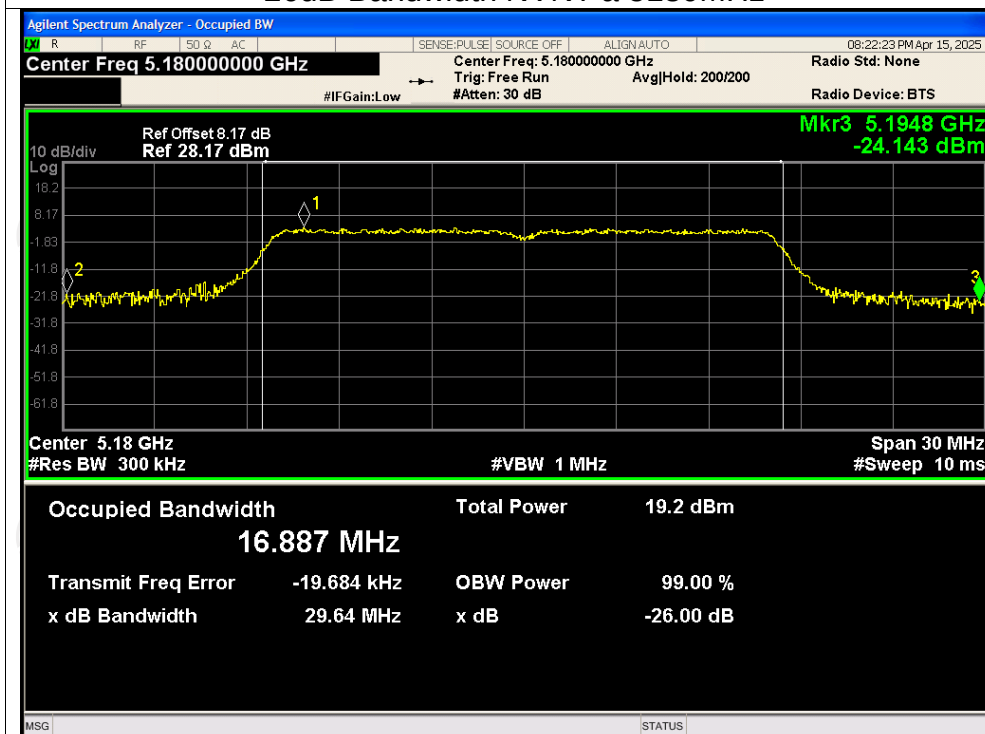


-26dB Bandwidth

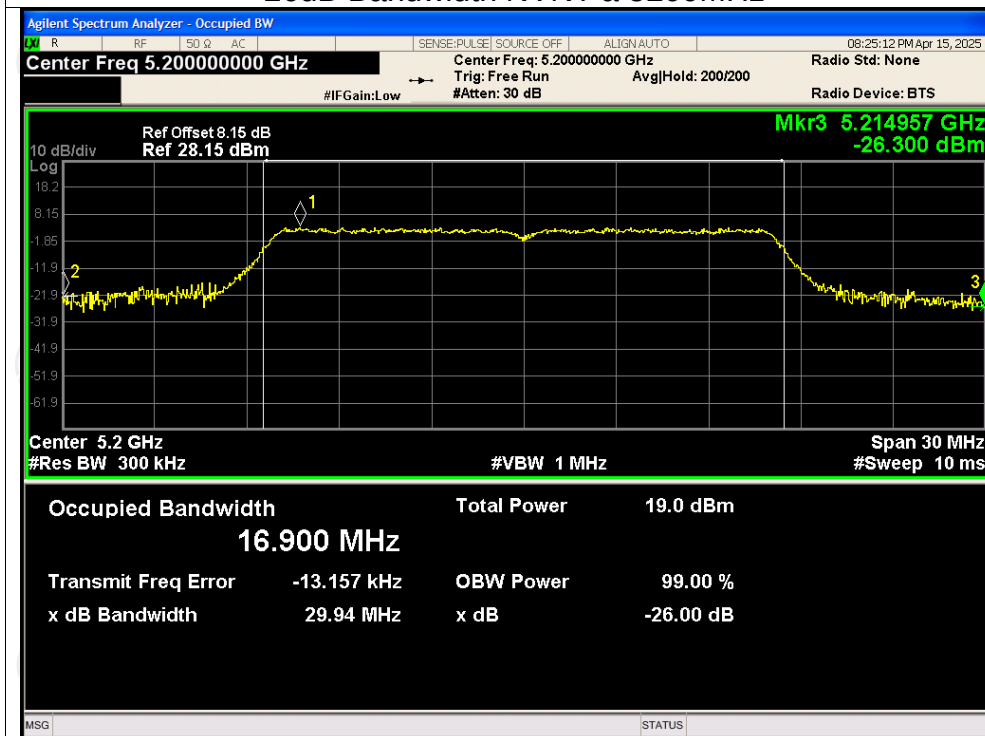
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	29.64	Pass
NVNT	a	5200	29.94	Pass
NVNT	a	5240	28.40	Pass
NVNT	n20	5180	29.72	Pass
NVNT	n20	5200	29.84	Pass
NVNT	n20	5240	29.58	Pass
NVNT	n40	5190	56.73	Pass
NVNT	n40	5230	57.21	Pass

Test Graphs

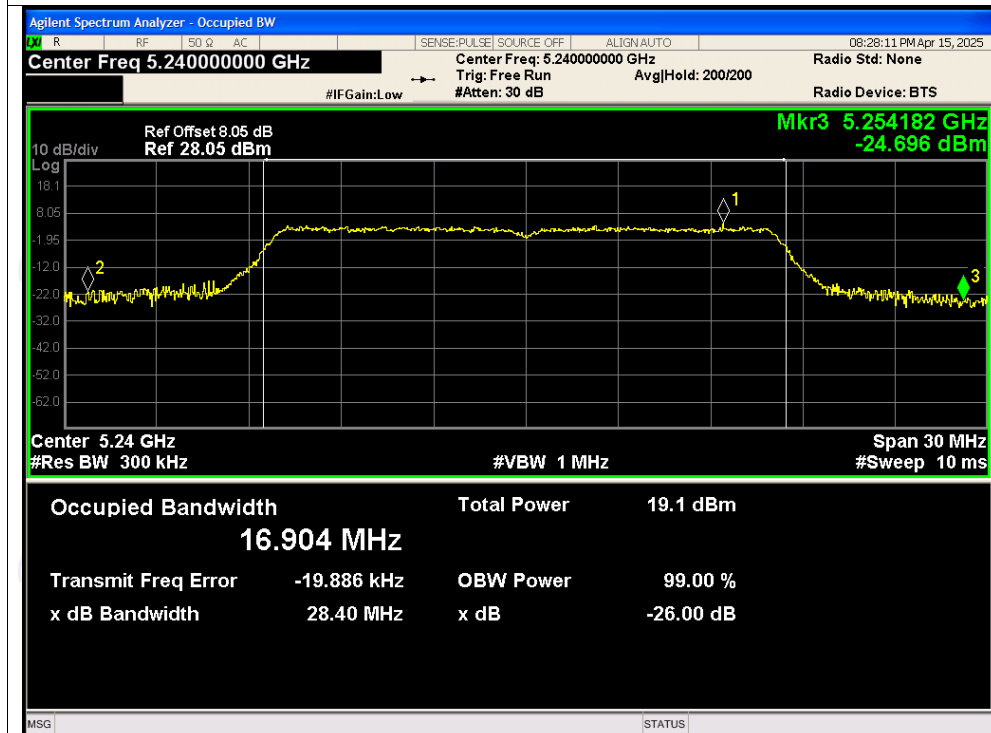
-26dB Bandwidth NVNT a 5180MHz



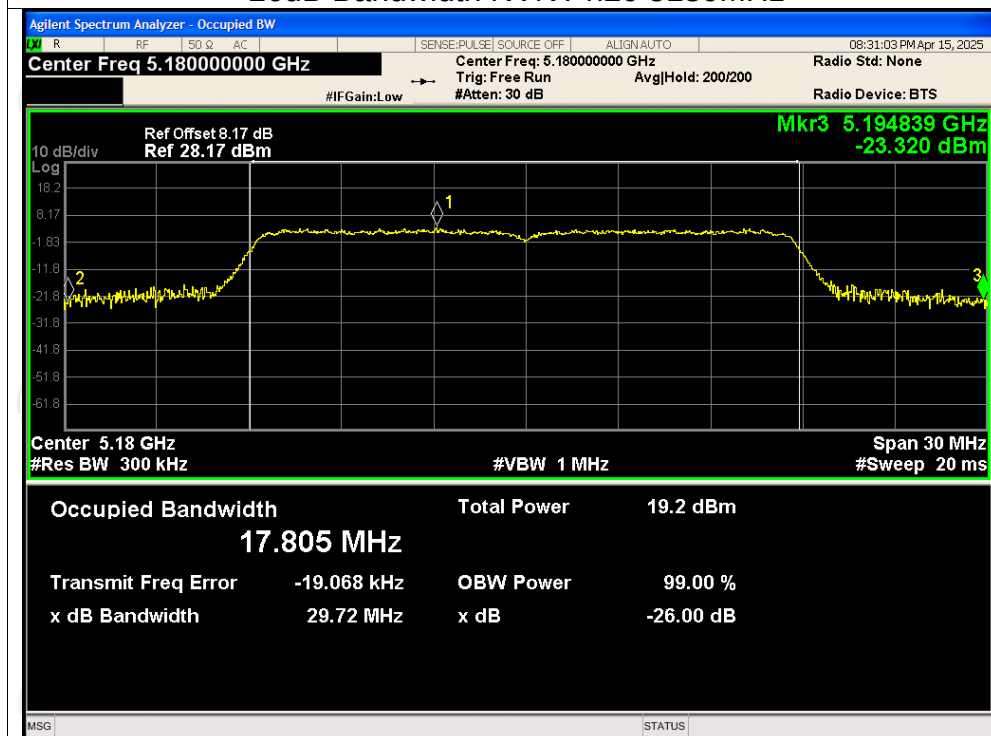
-26dB Bandwidth NVNT a 5200MHz



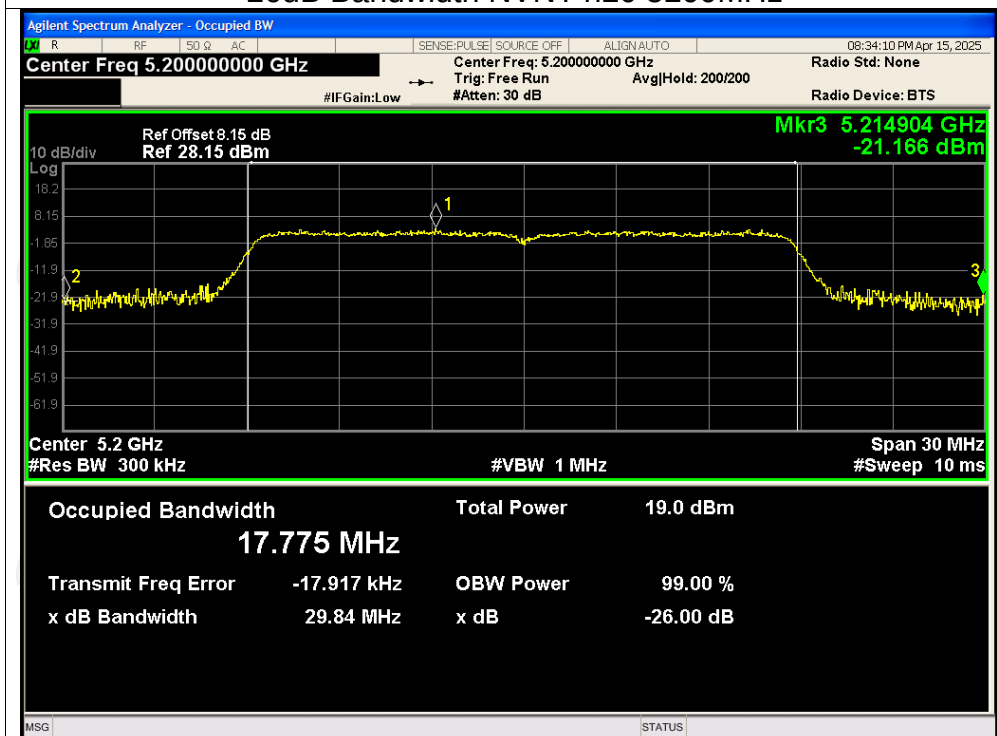
-26dB Bandwidth NVNT a 5240MHz



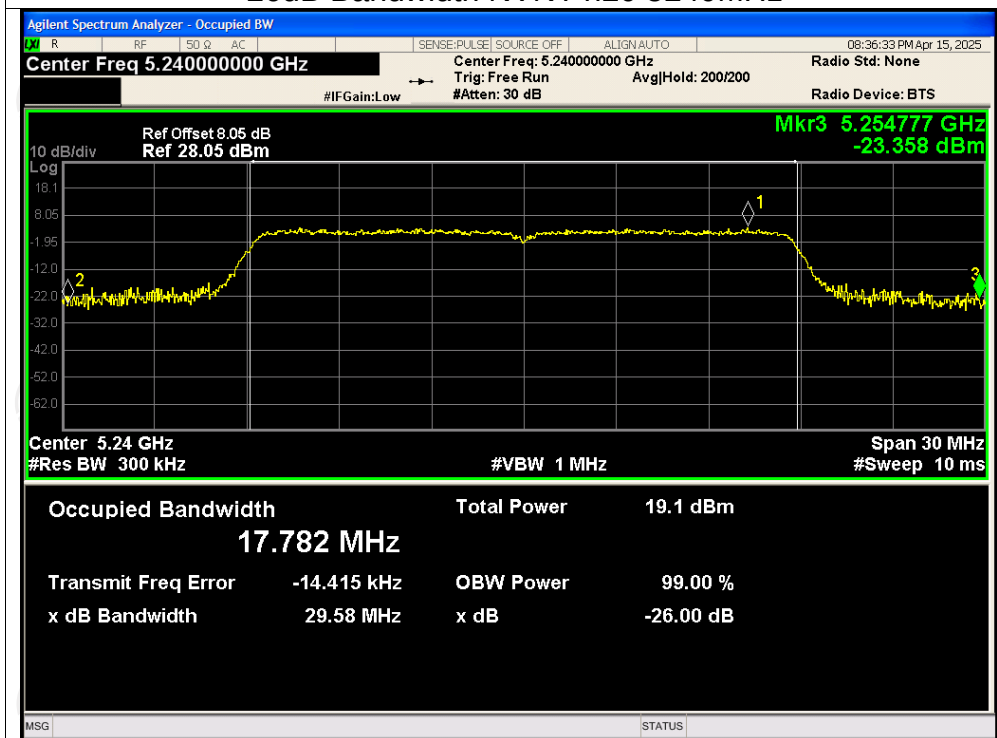
-26dB Bandwidth NVNT n20 5180MHz



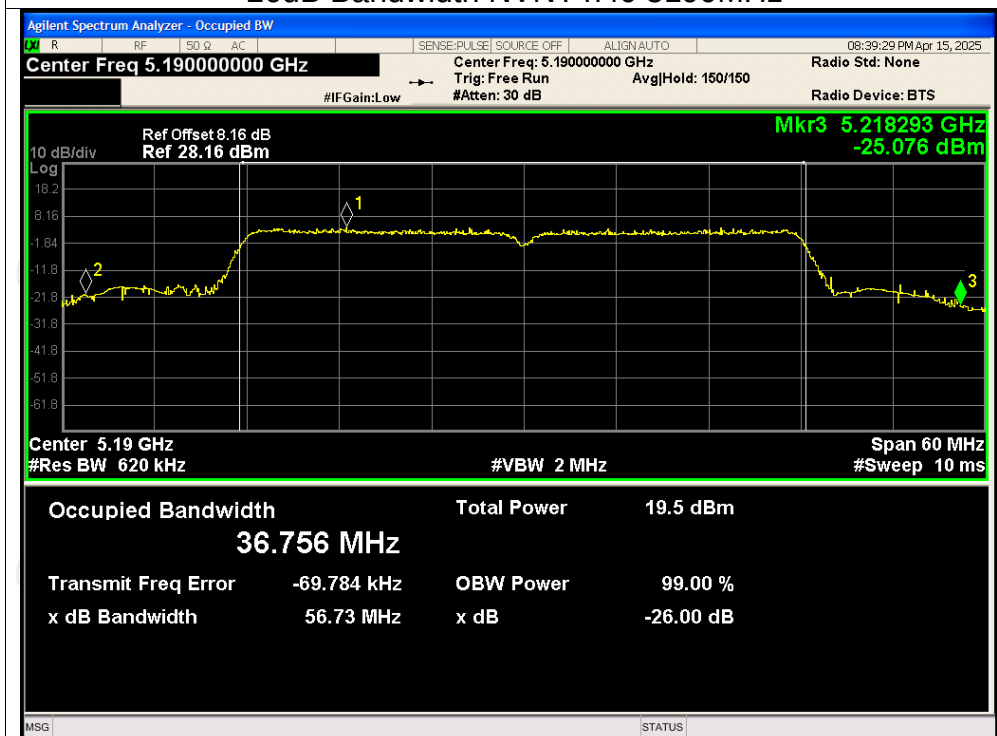
-26dB Bandwidth NVNT n20 5200MHz



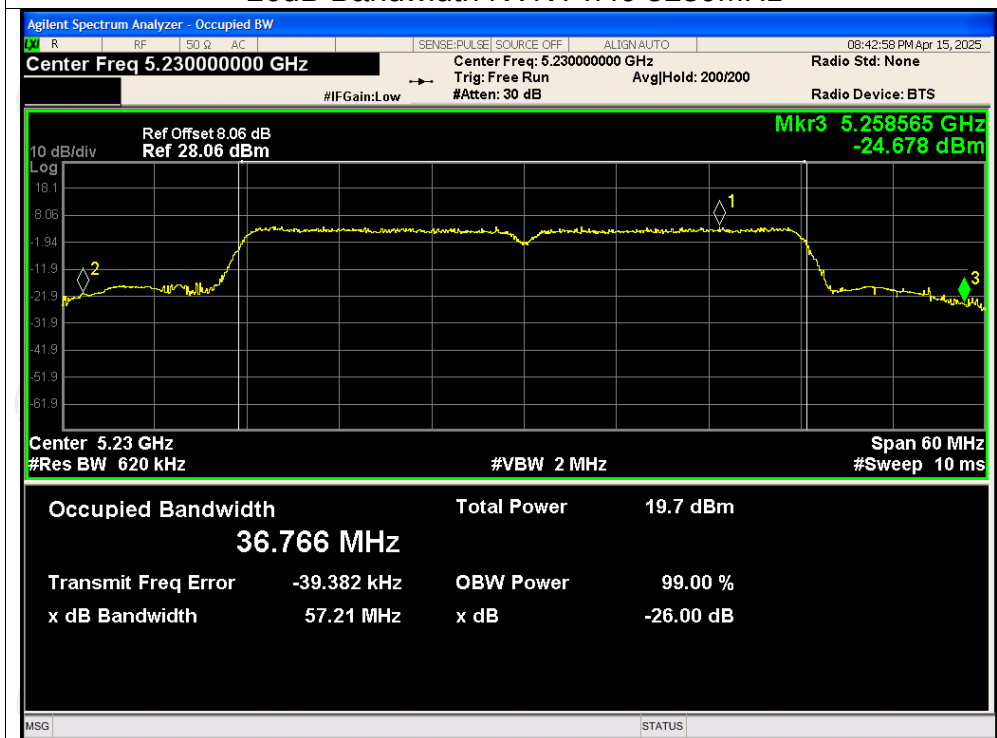
-26dB Bandwidth NVNT n20 5240MHz



-26dB Bandwidth NVNT n40 5190MHz



-26dB Bandwidth NVNT n40 5230MHz

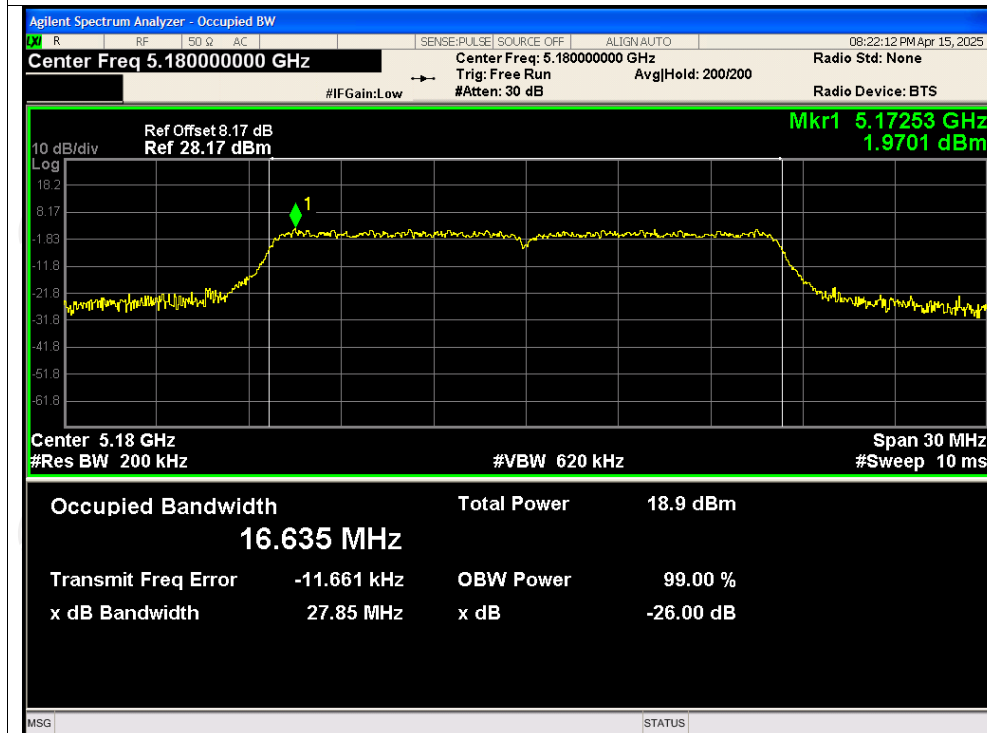


Occupied Channel Bandwidth

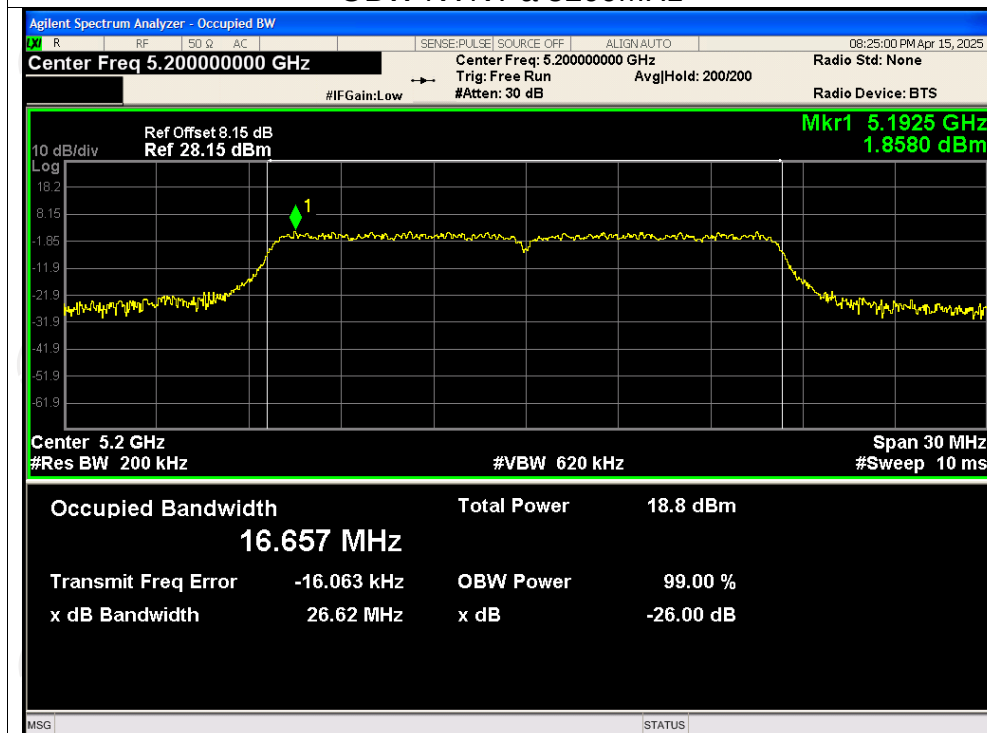
Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5180	16.635
NVNT	a	5200	16.657
NVNT	a	5240	16.651
NVNT	n20	5180	17.651
NVNT	n20	5200	17.645
NVNT	n20	5240	17.630
NVNT	n40	5190	36.448
NVNT	n40	5230	36.417

Test Graphs

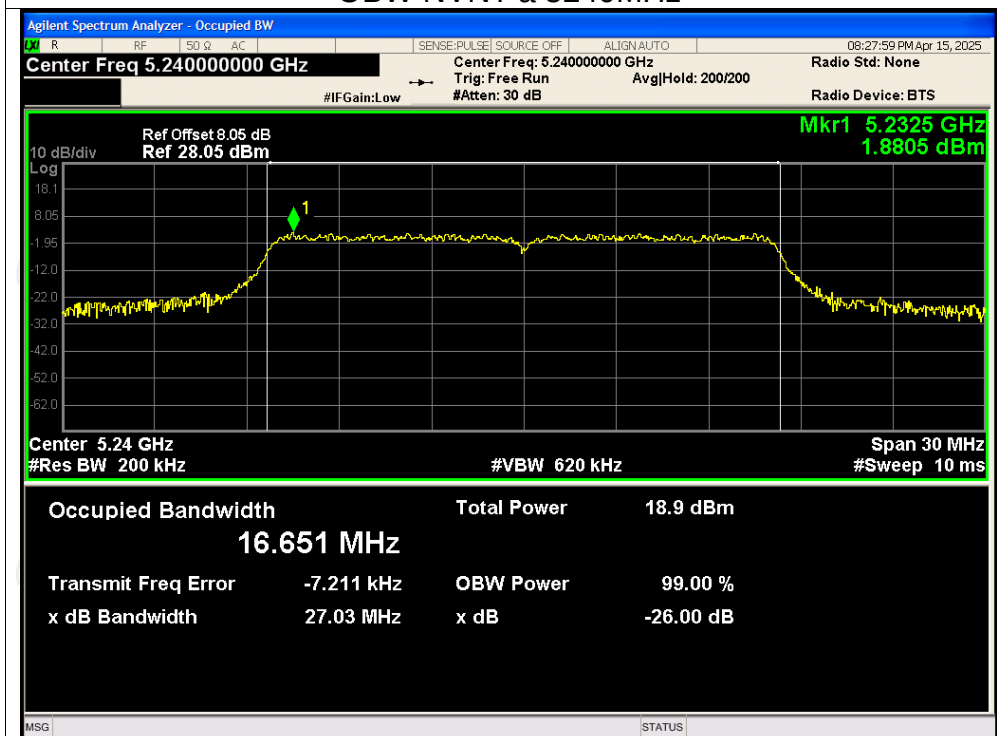
OBW NVNT a 5180MHz



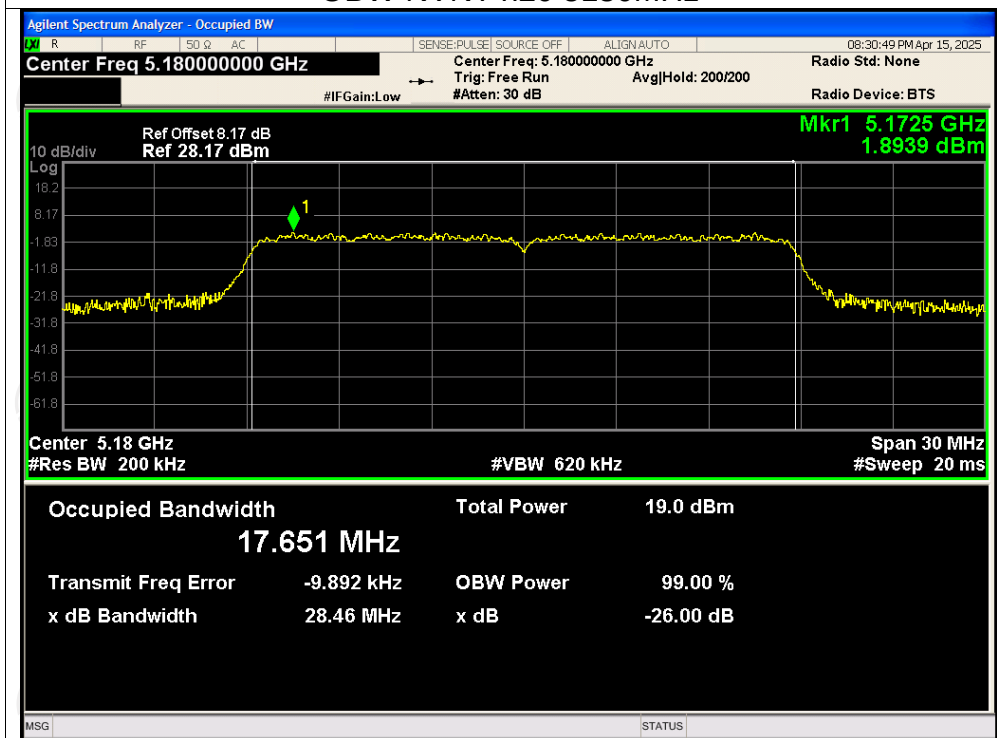
OBW NVNT a 5200MHz



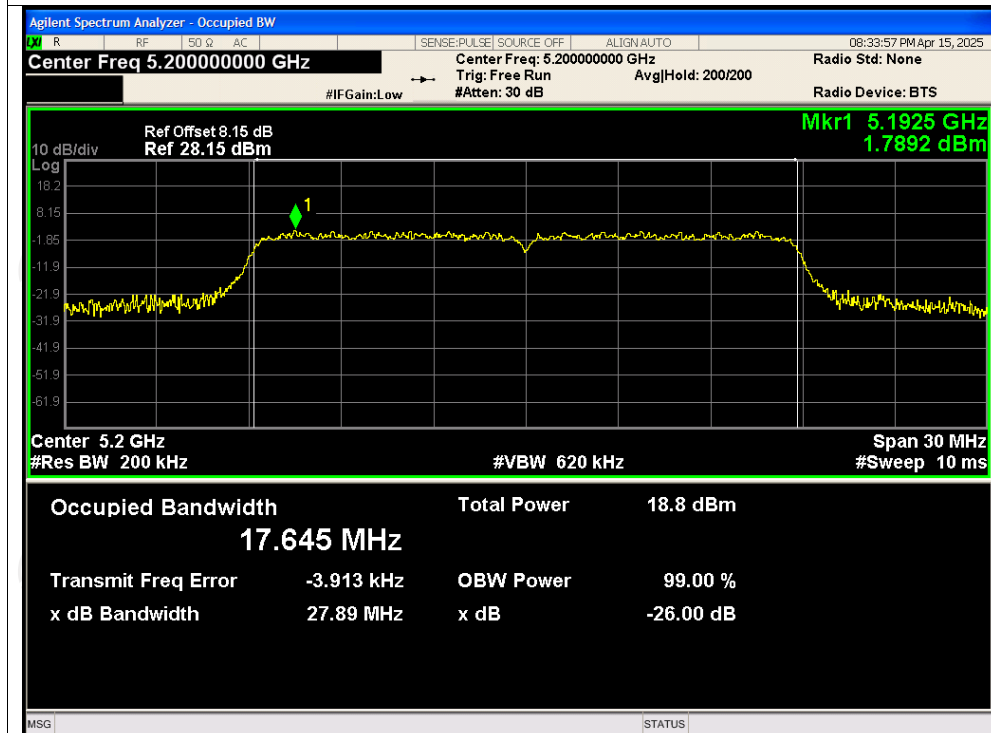
OBW NVNT a 5240MHz



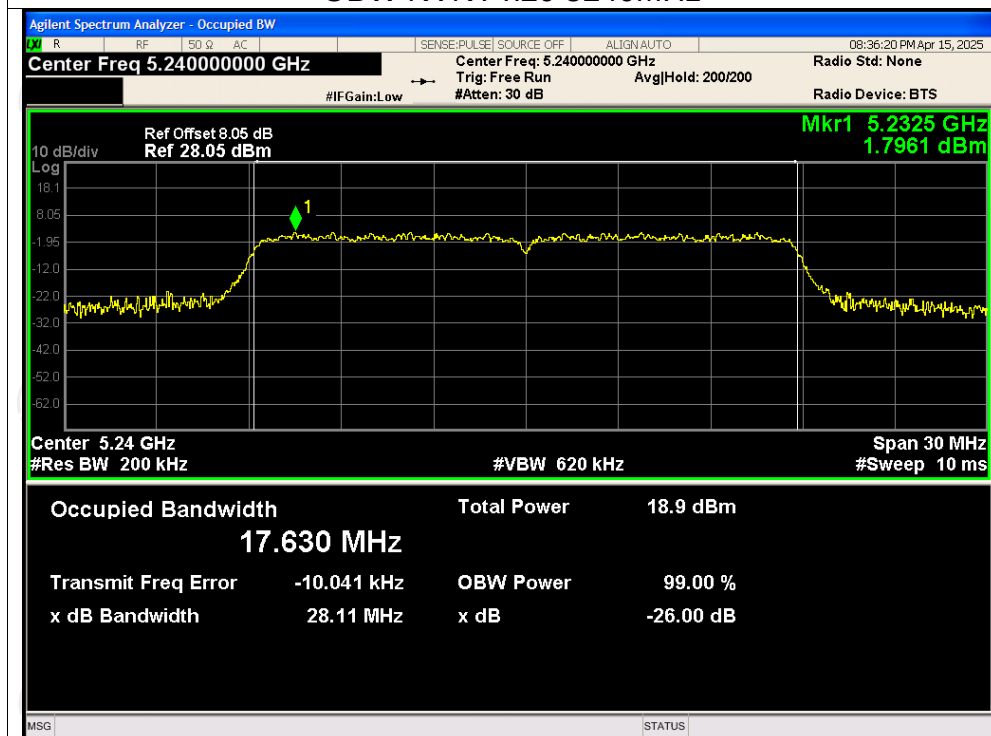
OBW NVNT n20 5180MHz



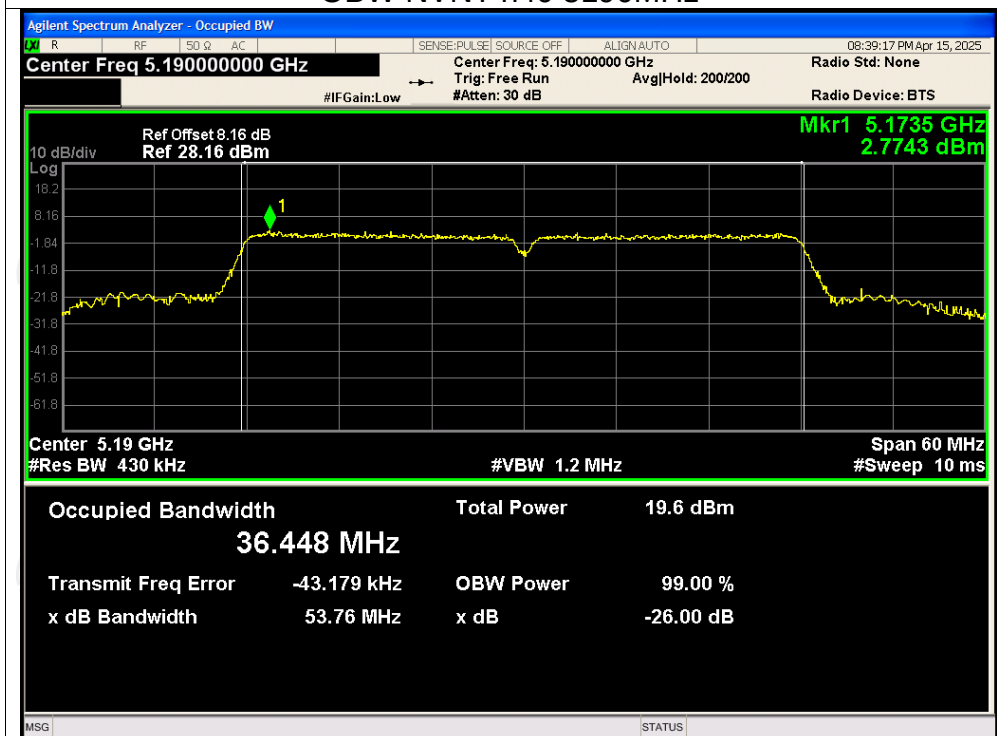
OBW NVNT n20 5200MHz



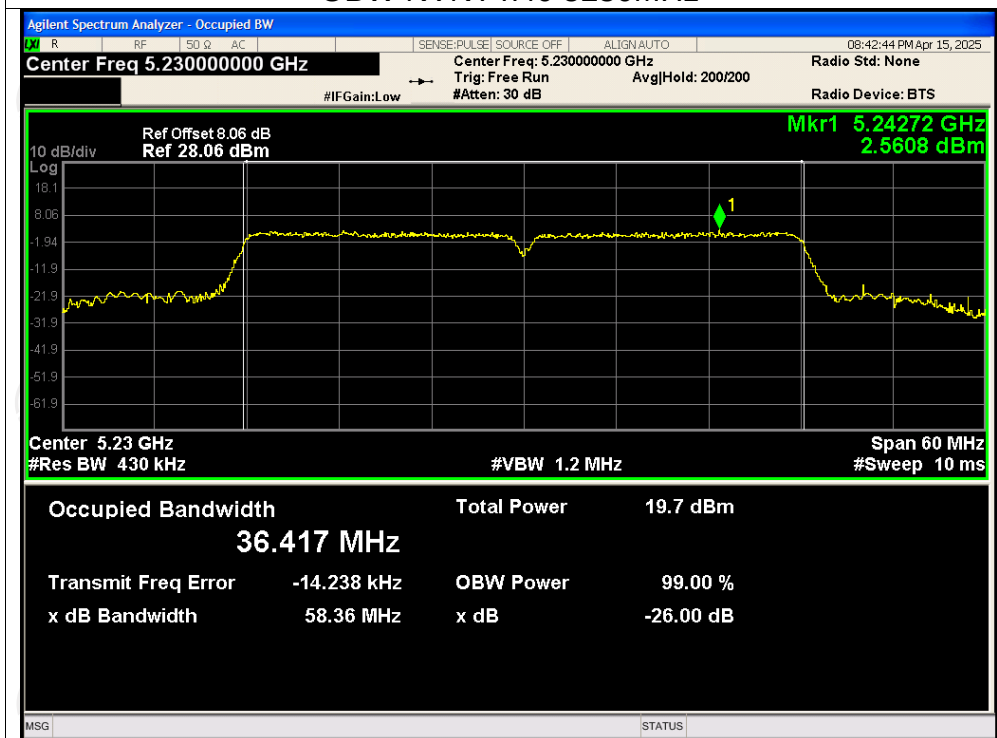
OBW NVNT n20 5240MHz



OBW NVNT n40 5190MHz



OBW NVNT n40 5230MHz

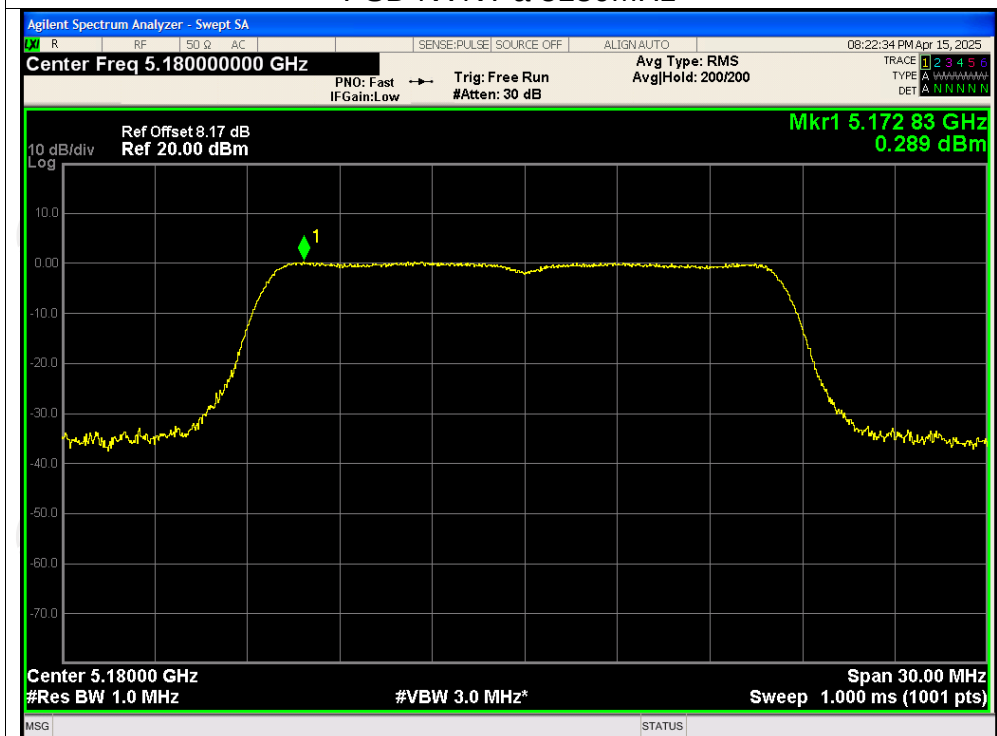


Maximum Power Spectral Density Level

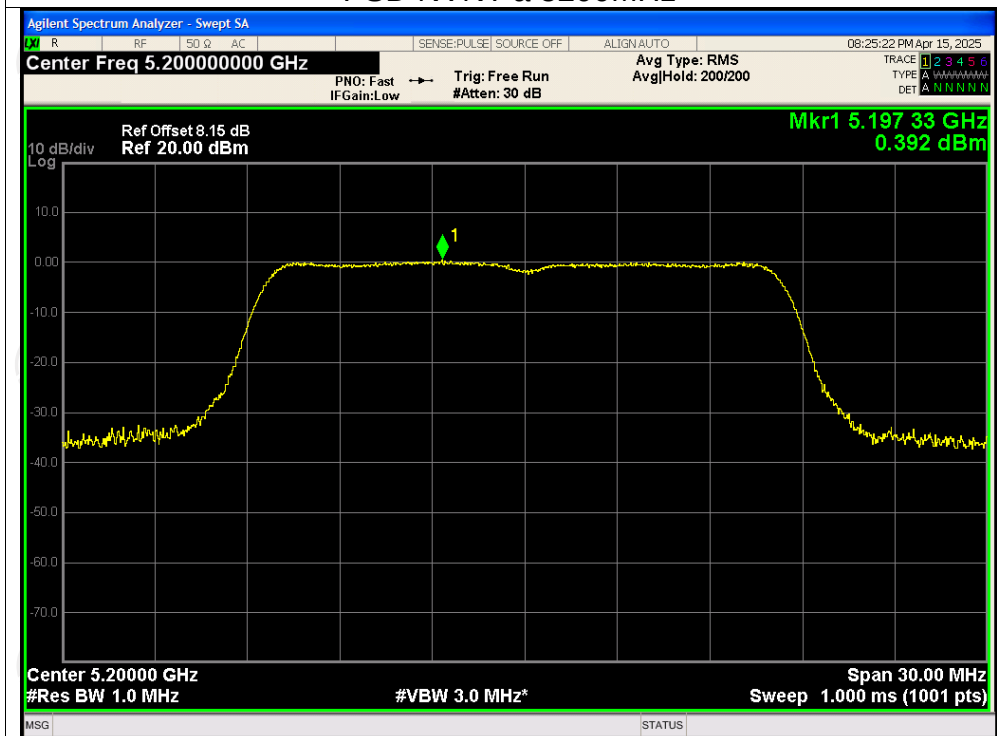
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	0.29	0.22	0.51	11	Pass
NVNT	a	5200	0.39	0.21	0.60	11	Pass
NVNT	a	5240	0.33	0.23	0.56	11	Pass
NVNT	n20	5180	-0.12	0.18	0.06	11	Pass
NVNT	n20	5200	-0.10	0.20	0.10	11	Pass
NVNT	n20	5240	-0.01	0.19	0.18	11	Pass
NVNT	n40	5190	-2.83	0.35	-2.48	11	Pass
NVNT	n40	5230	-2.83	0.40	-2.43	11	Pass

Test Graphs

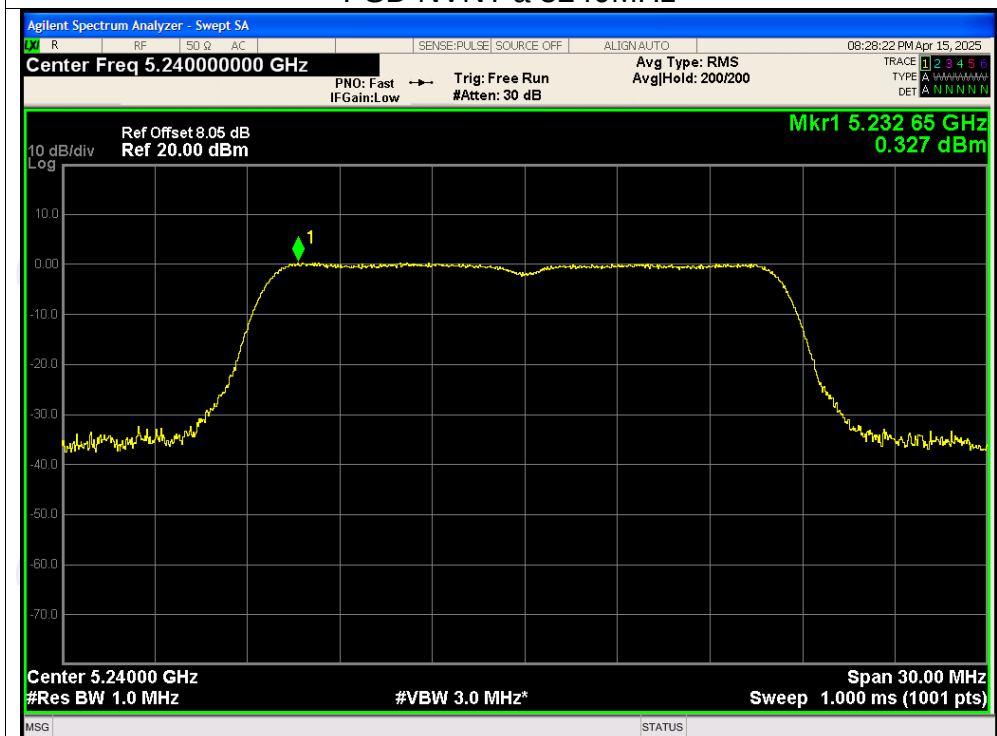
PSD NVNT a 5180MHz



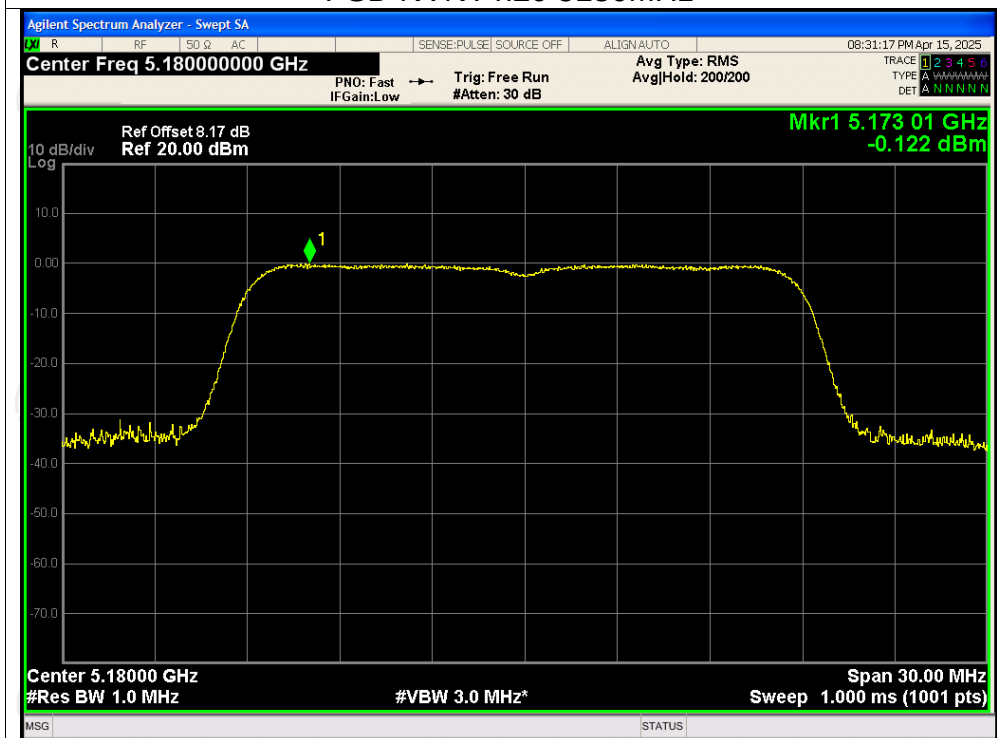
PSD NVNT a 5200MHz



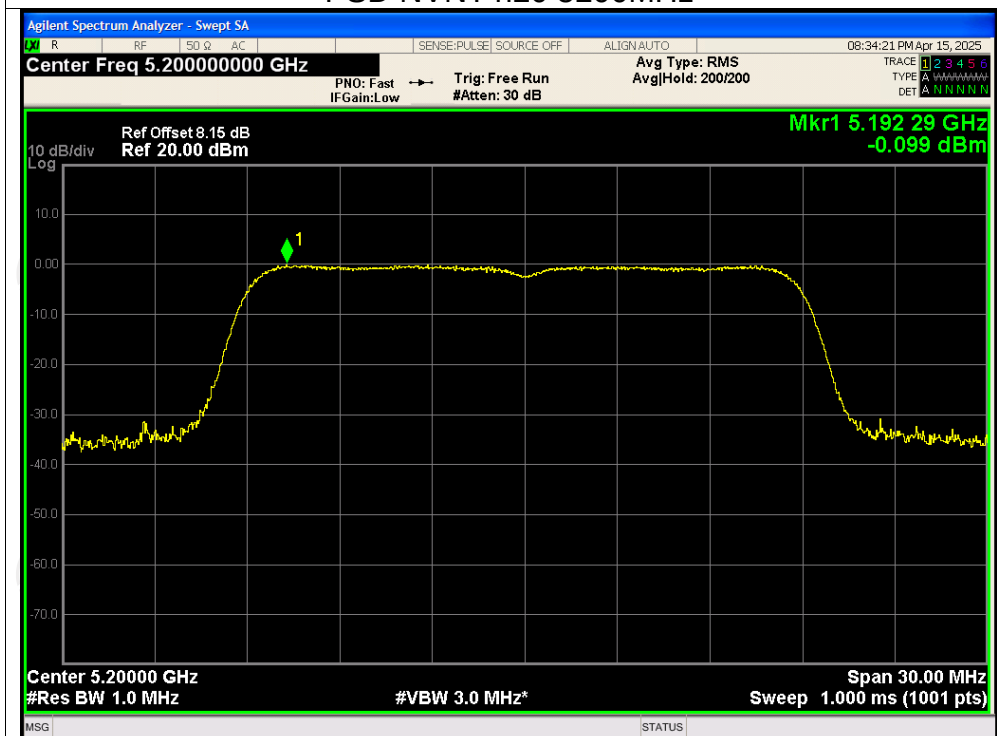
PSD NVNT a 5240MHz



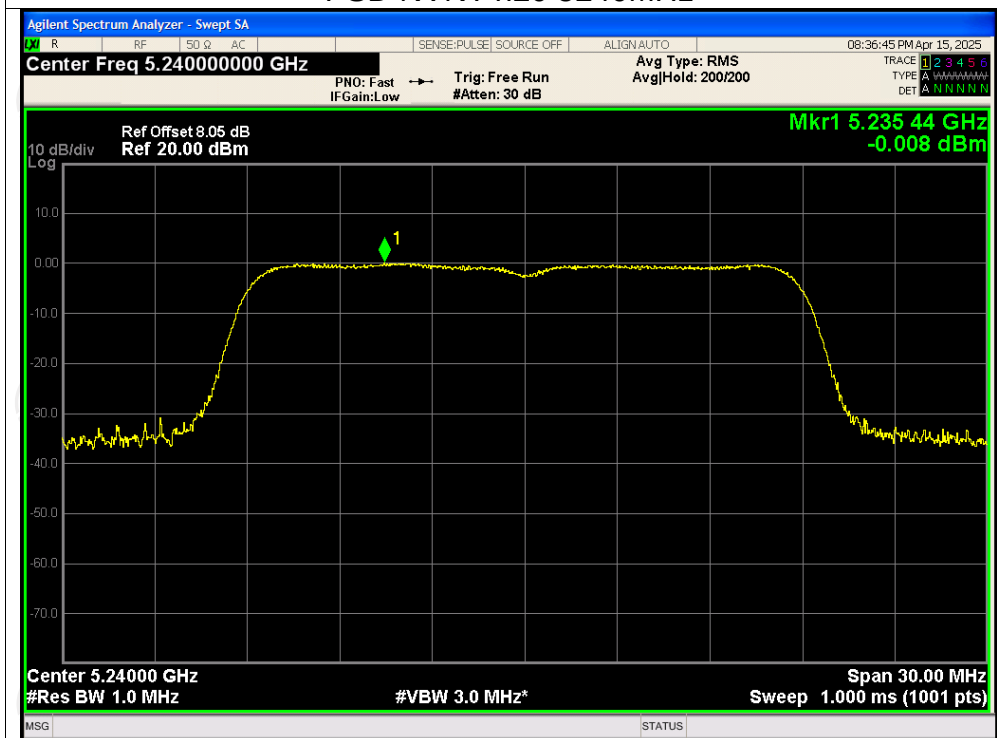
PSD NVNT n20 5180MHz



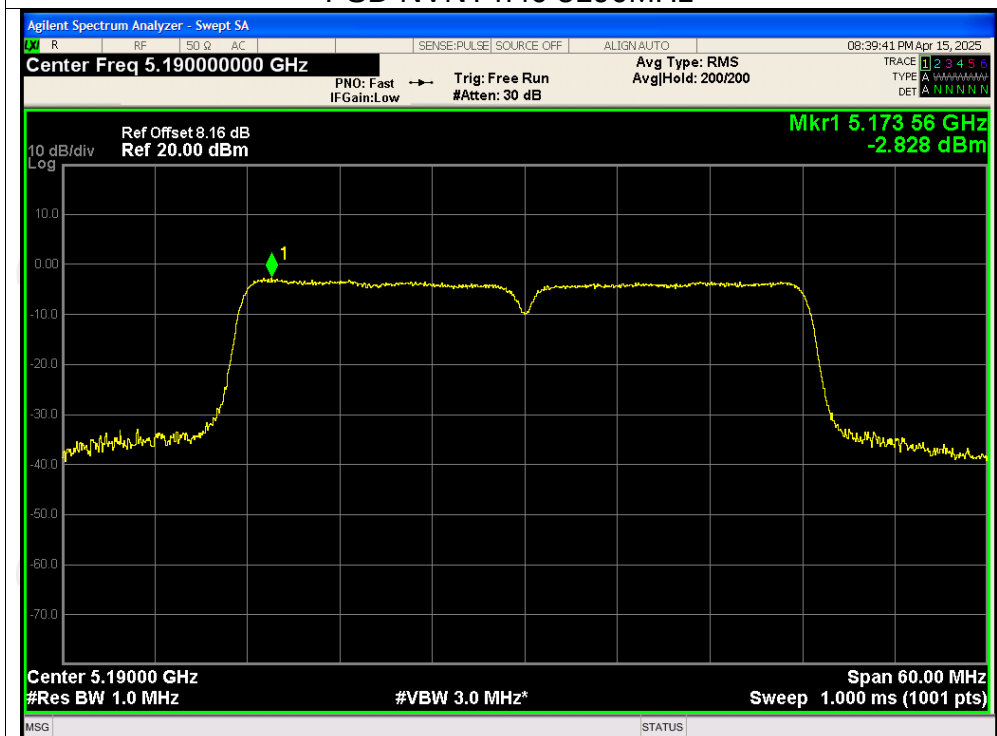
PSD NVNT n20 5200MHz



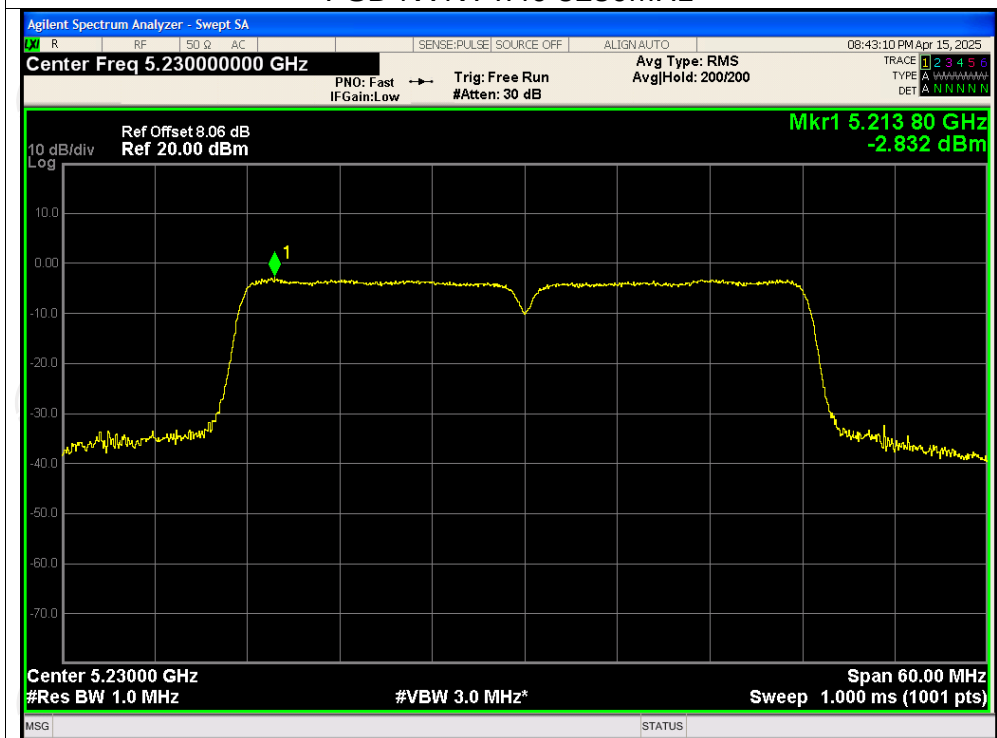
PSD NVNT n20 5240MHz



PSD NVNT n40 5190MHz



PSD NVNT n40 5230MHz



Appendix B: Photographs of Test Setup

Please refer to document Appendix No.: TCT250410E060-A

Appendix C: Photographs of EUT

Please refer to document Appendix No.: TCT250410E060-B & TCT250410E060-C

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