

TEST REPORT

Report No.: BCTC2411450473-4E

Applicant: Acer India PVT Limited

Product Name: Tablet

Test Model: ACER ONE T11-22L

Tested Date: 2024-11-14 to 2024-12-26

Issued Date: 2025-02-20

Shenzhen BCTC Testing Co., Ltd.



FCC ID: 2A94K-T11-22L

Product Name: Tablet

Trademark: 

Model/Type reference: ACER ONE T11-22L
YMT11LM

Prepared For: Acer India PVT Limited

Address: Acer India PVT Limited, 6th Floor, Embassy Heights, No.13, Magrath Road,
Bangalore, 560025, India

Manufacturer: Acer India PVT Limited

Address: Acer India PVT Limited, 6th Floor, Embassy Heights, No.13, Magrath Road,
Bangalore, 560025, India

Prepared By: Shenzhen BCTC Testing Co., Ltd.

Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road,
Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Sample Received Date: 2024-11-14

Sample tested Date: 2024-11-14 to 2024-12-26

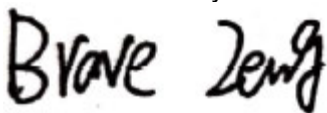
Issue Date: 2025-02-20

Report No.: BCTC2411450473-4E

Test Standards: FCC Part15 15.407
ANSI C63.10-2013
KDB 789033 D02 v02r01

Test Results: PASS

Tested by:



Brave Zeng/ Project Handler

Approved by:



Zero Zhou/Reviewer

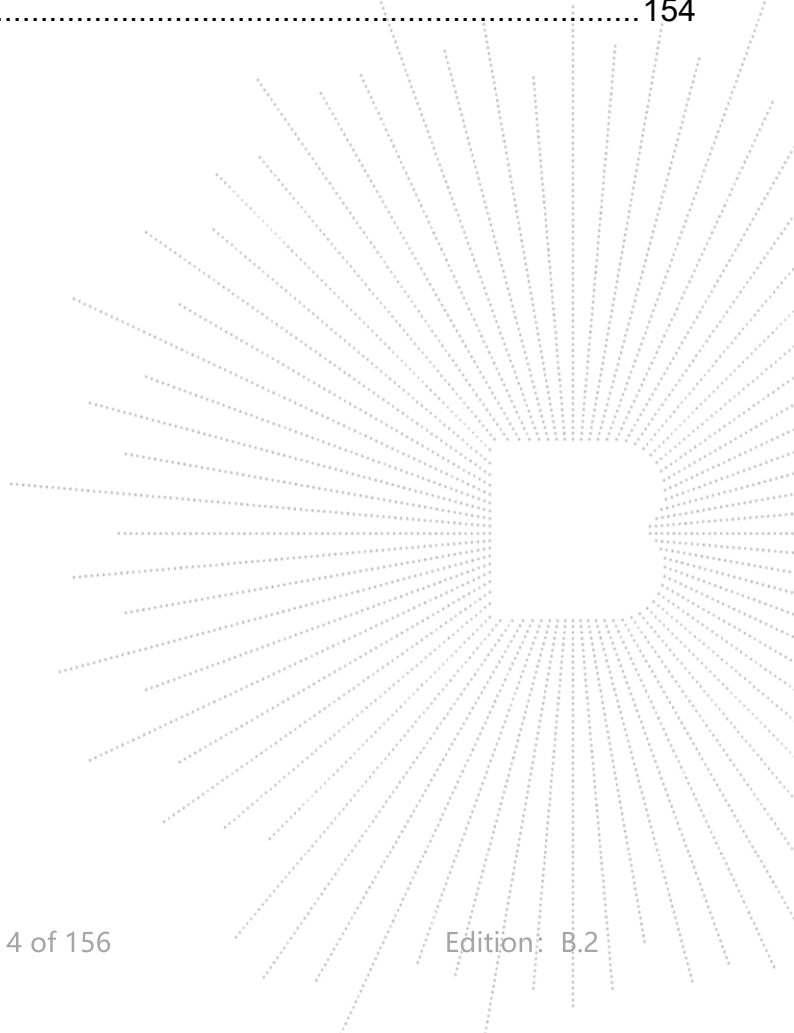
The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

Table Of Content

Test Report Declaration	Page
1. Version	5
2. Test Summary	6
3. Measurement Uncertainty	7
4. Product Information And Test Setup	8
4.1 Product Information	8
4.2 Test Setup Configuration	9
4.3 Support Equipment	9
4.4 Channel List	10
4.5 Test Mode	11
5. Test Facility And Test Instrument Used	12
5.1 Test Facility	12
5.2 Test Instrument Used	12
6. Conducted Emissions	14
6.1 Block Diagram Of Test Setup	14
6.2 Limit	14
6.3 Test Procedure	14
6.4 EUT Operating Conditions	14
6.5 Test Result	15
7. Radiated Emissions	19
7.1 Block Diagram Of Test Setup	19
7.2 Limit	20
7.3 Test Procedure	21
7.4 EUT Operating Conditions	22
7.5 Test Result	22
8. Power Spectral Density Test	39
8.1 Block Diagram Of Test Setup	39
8.2 Limit	39
8.3 Test Procedure	40
8.4 EUT Operating Conditions	40
8.5 Test Result	41
9. 26dB & 6dB & 99% Emission Bandwidth	56
9.1 Block Diagram Of Test Setup	56
9.2 Limit	56
9.3 Test Procedure	56
9.4 EUT Operating Conditions	57
9.5 Test Result	57
10. Maximum Conducted Output Power	87
10.1 Block Diagram Of Test Setup	87
10.2 Limit	87
10.3 Test Procedure	87
10.4 EUT Operating Conditions	88
10.5 Test Result	89
11. Out Of Band Emissions	104

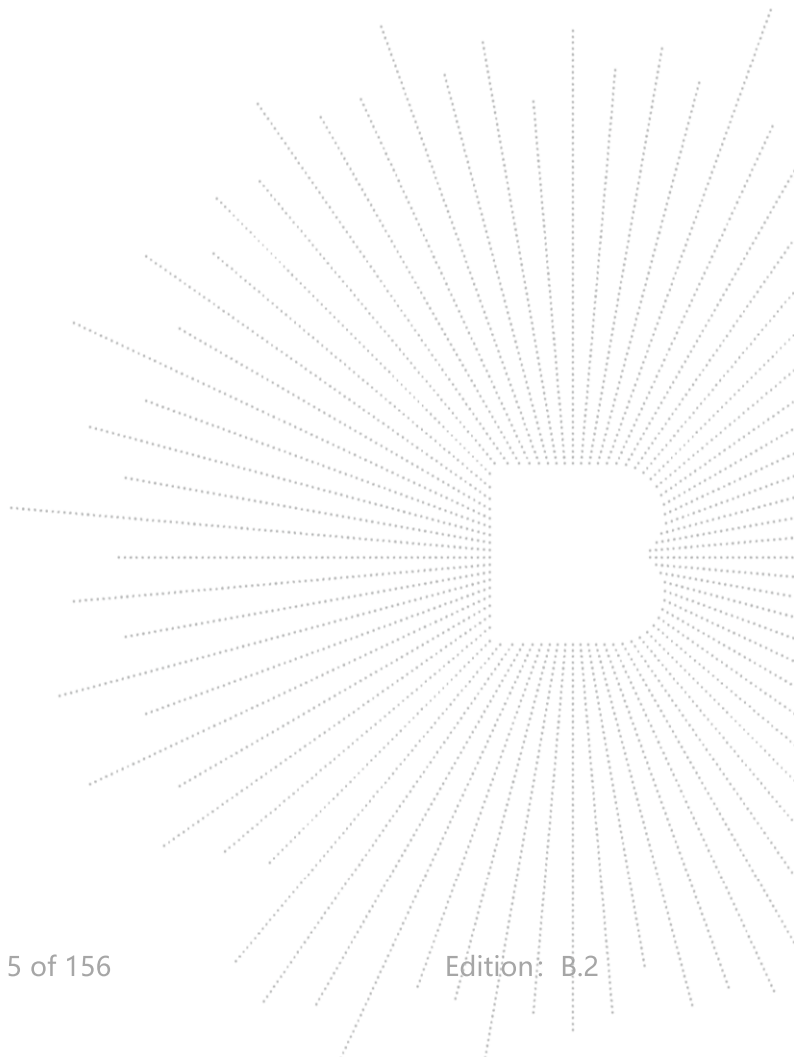
11.1	Block Diagram Of Test Setup.....	104
11.2	Limit	104
11.3	Test Procedure	104
11.4	EUT Operating Conditions	104
11.5	Test Result.....	105
12.	Spurious RF Conducted Emissions.....	117
12.1	Block Diagram Of Test Setup.....	117
12.2	Limit	117
12.3	Test Procedure	117
12.4	Test Result.....	117
13.	Frequency Stability Measurement.....	132
13.1	Block Diagram Of Test Setup.....	132
13.2	Limit	132
13.3	Test Procedure	132
13.4	Test Result.....	133
14.	Duty Cycle Of Test Signal	139
14.1	Standard Requirement	139
14.2	Formula.....	139
14.3	Test Procedure	139
14.4	Test Result.....	139
15.	Antenna Requirement	151
15.1	Limit	151
15.2	Test Result.....	151
16.	EUT Photographs.....	152
17.	EUT Test Setup Photographs.....	154

(Note: N/A Means Not Applicable)



1. Version

Report No.	Issue Date	Description	Approved
BCTC2411450473-4E	2025-02-20	Original	Valid



2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No.	Results
1	Spurious Radiated Emissions	15.209(a), 15.407 (b)(1) 15.407 (b)(4) 15.407 (b)(8)	PASS
2	Conducted Emission	15.207	PASS
3	26 dB and 99% Emission Bandwidth	15.407 (a)(12) 15.1049	PASS
4	Minimum 6 dB bandwidth	15.407(e)	PASS
5	Maximum Conducted Output Power	15.407 (a)(1) 15.407 (a)(3)	PASS
6	Band Edge	2.1051, 15.407(b)(1) 15.407(b)(4)	PASS
7	Power Spectral Density	15.407 (a)(1) 15.407 (a)(3)	PASS
8	Spurious Emissions at Antenna Terminals	2.1051, 15.407(b)	PASS
9	Antenna Requirement	15.203	PASS

3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(9kHz-30MHz)	U=3.7dB
2	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission(150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59°C

4. Product Information And Test Setup

4.1 Product Information

Model/Type Reference:	ACER ONE T11-22L YMT11LM
Model Differences:	All the model are the same circuit and RF module, except model names and appearance of the color.
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20)/ac(HT20); 5190-5230MHz for 802.11n(HT40)/ac(HT40); 5210MHz for 802.11 ac(HT80); 5745-5825 MHz for 802.11a/n(HT20)/ac(HT20); 5755-5795 MHz for 802.11n(HT40)/ac(HT40); 5775MHz for 802.11 ac(HT80);
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac; 4 channels for 802.11a/n20/ac20 in the 5180-5240MHz band ; 2 channels for 802.11 n40/ac40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ;
Number Of Channel	5 channels for 802.11a/n20/ac20 in the 5745-5825MHz band ; 2 channels for 802.11 n40/ac40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Antenna Type:	Internal antenna 2.78 dBi
Antenna Gain:	Remark: ☒ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. ☐ The antenna gain of the product is provided by the customer, and the test data is affected by the customer information.
Ratings:	DC 9V from adapter/DC 3.8V from battery Model: 623022C-1U
Adapter 1 Information:	Input: 100-240V~ 50/60Hz 0.8A Max Type-C Output: 5.0V===3.0A, 9.0V===2.0A, 12.0V===1.5A 18.0W Max PPS: 3.3-5.9V===3.0A 17.7W Max, 3.3-11.0V===1.65A 18.2W Max Model: TPD-203A120167UF01
Adapter 2 Information:	Input: 100-240V~ 50/60Hz 0.6A USB-C Output: 5.0V===3.0A or 9.0V===2.22A or 12.0V===1.67A

4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	Tablet		ACER ONE T11-22L	N/A	EUT
E-2	Adapter	N/A	623022C-1U	N/A	Auxiliary
E-3	Adapter	N/A	TPD-203A120 167UF01	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	1M	DC cable unshielded

Notes:

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.

4.4 Channel List

5.1G

802.11a/n/ac (20MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220	-	-	-	-
40	5200	48	5240	-	-	-	-

802.11n /ac(40MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	-	-	-	-	-	-
46	5230	-	-	-	-	-	-

802.11ac (80MHz) Carrier Frequency Channel	
Channel	Frequency (MHz)
42	5210

5.8G

802.11a/n/ac(20 MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	153	5765	157	5785	161	5805
165	5825	-	-	-	-	-	-

802.11n/ac 40MHz Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795	-	-

802.11ac 80MHz Carrier Frequency Channel	
Channel	Frequency (MHz)
155	5775

4.5 Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11a / n/ ac 20 CH36/ CH40/ CH 48 802.11a /n/ ac 20 CH149/ CH157/ CH 165
Mode 2	802.11n/ ac40 CH38/ CH 46 802.11n/ ac40 CH 151 / CH 159
Mode 3	802.11 ac80 CH 42/CH 155
Mode 4	Link

Note:

1. The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
2. We're testing antenna A data.

4.6 Table Of Parameters Of Text Software Setting

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters

Test software Version	CMD		
Parameters	DEF	DEF	DEF

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

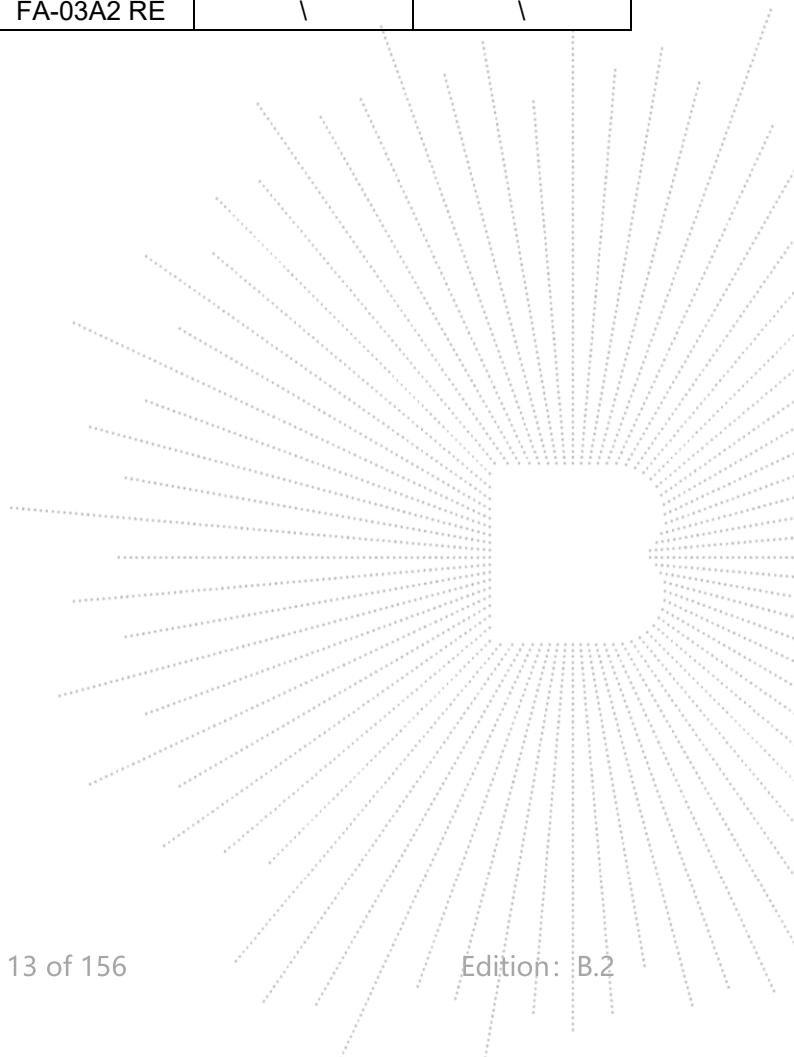
ISED CAB identifier: CN0017

5.2 Test Instrument Used

Conducted Emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 16, 2024	May 15, 2025

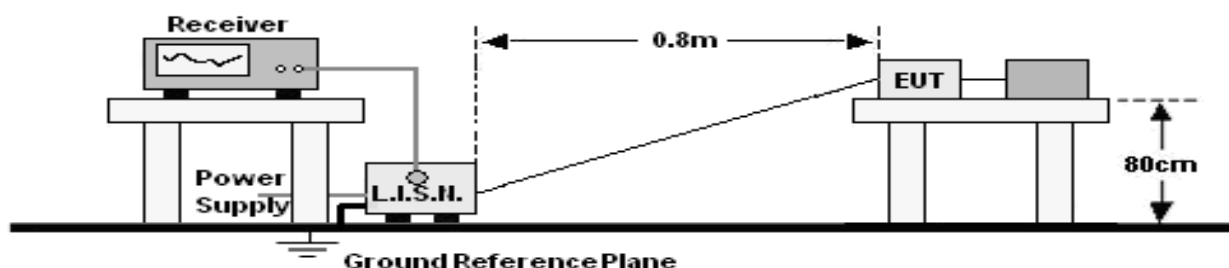
RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power meter	Keysight	E4419	\	May 16, 2024	May 15, 2025
Power Sensor (AV)	Keysight	E9300A	\	May 16, 2024	May 15, 2025
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Radio frequency control box	MAIWEI	MW100-RFC B	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

Radiated Emissions Test (966 Chamber02)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	SKET	966 Room	966	Oct. 31. 2024	Oct. 30. 2027
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESRI7	100010	Oct. 31. 2024	Oct. 30. 2025
Amplifier	SKET	LNPA-30M01 G-30	SK2021082004	Oct. 31. 2024	Oct. 30. 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9168	1323	May 21, 2024	May 20, 2025
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G18 G-45dB	SK202104090 1	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35- HG	2034381	May 16, 2024	May 15, 2025
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	FA-03A2 RE	\	\



6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Notes:

- *Decreasing linearly with logarithm of frequency.
- The lower limit shall apply at the transition frequencies.

6.3 Test Procedure

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

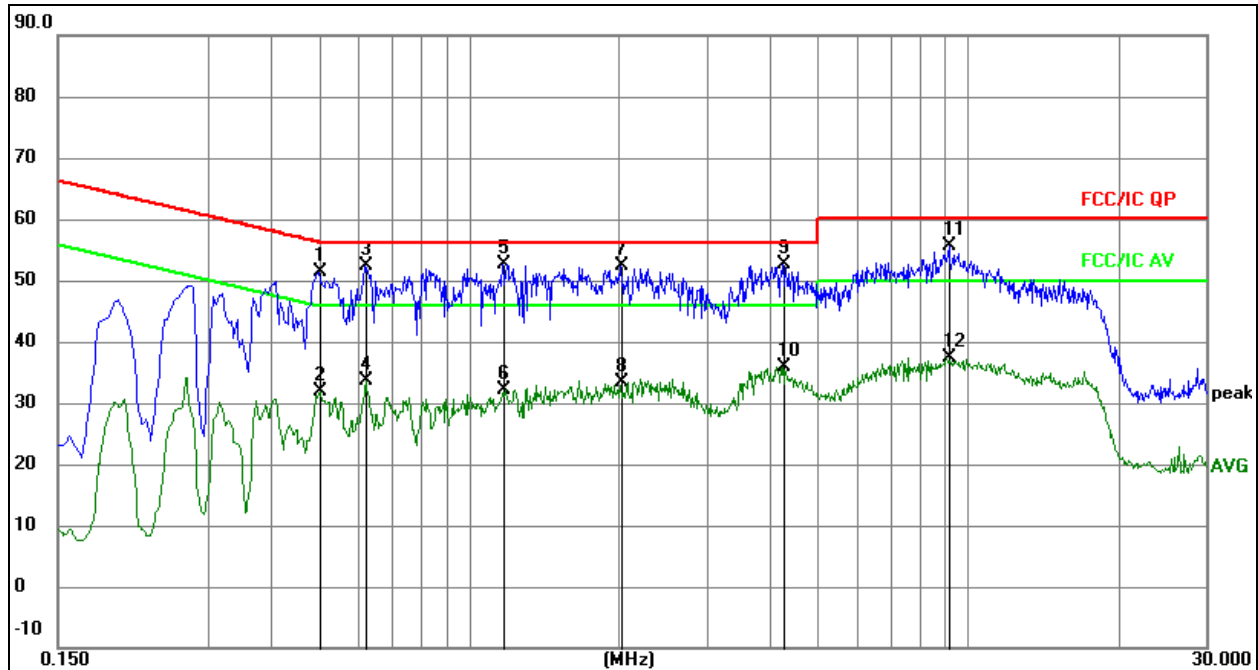
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
- For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

6.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

6.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4(Adapter 1)	Test Voltage :	AC120V/60Hz

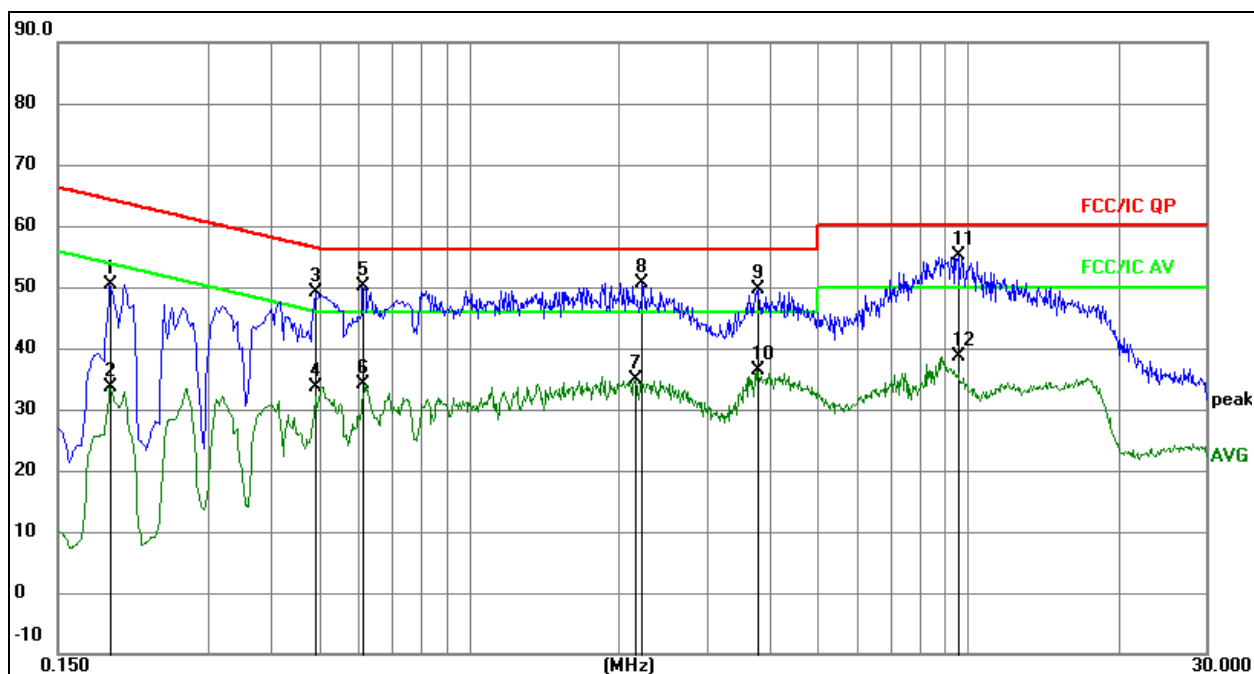


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.5010	31.21	20.08	51.29	56.00	-4.71	QP
2		0.5010	11.88	20.08	31.96	46.00	-14.04	AVG
3		0.6180	32.23	20.09	52.32	56.00	-3.68	QP
4		0.6180	13.44	20.09	33.53	46.00	-12.47	AVG
5		1.1715	32.53	20.09	52.62	56.00	-3.38	QP
6		1.1715	12.08	20.09	32.17	46.00	-13.83	AVG
7		2.0175	32.30	20.10	52.40	56.00	-3.60	QP
8		2.0175	13.31	20.10	33.41	46.00	-12.59	AVG
9	*	4.2675	32.49	20.14	52.63	56.00	-3.37	QP
10		4.2675	15.71	20.14	35.85	46.00	-10.15	AVG
11		9.1725	35.56	20.17	55.73	60.00	-4.27	QP
12		9.1725	17.14	20.17	37.31	50.00	-12.69	AVG

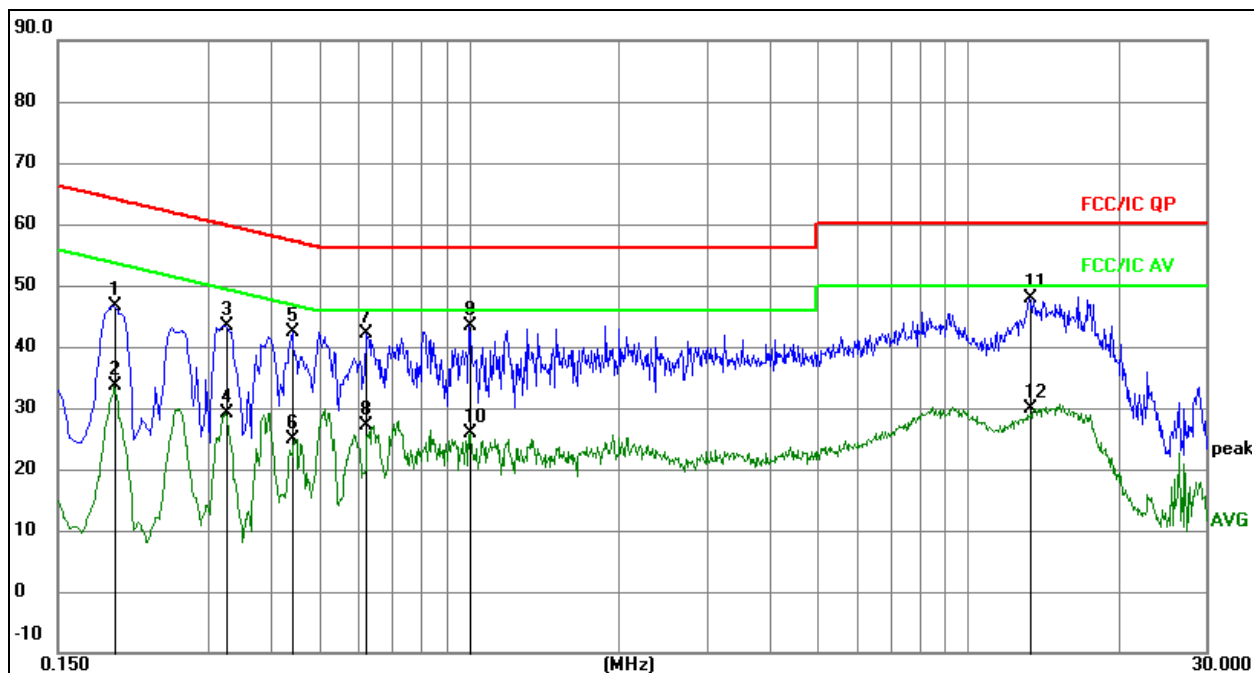
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 4(Adapter 1)	Test Voltage :	AC120V/60Hz


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1904	30.41	20.07	50.48	64.02	-13.54	QP
2		0.1904	13.68	20.07	33.75	54.02	-20.27	AVG
3		0.4915	29.01	20.08	49.09	56.14	-7.05	QP
4		0.4915	13.59	20.08	33.67	46.14	-12.47	AVG
5		0.6108	30.06	20.09	50.15	56.00	-5.85	QP
6		0.6108	14.05	20.09	34.14	46.00	-11.86	AVG
7		2.1552	14.80	20.10	34.90	46.00	-11.10	AVG
8		2.2249	30.62	20.10	50.72	56.00	-5.28	QP
9		3.7994	29.47	20.14	49.61	56.00	-6.39	QP
10		3.7994	16.21	20.14	36.35	46.00	-9.65	AVG
11	*	9.5520	34.90	20.17	55.07	60.00	-4.93	QP
12		9.5520	18.43	20.17	38.60	50.00	-11.40	AVG

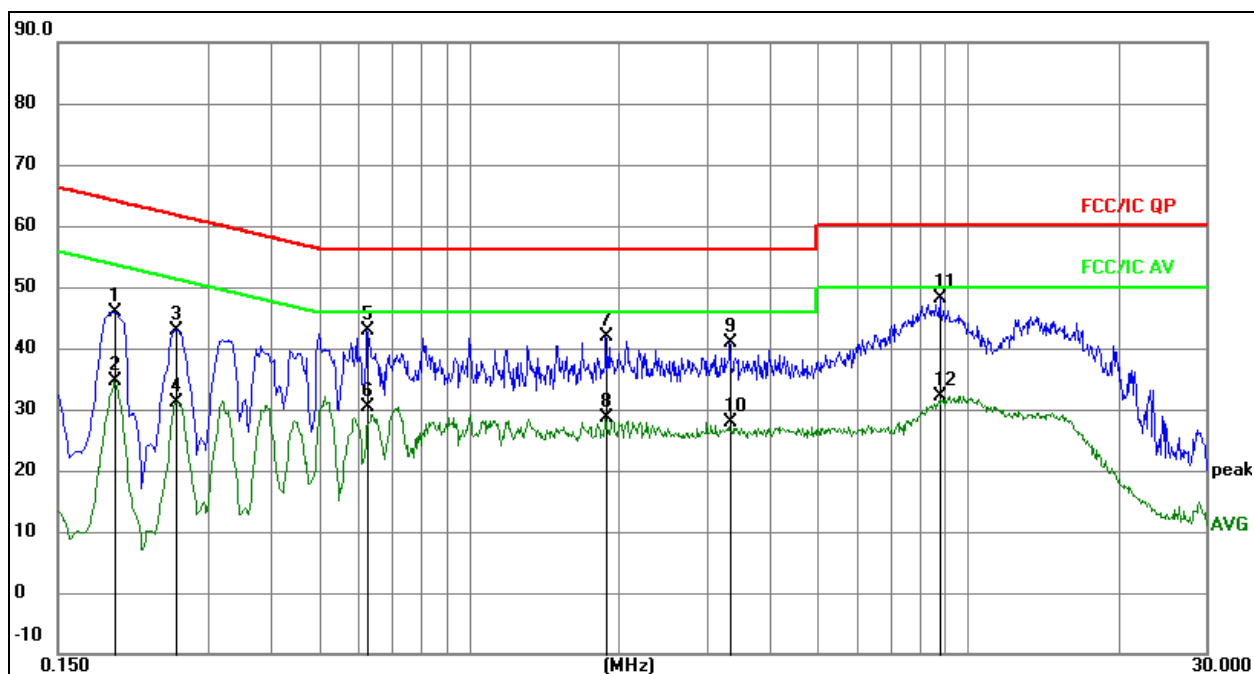
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4(Adapter 2)	Test Voltage :	AC120V/60Hz


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1949	26.54	20.07	46.61	63.83	-17.22	QP
2		0.1949	13.47	20.07	33.54	53.83	-20.29	AVG
3		0.3255	23.37	20.07	43.44	59.57	-16.13	QP
4		0.3255	9.09	20.07	29.16	49.57	-20.41	AVG
5		0.4425	22.40	20.08	42.48	57.01	-14.53	QP
6		0.4425	4.78	20.08	24.86	47.01	-22.15	AVG
7		0.6225	22.05	20.09	42.14	56.00	-13.86	QP
8		0.6225	6.94	20.09	27.03	46.00	-18.97	AVG
9		1.0005	23.32	20.09	43.41	56.00	-12.59	QP
10		1.0005	5.70	20.09	25.79	46.00	-20.21	AVG
11	*	13.3350	27.63	20.26	47.89	60.00	-12.11	QP
12		13.3350	9.52	20.26	29.78	50.00	-20.22	AVG

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 4(Adapter 2)	Test Voltage :	AC120V/60Hz


Remark:

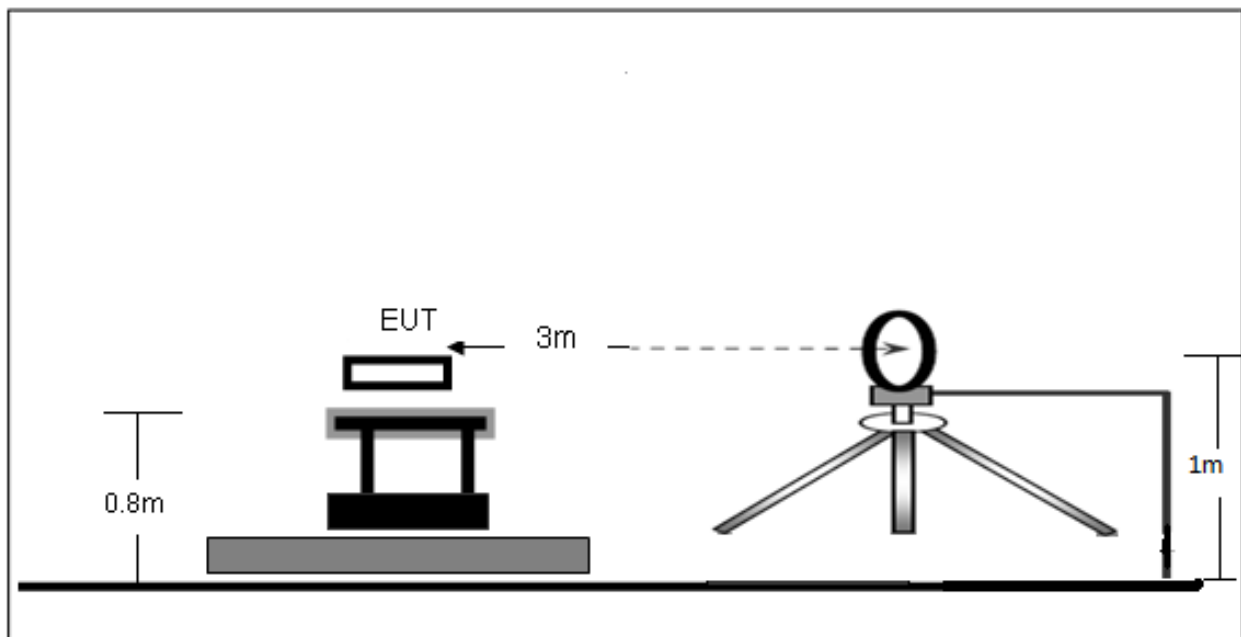
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1949	25.92	20.07	45.99	63.83	-17.84	QP
2		0.1949	14.63	20.07	34.70	53.83	-19.13	AVG
3		0.2580	22.82	20.07	42.89	61.50	-18.61	QP
4		0.2580	10.95	20.07	31.02	51.50	-20.48	AVG
5		0.6270	22.72	20.09	42.81	56.00	-13.19	QP
6		0.6270	10.31	20.09	30.40	46.00	-15.60	AVG
7		1.8780	21.72	20.10	41.82	56.00	-14.18	QP
8		1.8780	8.43	20.10	28.53	46.00	-17.47	AVG
9		3.3405	20.73	20.13	40.86	56.00	-15.14	QP
10		3.3405	7.68	20.13	27.81	46.00	-18.19	AVG
11	*	8.8170	27.95	20.17	48.12	60.00	-11.88	QP
12		8.8170	11.96	20.17	32.13	50.00	-17.87	AVG

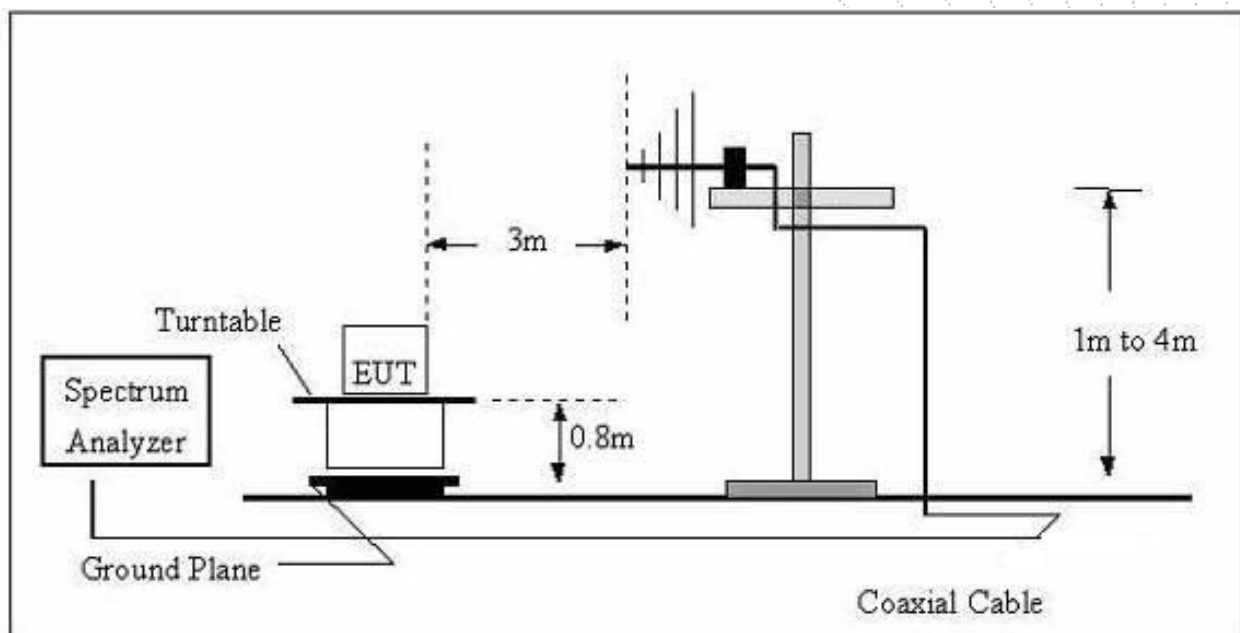
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

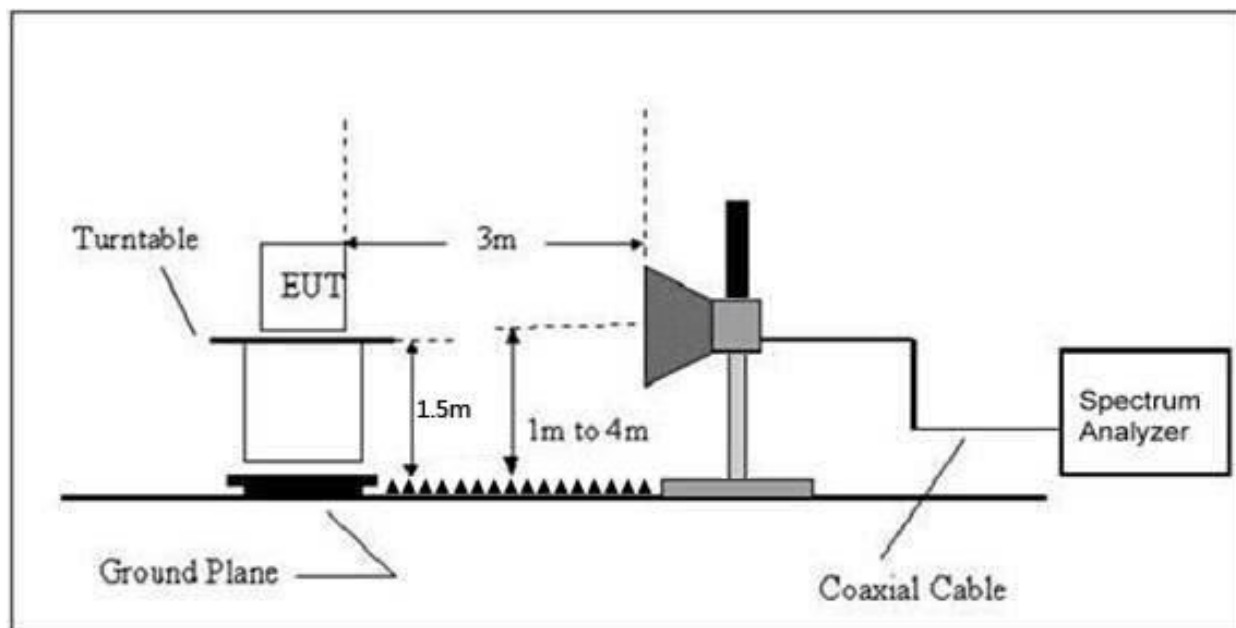
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



7.2 Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency (MHz)	Field Strength uV/m	Distance (m)	Field Strength Limit at 3m Distance	
			uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log(2400/F(\text{kHz})) + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log(24000/F(\text{kHz})) + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

Limits Of Radiated Emission Measurement (Above 1000MHz)

Frequency (MHz)	Limit (dBuV/m) (at 3M)	
	Peak	Average
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

7.3 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT.

Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where $RBWCF [dB] = 10 \cdot \lg(100 [kHz] / \text{narrower RBW [kHz]})$, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

7.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

7.5 Test Result

Below 30MHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	--

Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

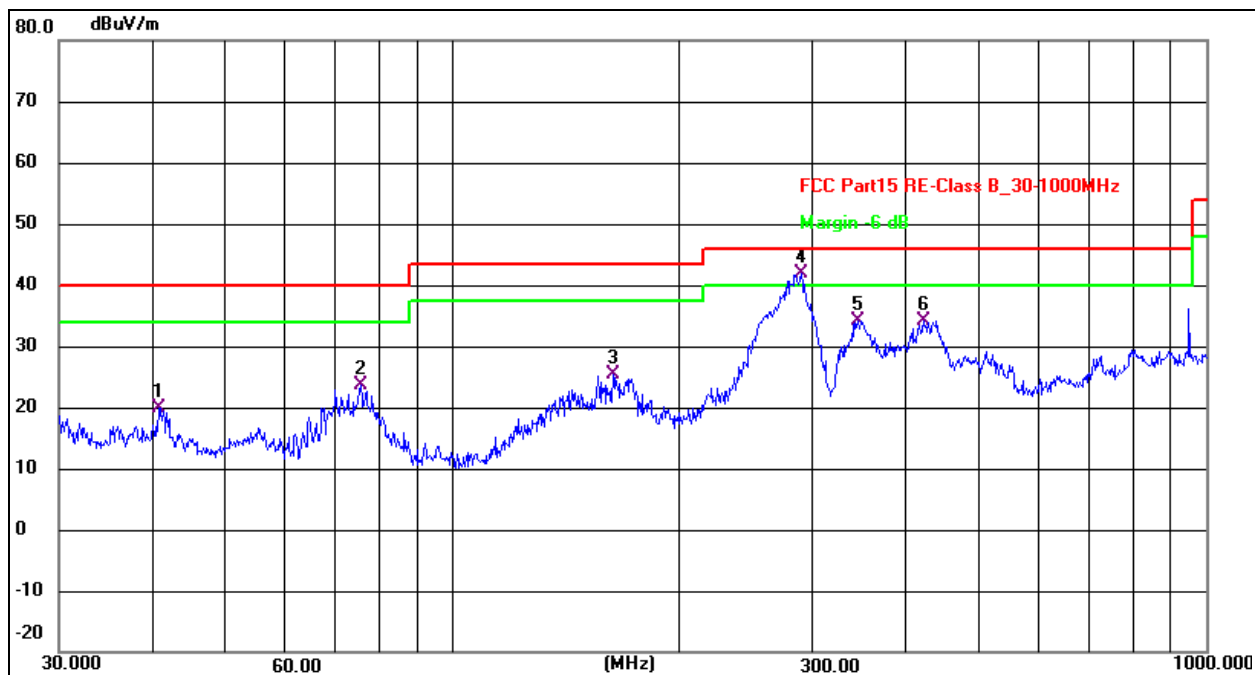
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log(\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

Between 30MHz – 1GHz

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4(Adapter 1)	Test Voltage:	AC120V/60Hz

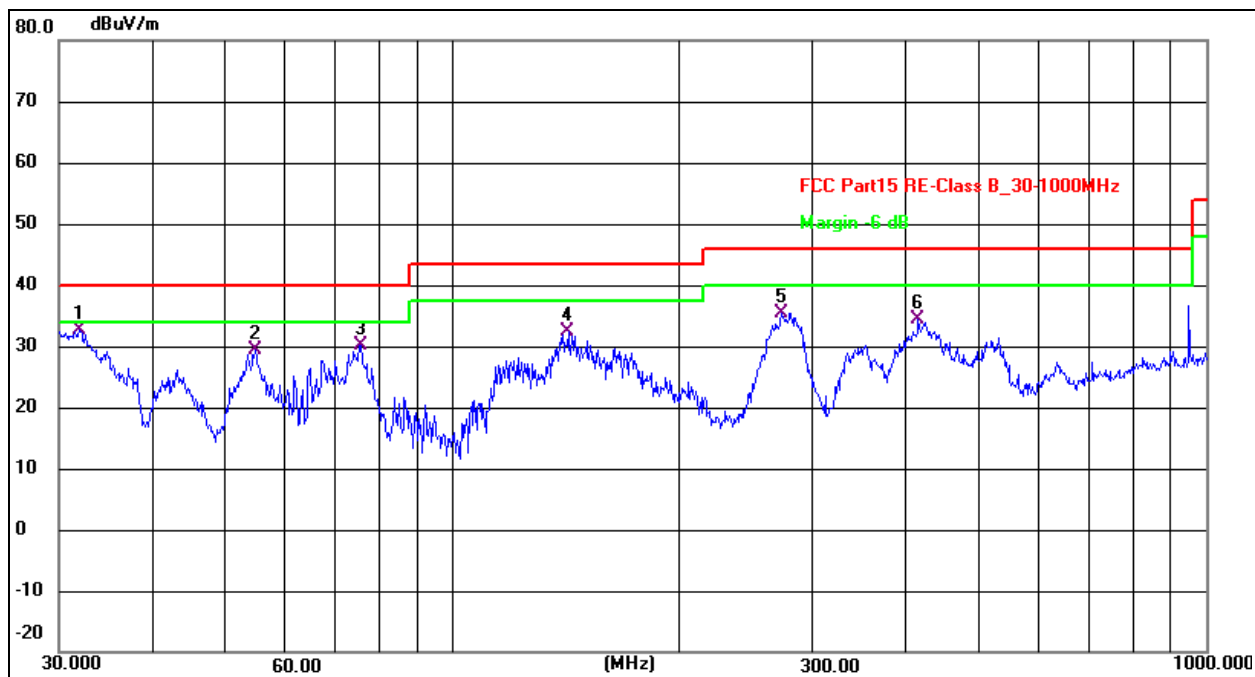


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	40.7016	32.93	-12.98	19.95	40.00	-20.05	QP
2	75.4464	39.38	-15.64	23.74	40.00	-16.26	QP
3	163.1818	37.23	-11.88	25.35	43.50	-18.15	QP
4 *	290.0172	52.90	-11.00	41.90	46.00	-4.10	QP
5	345.5952	43.47	-9.23	34.24	46.00	-11.76	QP
6	422.0577	41.31	-7.07	34.24	46.00	-11.76	QP

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 4(Adapter 1)	Test Voltage:	AC120V/60Hz



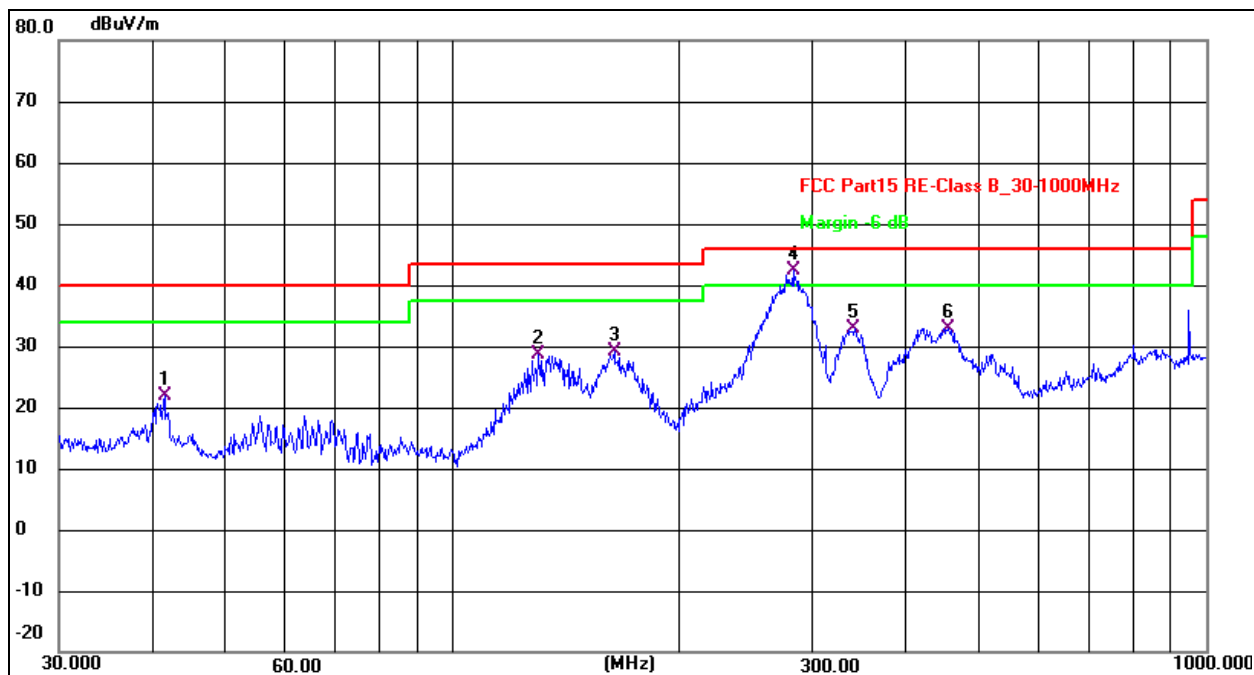
Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier.
- Measurement = Reading Level + Correct Factor
- Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	31.9546	44.99	-12.34	32.65	40.00	-7.35	QP
2	54.6429	43.34	-13.99	29.35	40.00	-10.65	QP
3	75.4464	45.71	-15.64	30.07	40.00	-9.93	QP
4	142.3243	43.98	-11.56	32.42	43.50	-11.08	QP
5	273.2341	46.96	-11.67	35.29	46.00	-10.71	QP
6	414.7223	41.62	-7.25	34.37	46.00	-11.63	QP

Between 30MHz – 1GHz

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4(Adapter 2)	Test Voltage:	AC120V/60Hz

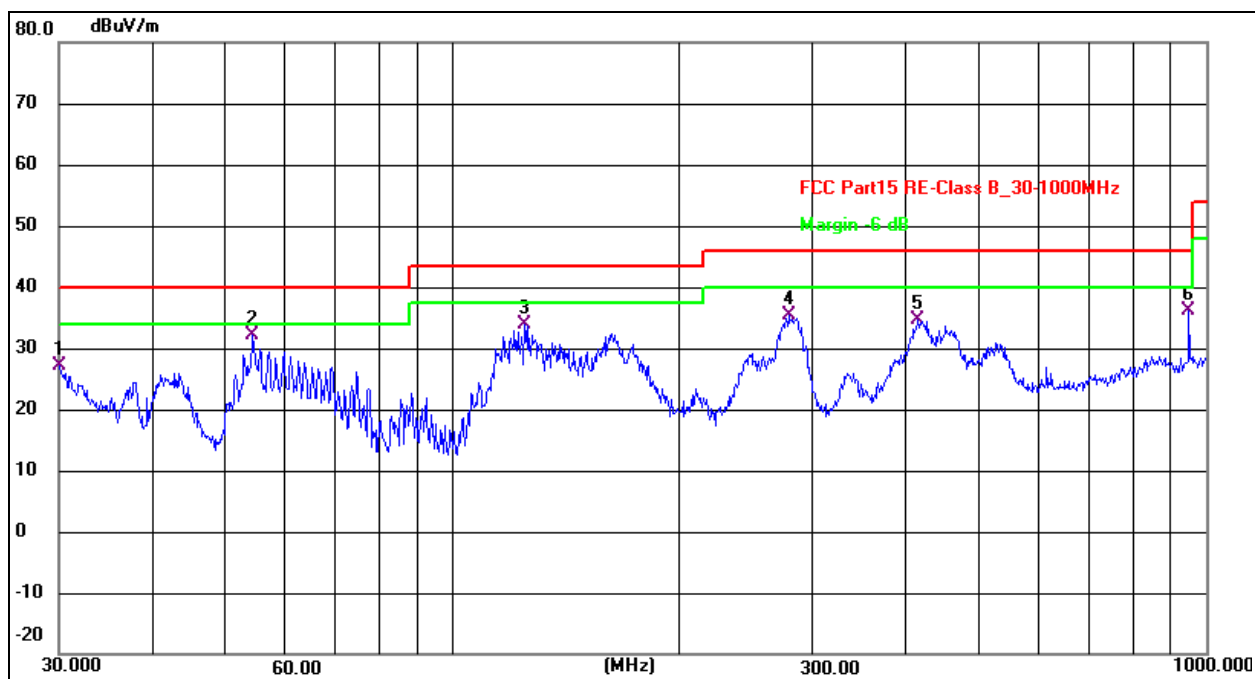


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	41.4215	34.83	-13.03	21.80	40.00	-18.20	QP
2	129.9225	41.16	-12.63	28.53	43.50	-14.97	QP
3	163.7549	40.95	-11.92	29.03	43.50	-14.47	QP
4 *	282.9851	53.62	-11.28	42.34	46.00	-3.66	QP
5	341.9786	42.20	-9.34	32.86	46.00	-13.14	QP
6	454.3100	39.21	-6.30	32.91	46.00	-13.09	QP

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 4(Adapter 2)	Test Voltage:	AC120V/60Hz


Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier.
- Measurement = Reading Level + Correct Factor
- Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.1054	39.26	-12.21	27.05	40.00	-12.95	QP
2 *	54.2610	46.10	-13.96	32.14	40.00	-7.86	QP
3	124.5690	46.99	-13.09	33.90	43.50	-9.60	QP
4	279.0436	46.78	-11.44	35.34	46.00	-10.66	QP
5	414.7223	41.91	-7.25	34.66	46.00	-11.34	QP
6	948.7610	33.47	2.78	36.25	46.00	-9.75	QP

Between 1GHz – 40GHz

Test Mode:	TX(5.1G) - 802.11a
------------	--------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.020	73.50	-20.73	52.77	68.2	-15.43	PK
Vertical	4434.020	59.94	-20.73	39.20	54	-14.80	AV
Vertical	10360.197	60.38	-9.36	51.02	68.2	-17.18	PK
Vertical	10360.197	49.19	-9.36	39.83	54	-14.17	AV
Vertical	15540.051	60.20	-7.84	52.36	74	-21.64	PK
Vertical	15540.051	49.98	-7.84	42.14	54	-11.86	AV
Horizontal	4434.070	71.87	-20.73	51.14	68.2	-17.06	PK
Horizontal	4434.070	59.68	-20.73	38.95	54	-15.05	AV
Horizontal	10360.019	64.81	-9.36	55.45	68.2	-12.75	PK
Horizontal	10360.019	49.08	-9.36	39.72	54	-14.28	AV
Horizontal	15540.179	63.22	-7.84	55.38	74	-18.62	PK
Horizontal	15540.179	49.40	-7.84	41.56	54	-12.44	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.050	72.42	-20.42	52.01	74	-21.99	PK
Vertical	4592.050	59.01	-20.42	38.60	54	-15.40	AV
Vertical	10400.123	64.47	-9.30	55.17	68.2	-13.03	PK
Vertical	10400.123	49.44	-9.30	40.14	54	-13.86	AV
Vertical	15600.091	60.27	-7.82	52.45	74	-21.55	PK
Vertical	15600.091	49.56	-7.82	41.74	54	-12.26	AV
Horizontal	4592.159	70.33	-20.42	49.91	74	-24.09	PK
Horizontal	4592.159	59.04	-20.42	38.62	54	-15.38	AV
Horizontal	10400.043	61.28	-9.30	51.98	68.2	-16.22	PK
Horizontal	10400.043	49.34	-9.30	40.04	54	-13.96	AV
Horizontal	15600.185	61.58	-7.82	53.76	74	-20.24	PK
Horizontal	15600.185	49.50	-7.82	41.68	54	-12.32	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.155	74.38	-20.12	54.26	74	-19.74	PK
Vertical	4739.155	59.80	-20.12	39.68	54	-14.32	AV
Vertical	10480.013	64.87	-9.18	55.69	68.2	-12.51	PK
Vertical	10480.013	49.04	-9.18	39.86	54	-14.14	AV
Vertical	15720.047	64.44	-7.78	56.66	74	-17.34	PK
Vertical	15720.047	49.89	-7.78	42.11	54	-11.89	AV
Horizontal	4739.117	71.84	-20.12	51.72	74	-22.28	PK
Horizontal	4739.117	59.13	-20.12	39.01	54	-14.99	AV
Horizontal	10480.067	64.71	-9.18	55.53	68.2	-12.67	PK
Horizontal	10480.067	49.80	-9.18	40.62	54	-13.38	AV
Horizontal	15720.046	63.25	-7.78	55.47	74	-18.53	PK
Horizontal	15720.046	49.24	-7.78	41.46	54	-12.54	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11n-HT20
------------	-------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.120	70.52	-20.73	49.79	68.2	-18.41	PK
Vertical	4434.120	59.36	-20.73	38.63	54	-15.37	AV
Vertical	10360.096	64.17	-9.36	54.81	68.2	-13.39	PK
Vertical	10360.096	49.76	-9.36	40.40	54	-13.60	AV
Vertical	15540.126	61.24	-7.84	53.40	74	-20.60	PK
Vertical	15540.126	49.16	-7.84	41.32	54	-12.68	AV
Horizontal	4434.038	74.46	-20.73	53.73	68.2	-14.47	PK
Horizontal	4434.038	59.27	-20.73	38.54	54	-15.46	AV
Horizontal	10360.045	60.38	-9.36	51.02	68.2	-17.18	PK
Horizontal	10360.045	49.86	-9.36	40.50	54	-13.50	AV
Horizontal	15540.079	65.00	-7.84	57.16	74	-16.84	PK
Horizontal	15540.079	49.36	-7.84	41.52	54	-12.48	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.128	72.67	-20.42	52.26	74	-21.74	PK
Vertical	4592.128	59.28	-20.42	38.86	54	-15.14	AV
Vertical	10400.194	60.56	-9.30	51.26	68.2	-16.94	PK
Vertical	10400.194	49.12	-9.30	39.82	54	-14.18	AV
Vertical	15600.131	60.03	-7.82	52.21	74	-21.79	PK
Vertical	15600.131	49.42	-7.82	41.60	54	-12.40	AV
Horizontal	4592.163	73.01	-20.42	52.60	74	-21.40	PK
Horizontal	4592.163	59.66	-20.42	39.25	54	-14.75	AV
Horizontal	10400.002	62.70	-9.30	53.40	68.2	-14.80	PK
Horizontal	10400.002	49.88	-9.30	40.58	54	-13.42	AV
Horizontal	15600.123	64.51	-7.82	56.69	74	-17.31	PK
Horizontal	15600.123	49.12	-7.82	41.30	54	-12.70	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.197	72.34	-20.12	52.21	74	-21.79	PK
Vertical	4739.197	59.35	-20.12	39.22	54	-14.78	AV
Vertical	10480.099	60.47	-9.18	51.29	68.2	-16.91	PK
Vertical	10480.099	49.20	-9.18	40.02	54	-13.98	AV
Vertical	15720.040	61.18	-7.78	53.40	74	-20.60	PK
Vertical	15720.040	49.71	-7.78	41.93	54	-12.07	AV
Horizontal	4739.065	73.90	-20.12	53.78	74	-20.22	PK
Horizontal	4739.065	59.24	-20.12	39.12	54	-14.88	AV
Horizontal	10480.113	62.94	-9.18	53.76	68.2	-14.44	PK
Horizontal	10480.113	49.54	-9.18	40.36	54	-13.64	AV
Horizontal	15720.033	63.34	-7.78	55.56	74	-18.44	PK
Horizontal	15720.033	49.82	-7.78	42.04	54	-11.96	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11n-HT40
------------	-------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.122	73.62	-20.73	52.89	68.2	-15.31	PK
Vertical	4434.122	59.87	-20.73	39.13	54	-14.87	AV
Vertical	10380.094	61.35	-9.33	52.02	68.2	-16.18	PK
Vertical	10380.094	49.73	-9.33	40.40	54	-13.60	AV
Vertical	15570.168	62.16	-7.83	54.33	74	-19.67	PK
Vertical	15570.168	49.76	-7.83	41.93	54	-12.07	AV
Horizontal	4434.014	72.87	-20.73	52.14	74	-21.86	PK
Horizontal	4434.014	59.29	-20.73	38.56	54	-15.44	AV
Horizontal	10380.033	61.62	-9.33	52.29	68.2	-15.91	PK
Horizontal	10380.033	49.17	-9.33	39.84	54	-14.16	AV
Horizontal	15570.041	64.06	-7.83	56.23	74	-17.77	PK
Horizontal	15570.041	49.31	-7.83	41.48	54	-12.52	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.195	74.83	-20.12	54.71	68.2	-13.49	PK
Vertical	4739.195	59.57	-20.12	39.45	54	-14.55	AV
Vertical	10460.034	61.80	-9.21	52.59	68.2	-15.61	PK
Vertical	10460.034	49.29	-9.21	40.08	54	-13.92	AV
Vertical	15690.032	62.40	-7.79	54.61	74	-19.39	PK
Vertical	15690.032	49.35	-7.79	41.56	54	-12.44	AV
Horizontal	4739.136	72.49	-20.12	52.37	68.2	-15.83	PK
Horizontal	4739.136	59.75	-20.12	39.63	54	-14.37	AV
Horizontal	10460.073	60.50	-9.21	51.29	68.2	-16.91	PK
Horizontal	10460.073	49.26	-9.21	40.05	54	-13.95	AV
Horizontal	15690.177	60.49	-7.79	52.70	74	-21.30	PK
Horizontal	15690.177	49.84	-7.79	42.05	54	-11.95	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11ac-HT20
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.183	71.48	-20.73	50.75	68.2	-17.45	PK
Vertical	4434.183	59.83	-20.73	39.09	54	-14.91	AV
Vertical	10360.120	62.51	-9.36	53.15	68.2	-15.05	PK
Vertical	10360.120	49.29	-9.36	39.93	54	-14.07	AV
Vertical	15540.031	61.10	-7.84	53.26	74	-20.74	PK
Vertical	15540.031	49.38	-7.84	41.54	54	-12.46	AV
Horizontal	4434.012	72.28	-20.73	51.55	68.2	-16.65	PK
Horizontal	4434.012	59.05	-20.73	38.32	54	-15.68	AV
Horizontal	10360.125	61.31	-9.36	51.95	68.2	-16.25	PK
Horizontal	10360.125	49.96	-9.36	40.60	54	-13.40	AV
Horizontal	15540.192	61.49	-7.84	53.65	74	-20.35	PK
Horizontal	15540.192	49.39	-7.84	41.55	54	-12.45	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.027	72.98	-20.42	52.56	74	-21.44	PK
Vertical	4592.027	59.23	-20.42	38.81	54	-15.19	AV
Vertical	10400.162	62.08	-9.30	52.78	68.2	-15.42	PK
Vertical	10400.162	49.55	-9.30	40.25	54	-13.75	AV
Vertical	15600.013	63.53	-7.82	55.71	74	-18.29	PK
Vertical	15600.013	49.90	-7.82	42.08	54	-11.92	AV
Horizontal	4592.102	70.94	-20.42	50.52	74	-23.48	PK
Horizontal	4592.102	59.48	-20.42	39.07	54	-14.93	AV
Horizontal	10400.093	61.65	-9.30	52.35	68.2	-15.85	PK
Horizontal	10400.093	49.17	-9.30	39.87	54	-14.13	AV
Horizontal	15600.032	62.51	-7.82	54.69	74	-19.31	PK
Horizontal	15600.032	49.04	-7.82	41.22	54	-12.78	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.068	70.76	-20.12	50.64	74	-23.36	PK
Vertical	4739.068	59.20	-20.12	39.08	54	-14.92	AV
Vertical	10480.187	61.52	-9.18	52.34	68.2	-15.86	PK
Vertical	10480.187	49.53	-9.18	40.35	54	-13.65	AV
Vertical	15720.089	60.67	-7.78	52.89	74	-21.11	PK
Vertical	15720.089	49.87	-7.78	42.09	54	-11.91	AV
Horizontal	4739.176	73.87	-20.12	53.75	74	-20.25	PK
Horizontal	4739.176	59.95	-20.12	39.83	54	-14.17	AV
Horizontal	10480.110	62.73	-9.18	53.55	68.2	-14.65	PK
Horizontal	10480.110	49.03	-9.18	39.85	54	-14.15	AV
Horizontal	15720.128	63.74	-7.78	55.96	74	-18.04	PK
Horizontal	15720.128	49.36	-7.78	41.58	54	-12.42	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11ac-HT40
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.004	72.08	-20.73	51.35	68.2	-16.85	PK
Vertical	4434.004	59.20	-20.73	38.47	54	-15.53	AV
Vertical	10380.131	64.84	-9.33	55.51	68.2	-12.69	PK
Vertical	10380.131	49.70	-9.33	40.37	54	-13.63	AV
Vertical	15570.047	62.57	-7.83	54.74	74	-19.26	PK
Vertical	15570.047	49.43	-7.83	41.60	54	-12.40	AV
Horizontal	4434.134	71.28	-20.73	50.54	74	-23.46	PK
Horizontal	4434.134	59.21	-20.73	38.48	54	-15.52	AV
Horizontal	10380.085	62.79	-9.33	53.46	68.2	-14.74	PK
Horizontal	10380.085	49.32	-9.33	39.99	54	-14.01	AV
Horizontal	15570.156	61.64	-7.83	53.81	74	-20.19	PK
Horizontal	15570.156	49.46	-7.83	41.63	54	-12.37	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.066	70.93	-20.12	50.81	68.2	-17.39	PK
Vertical	4739.066	59.28	-20.12	39.16	54	-14.84	AV
Vertical	10460.007	62.43	-9.21	53.22	68.2	-14.98	PK
Vertical	10460.007	49.78	-9.21	40.57	54	-13.43	AV
Vertical	15690.127	63.26	-7.79	55.47	74	-18.53	PK
Vertical	15690.127	49.71	-7.79	41.92	54	-12.08	AV
Horizontal	4739.035	74.72	-20.12	54.60	68.2	-13.60	PK
Horizontal	4739.035	59.35	-20.12	39.23	54	-14.77	AV
Horizontal	10460.135	64.45	-9.21	55.24	68.2	-12.96	PK
Horizontal	10460.135	49.67	-9.21	40.46	54	-13.54	AV
Horizontal	15690.017	61.80	-7.79	54.01	74	-19.99	PK
Horizontal	15690.017	49.37	-7.79	41.58	54	-12.42	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11ac 80
------------	------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5210 MHz)-Above 1G							
Vertical	4434.121	74.85	-20.73	54.12	68.2	-14.08	PK
Vertical	4434.121	59.59	-20.73	38.86	54	-15.14	AV
Vertical	10420.058	60.44	-9.27	51.17	68.2	-17.03	PK
Vertical	10420.058	49.82	-9.27	40.55	54	-13.45	AV
Vertical	15630.031	60.53	-7.81	52.72	74	-21.28	PK
Vertical	15630.031	49.52	-7.81	41.71	54	-12.29	AV
Horizontal	4434.120	71.09	-20.73	50.36	68.2	-17.84	PK
Horizontal	4434.120	59.03	-20.73	38.30	54	-15.70	AV
Horizontal	10420.061	44.57	9.27	53.84	68.2	-14.36	PK
Horizontal	10420.061	29.25	9.27	38.52	54	-15.48	AV
Horizontal	15630.082	60.69	-7.81	52.88	74	-21.12	PK
Horizontal	15630.082	49.35	-7.81	41.54	54	-12.46	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX (5.8G) -- 802.11a
------------	----------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.094	74.06	-20.24	53.82	74	-20.18	PK
Vertical	4679.094	59.92	-20.24	39.68	54	-14.32	AV
Vertical	11490.080	64.38	-8.79	55.59	68.2	-12.61	PK
Vertical	11490.080	49.22	-8.79	40.43	54	-13.57	AV
Vertical	17235.124	57.67	-3.18	54.49	68.2	-13.71	PK
Vertical	17235.124	44.79	-3.18	41.61	54	-12.39	AV
Horizontal	4679.073	70.24	-20.73	49.51	74	-24.49	PK
Horizontal	4679.073	59.31	-20.73	38.58	54	-15.42	AV
Horizontal	11490.044	61.09	-8.79	52.30	68.2	-15.90	PK
Horizontal	11490.044	49.52	-8.79	40.73	54	-13.27	AV
Horizontal	17235.056	56.86	-3.18	53.68	68.2	-14.52	PK
Horizontal	17235.056	44.19	-3.18	41.01	54	-12.99	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.075	73.87	-20.42	53.45	74	-20.55	PK
Vertical	4592.075	59.64	-20.42	39.23	54	-14.77	AV
Vertical	11570.007	61.88	-8.86	53.02	68.2	-15.18	PK
Vertical	11570.007	49.67	-8.86	40.81	54	-13.19	AV
Vertical	17355.102	59.90	-2.52	57.38	68.2	-10.82	PK
Vertical	17355.102	44.29	-2.52	41.77	54	-12.23	AV
Horizontal	4592.043	70.29	-20.42	49.87	74	-24.13	PK
Horizontal	4592.043	59.93	-20.42	39.52	54	-14.48	AV
Horizontal	11570.028	60.05	-8.86	51.19	68.2	-17.01	PK
Horizontal	11570.028	49.80	-8.86	40.94	54	-13.06	AV
Horizontal	17355.185	57.09	-2.52	54.57	68.2	-13.63	PK
Horizontal	17355.185	44.68	-2.52	42.16	54	-11.84	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.089	71.89	-18.93	52.96	68.2	-15.24	PK
Vertical	6039.089	59.81	-18.93	40.88	54	-13.12	AV
Vertical	11650.149	61.51	-8.92	52.59	74	-21.41	PK
Vertical	11650.149	49.13	-8.92	40.21	54	-13.79	AV
Vertical	17475.143	59.39	-1.86	57.53	68.2	-10.67	PK
Vertical	17475.143	44.04	-1.86	42.18	54	-11.82	AV
Horizontal	6039.130	71.18	-18.93	52.25	68.2	-15.95	PK
Horizontal	6039.130	59.24	-18.93	40.31	54	-13.69	AV
Horizontal	11650.085	64.26	-8.92	55.34	74	-18.66	PK
Horizontal	11650.085	49.73	-8.92	40.81	54	-13.19	AV
Horizontal	17475.132	59.40	-1.86	57.54	68.2	-10.66	PK
Horizontal	17475.132	44.29	-1.86	42.43	54	-11.57	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode: TX (5.8G) --802.11n-HT20

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.097	72.99	-20.24	52.75	74	-21.25	PK
Vertical	4679.097	59.00	-20.24	38.76	54	-15.24	AV
Vertical	11490.078	60.62	-8.79	51.83	68.2	-16.37	PK
Vertical	11490.078	49.87	-8.79	41.08	54	-12.92	AV
Vertical	17235.124	57.27	-3.18	54.09	68.2	-14.11	PK
Vertical	17235.124	44.47	-3.18	41.29	54	-12.71	AV
Horizontal	4679.072	74.97	-20.24	54.72	74	-19.28	PK
Horizontal	4679.072	59.32	-20.24	39.08	54	-14.92	AV
Horizontal	11490.105	64.35	-8.79	55.56	68.2	-12.64	PK
Horizontal	11490.105	49.31	-8.79	40.52	54	-13.48	AV
Horizontal	17235.003	59.03	-3.18	55.85	68.2	-12.35	PK
Horizontal	17235.003	44.50	-3.18	41.32	54	-12.68	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.136	70.91	-20.42	50.49	74	-23.51	PK
Vertical	4592.136	59.33	-20.42	38.91	54	-15.09	AV
Vertical	11570.070	63.96	-8.86	55.10	68.2	-13.10	PK
Vertical	11570.070	49.23	-8.86	40.37	54	-13.63	AV
Vertical	17355.166	56.83	-2.52	54.31	68.2	-13.89	PK
Vertical	17355.166	44.60	-2.52	42.08	54	-11.92	AV
Horizontal	4592.096	72.83	-20.42	52.41	74	-21.59	PK
Horizontal	4592.096	59.10	-20.42	38.69	54	-15.31	AV
Horizontal	11570.080	62.12	-8.86	53.26	68.2	-14.94	PK
Horizontal	11570.080	49.27	-8.86	40.41	54	-13.59	AV
Horizontal	17355.193	56.29	-2.52	53.77	68.2	-14.43	PK
Horizontal	17355.193	44.75	-2.52	42.23	54	-11.77	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.052	73.84	-18.93	54.91	68.2	-13.29	PK
Vertical	6039.052	59.81	-18.93	40.87	54	-13.13	AV
Vertical	11650.181	62.12	-8.92	53.20	74	-20.80	PK
Vertical	11650.181	49.67	-8.92	40.75	54	-13.25	AV
Vertical	17475.185	59.51	-1.86	57.65	68.2	-10.55	PK
Vertical	17475.185	44.34	-1.86	42.48	54	-11.52	AV
Horizontal	6039.089	71.22	-18.93	52.29	68.2	-15.91	PK
Horizontal	6039.089	59.09	-18.93	40.15	54	-13.85	AV
Horizontal	11650.192	64.42	-8.92	55.50	74	-18.50	PK
Horizontal	11650.192	49.60	-8.92	40.68	54	-13.32	AV
Horizontal	17475.119	58.41	-1.86	56.55	68.2	-11.65	PK
Horizontal	17475.119	44.59	-1.86	42.73	54	-11.27	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX (5.8G) -- 802.11n-HT40
------------	---------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.021	71.81	-20.24	51.57	74	-22.43	PK
Vertical	4679.021	59.55	-20.24	39.31	54	-14.69	AV
Vertical	11510.011	61.60	-8.81	52.79	74	-21.21	PK
Vertical	11510.011	49.10	-8.81	40.29	54	-13.71	AV
Vertical	17265.050	58.55	-3.01	55.54	68.2	-12.66	PK
Vertical	17265.050	44.67	-3.01	41.66	54	-12.34	AV
Horizontal	4679.178	70.75	-20.24	50.51	74	-23.49	PK
Horizontal	4679.178	59.95	-20.24	39.71	54	-14.29	AV
Horizontal	11510.060	60.10	-8.81	51.29	74	-22.71	PK
Horizontal	11510.060	49.72	-8.81	40.91	54	-13.09	AV
Horizontal	17265.037	59.86	-3.01	56.85	68.2	-11.35	PK
Horizontal	17265.037	44.27	-3.01	41.26	54	-12.74	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.084	70.06	-18.93	51.13	68.2	-17.07	PK
Vertical	6039.084	59.56	-18.93	40.62	54	-13.38	AV
Vertical	11590.124	64.48	-8.87	55.61	74	-18.39	PK
Vertical	11590.124	49.30	-8.87	40.43	54	-13.57	AV
Vertical	17385.123	56.54	-2.35	54.19	68.2	-14.01	PK
Vertical	17385.123	44.67	-2.35	42.32	54	-11.68	AV
Horizontal	6039.071	74.15	-18.93	55.22	68.2	-12.98	PK
Horizontal	6039.071	59.71	-18.93	40.78	54	-13.22	AV
Horizontal	11590.082	61.84	-8.87	52.97	74	-21.03	PK
Horizontal	11590.082	49.36	-8.87	40.49	54	-13.51	AV
Horizontal	17385.164	59.28	-2.35	56.93	68.2	-11.27	PK
Horizontal	17385.164	44.39	-2.35	42.04	54	-11.96	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode: TX (5.8G) --802.11ac-HT20

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.169	71.39	-20.24	51.15	74	-22.85	PK
Vertical	4679.169	59.27	-20.24	39.03	54	-14.97	AV
Vertical	11490.038	61.75	-8.79	52.96	68.2	-15.24	PK
Vertical	11490.038	49.57	-8.79	40.78	54	-13.22	AV
Vertical	17235.132	57.80	-3.18	54.62	68.2	-13.58	PK
Vertical	17235.132	44.57	-3.18	41.39	54	-12.61	AV
Horizontal	4679.019	73.86	-20.24	53.61	74	-20.39	PK
Horizontal	4679.019	59.52	-20.24	39.28	54	-14.72	AV
Horizontal	11490.028	61.69	-8.79	52.90	68.2	-15.30	PK
Horizontal	11490.028	49.27	-8.79	40.48	54	-13.52	AV
Horizontal	17235.097	55.02	-3.18	51.84	68.2	-16.36	PK
Horizontal	17235.097	44.46	-3.18	41.28	54	-12.72	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.051	71.34	-20.42	50.92	74	-23.08	PK
Vertical	4592.051	59.07	-20.42	38.65	54	-15.35	AV
Vertical	11570.105	60.39	-8.86	51.53	68.2	-16.67	PK
Vertical	11570.105	49.21	-8.86	40.35	54	-13.65	AV
Vertical	17355.165	56.98	-2.52	54.46	68.2	-13.74	PK
Vertical	17355.165	44.56	-2.52	42.04	54	-11.96	AV
Horizontal	4592.050	74.15	-20.42	53.73	74	-20.27	PK
Horizontal	4592.050	59.58	-20.42	39.16	54	-14.84	AV
Horizontal	11570.134	60.88	-8.86	52.02	68.2	-16.18	PK
Horizontal	11570.134	49.11	-8.86	40.25	54	-13.75	AV
Horizontal	17355.188	58.42	-2.52	55.90	68.2	-12.30	PK
Horizontal	17355.188	44.09	-2.52	41.57	54	-12.43	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.153	73.53	-18.93	54.60	68.2	-13.60	PK
Vertical	6039.153	59.79	-18.93	40.86	54	-13.14	AV
Vertical	11650.093	63.75	-8.92	54.83	74	-19.17	PK
Vertical	11650.093	49.84	-8.92	40.92	54	-13.08	AV
Vertical	17475.000	57.04	-1.86	55.18	68.2	-13.02	PK
Vertical	17475.000	44.33	-1.86	42.47	54	-11.53	AV
Horizontal	6039.006	73.31	-18.93	54.37	68.2	-13.83	PK
Horizontal	6039.006	59.70	-18.93	40.77	54	-13.23	AV
Horizontal	11650.071	61.66	-8.92	52.74	74	-21.26	PK
Horizontal	11650.071	49.52	-8.92	40.60	54	-13.40	AV
Horizontal	17475.164	56.93	-1.86	55.07	68.2	-13.13	PK
Horizontal	17475.164	44.69	-1.86	42.83	54	-11.17	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode :	TX (5.8G) -- 802.11ac-HT40
-------------	----------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.091	73.70	-20.24	53.46	74	-20.54	PK
Vertical	4679.091	59.64	-20.24	39.40	54	-14.60	AV
Vertical	11510.101	63.77	-8.81	54.96	74	-19.04	PK
Vertical	11510.101	49.01	-8.81	40.20	54	-13.80	AV
Vertical	17265.161	55.10	-3.01	52.09	68.2	-16.11	PK
Vertical	17265.161	44.97	-3.01	41.96	54	-12.04	AV
Horizontal	4679.111	71.74	-20.24	51.50	74	-22.50	PK
Horizontal	4679.111	59.38	-20.24	39.13	54	-14.87	AV
Horizontal	11510.183	64.86	-8.81	56.05	74	-17.95	PK
Horizontal	11510.183	49.61	-8.81	40.80	54	-13.20	AV
Horizontal	17265.053	59.68	-3.01	56.67	68.2	-11.53	PK
Horizontal	17265.053	44.34	-3.01	41.33	54	-12.67	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.114	71.66	-18.93	52.73	68.2	-15.47	PK
Vertical	6039.114	59.56	-18.93	40.63	54	-13.37	AV
Vertical	11590.151	63.99	-8.87	55.12	74	-18.88	PK
Vertical	11590.151	49.70	-8.87	40.83	54	-13.17	AV
Vertical	17385.070	57.21	-2.35	54.86	68.2	-13.34	PK
Vertical	17385.070	44.14	-2.35	41.79	54	-12.21	AV
Horizontal	6039.038	74.02	-18.93	55.09	68.2	-13.11	PK
Horizontal	6039.038	59.11	-18.93	40.18	54	-13.82	AV
Horizontal	11590.093	60.84	-8.87	51.97	74	-22.03	PK
Horizontal	11590.093	49.19	-8.87	40.32	54	-13.68	AV
Horizontal	17385.054	56.11	-2.35	53.76	68.2	-14.44	PK
Horizontal	17385.054	44.23	-2.35	41.88	54	-12.12	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode :	TX (5.8G) -- 802.11ac 80
-------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5775 MHz)-Above 1G							
Vertical	4679.015	71.48	-20.24	51.24	74	-22.76	PK
Vertical	4679.015	59.68	-20.24	39.44	54	-14.56	AV
Vertical	11550.099	63.13	-8.84	54.29	74	-19.71	PK
Vertical	11550.099	49.16	-8.84	40.32	54	-13.68	AV
Vertical	17325.032	56.80	-2.68	54.12	68.2	-14.08	PK
Vertical	17325.032	44.65	-2.68	41.97	54	-12.03	AV
Horizontal	4679.004	72.62	-20.24	52.37	74	-21.63	PK
Horizontal	4679.004	59.91	-20.24	39.67	54	-14.33	AV
Horizontal	11550.069	62.36	-8.84	53.52	74	-20.48	PK
Horizontal	11550.069	49.36	-8.84	40.52	54	-13.48	AV
Horizontal	17325.150	55.65	-2.68	52.97	68.2	-15.23	PK
Horizontal	17325.150	44.67	-2.68	41.99	54	-12.01	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

8. Power Spectral Density Test

8.1 Block Diagram Of Test Setup



8.2 Limit

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz

(3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.3 Test Procedure

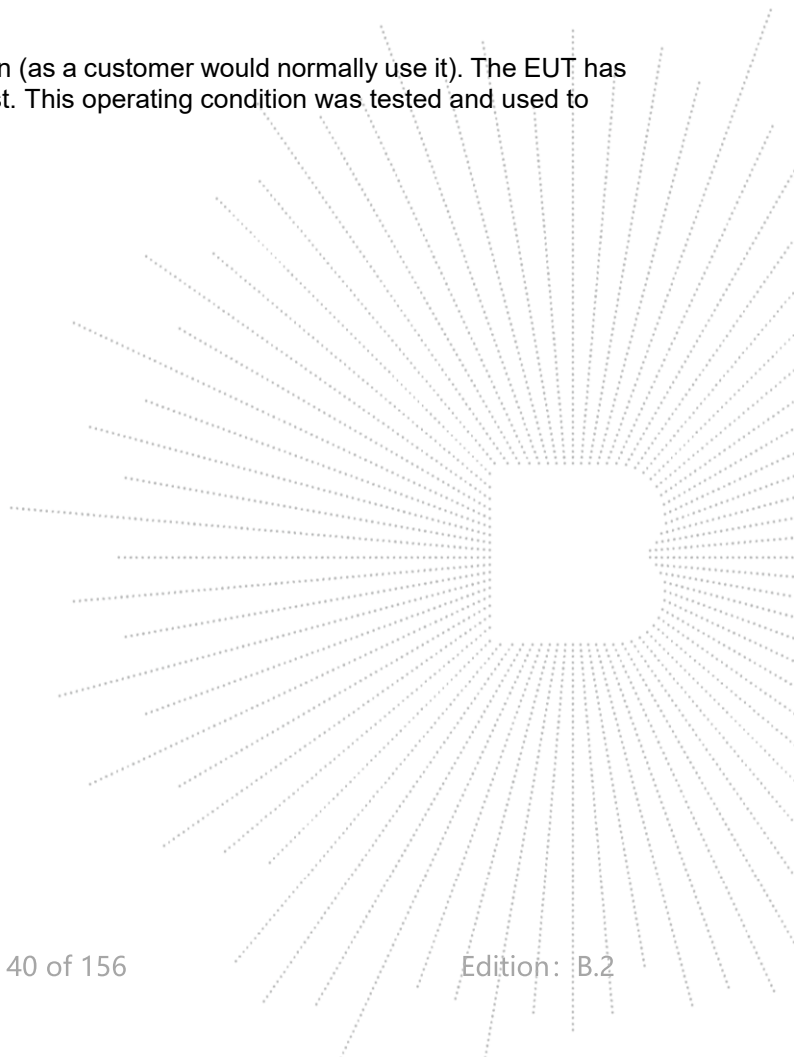
For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

8.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



8.5 Test Result

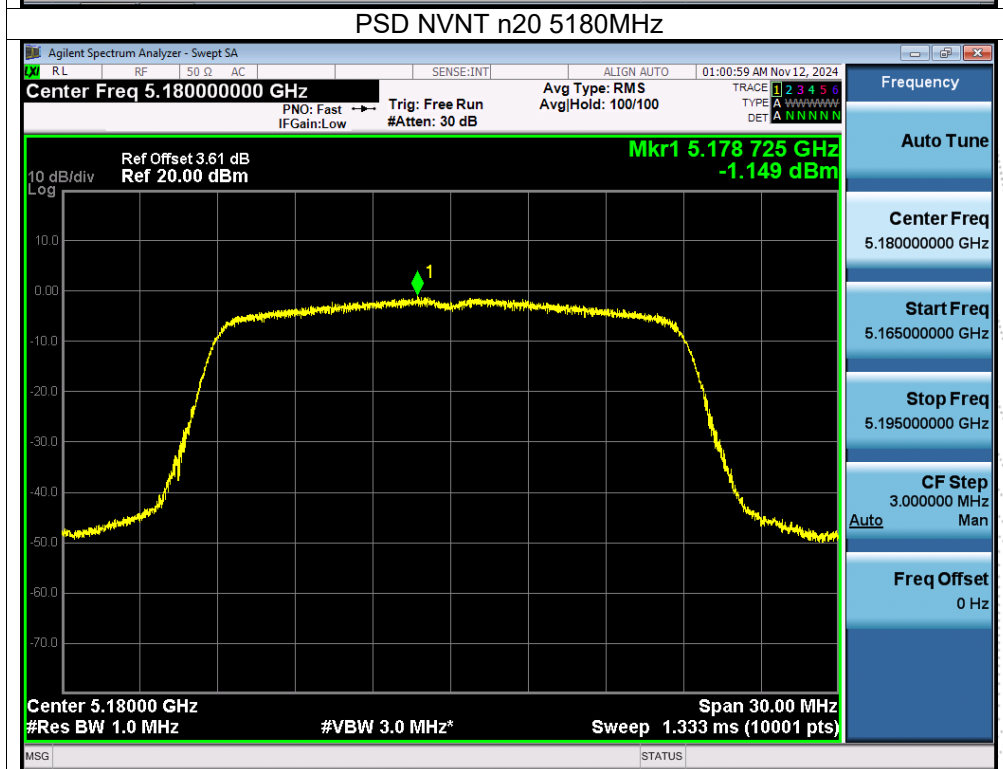
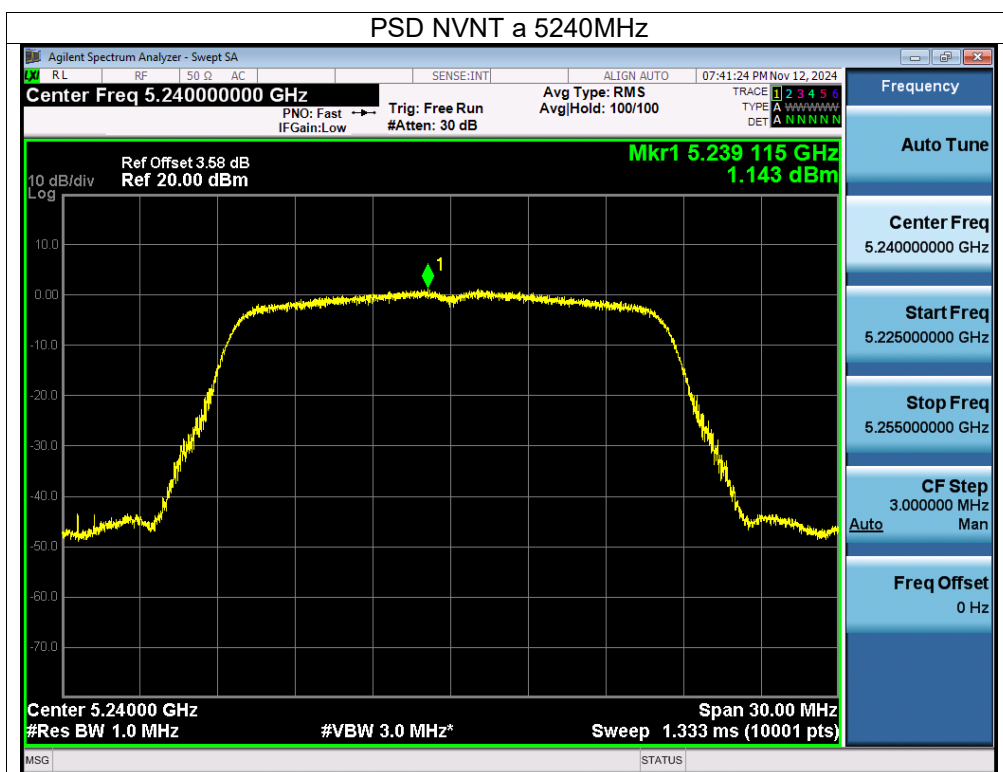
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.8V
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

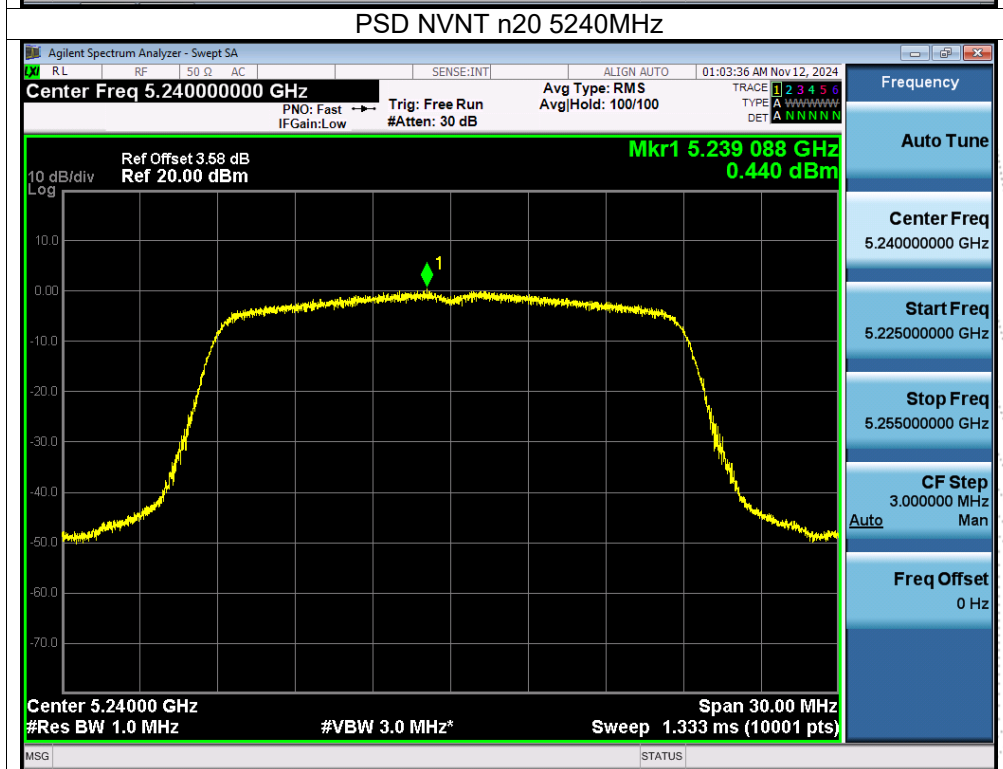
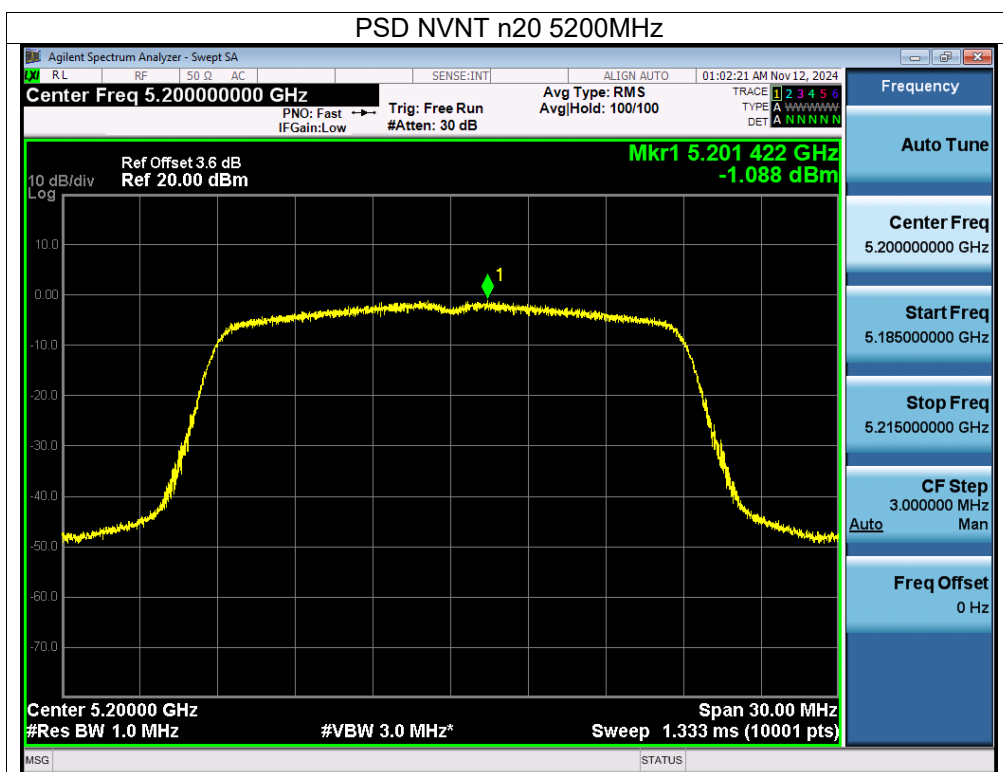
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5180	2.11	11	Pass
NVNT	a	5200	1.84	11	Pass
NVNT	a	5240	1.14	11	Pass
NVNT	n20	5180	-1.15	11	Pass
NVNT	n20	5200	-1.09	11	Pass
NVNT	n20	5240	0.44	11	Pass
NVNT	n40	5190	-4.64	11	Pass
NVNT	n40	5230	-5.73	11	Pass
NVNT	ac20	5180	-0.23	11	Pass
NVNT	ac20	5200	-0.76	11	Pass
NVNT	ac20	5240	-0.32	11	Pass
NVNT	ac40	5190	-4.65	11	Pass
NVNT	ac40	5230	-5.61	11	Pass
NVNT	ac80	5210	-11.02	11	Pass

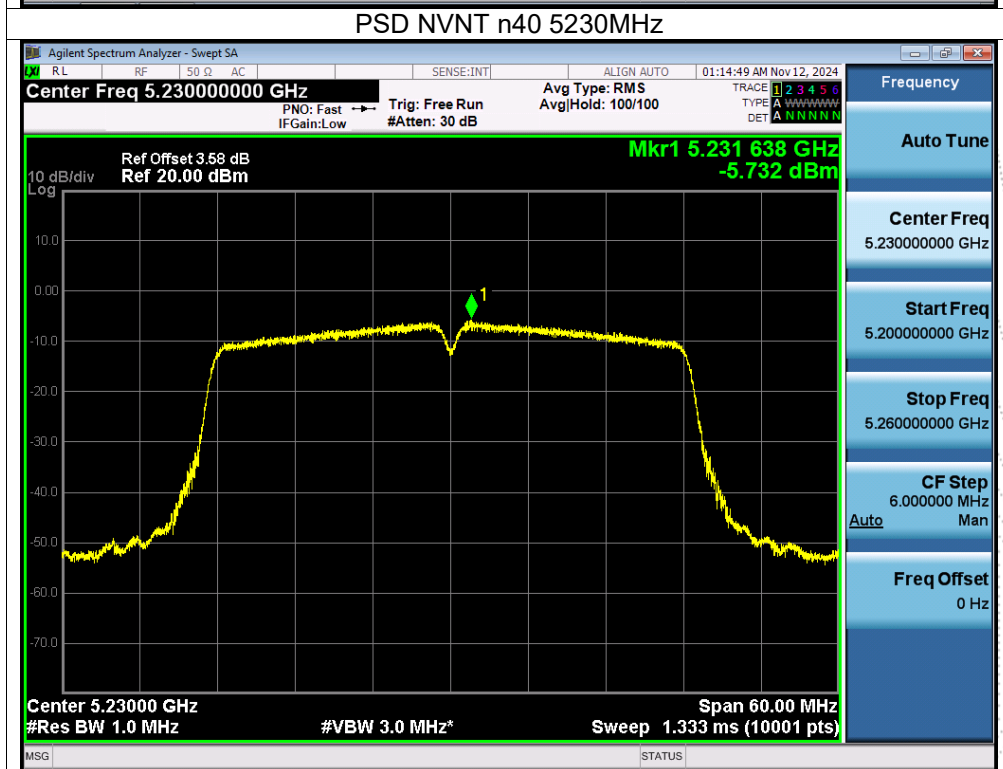
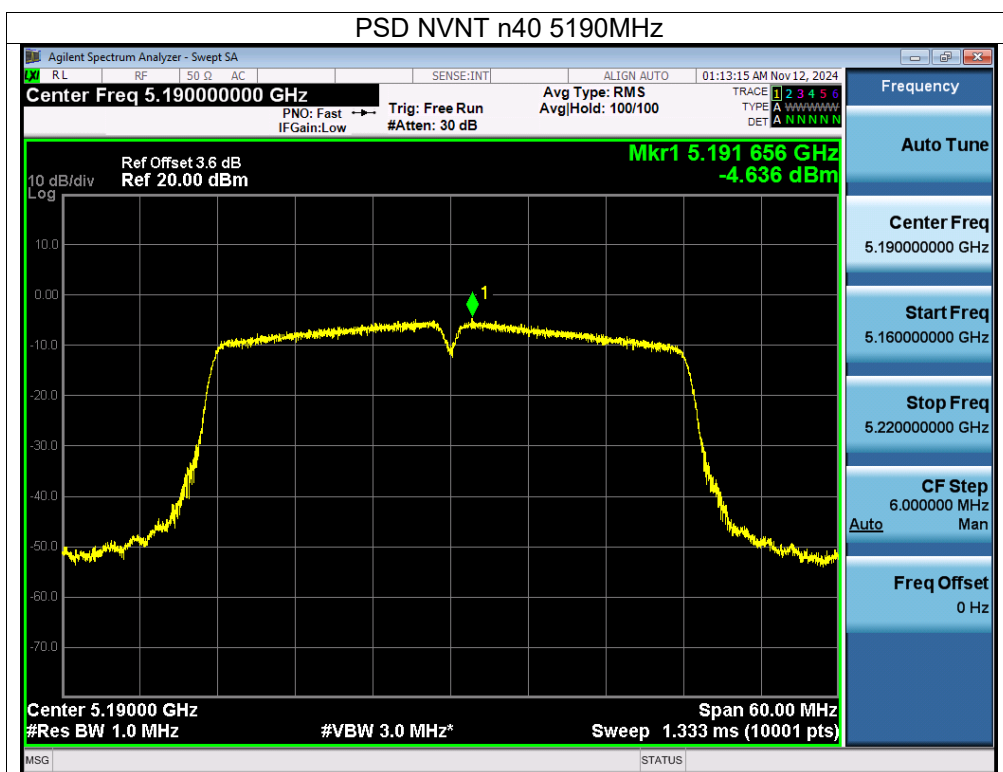
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/510KHz)	Conducted PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	-4.48	-4.566	30	Pass
NVNT	a	5785	-5.25	-5.336	30	Pass
NVNT	a	5825	-6.4	-6.486	30	Pass
NVNT	n20	5745	-6.56	-6.646	30	Pass
NVNT	n20	5785	-6.76	-6.846	30	Pass
NVNT	n20	5825	-7.31	-7.396	30	Pass
NVNT	n40	5755	-10.31	-10.396	30	Pass
NVNT	n40	5795	-10.99	-11.076	30	Pass
NVNT	ac20	5745	-6.17	-6.256	30	Pass
NVNT	ac20	5785	-6.66	-6.746	30	Pass
NVNT	ac20	5825	-7.48	-7.566	30	Pass
NVNT	ac40	5755	-9.99	-10.076	30	Pass
NVNT	ac40	5795	-10.71	-10.796	30	Pass
NVNT	ac80	5775	-13.77	-13.856	30	Pass

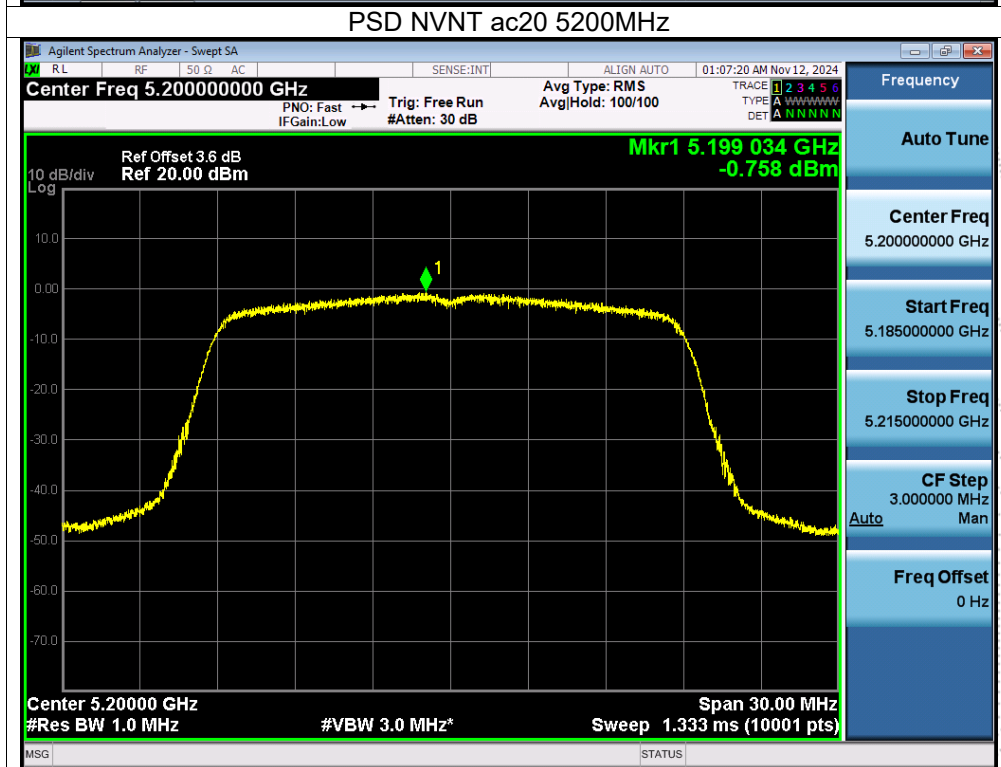
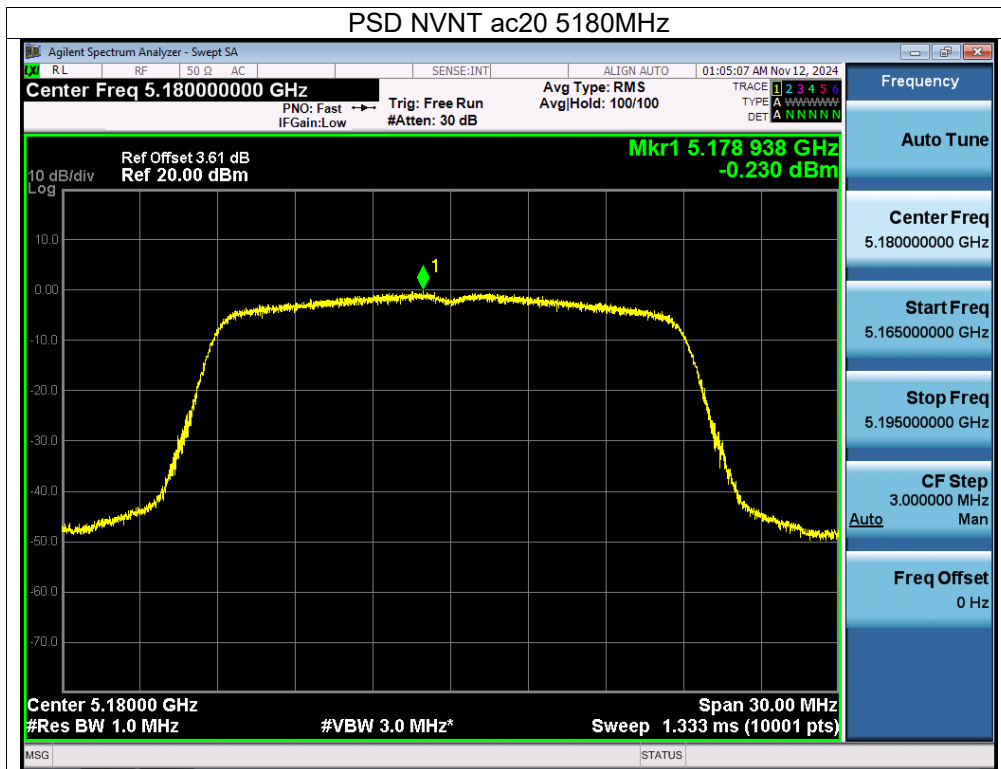
Note: Correction Factor = $10\log(500\text{KHz}/\text{RBW in measurement}) = -0.086$

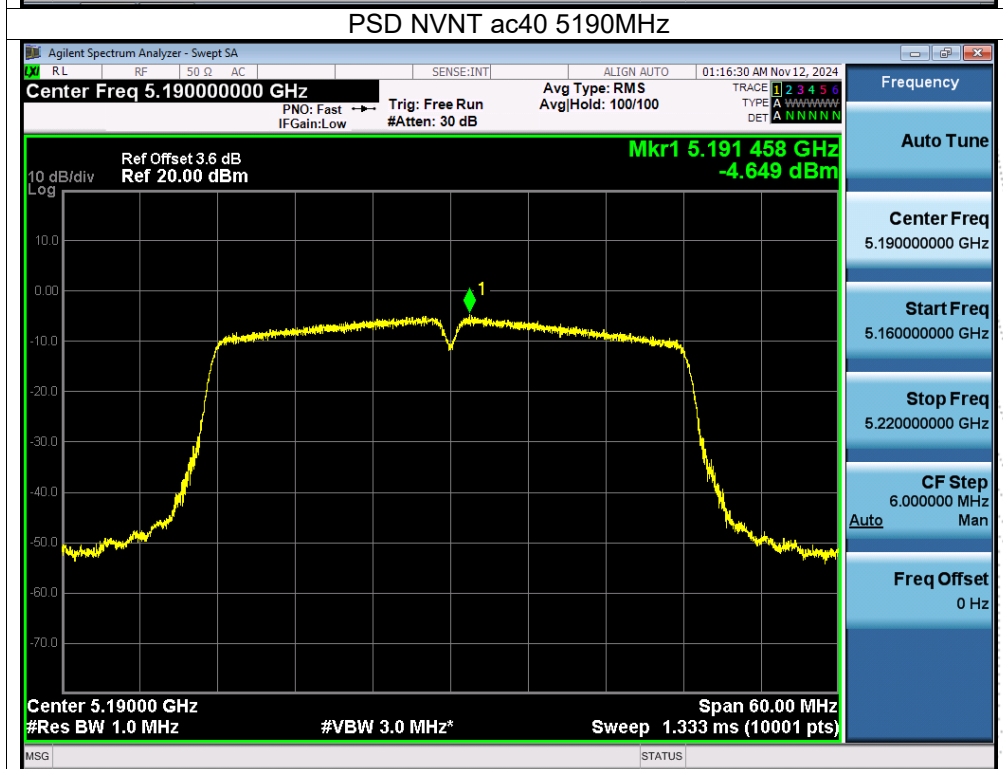
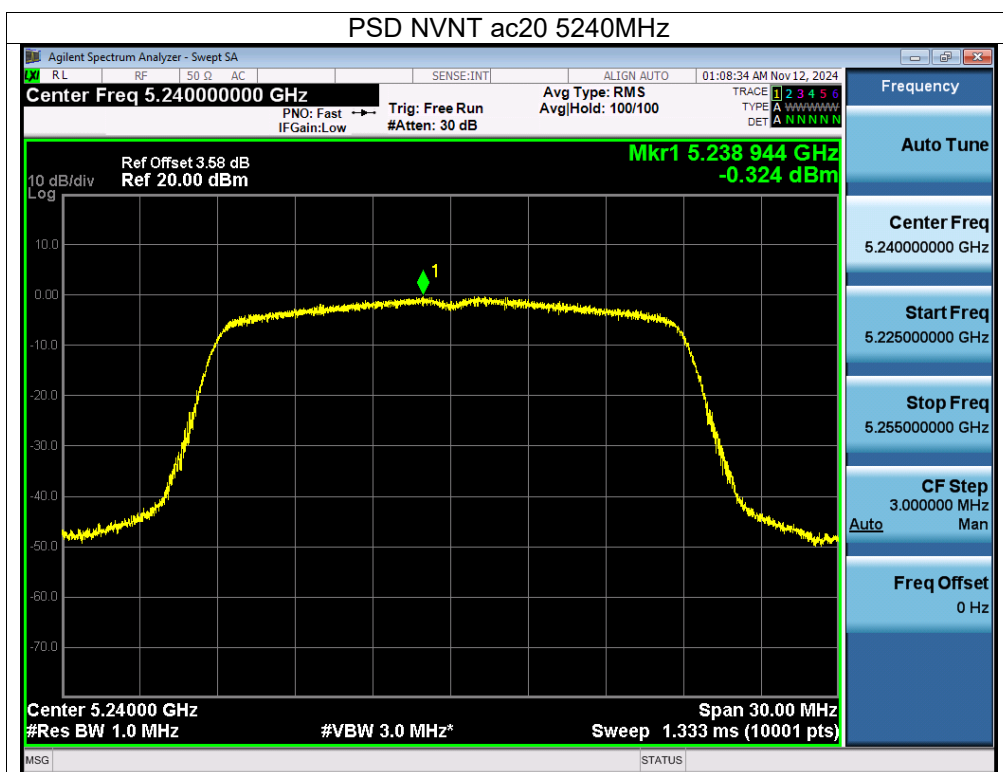


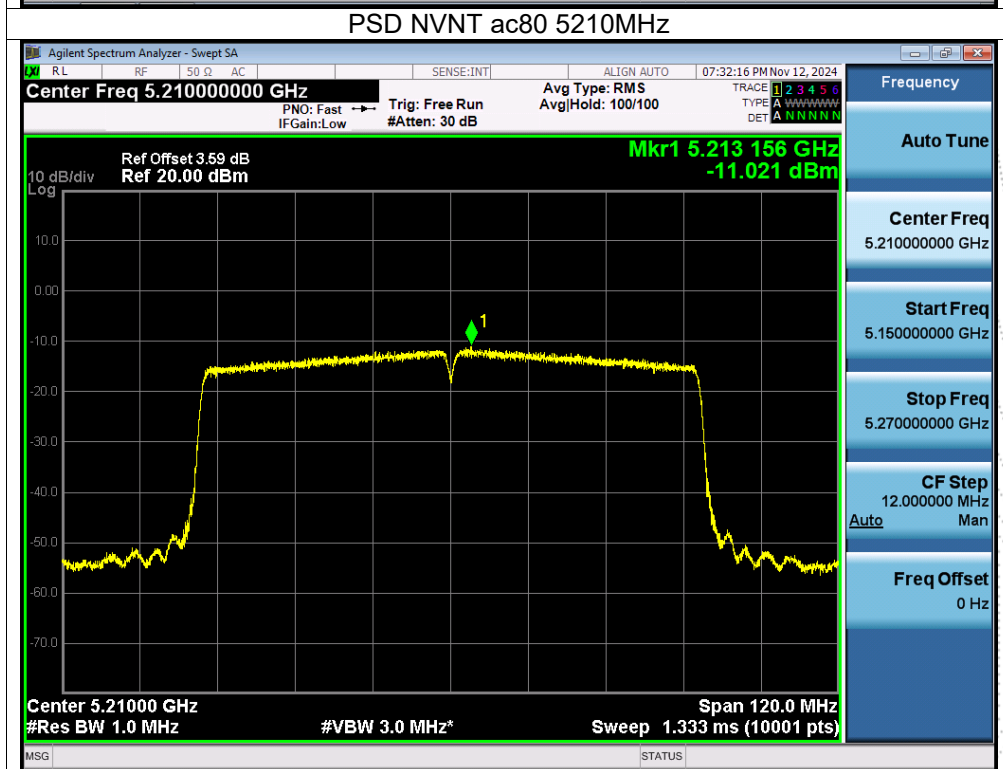
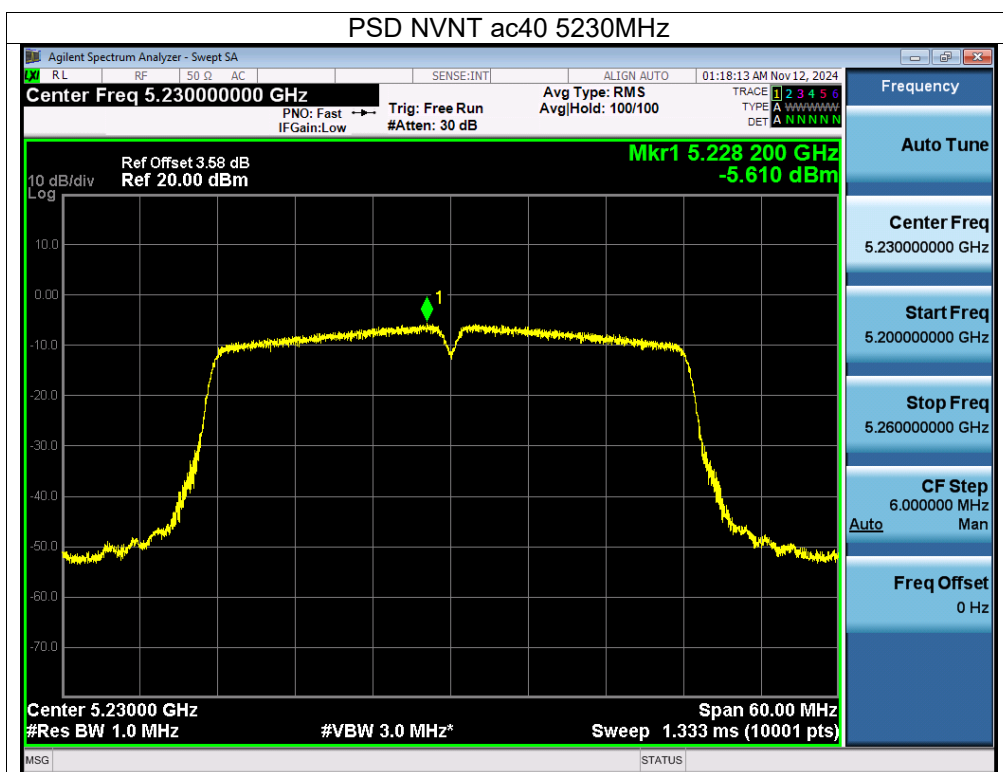


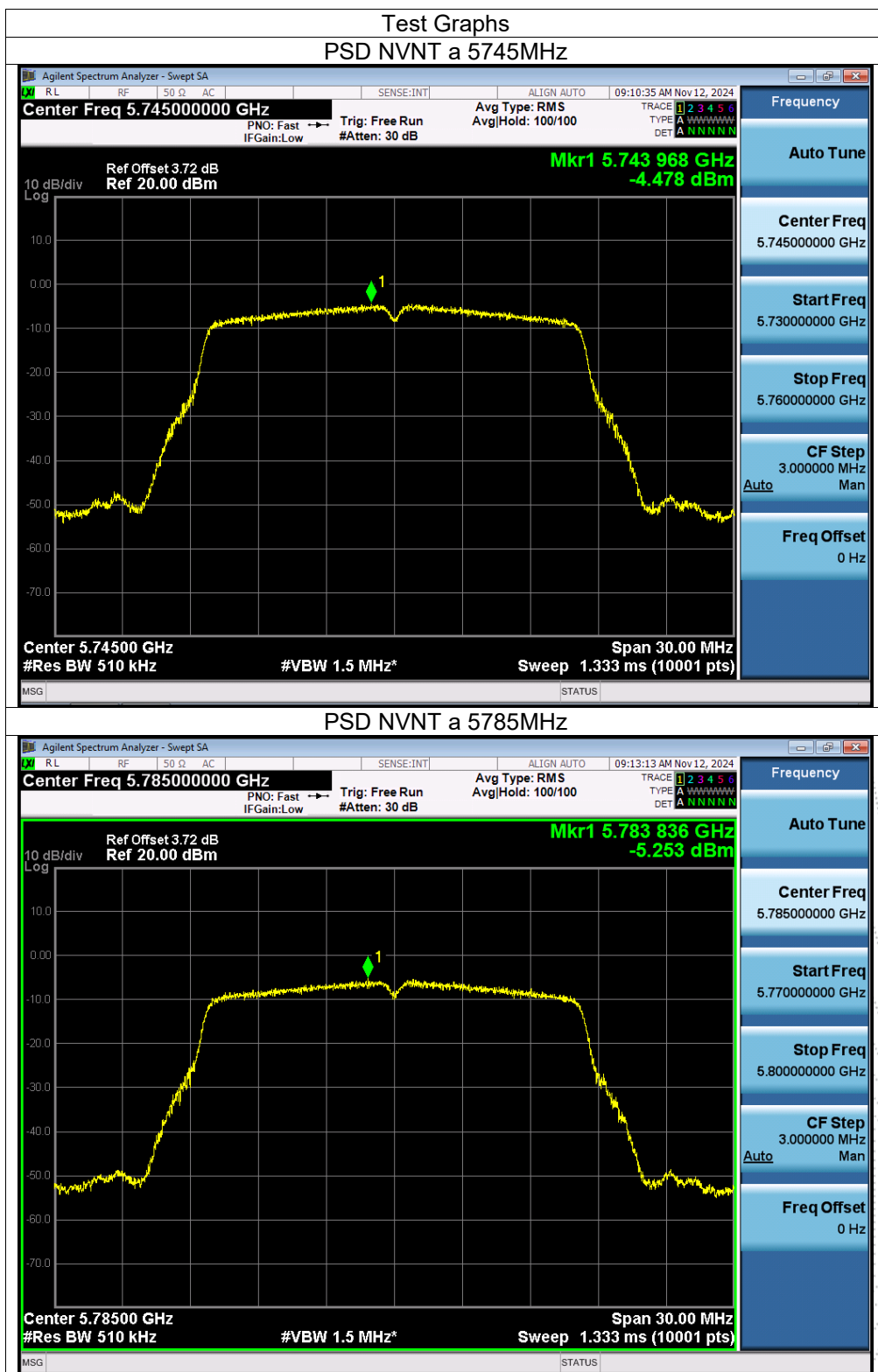


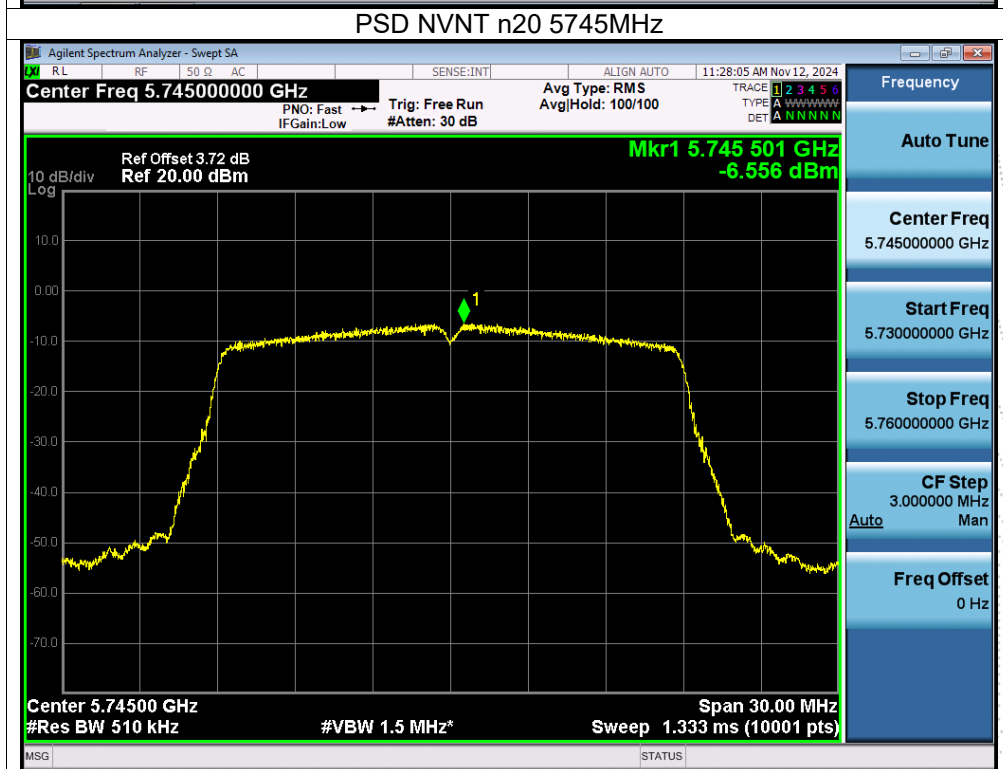
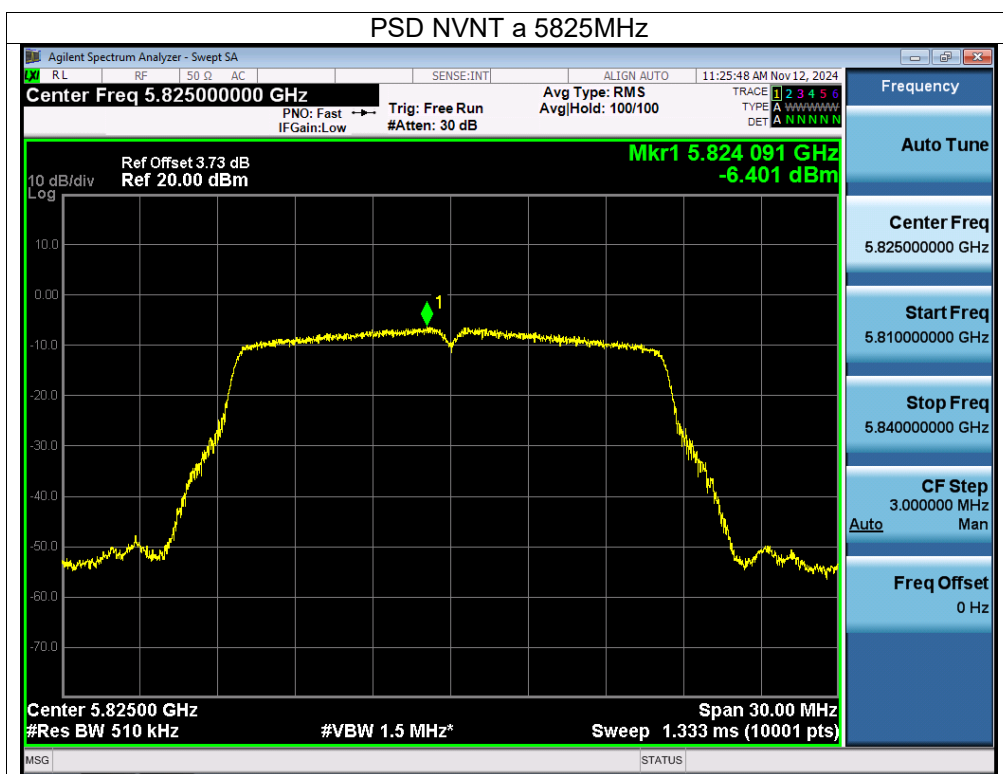


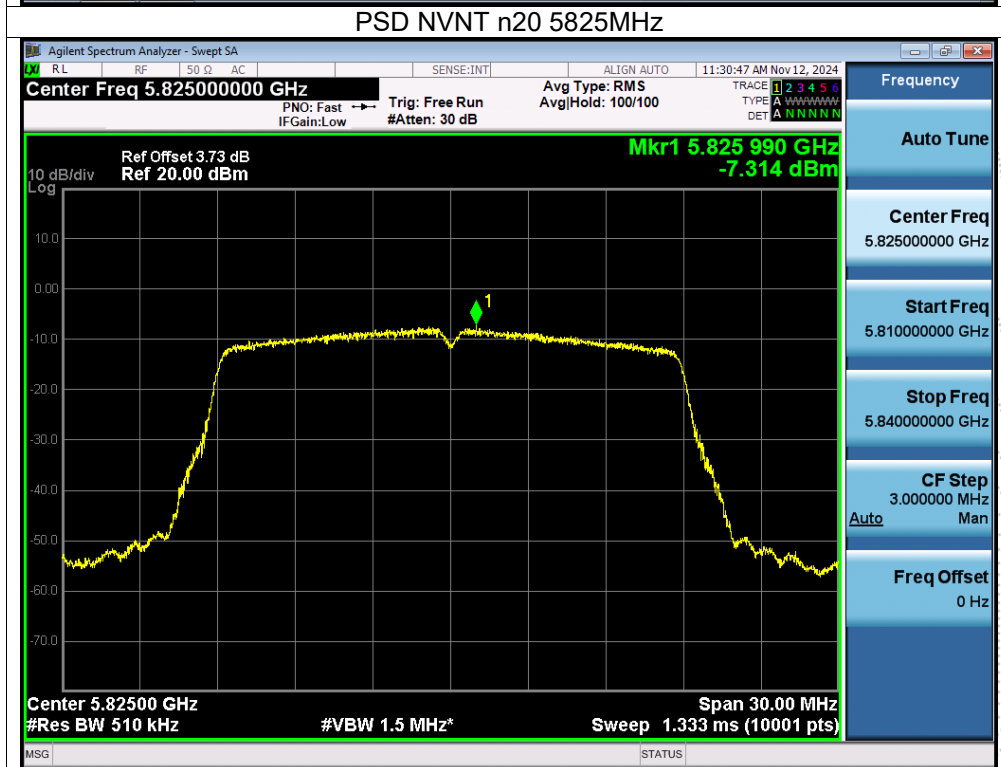
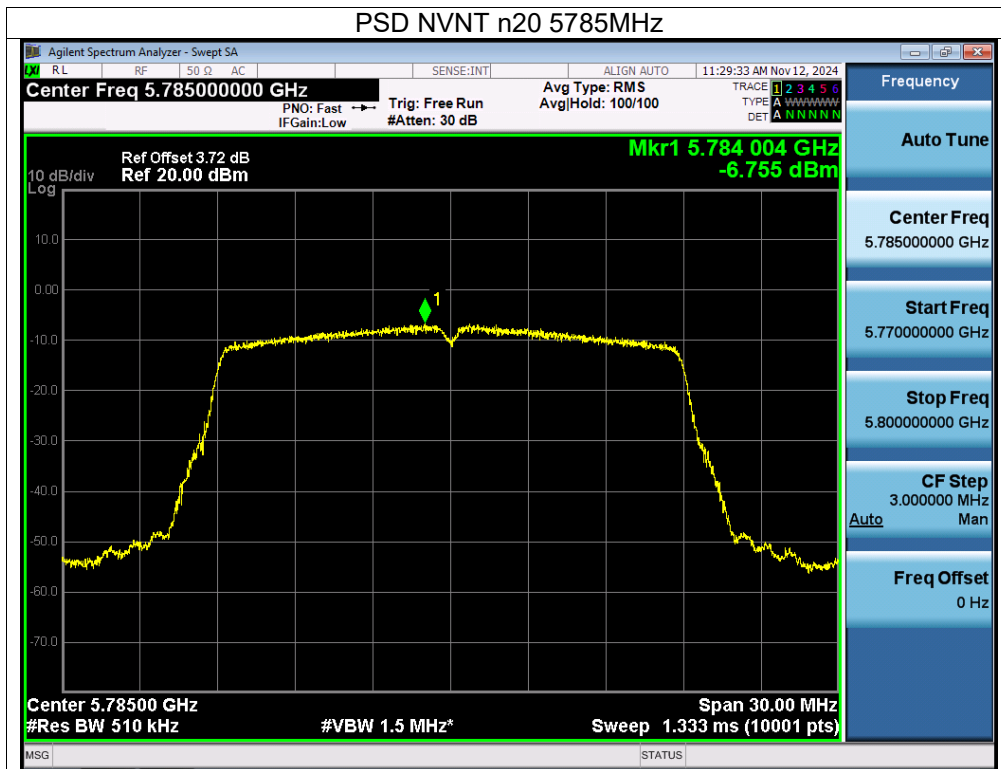


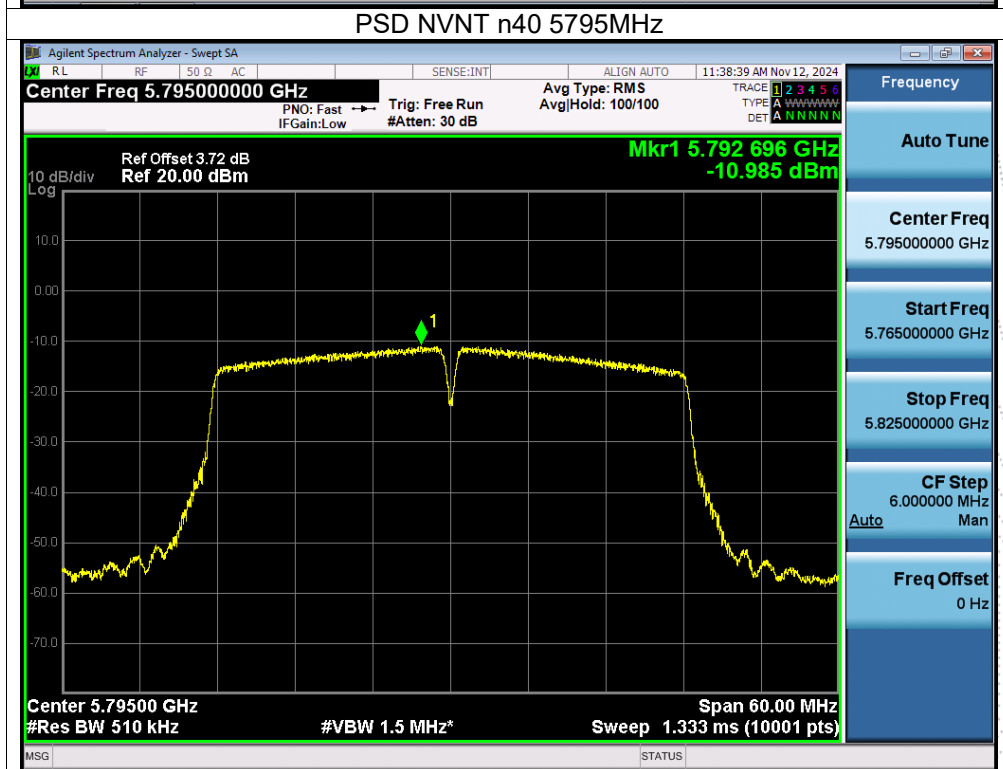
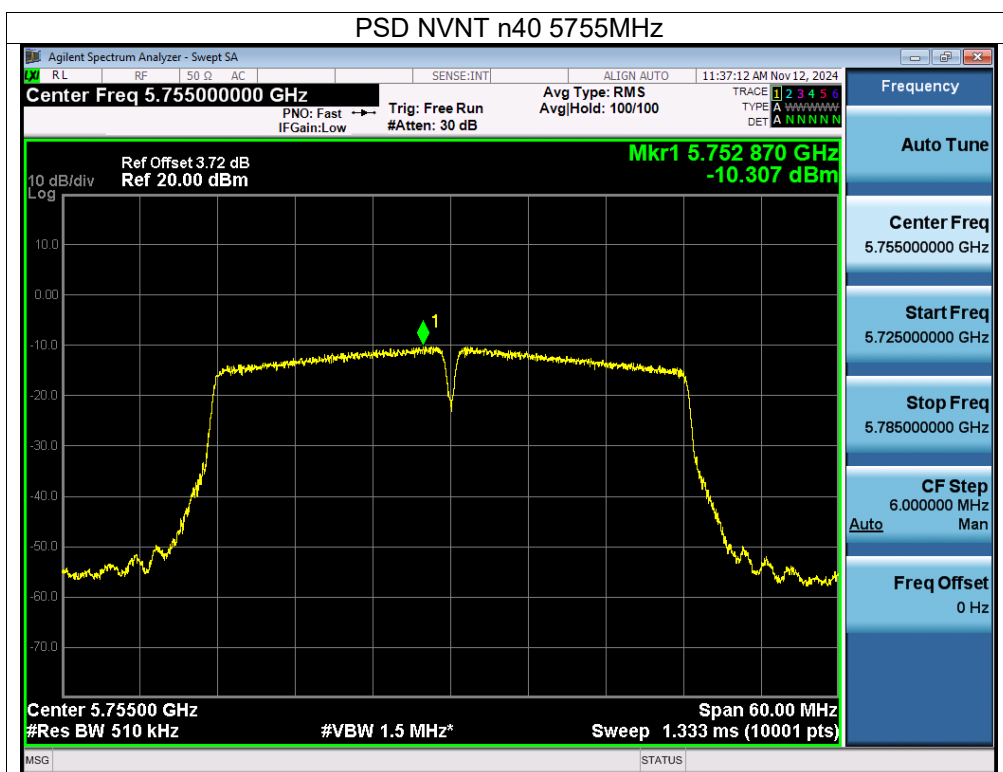


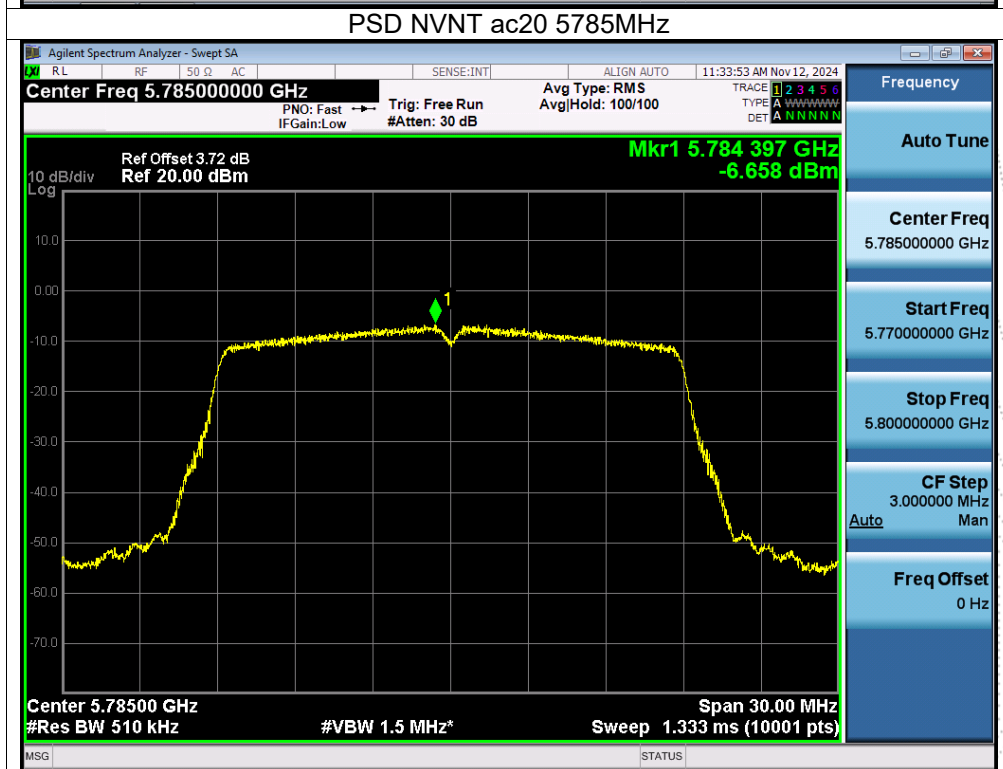
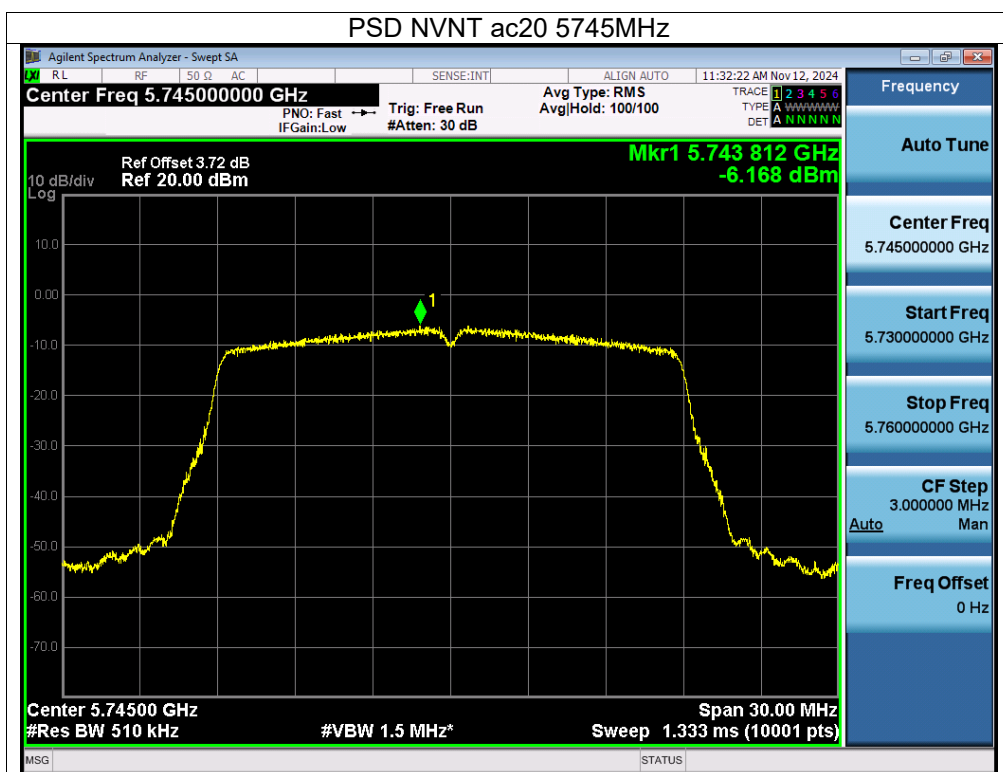


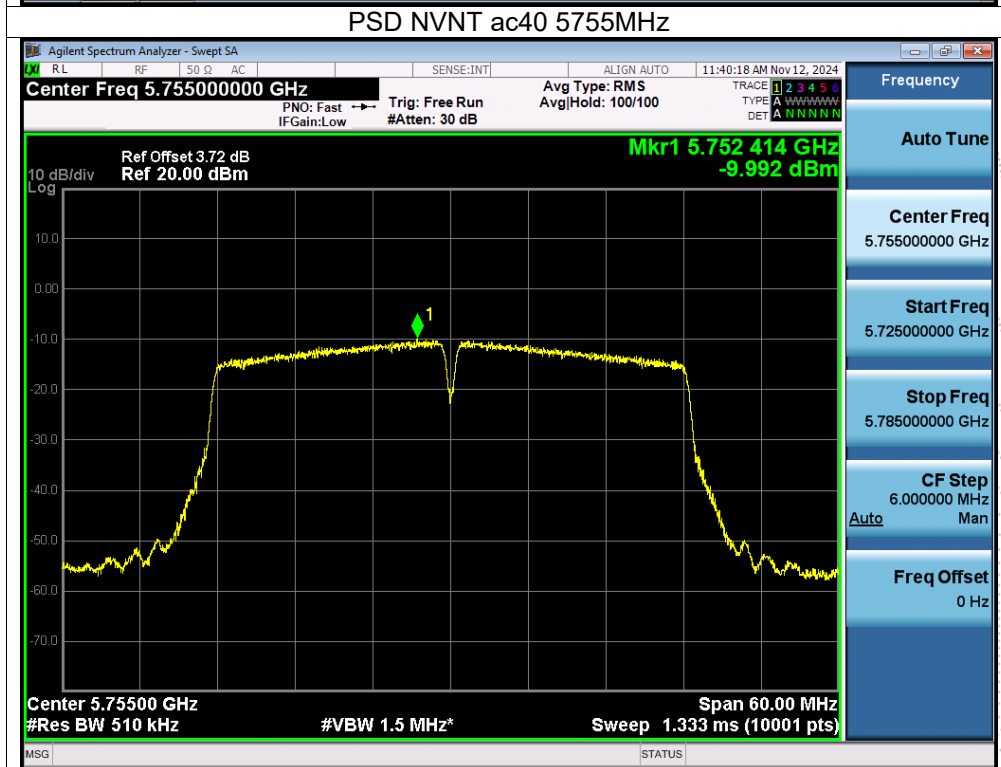
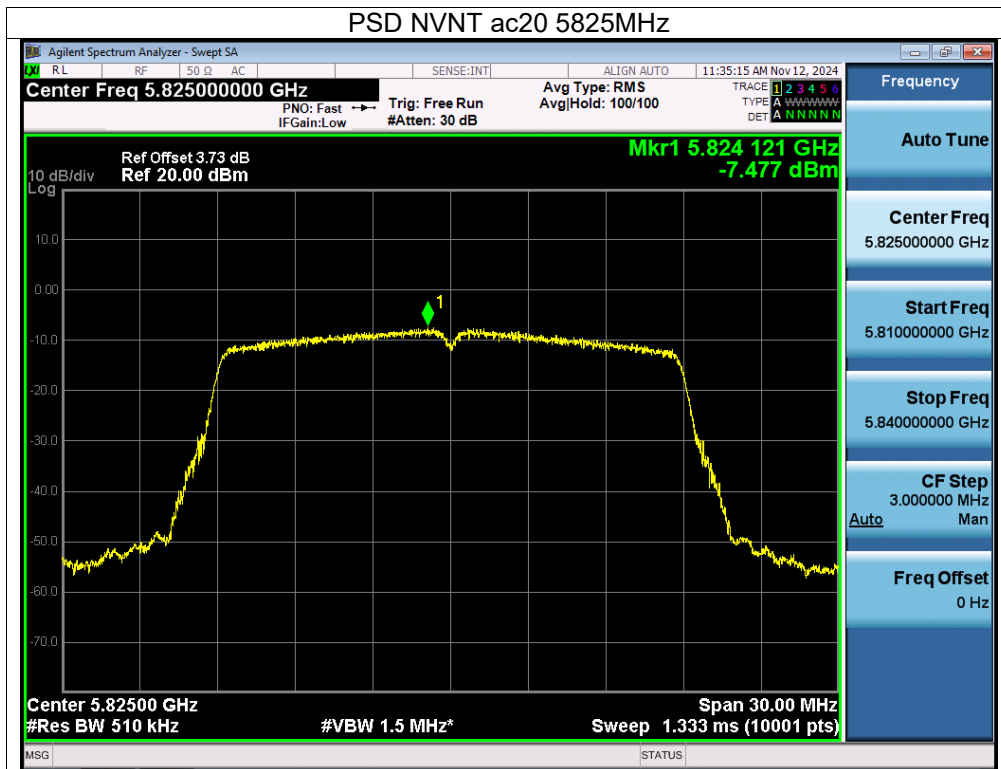


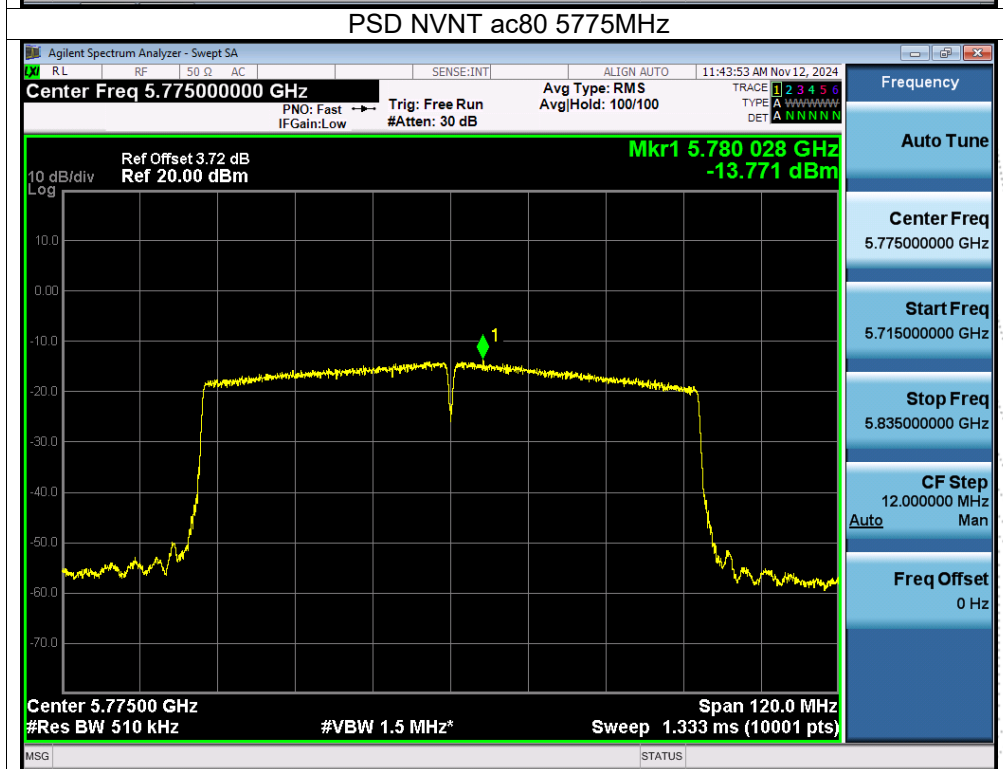
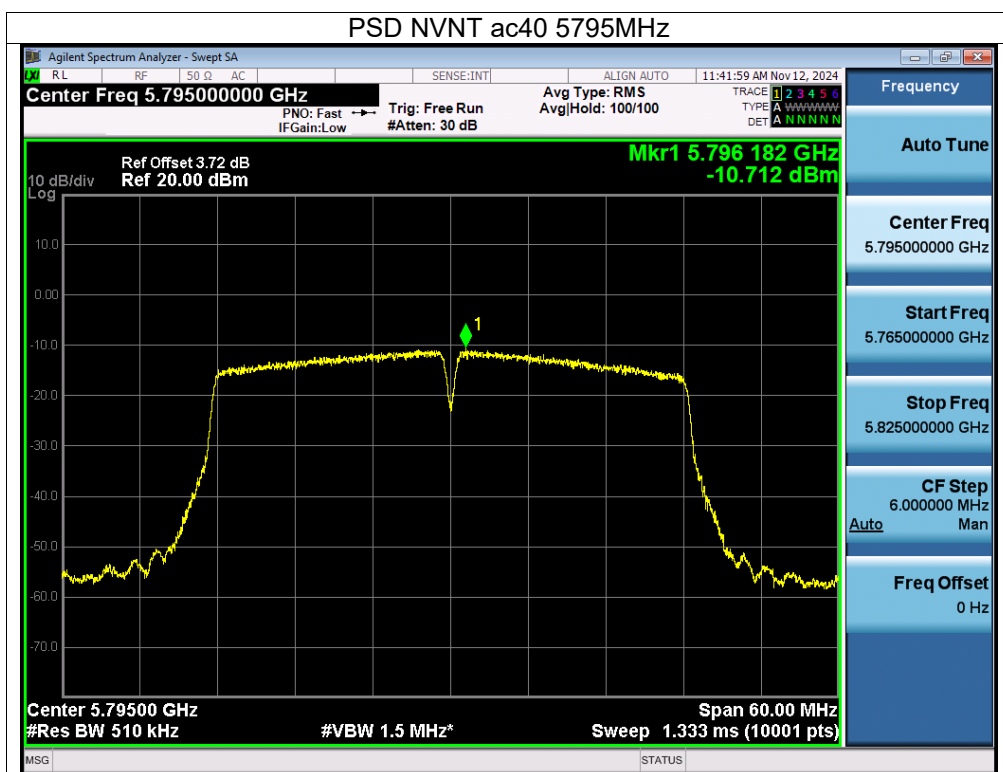






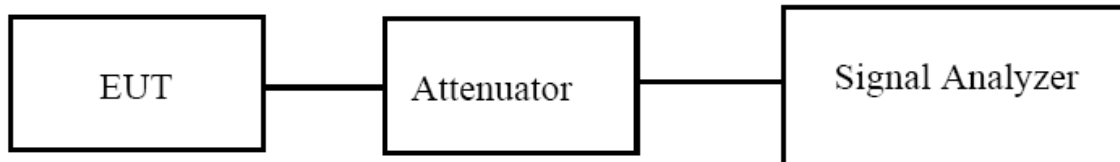






9. 26dB & 6dB & 99% Emission Bandwidth

9.1 Block Diagram Of Test Setup



9.2 Limit

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.
(6dB bandwidth)>500kHz

9.3 Test Procedure

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

The following procedure shall be used for measuring (99 %) power bandwidth:

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1 % to 5 % of the OBW
- Set VBW $\geq 3 \cdot$ RBW
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- Use the 99 % power bandwidth function of the instrument (if available).
- If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

6dB

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.

6. Allow the trace to stabilize.

7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

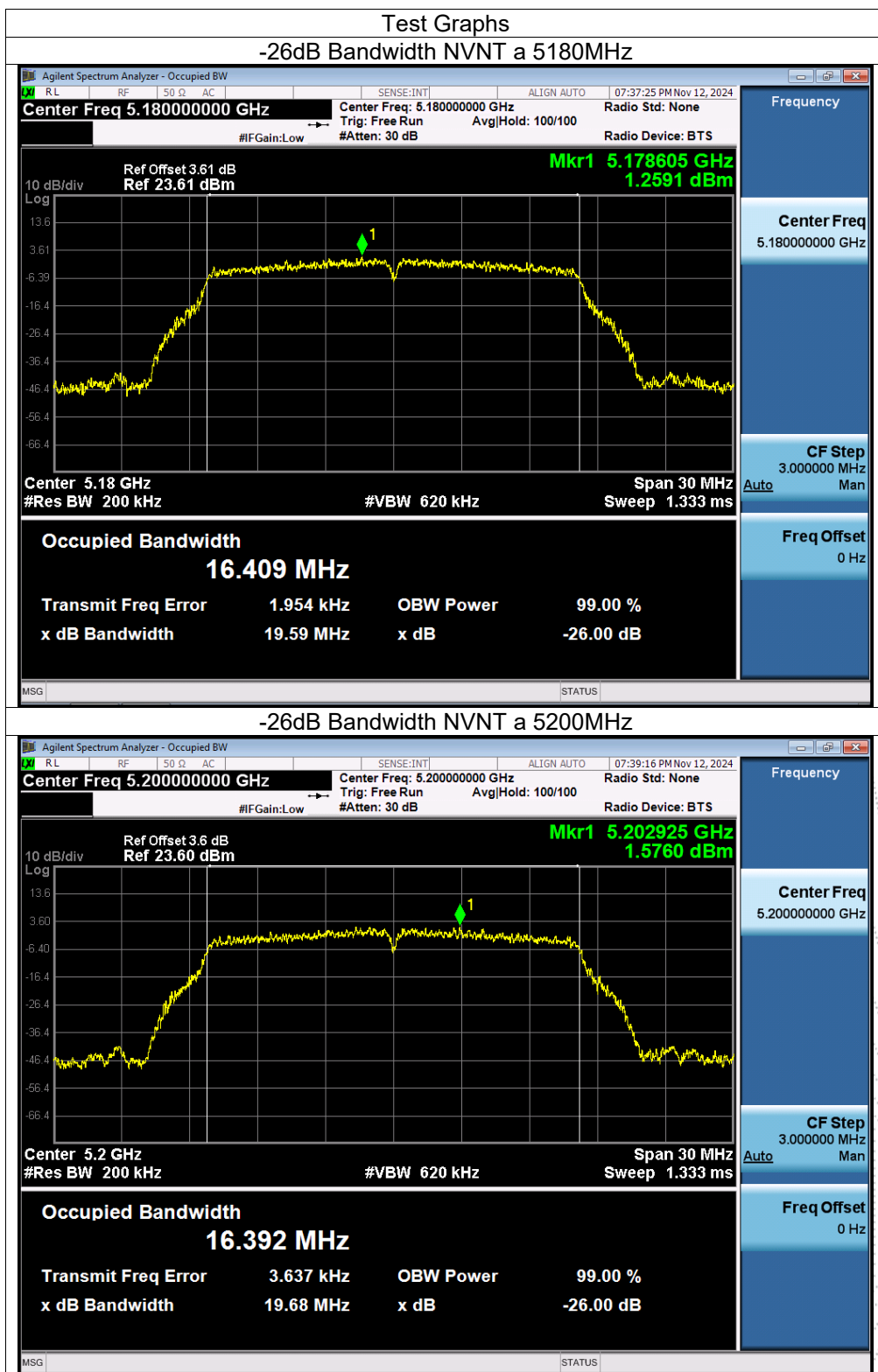
9.4 EUT Operating Conditions

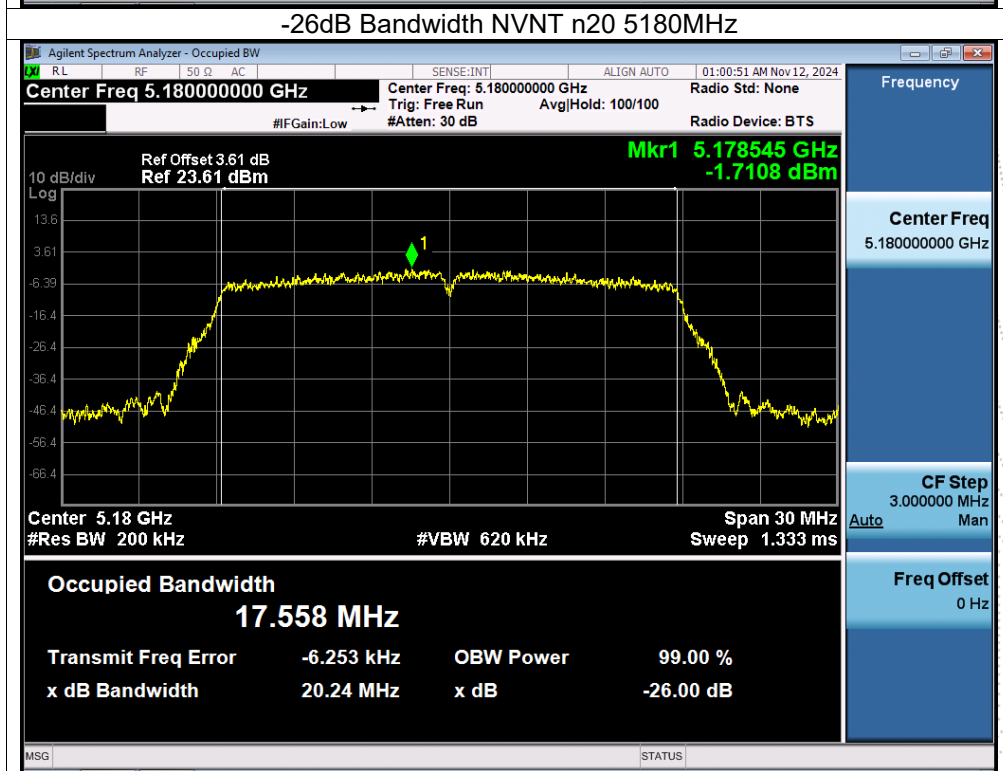
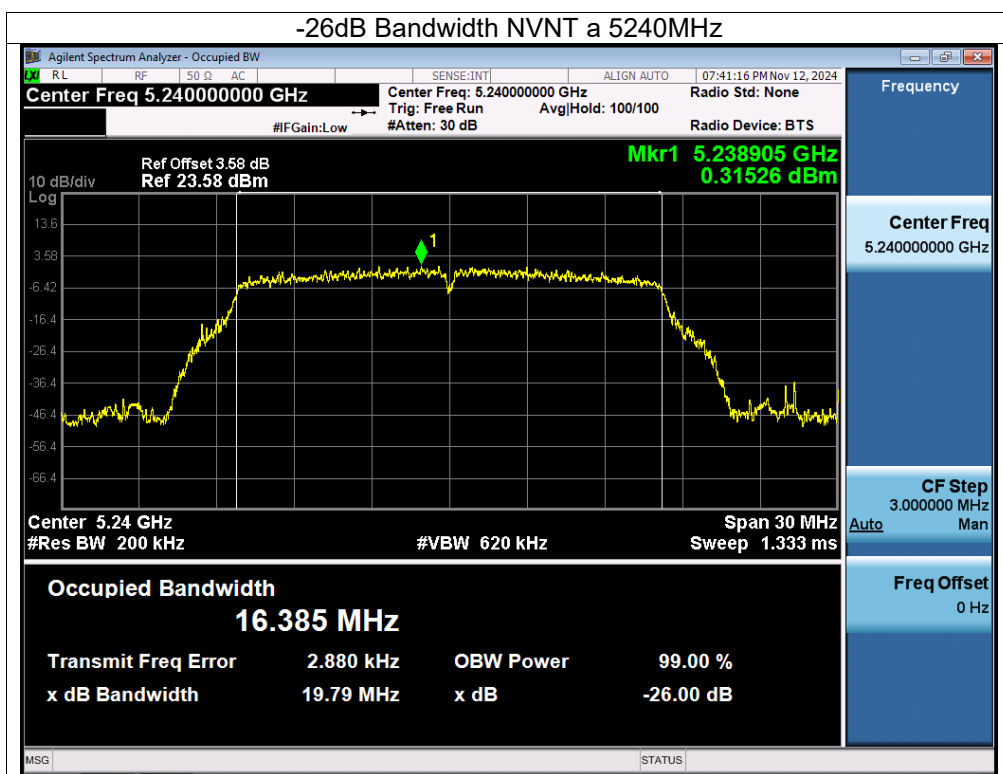
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

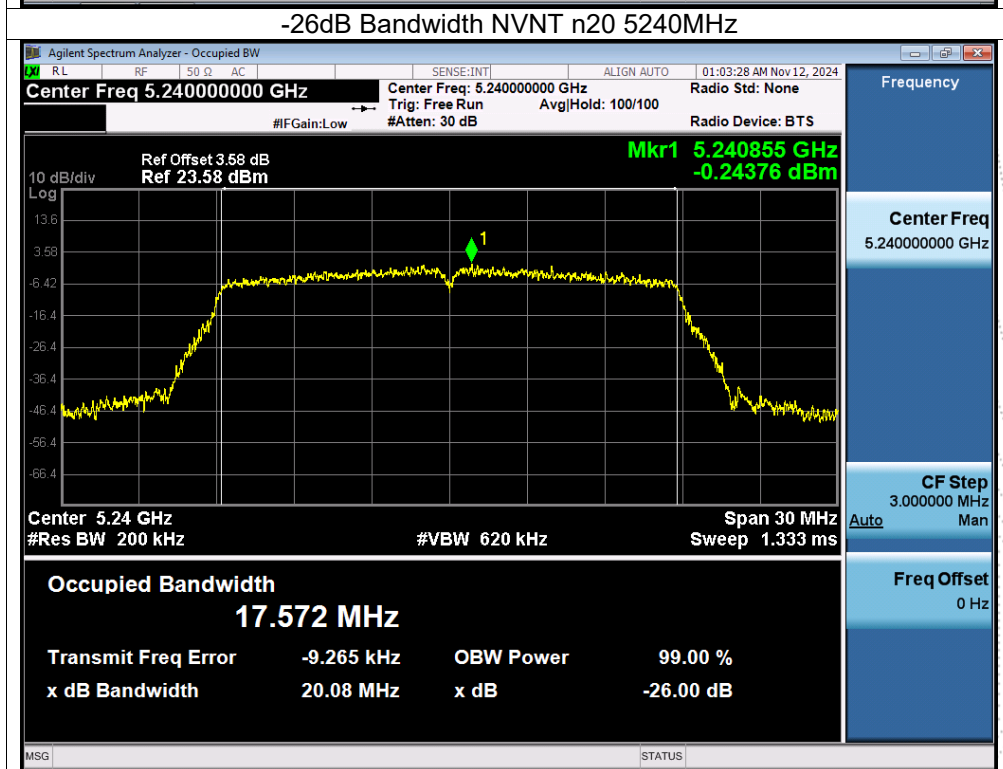
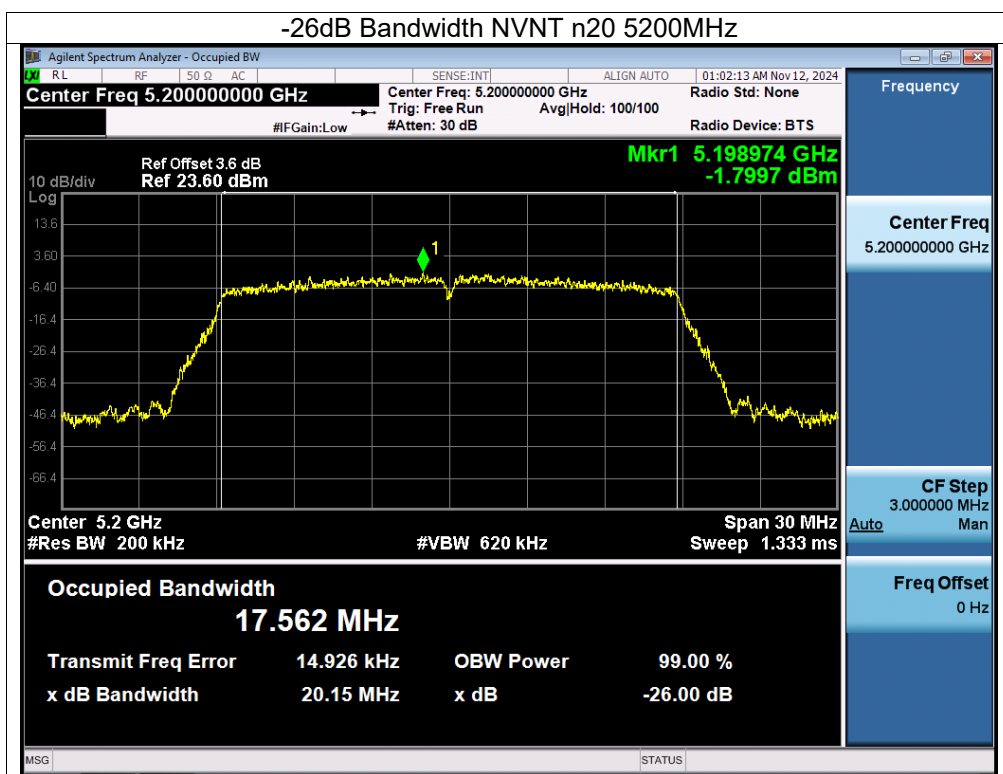
9.5 Test Result

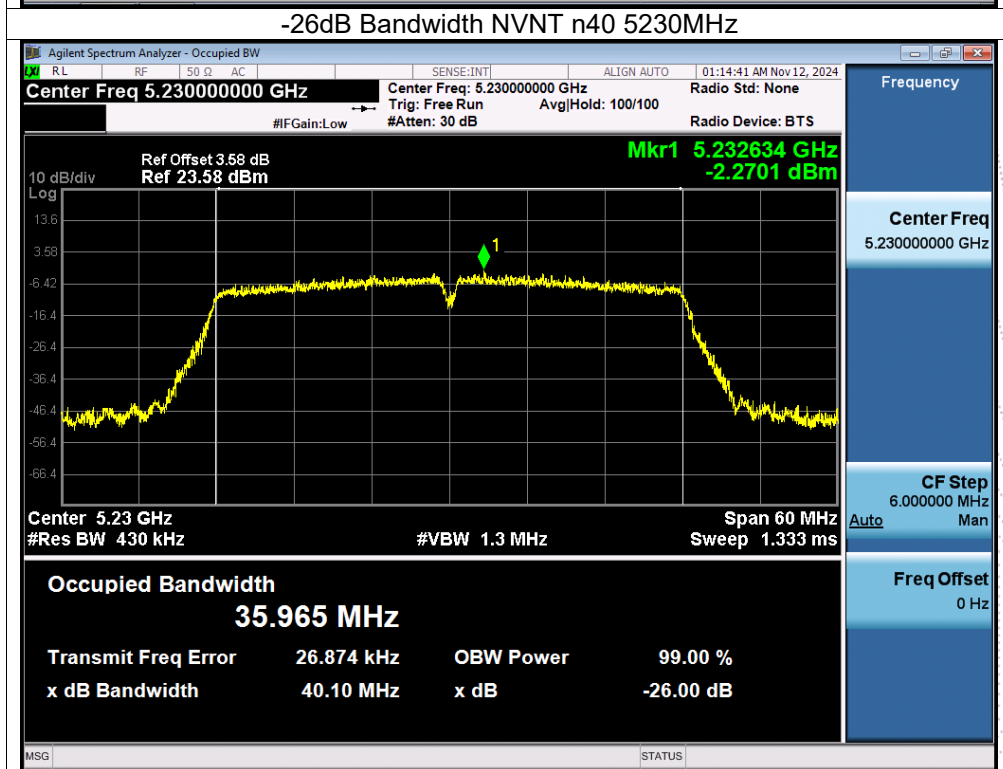
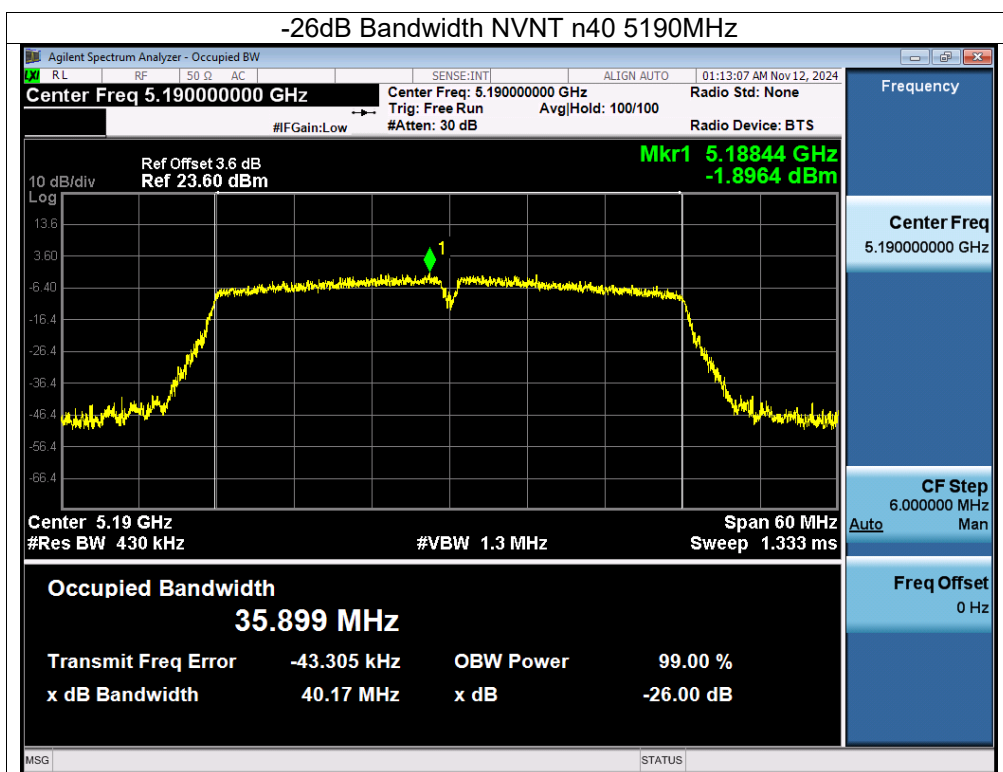
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.8V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

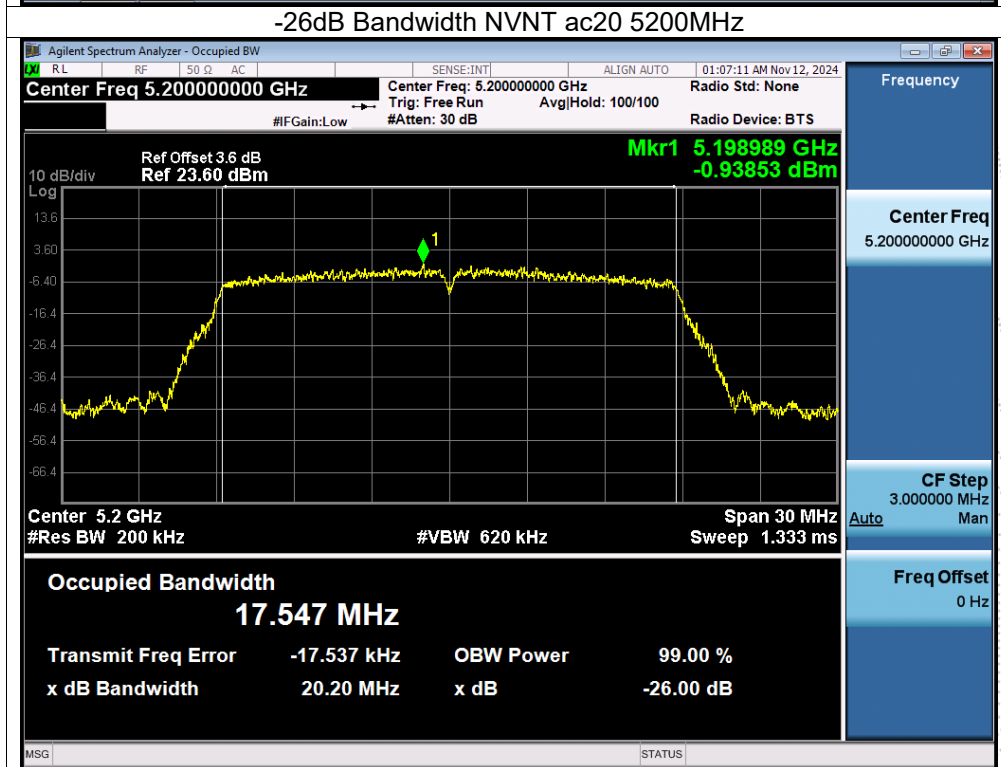
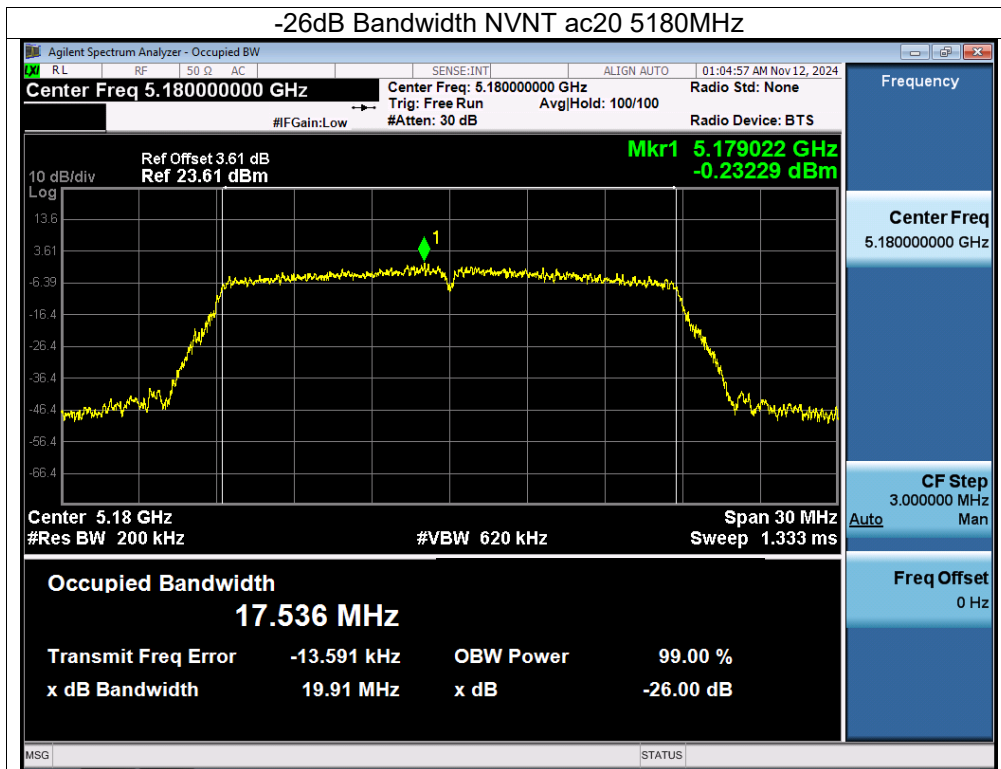
Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-26dB bandwidth (MHz)	Result
NVNT	a	5180	16.404	19.585	Pass
NVNT	a	5200	16.394	19.683	Pass
NVNT	a	5240	16.416	19.787	Pass
NVNT	n20	5180	17.564	20.241	Pass
NVNT	n20	5200	17.558	20.152	Pass
NVNT	n20	5240	17.547	20.079	Pass
NVNT	n40	5190	35.959	40.175	Pass
NVNT	n40	5230	35.972	40.105	Pass
NVNT	ac20	5180	17.543	19.911	Pass
NVNT	ac20	5200	17.562	20.203	Pass
NVNT	ac20	5240	17.543	20.163	Pass
NVNT	ac40	5190	35.88	40.297	Pass
NVNT	ac40	5230	35.998	40.345	Pass
NVNT	ac80	5210	75.333	80.706	Pass

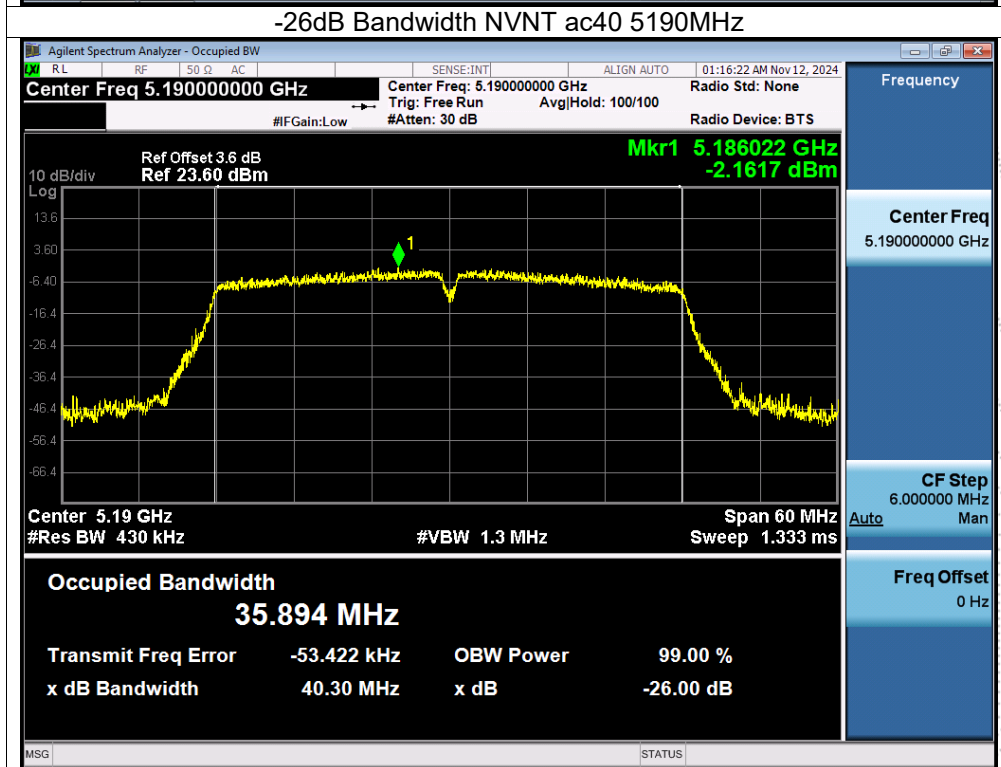
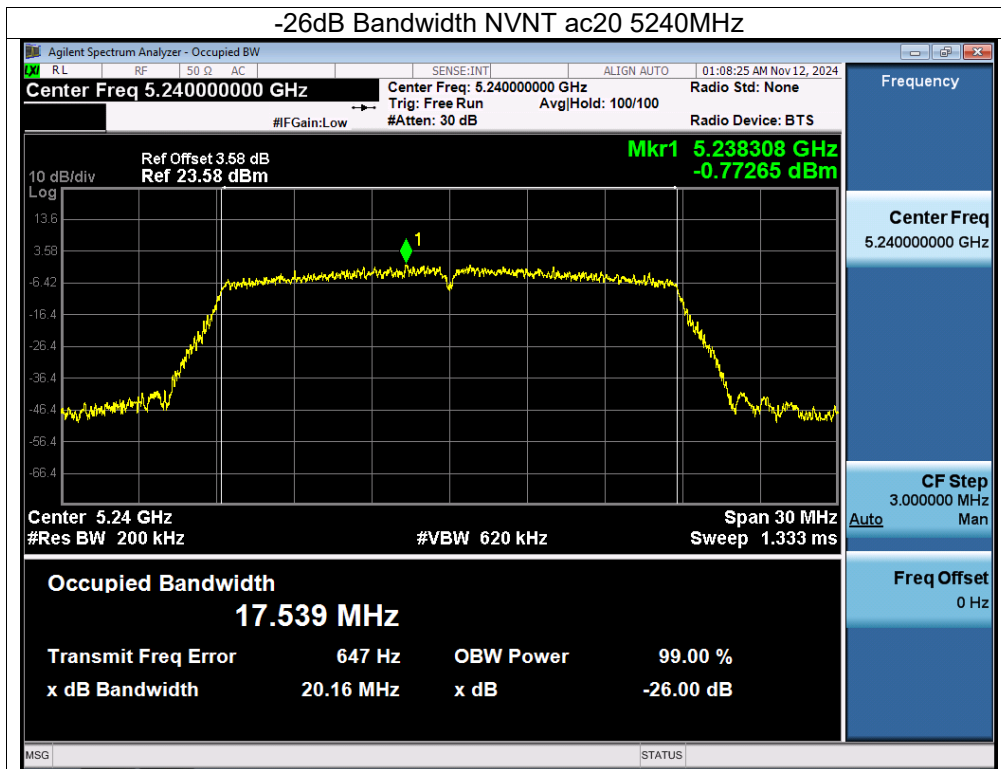


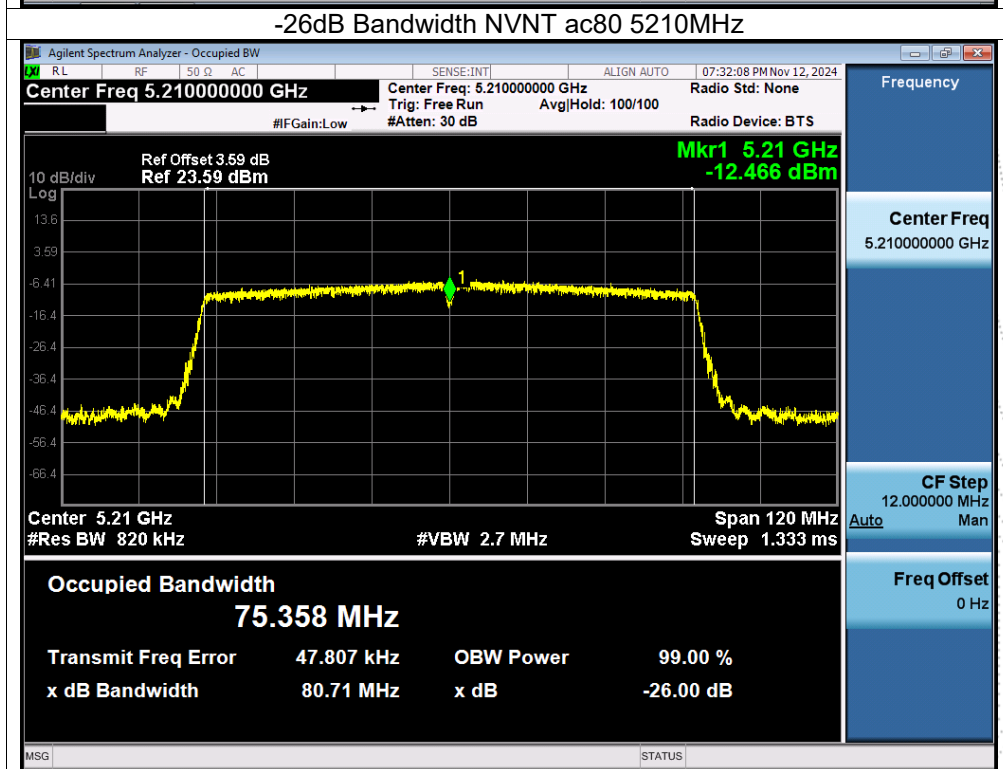
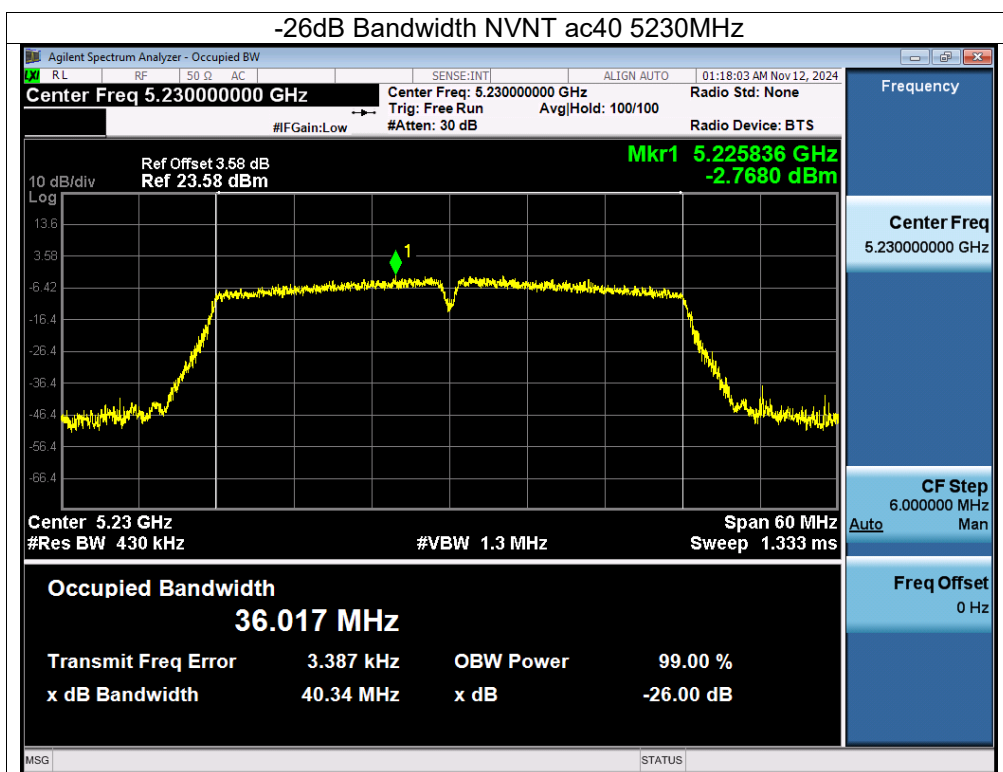


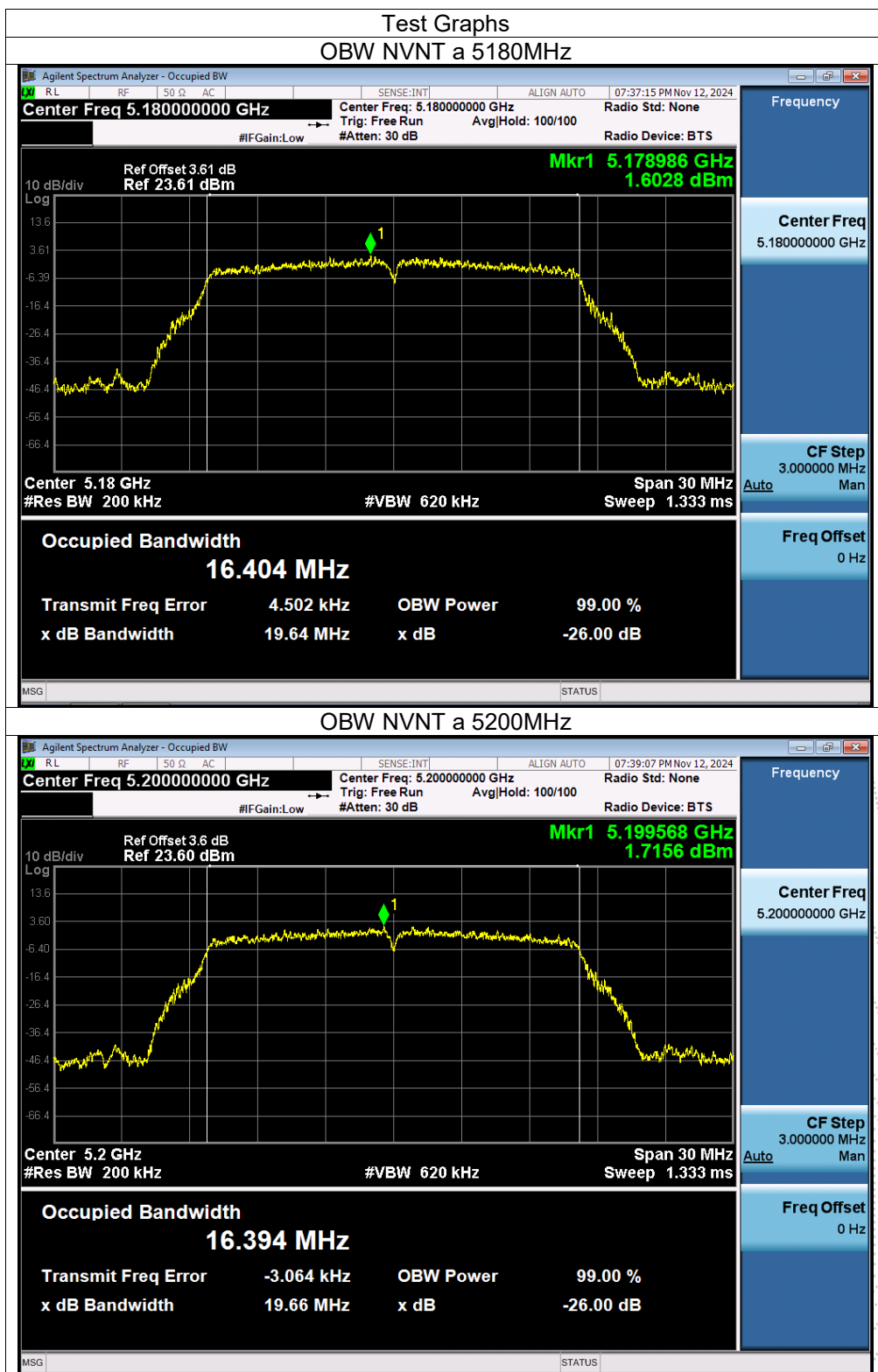


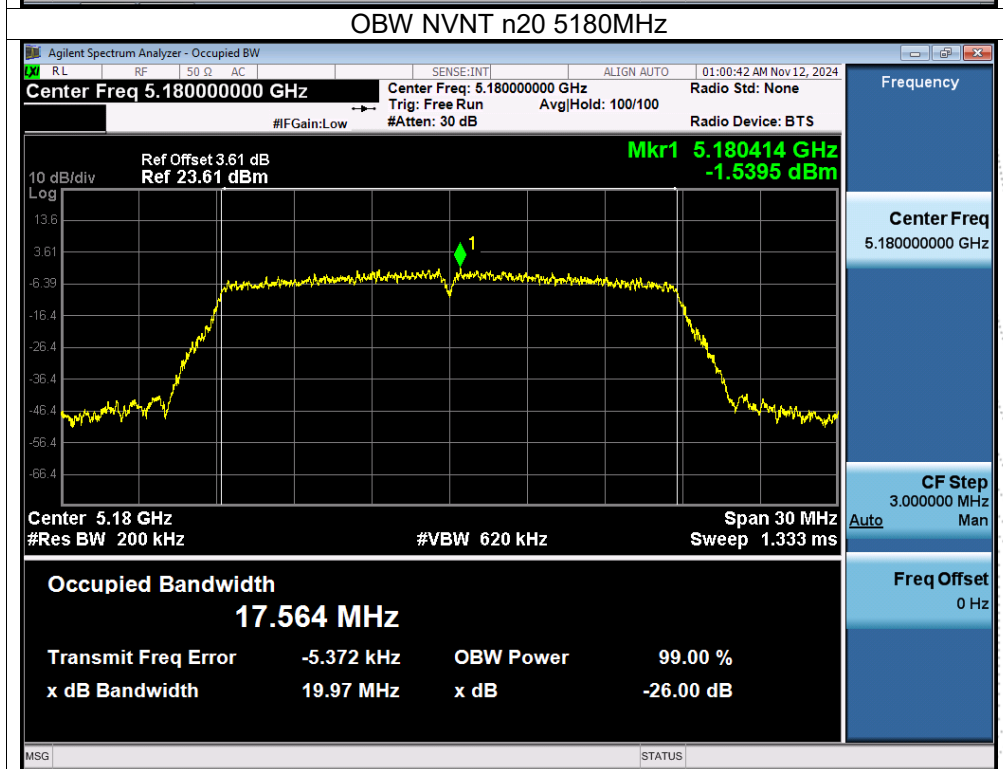
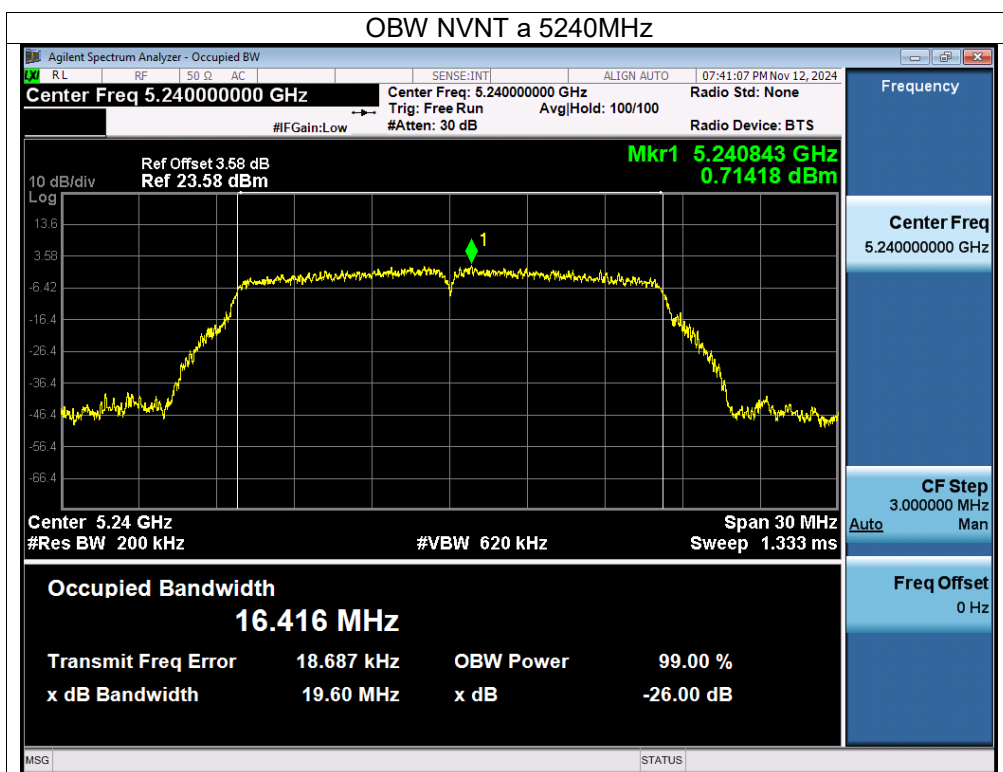


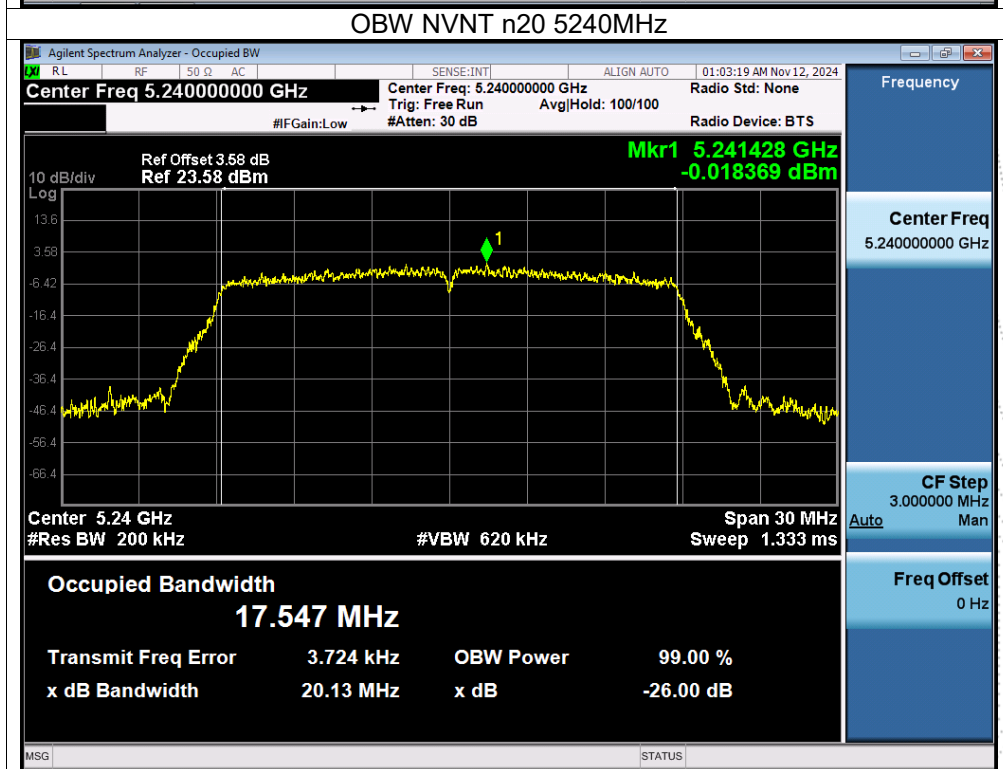
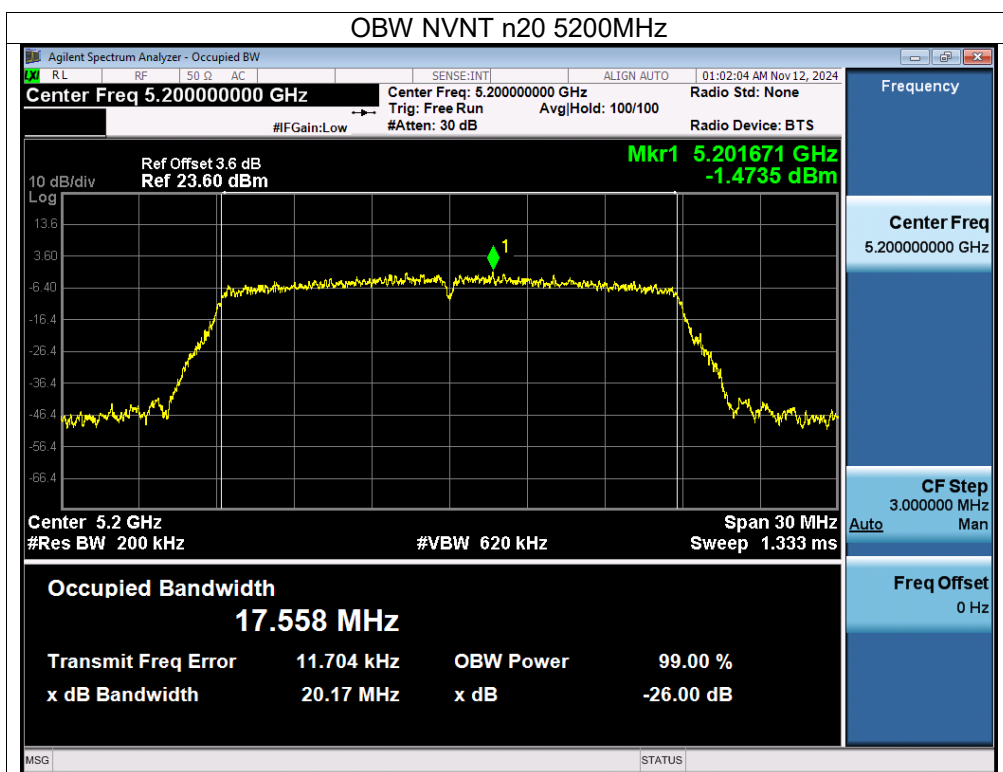


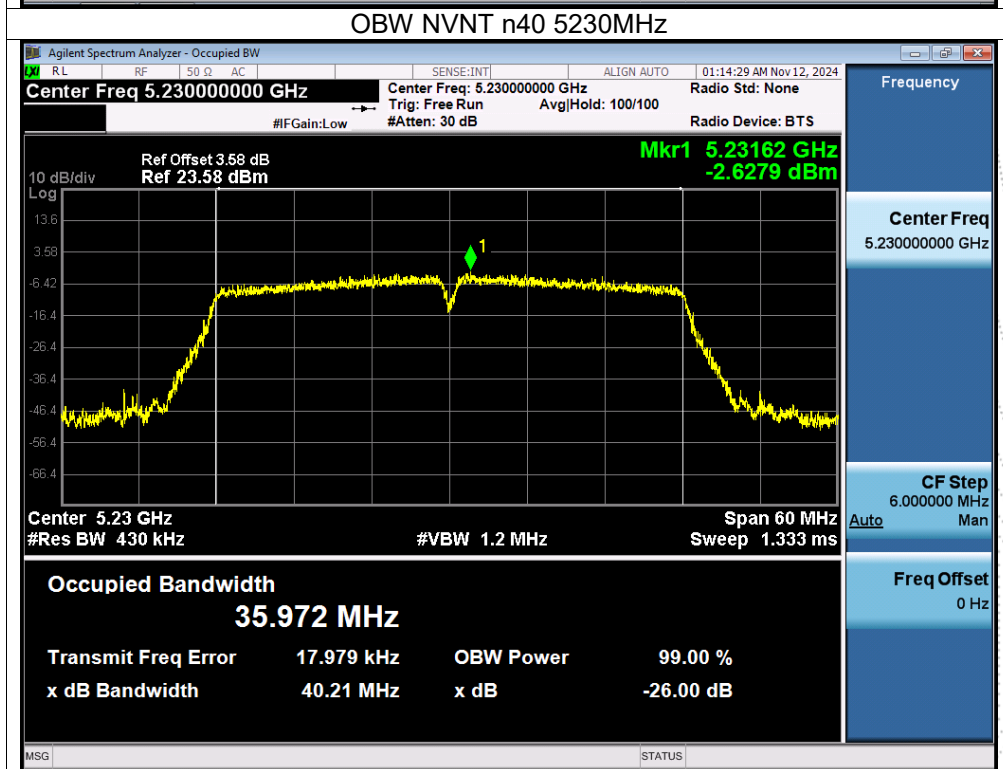
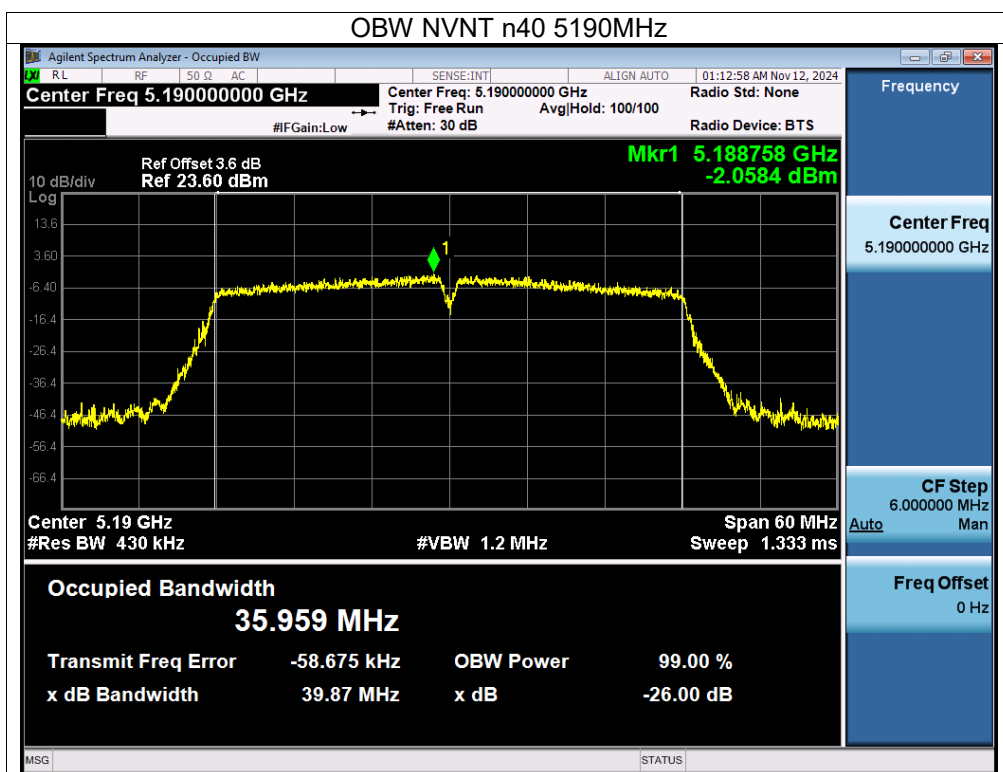


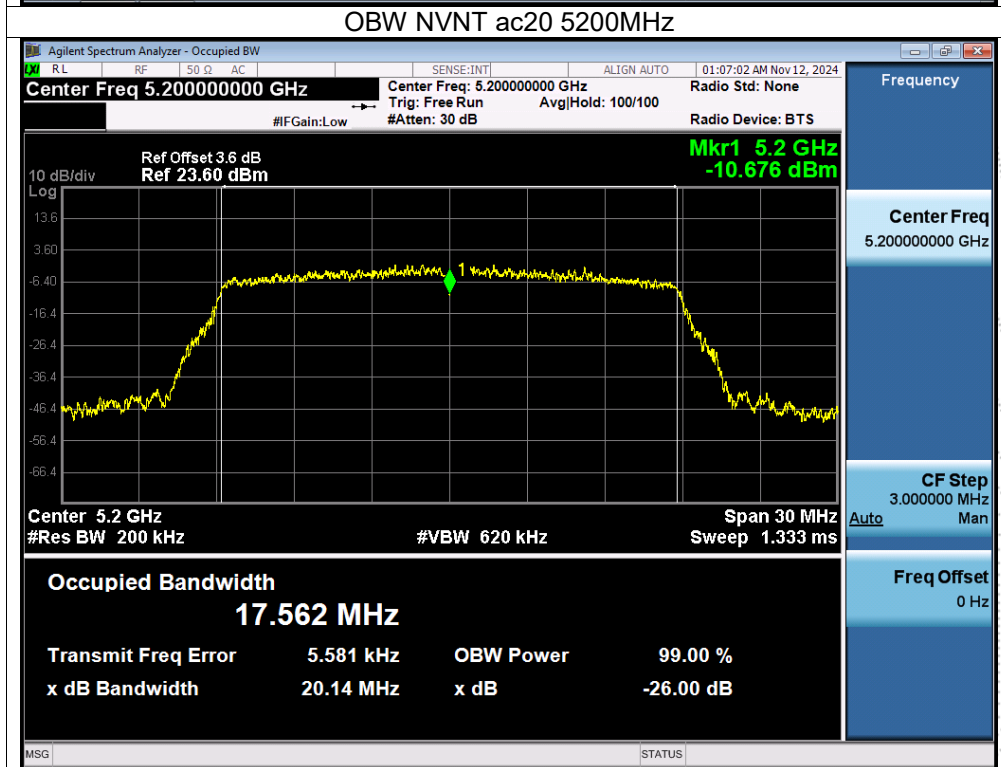
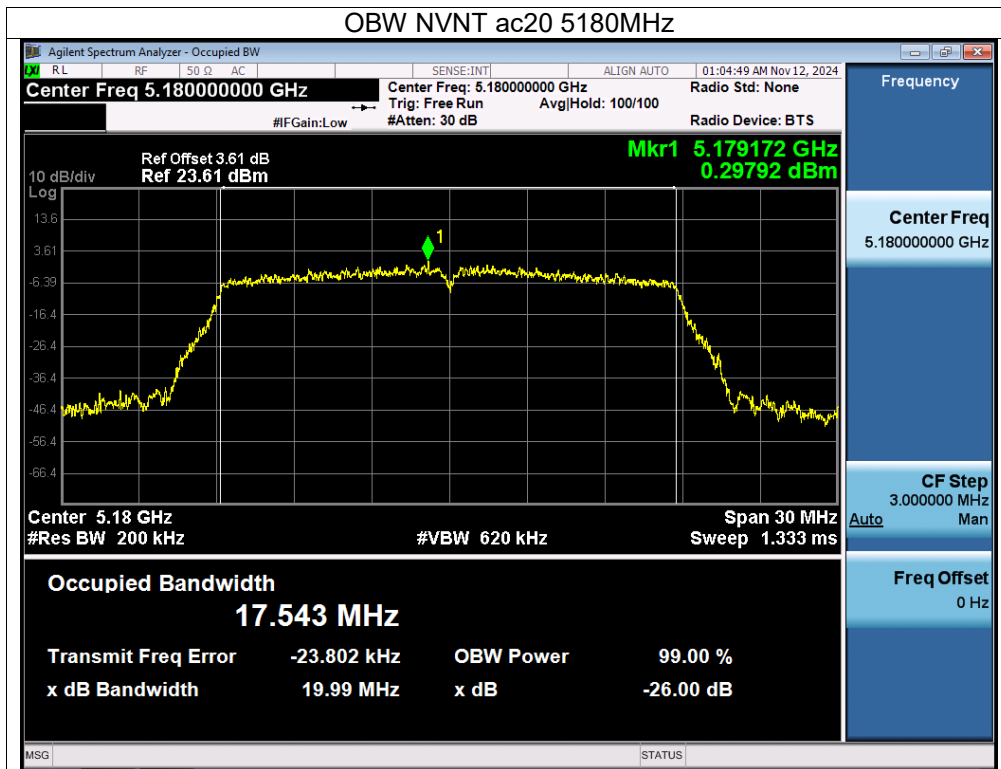


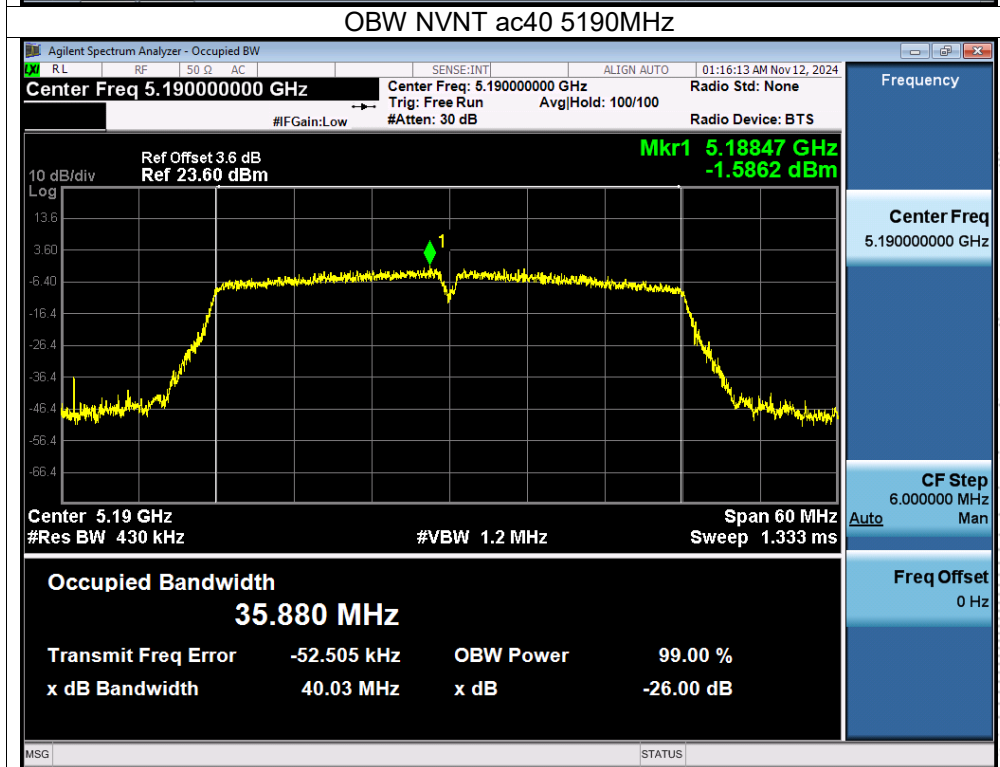
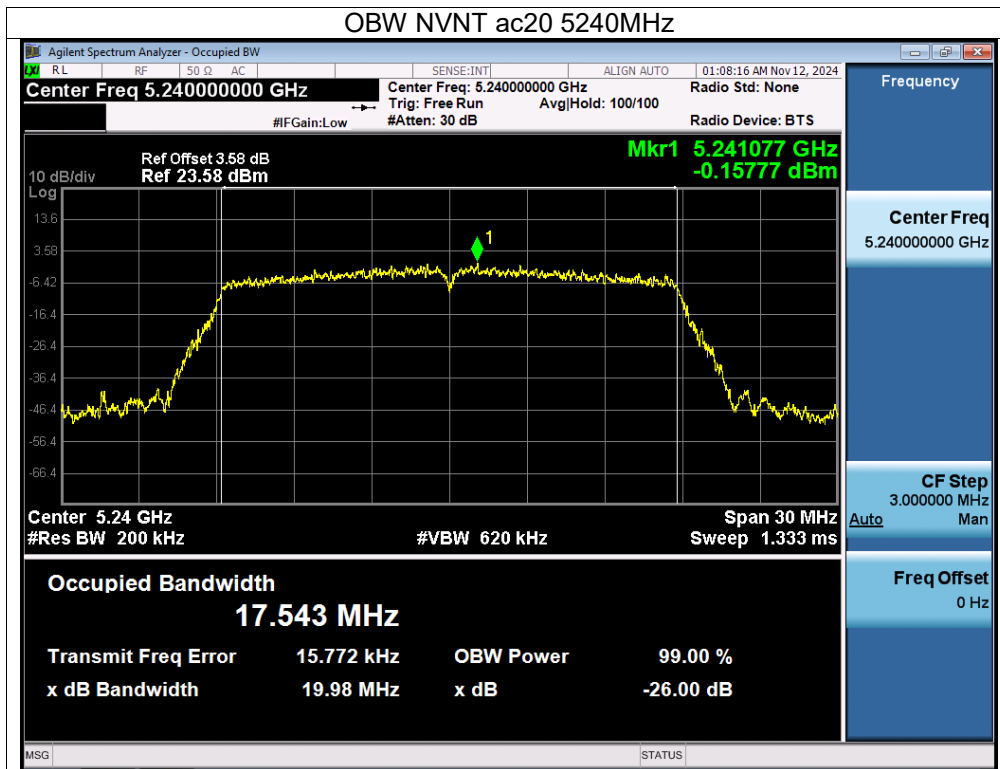


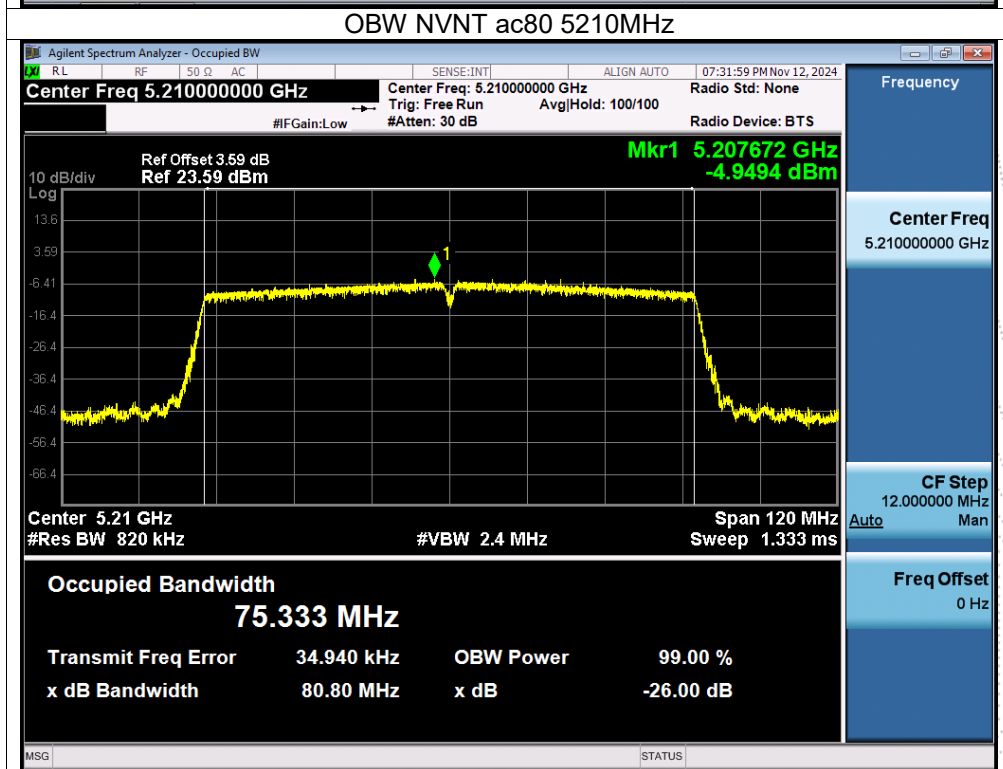
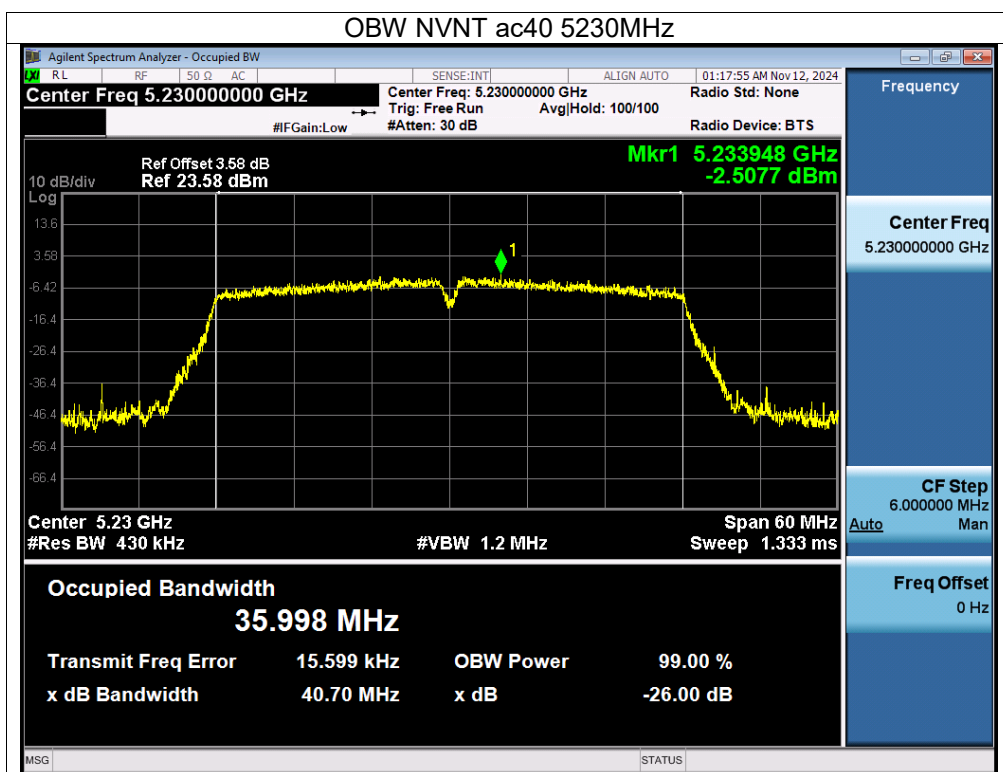












Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.8V
Test Mode :	TX Frequency U-NII-3(5745-5825MHz)		

Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-6dB bandwidth (MHz)	Limit -6dB bandwidth (MHz)	Result
NVNT	a	5745	16.368	16.324	0.5	Pass
NVNT	a	5785	16.396	16.336	0.5	Pass
NVNT	a	5825	16.431	16.352	0.5	Pass
NVNT	n20	5745	17.547	17.576	0.5	Pass
NVNT	n20	5785	17.547	17.581	0.5	Pass
NVNT	n20	5825	17.565	17.584	0.5	Pass
NVNT	n40	5755	35.953	36.082	0.5	Pass
NVNT	n40	5795	35.948	35.938	0.5	Pass
NVNT	ac20	5745	17.543	17.567	0.5	Pass
NVNT	ac20	5785	17.54	17.55	0.5	Pass
NVNT	ac20	5825	17.553	17.582	0.5	Pass
NVNT	ac40	5755	35.918	36.054	0.5	Pass
NVNT	ac40	5795	35.917	35.972	0.5	Pass
NVNT	ac80	5775	75.073	75.68	0.5	Pass

