TEST REPORT

Report No.:	BCTC2311402994-4E
Applicant:	SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
Product Name:	17.3inch laptop
Test Model:	M17S
Tested Date:	2023-12-27 to 2024-01-10
Issued Date:	2024-01-10

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2AAMS-M17S

Product Name:	17.3inch laptop
Trademark:	N/A
Model/Type Reference:	M17S M173CN
Prepared For:	SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
Address:	3-4/F, Bldg 1, Hongbang Intelligent Technology Park, No.30 Cuibao Road, Baolong Street, Longgang District, Shenzhen, China
Manufacturer:	SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
Address:	3-4/F, Bldg 1, Hongbang Intelligent Technology Park, No.30 Cuibao Road, Baolong Street, Longgang District, Shenzhen, China
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:	2023-12-27
Sample Tested Date:	2023-12-27 to 2024-01-10
Issue Date:	2024-01-10
Report No.:	BCTC2311402994-4E
Test Standards:	FCC Part15 15.407 ANSI C63.10-2013 KDB 662911 D01 v02r01 KDB 789033 D02 v02r01
Test Results:	PASS
Remark:	This is WIFI-5GHz band radio test report.

Tested by:

Lei Chen

Lei Chen/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

(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2311402994-4E	2024-01-10	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

1	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

Note: The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure.

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(30MHz-1GHz)	U=4.3dB
2	3m chamber Radiated spurious emission(9KHz-30MHz)	U=3.7dB
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℃

4. Product Information And Test Setup

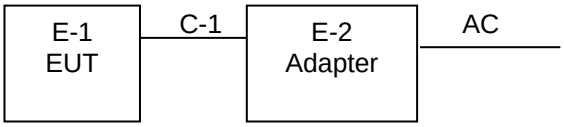
4.1 Product Information

Model/Type reference:	M17S M173CN
Model differences:	All the model are the same circuit and RF module, except model names and appearance of the color.
Hardware Version:	XU133UR720
Software Version:	windows11
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)/ac20; 5190-5230MHz for 802.11n(HT40)/ac40; 5210MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n(HT20)/ac20; 5755-5795 MHz for 802.11a/n(HT40)/ac40; 5775MHz for 802.11 ac80;
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;
Number Of Channel:	4 channels for 802.11a/n20 in the 5180-5240MHz band ; 2 channels for 802.11 n40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20 in the 5745-5825MHz band ; 2 channels for 802.11 n40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band ;
Antenna installation:	FPC antenna
Antenna Gain:	5.1GHzWIFI: 2.5 dBi, 5.8GHzWIFI: 2.85 dBi
Ratings:	DC 7.6V from battery, DC 12V from adapter
Adapter Information 1:	Manufacturer: Shenzhen Jihongda Power Co., Ltd. Model No.: JHD-AP036U-120300BA-A Input: AC 100-240V 50/60Hz 1.2A Output: DC 12V 3A
Adapter Information 2:	Manufacturer: Zhongshan MLS Electrical Appliance Co., Ltd. Model No.: M120300-A010US Input: AC 100-240V 50/60Hz 0.8A Output: DC 12V 3A
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.

4.2 Test Setup Configuration

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

Conducted Emission and Radiated Spurious Emission:



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	17.3inch laptop	N/A	M17S	M173CN	EUT
E-2	Adapter	N/A	JHD-AP036U-120 300BA-A/ M120300-A010US	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	N/A	N/A	0.5M	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

Frequency and Channel list for 802.11a/n /ac (5180-5240MHz):

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)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
42	5210	-	-	-	-	-	-

Frequency and Channel list for 802.11a/n /ac (5745-5825MHz):

802.11a/n/ac(20MHz) 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)**	**Channel**	**Frequency (MHz)**
151	5755	159	5795	-	-	-	-

802.11ac (80MHz) Carrier Frequency Channel							
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**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 mode (Conducted Emission & Radiated emission)

Note: The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.

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	MP_Kit_RTL11ac_8821CU		
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

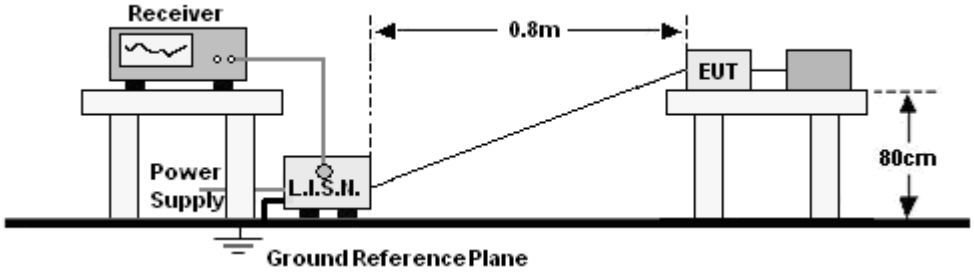
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
LISN	R&S	ENV216	101375	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	Sept. 22, 2023	Sept. 21, 2024

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Power Metter	Keysight	E4419	\	May 15, 2023	May 14, 2024
Power Sensor (AV)	Keysight	E9300A	\	May 15, 2023	May 14, 2024
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 15, 2023	May 14, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
Radio frequency control box	MAIWEI	MW100-RFCB	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

Radiated Emissions Test (966 Chamber01)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
Receiver	R&S	ESRP	101154	May 15, 2023	May 14, 2024
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 15, 2023	May 14, 2024
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 29, 2023	May 28, 2024
Loop Antenna(9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	May 31, 2023	May 30, 2024
Amplifier	SKET	LAPA_01G18G-45dB	SK2021040901	May 15, 2023	May 14, 2024
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 31, 2023	May 30, 2024
Amplifier(18GHz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 15, 2023	May 14, 2024
Horn Antenn(18GHz-40GHz)	Schwarzbeck	BBHA9170	00822	May 31, 2023	May 30, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
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: 1. *Decreasing linearly with logarithm of frequency. 2. 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

a. 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).
b. 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.
c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

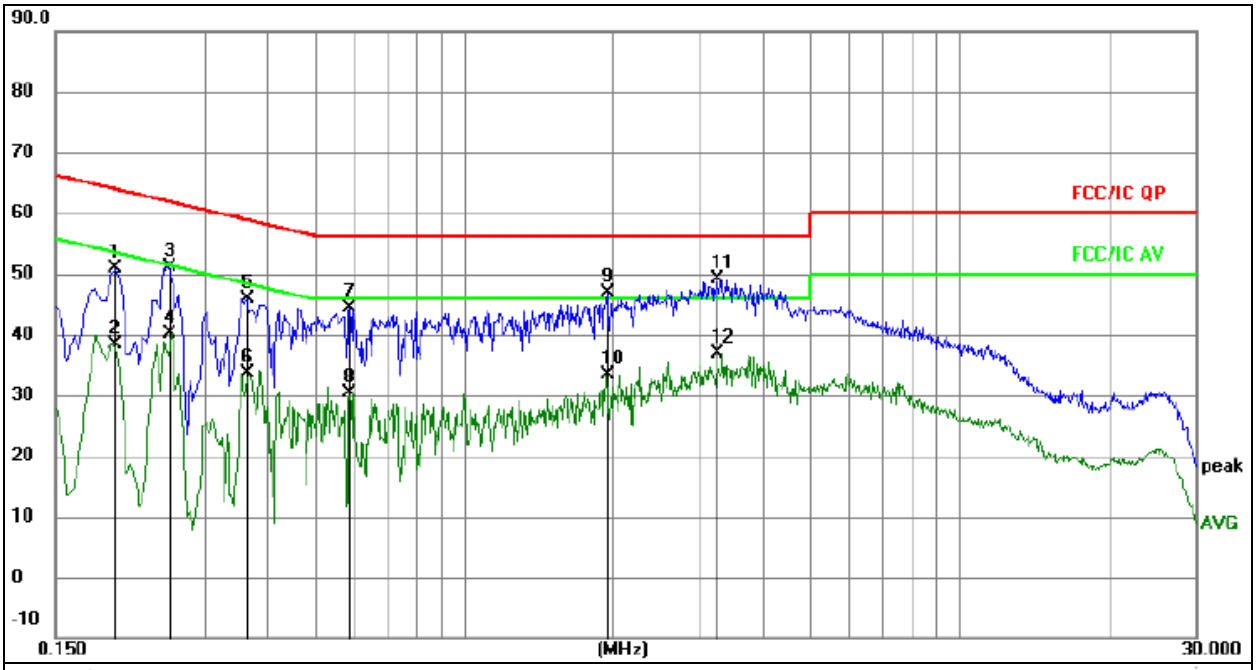
6.4 EUT operating Conditions

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.
We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in the report.

6.5 Test Result

Adapter 1:

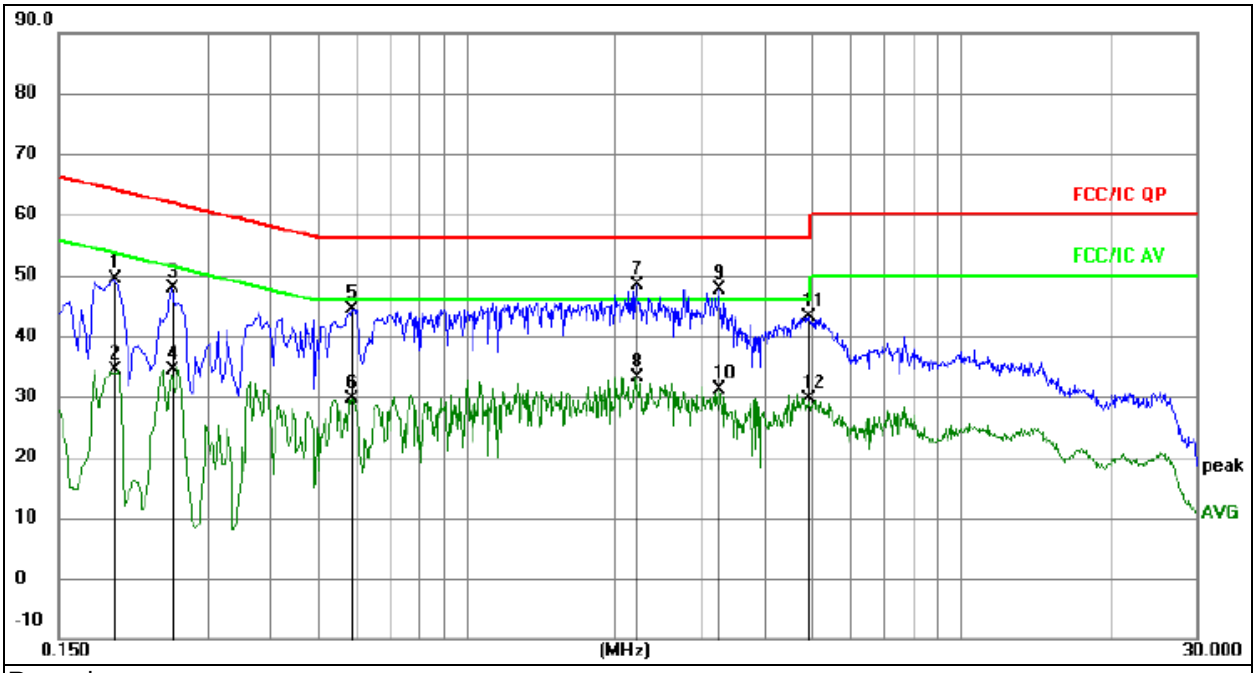
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization :	L



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.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1986	31.07	19.83	50.90	63.67	-12.77	QP
2		0.1986	18.60	19.83	38.43	53.67	-15.24	AVG
3		0.2535	31.21	19.83	51.04	61.64	-10.60	QP
4		0.2535	20.24	19.83	40.07	51.64	-11.57	AVG
5		0.3653	26.15	19.84	45.99	58.61	-12.62	QP
6		0.3653	13.82	19.84	33.66	48.61	-14.95	AVG
7		0.5885	24.44	19.84	44.28	56.00	-11.72	QP
8		0.5885	10.46	19.84	30.30	46.00	-15.70	AVG
9		1.9489	26.87	19.95	46.82	56.00	-9.18	QP
10		1.9489	13.35	19.95	33.30	46.00	-12.70	AVG
11	*	3.2411	28.72	20.39	49.11	56.00	-6.89	QP
12		3.2411	16.39	20.39	36.78	46.00	-9.22	AVG

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	N

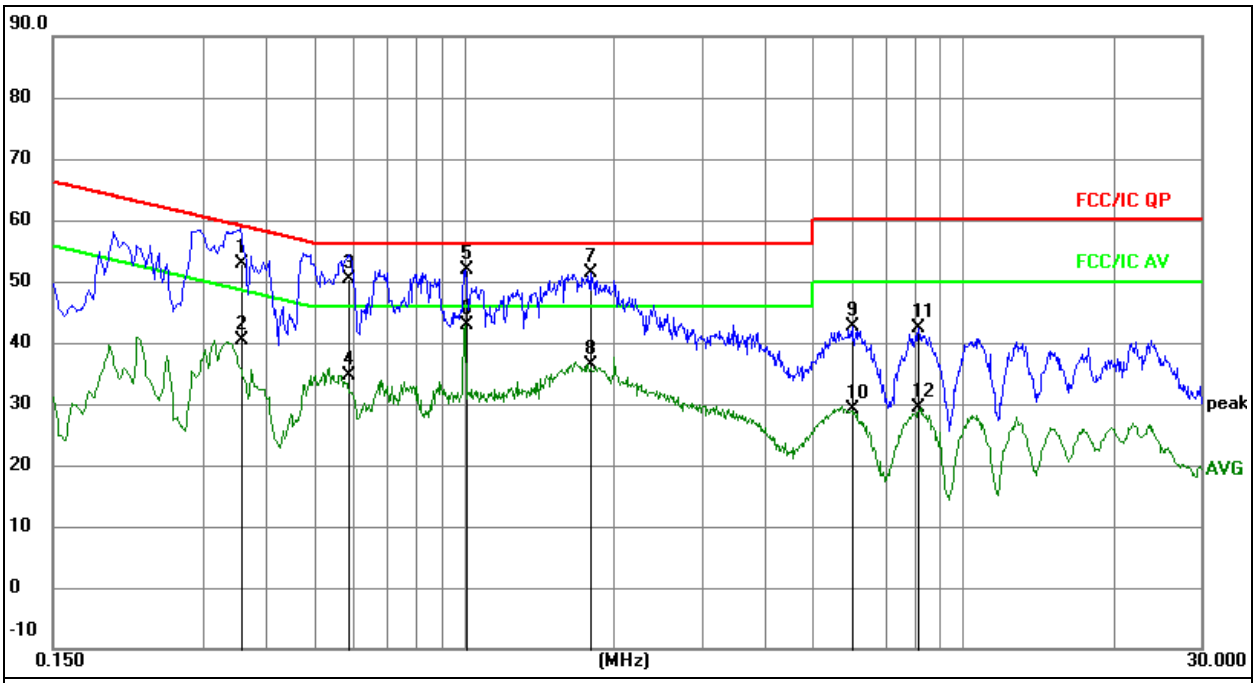


Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1945	29.56	19.82	49.38	63.84	-14.46	QP
2		0.1945	14.46	19.82	34.28	53.84	-19.56	AVG
3		0.2535	27.93	19.83	47.76	61.64	-13.88	QP
4		0.2535	14.60	19.83	34.43	51.64	-17.21	AVG
5		0.5885	24.46	19.84	44.30	56.00	-11.70	QP
6		0.5885	9.80	19.84	29.64	46.00	-16.36	AVG
7	*	2.2015	28.37	20.02	48.39	56.00	-7.61	QP
8		2.2015	13.16	20.02	33.18	46.00	-12.82	AVG
9		3.2411	27.34	20.39	47.73	56.00	-8.27	QP
10		3.2411	10.66	20.39	31.05	46.00	-14.95	AVG
11		4.9257	22.69	20.44	43.13	56.00	-12.87	QP
12		4.9257	9.29	20.44	29.73	46.00	-16.27	AVG

Adapter 2:

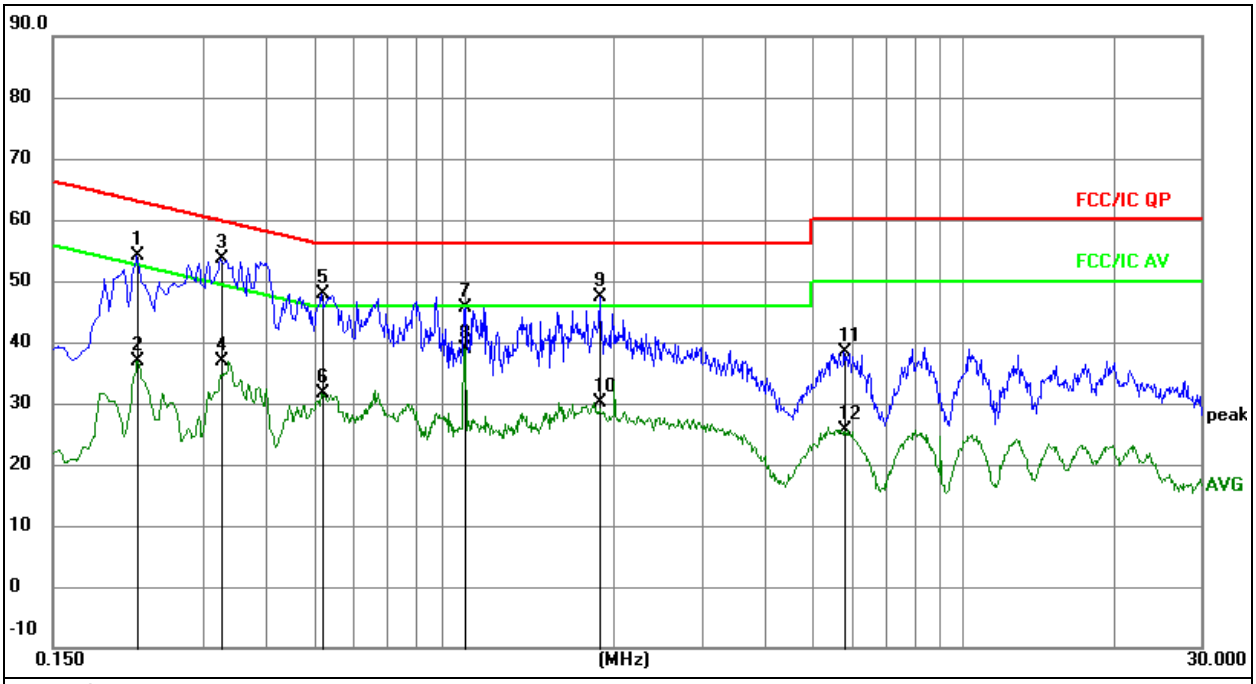
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization :	L



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.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.3570	32.94	19.83	52.77	58.80	-6.03	QP
2		0.3570	20.55	19.83	40.38	48.80	-8.42	AVG
3		0.5885	30.53	19.84	50.37	56.00	-5.63	QP
4		0.5885	14.91	19.84	34.75	46.00	-11.25	AVG
5		1.0050	31.86	19.95	51.81	56.00	-4.19	QP
6	*	1.0050	23.05	19.95	43.00	46.00	-3.00	AVG
7		1.7904	31.46	19.95	51.41	56.00	-4.59	QP
8		1.7904	16.53	19.95	36.48	46.00	-9.52	AVG
9		5.9925	22.38	20.20	42.58	60.00	-17.42	QP
10		5.9925	8.88	20.20	29.08	50.00	-20.92	AVG
11		8.1483	22.48	19.93	42.41	60.00	-17.59	QP
12		8.1483	9.45	19.93	29.38	50.00	-20.62	AVG

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	N



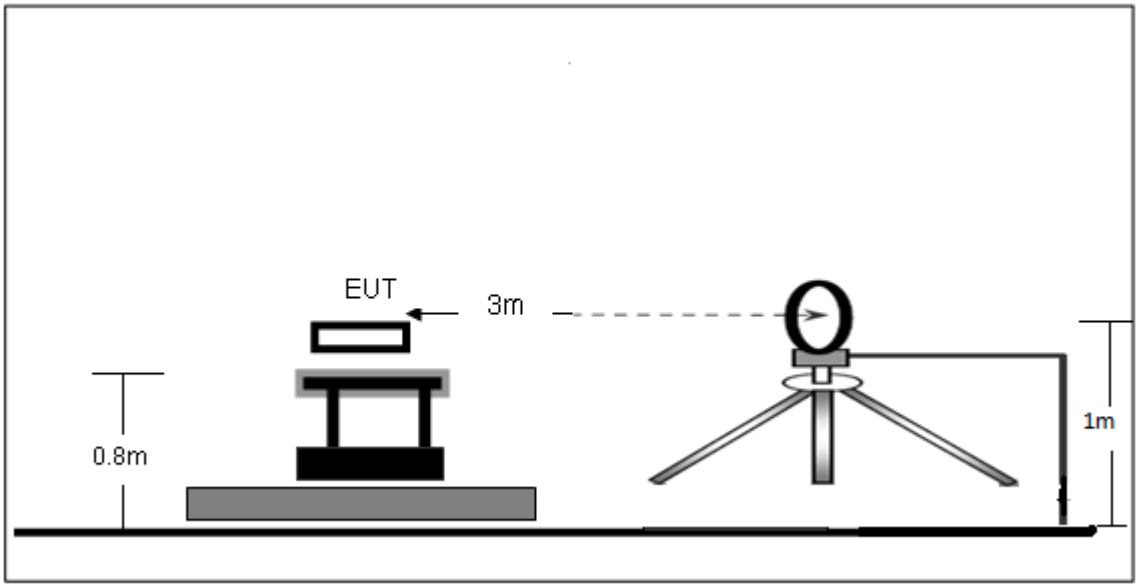
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.2220	34.36	19.83	54.19	62.74	-8.55	QP
2		0.2220	16.96	19.83	36.79	52.74	-15.95	AVG
3	*	0.3255	33.83	19.83	53.66	59.57	-5.91	QP
4		0.3255	16.99	19.83	36.82	49.57	-12.75	AVG
5		0.5190	28.06	19.84	47.90	56.00	-8.10	QP
6		0.5190	11.84	19.84	31.68	46.00	-14.32	AVG
7		1.0048	25.59	19.95	45.54	56.00	-10.46	QP
8		1.0048	19.04	19.95	38.99	46.00	-7.01	AVG
9		1.8689	27.40	19.95	47.35	56.00	-8.65	QP
10		1.8689	10.28	19.95	30.23	46.00	-15.77	AVG
11		5.7975	18.13	20.24	38.37	60.00	-21.63	QP
12		5.7975	5.46	20.24	25.70	50.00	-24.30	AVG

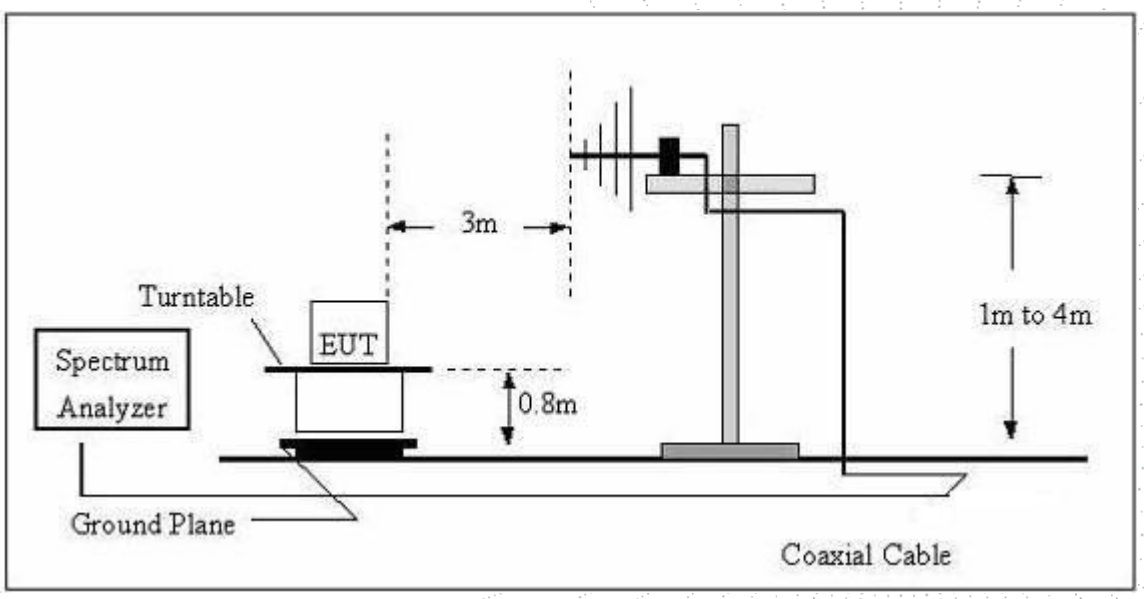
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

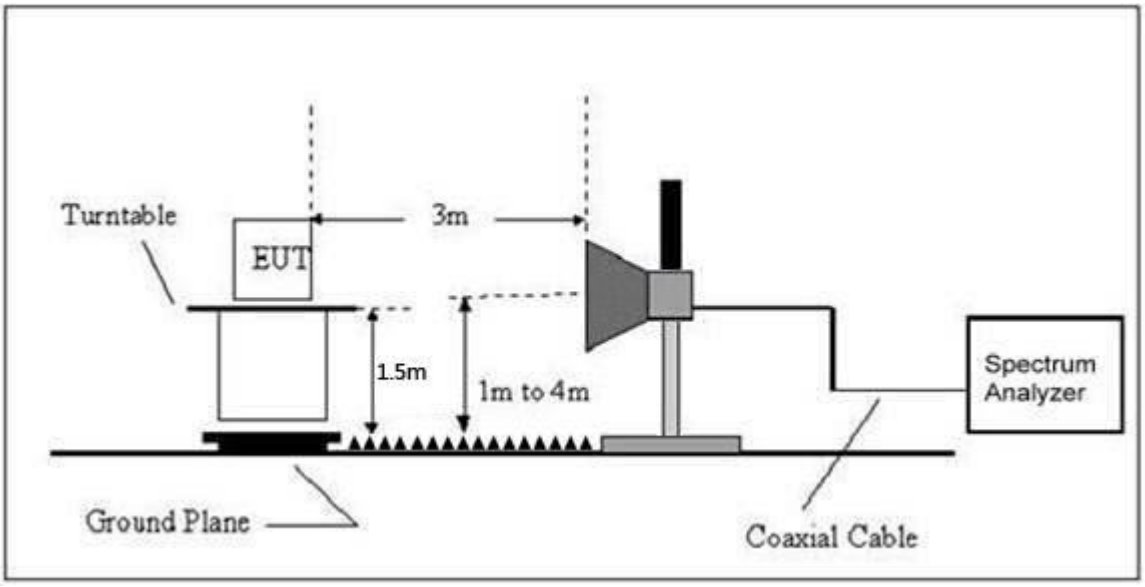
（A）Radiated Emission Test-Up Frequency Below 30MHz



（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	Field Strength	Distance	Field Strength Limit at 3m Distance	
(MHz)	uV/m	(m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))}$ + 80
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))}$ + 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

a. 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.
b. 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.
c. 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.
d. 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.
e. 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.
f. 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*lg(100 [kHz]/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:	AC 120V/60Hz
Test Mode:	Mode 4		

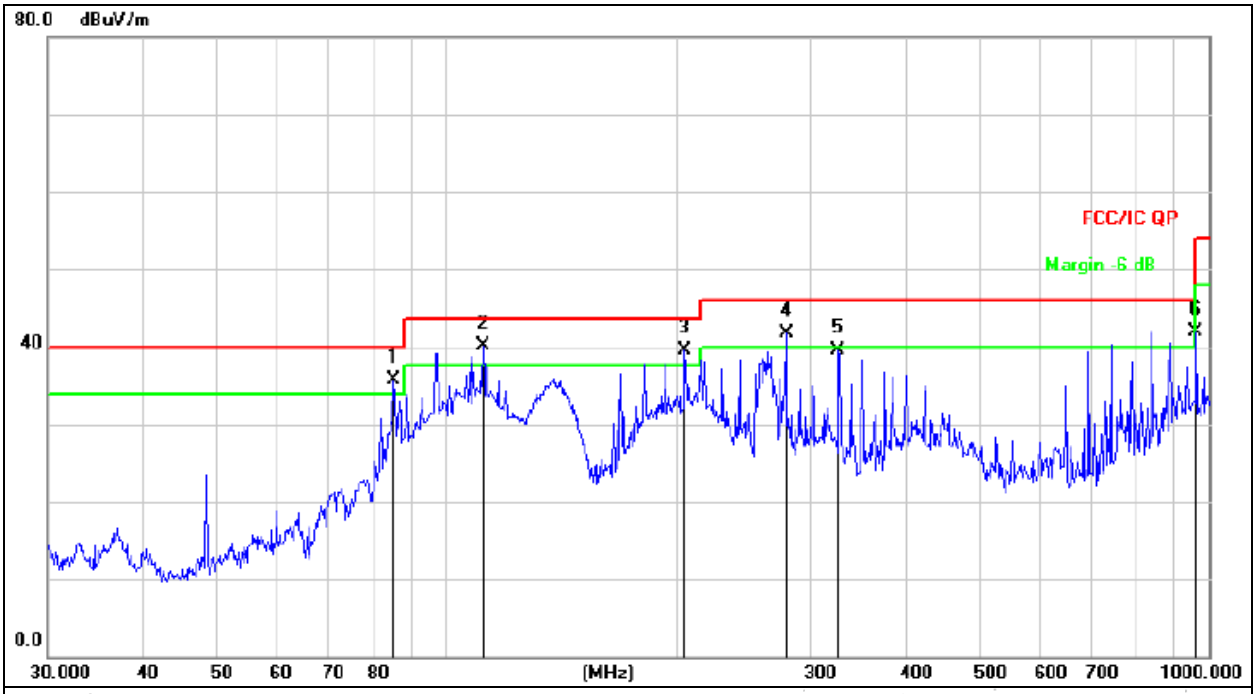
Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

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 (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

Between 30MHz – 1GHz

Adapter 1:

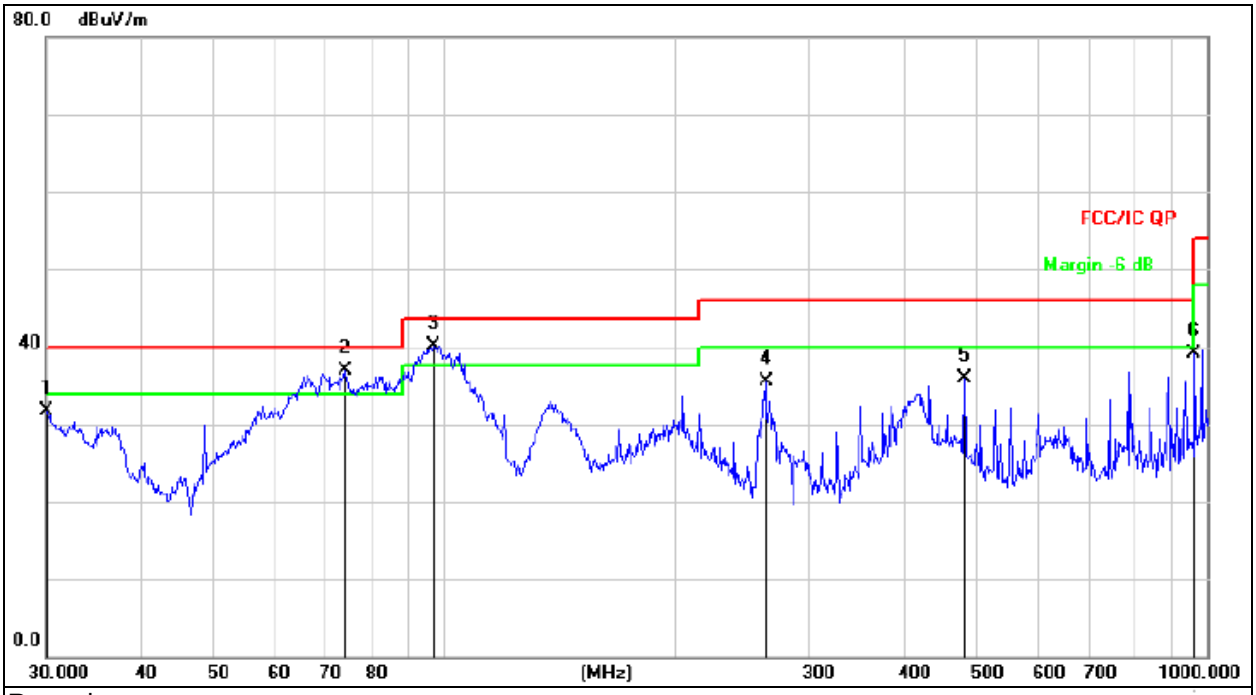
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization :	Horizontal



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	!	85.2980	54.26	-18.50	35.76	40.00	-4.24	QP
2	*	111.7380	56.86	-16.75	40.11	43.50	-3.39	QP
3	!	205.6751	55.08	-15.56	39.52	43.50	-3.98	QP
4	!	279.0436	55.46	-13.68	41.78	46.00	-4.22	QP
5		326.7395	51.87	-12.30	39.57	46.00	-6.43	QP
6		962.1623	44.80	-2.80	42.00	54.00	-12.00	QP

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	Vertical

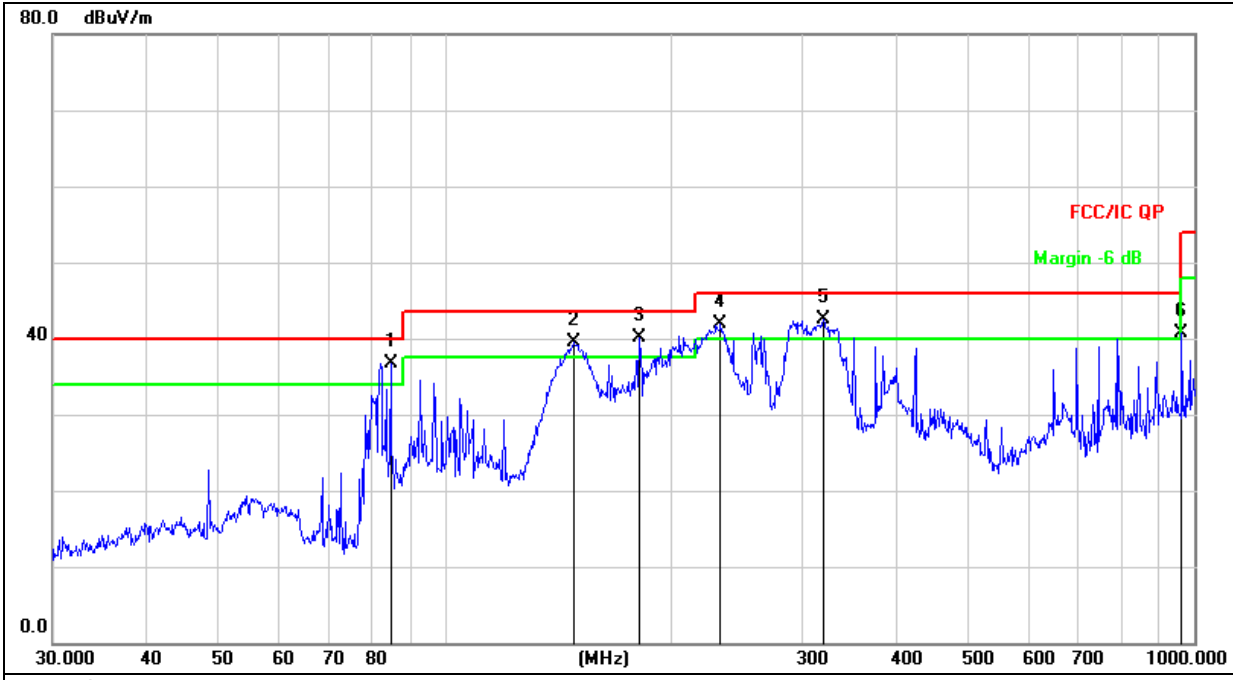


Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		30.1054	48.39	-16.63	31.76	40.00	-8.24	QP
2	*	74.1351	55.54	-18.72	36.82	40.00	-3.18	QP
3	!	96.7749	56.56	-16.40	40.16	43.50	-3.34	QP
4		263.8190	49.53	-14.00	35.53	46.00	-10.47	QP
5		480.5276	45.01	-9.10	35.91	46.00	-10.09	QP
6		962.1623	41.93	-2.80	39.13	54.00	-14.87	QP

Adapter 2:

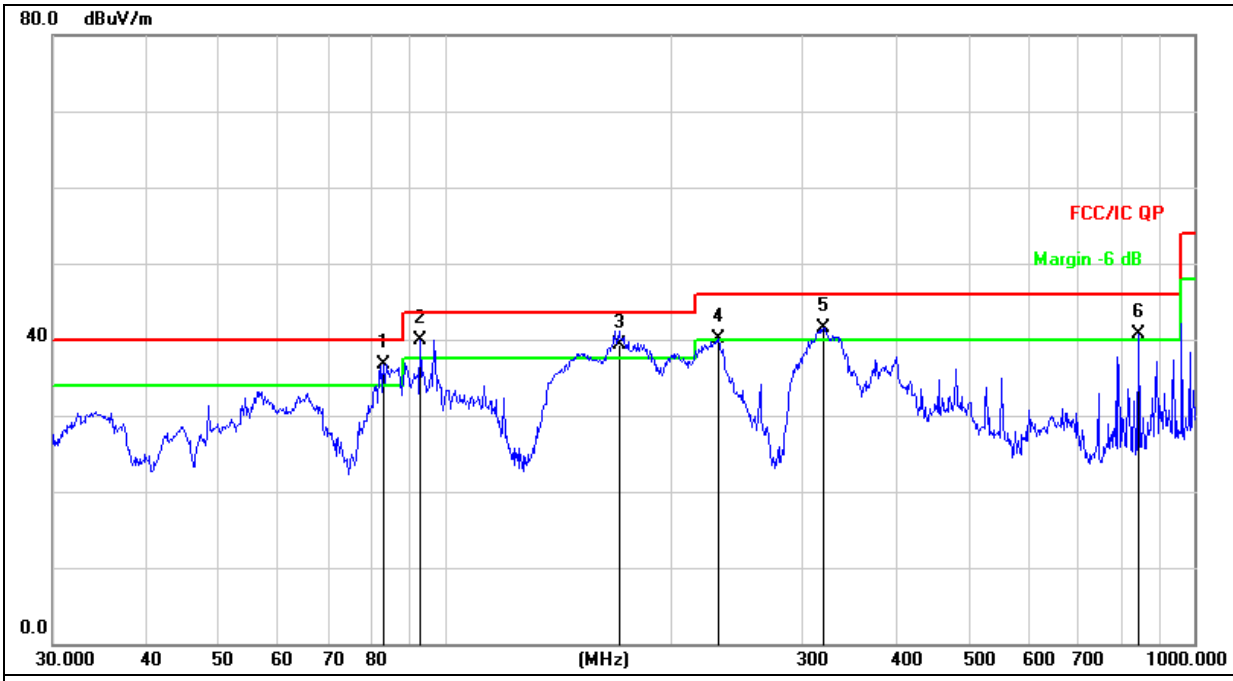
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization :	Horizontal



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	84.7019	55.37	-18.64	36.73	40.00	-3.27	QP
2	!	148.4410	58.86	-19.32	39.54	43.50	-3.96	QP
3	!	181.9202	57.08	-17.06	40.02	43.50	-3.48	QP
4	!	233.3487	56.71	-14.77	41.94	46.00	-4.06	QP
5	!	319.9370	55.00	-12.54	42.46	46.00	-3.54	QP
6		962.1623	43.44	-2.80	40.64	54.00	-13.36	QP

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	Vertical



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	82.9385	55.84	-19.06	36.78	40.00	-3.22	QP
2	!	92.7871	56.98	-16.99	39.99	43.50	-3.51	QP
3	!	170.5518	57.29	-17.90	39.39	43.50	-4.11	QP
4	!	231.7179	54.97	-14.81	40.16	46.00	-5.84	QP
5	!	319.9370	54.04	-12.54	41.50	46.00	-4.50	QP
6	!	842.1296	44.79	-4.05	40.74	46.00	-5.26	QP

Between 1GHz – 40GHz

Test Mode:	TX(5.1G) - 802.11a

Polar (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G							
V	4434.042	74.79	-20.73	54.06	68.2	-14.14	PK
V	4434.042	59.85	-20.73	39.12	54	-14.88	AV
V	10360.105	64.05	-9.36	54.69	68.2	-13.51	PK
V	10360.105	49.69	-9.36	40.33	54	-13.67	AV
V	15540.020	61.38	-7.84	53.54	74	-20.46	PK
V	15540.020	49.91	-7.84	42.07	54	-11.93	AV
H	4434.072	72.86	-20.73	52.13	68.2	-16.07	PK
H	4434.072	59.82	-20.73	39.09	54	-14.91	AV
H	10360.113	61.83	-9.36	52.47	68.2	-15.73	PK
H	10360.113	49.04	-9.36	39.68	54	-14.32	AV
H	15540.135	62.65	-7.84	54.81	74	-19.19	PK
H	15540.135	49.87	-7.84	42.03	54	-11.97	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.053	71.75	-20.42	51.34	74	-22.66	PK
V	4592.053	59.17	-20.42	38.75	54	-15.25	AV
V	10400.162	63.46	-9.30	54.16	68.2	-14.04	PK
V	10400.162	49.34	-9.30	40.04	54	-13.96	AV
V	15600.127	63.10	-7.82	55.28	74	-18.72	PK
V	15600.127	49.23	-7.82	41.41	54	-12.59	AV
H	4592.163	74.28	-20.42	53.86	74	-20.14	PK
H	4592.163	59.84	-20.42	39.42	54	-14.58	AV
H	10400.123	62.09	-9.30	52.79	68.2	-15.41	PK
H	10400.123	49.03	-9.30	39.73	54	-14.27	AV
H	15600.094	61.80	-7.82	53.98	74	-20.02	PK
H	15600.094	49.99	-7.82	42.17	54	-11.83	AV
High Channel (5240 MHz)-Above 1G							
V	4739.103	73.48	-20.12	53.36	74	-20.64	PK
V	4739.103	59.85	-20.12	39.73	54	-14.27	AV
V	10480.176	63.95	-9.18	54.77	68.2	-13.43	PK
V	10480.176	49.20	-9.18	40.02	54	-13.98	AV
V	15720.160	62.92	-7.78	55.14	74	-18.86	PK
V	15720.160	49.57	-7.78	41.79	54	-12.21	AV
H	4739.120	73.89	-20.12	53.77	74	-20.23	PK
H	4739.120	59.61	-20.12	39.49	54	-14.51	AV
H	10480.102	62.04	-9.18	52.86	68.2	-15.34	PK
H	10480.102	49.76	-9.18	40.58	54	-13.42	AV
H	15720.177	61.02	-7.78	53.24	74	-20.76	PK
H	15720.177	49.44	-7.78	41.66	54	-12.34	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G							
V	4434.075	70.64	-20.73	49.91	68.2	-18.29	PK
V	4434.075	59.55	-20.73	38.82	54	-15.18	AV
V	10360.066	60.91	-9.36	51.55	68.2	-16.65	PK
V	10360.066	49.24	-9.36	39.88	54	-14.12	AV
V	15540.124	62.43	-7.84	54.59	74	-19.41	PK
V	15540.124	49.63	-7.84	41.79	54	-12.21	AV
H	4434.037	70.59	-20.73	49.86	68.2	-18.34	PK
H	4434.037	59.76	-20.73	39.03	54	-14.97	AV
H	10360.024	61.38	-9.36	52.02	68.2	-16.18	PK
H	10360.024	49.10	-9.36	39.74	54	-14.26	AV
H	15540.035	62.03	-7.84	54.19	74	-19.81	PK
H	15540.035	49.28	-7.84	41.44	54	-12.56	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.189	71.40	-20.42	50.99	74	-23.01	PK
V	4592.189	59.93	-20.42	39.51	54	-14.49	AV
V	10400.002	64.00	-9.30	54.70	68.2	-13.50	PK
V	10400.002	49.90	-9.30	40.60	54	-13.40	AV
V	15600.134	61.78	-7.82	53.96	74	-20.04	PK
V	15600.134	49.56	-7.82	41.74	54	-12.26	AV
H	4592.013	73.82	-20.42	53.41	74	-20.59	PK
H	4592.013	59.48	-20.42	39.06	54	-14.94	AV
H	10400.083	61.80	-9.30	52.50	68.2	-15.70	PK
H	10400.083	49.20	-9.30	39.90	54	-14.10	AV
H	15600.140	60.02	-7.82	52.20	74	-21.80	PK
H	15600.140	49.89	-7.82	42.07	54	-11.93	AV
High Channel (5240 MHz)-Above 1G							
V	4739.195	70.33	-20.12	50.21	74	-23.79	PK
V	4739.195	59.60	-20.12	39.48	54	-14.52	AV
V	10480.018	62.82	-9.18	53.64	68.2	-14.56	PK
V	10480.018	49.99	-9.18	40.81	54	-13.19	AV
V	15720.090	62.14	-7.78	54.36	74	-19.64	PK
V	15720.090	49.44	-7.78	41.66	54	-12.34	AV
H	4739.130	74.51	-20.12	54.38	74	-19.62	PK
H	4739.130	59.65	-20.12	39.53	54	-14.47	AV
H	10480.063	60.35	-9.18	51.17	68.2	-17.03	PK
H	10480.063	49.16	-9.18	39.98	54	-14.02	AV
H	15720.036	63.60	-7.78	55.82	74	-18.18	PK
H	15720.036	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G							
V	4434.154	71.86	-20.73	51.13	68.2	-17.07	PK
V	4434.154	59.42	-20.73	38.69	54	-15.31	AV
V	10380.156	64.44	-9.33	55.11	68.2	-13.09	PK
V	10380.156	49.22	-9.33	39.89	54	-14.11	AV
V	15570.152	60.19	-7.83	52.36	74	-21.64	PK
V	15570.152	49.18	-7.83	41.35	54	-12.65	AV
H	4434.018	72.85	-20.73	52.12	74	-21.88	PK
H	4434.018	59.33	-20.73	38.60	54	-15.40	AV
H	10380.034	64.04	-9.33	54.71	68.2	-13.49	PK
H	10380.034	49.73	-9.33	40.40	54	-13.60	AV
H	15570.067	61.64	-7.83	53.81	74	-20.19	PK
H	15570.067	49.93	-7.83	42.10	54	-11.90	AV
High Channel (5230 MHz)-Above 1G							
V	4739.070	74.44	-20.12	54.32	68.2	-13.88	PK
V	4739.070	59.14	-20.12	39.02	54	-14.98	AV
V	10460.101	61.08	-9.21	51.87	68.2	-16.33	PK
V	10460.101	49.86	-9.21	40.65	54	-13.35	AV
V	15690.109	61.96	-7.79	54.17	74	-19.83	PK
V	15690.109	49.46	-7.79	41.67	54	-12.33	AV
H	4739.186	74.44	-20.12	54.32	68.2	-13.88	PK
H	4739.186	59.76	-20.12	39.64	54	-14.36	AV
H	10460.096	62.05	-9.21	52.84	68.2	-15.36	PK
H	10460.096	49.03	-9.21	39.82	54	-14.18	AV
H	15690.200	61.49	-7.79	53.70	74	-20.30	PK
H	15690.200	49.76	-7.79	41.97	54	-12.03	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G							
V	4434.048	72.53	-20.73	51.80	68.2	-16.40	PK
V	4434.048	59.13	-20.73	38.40	54	-15.60	AV
V	10360.009	61.11	-9.36	51.75	68.2	-16.45	PK
V	10360.009	49.19	-9.36	39.83	54	-14.17	AV
V	15540.119	64.97	-7.84	57.13	74	-16.87	PK
V	15540.119	49.42	-7.84	41.58	54	-12.42	AV
H	4434.131	72.54	-20.73	51.81	68.2	-16.39	PK
H	4434.131	59.58	-20.73	38.85	54	-15.15	AV
H	10360.138	61.78	-9.36	52.42	68.2	-15.78	PK
H	10360.138	49.95	-9.36	40.59	54	-13.41	AV
H	15540.072	62.25	-7.84	54.41	74	-19.59	PK
H	15540.072	49.71	-7.84	41.87	54	-12.13	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.094	74.78	-20.42	54.36	74	-19.64	PK
V	4592.094	59.53	-20.42	39.11	54	-14.89	AV
V	10400.004	63.85	-9.30	54.55	68.2	-13.65	PK
V	10400.004	49.99	-9.30	40.69	54	-13.31	AV
V	15600.108	60.93	-7.82	53.11	74	-20.89	PK
V	15600.108	49.61	-7.82	41.79	54	-12.21	AV
H	4592.101	70.68	-20.42	50.27	74	-23.73	PK
H	4592.101	59.30	-20.42	38.89	54	-15.11	AV
H	10400.033	60.75	-9.30	51.45	68.2	-16.75	PK
H	10400.033	49.44	-9.30	40.14	54	-13.86	AV
H	15600.004	62.12	-7.82	54.30	74	-19.70	PK
H	15600.004	49.92	-7.82	42.10	54	-11.90	AV
High Channel (5240 MHz)-Above 1G							
V	4739.172	70.42	-20.12	50.30	74	-23.70	PK
V	4739.172	59.16	-20.12	39.04	54	-14.96	AV
V	10480.168	62.73	-9.18	53.55	68.2	-14.65	PK
V	10480.168	49.37	-9.18	40.19	54	-13.81	AV
V	15720.191	64.21	-7.78	56.43	74	-17.57	PK
V	15720.191	49.46	-7.78	41.68	54	-12.32	AV
H	4739.129	73.72	-20.12	53.60	74	-20.40	PK
H	4739.129	59.14	-20.12	39.02	54	-14.98	AV
H	10480.122	61.84	-9.18	52.66	68.2	-15.54	PK
H	10480.122	49.53	-9.18	40.35	54	-13.65	AV
H	15720.163	61.95	-7.78	54.17	74	-19.83	PK
H	15720.163	49.63	-7.78	41.85	54	-12.15	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G							
V	4434.117	71.72	-20.73	50.99	68.2	-17.21	PK
V	4434.117	59.42	-20.73	38.69	54	-15.31	AV
V	10380.080	61.18	-9.33	51.85	68.2	-16.35	PK
V	10380.080	49.93	-9.33	40.60	54	-13.40	AV
V	15570.112	60.47	-7.83	52.64	74	-21.36	PK
V	15570.112	49.19	-7.83	41.36	54	-12.64	AV
H	4434.166	74.61	-20.73	53.88	74	-20.12	PK
H	4434.166	59.50	-20.73	38.77	54	-15.23	AV
H	10380.121	63.63	-9.33	54.30	68.2	-13.90	PK
H	10380.121	49.28	-9.33	39.95	54	-14.05	AV
H	15570.035	60.50	-7.83	52.67	74	-21.33	PK
H	15570.035	49.72	-7.83	41.89	54	-12.11	AV
High Channel (5230 MHz)-Above 1G							
V	4739.113	73.94	-20.12	53.82	68.2	-14.38	PK
V	4739.113	59.35	-20.12	39.23	54	-14.77	AV
V	10460.153	60.36	-9.21	51.15	68.2	-17.05	PK
V	10460.153	49.70	-9.21	40.49	54	-13.51	AV
V	15690.071	64.10	-7.79	56.31	74	-17.69	PK
V	15690.071	49.98	-7.79	42.19	54	-11.81	AV
H	4739.037	74.57	-20.12	54.45	68.2	-13.75	PK
H	4739.037	59.39	-20.12	39.27	54	-14.73	AV
H	10460.037	64.13	-9.21	54.92	68.2	-13.28	PK
H	10460.037	49.74	-9.21	40.53	54	-13.47	AV
H	15690.130	63.40	-7.79	55.61	74	-18.39	PK
H	15690.130	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-HT80

Polar (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
(5210 MHz)-Above 1G							
V	4434.197	73.14	-20.73	52.41	68.2	-15.79	PK
V	4434.197	59.47	-20.73	38.73	54	-15.27	AV
V	10420.085	60.47	-9.27	51.20	68.2	-17.00	PK
V	10420.085	49.12	-9.27	39.85	54	-14.15	AV
V	15630.104	62.26	-7.81	54.45	74	-19.55	PK
V	15630.104	49.80	-7.81	41.99	54	-12.01	AV
H	4434.062	71.45	-20.73	50.71	68.2	-17.49	PK
H	4434.062	59.92	-20.73	39.19	54	-14.81	AV
H	10420.170	41.78	9.27	51.05	68.2	-17.15	PK
H	10420.170	29.12	9.27	38.39	54	-15.61	AV
H	15630.110	61.80	-7.81	53.99	74	-20.01	PK
H	15630.110	49.45	-7.81	41.64	54	-12.36	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G							
V	4679.037	70.18	-20.24	49.93	74	-24.07	PK
V	4679.037	59.61	-20.24	39.36	54	-14.64	AV
V	11490.184	64.89	-8.79	56.10	68.2	-12.10	PK
V	11490.184	49.26	-8.79	40.47	54	-13.53	AV
V	17235.007	55.36	-3.18	52.18	68.2	-16.02	PK
V	17235.007	44.41	-3.18	41.23	54	-12.77	AV
H	4679.065	72.13	-20.73	51.40	74	-22.60	PK
H	4679.065	59.14	-20.73	38.41	54	-15.59	AV
H	11490.193	63.97	-8.79	55.18	68.2	-13.02	PK
H	11490.193	49.95	-8.79	41.16	54	-12.84	AV
H	17235.032	57.30	-3.18	54.12	68.2	-14.08	PK
H	17235.032	44.52	-3.18	41.34	54	-12.66	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.056	73.42	-20.42	53.01	74	-20.99	PK
V	4592.056	59.58	-20.42	39.16	54	-14.84	AV
V	11570.085	61.42	-8.86	52.56	68.2	-15.64	PK
V	11570.085	49.08	-8.86	40.22	54	-13.78	AV
V	17355.128	58.18	-2.52	55.66	68.2	-12.54	PK
V	17355.128	44.13	-2.52	41.61	54	-12.39	AV
H	4592.099	70.04	-20.42	49.62	74	-24.38	PK
H	4592.099	59.34	-20.42	38.92	54	-15.08	AV
H	11570.168	63.68	-8.86	54.82	68.2	-13.38	PK
H	11570.168	49.47	-8.86	40.61	54	-13.39	AV
H	17355.161	59.92	-2.52	57.40	68.2	-10.80	PK
H	17355.161	44.62	-2.52	42.10	54	-11.90	AV
High Channel (5825 MHz)-Above 1G							
V	6039.051	70.84	-18.93	51.90	68.2	-16.30	PK
V	6039.051	59.74	-18.93	40.81	54	-13.19	AV
V	11650.038	60.81	-8.92	51.89	74	-22.11	PK
V	11650.038	49.58	-8.92	40.66	54	-13.34	AV
V	17475.100	59.27	-1.86	57.41	68.2	-10.79	PK
V	17475.100	44.87	-1.86	43.01	54	-10.99	AV
H	6039.069	70.43	-18.93	51.50	68.2	-16.70	PK
H	6039.069	59.91	-18.93	40.98	54	-13.02	AV
H	11650.117	61.14	-8.92	52.22	74	-21.78	PK
H	11650.117	49.59	-8.92	40.67	54	-13.33	AV
H	17475.120	55.55	-1.86	53.69	68.2	-14.51	PK
H	17475.120	44.84	-1.86	42.98	54	-11.02	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G							
V	4679.182	70.39	-20.24	50.15	74	-23.85	PK
V	4679.182	59.38	-20.24	39.14	54	-14.86	AV
V	11490.087	63.41	-8.79	54.62	68.2	-13.58	PK
V	11490.087	49.10	-8.79	40.31	54	-13.69	AV
V	17235.080	58.42	-3.18	55.24	68.2	-12.96	PK
V	17235.080	44.76	-3.18	41.58	54	-12.42	AV
H	4679.104	74.46	-20.24	54.22	74	-19.78	PK
H	4679.104	59.65	-20.24	39.41	54	-14.59	AV
H	11490.086	64.42	-8.79	55.63	68.2	-12.57	PK
H	11490.086	49.09	-8.79	40.30	54	-13.70	AV
H	17235.200	58.57	-3.18	55.39	68.2	-12.81	PK
H	17235.200	44.92	-3.18	41.74	54	-12.26	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.026	71.66	-20.42	51.25	74	-22.75	PK
V	4592.026	59.51	-20.42	39.09	54	-14.91	AV
V	11570.169	64.93	-8.86	56.07	68.2	-12.13	PK
V	11570.169	49.77	-8.86	40.91	54	-13.09	AV
V	17355.111	59.46	-2.52	56.94	68.2	-11.26	PK
V	17355.111	44.30	-2.52	41.78	54	-12.22	AV
H	4592.119	74.17	-20.42	53.75	74	-20.25	PK
H	4592.119	59.98	-20.42	39.56	54	-14.44	AV
H	11570.010	61.51	-8.86	52.65	68.2	-15.55	PK
H	11570.010	49.95	-8.86	41.09	54	-12.91	AV
H	17355.143	59.81	-2.52	57.29	68.2	-10.91	PK
H	17355.143	44.97	-2.52	42.45	54	-11.55	AV
High Channel (5825 MHz)-Above 1G							
V	6039.005	72.54	-18.93	53.60	68.2	-14.60	PK
V	6039.005	59.50	-18.93	40.57	54	-13.43	AV
V	11650.171	61.28	-8.92	52.36	74	-21.64	PK
V	11650.171	49.75	-8.92	40.83	54	-13.17	AV
V	17475.170	55.11	-1.86	53.25	68.2	-14.95	PK
V	17475.170	44.51	-1.86	42.65	54	-11.35	AV
H	6039.200	72.74	-18.93	53.81	68.2	-14.39	PK
H	6039.200	59.78	-18.93	40.85	54	-13.15	AV
H	11650.155	61.71	-8.92	52.79	74	-21.21	PK
H	11650.155	49.90	-8.92	40.98	54	-13.02	AV
H	17475.086	59.88	-1.86	58.02	68.2	-10.18	PK
H	17475.086	44.45	-1.86	42.59	54	-11.41	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5755 MHz)-Above 1G							
V	4679.049	70.39	-20.24	50.15	74	-23.85	PK
V	4679.049	59.08	-20.24	38.84	54	-15.16	AV
V	11510.019	62.50	-8.81	53.69	74	-20.31	PK
V	11510.019	49.07	-8.81	40.26	54	-13.74	AV
V	17265.094	59.39	-3.01	56.38	68.2	-11.82	PK
V	17265.094	44.64	-3.01	41.63	54	-12.37	AV
H	4679.102	73.06	-20.24	52.81	74	-21.19	PK
H	4679.102	59.96	-20.24	39.71	54	-14.29	AV
H	11510.022	62.62	-8.81	53.81	74	-20.19	PK
H	11510.022	49.60	-8.81	40.79	54	-13.21	AV
H	17265.129	56.24	-3.01	53.23	68.2	-14.97	PK
H	17265.129	44.51	-3.01	41.50	54	-12.50	AV
High Channel (5795 MHz)-Above 1G							
V	6039.138	71.85	-18.93	52.92	68.2	-15.28	PK
V	6039.138	59.34	-18.93	40.41	54	-13.59	AV
V	11590.101	60.94	-8.87	52.07	74	-21.93	PK
V	11590.101	49.74	-8.87	40.87	54	-13.13	AV
V	17385.164	59.33	-2.35	56.98	68.2	-11.22	PK
V	17385.164	44.88	-2.35	42.53	54	-11.47	AV
H	6039.195	73.22	-18.93	54.28	68.2	-13.92	PK
H	6039.195	59.66	-18.93	40.73	54	-13.27	AV
H	11590.091	61.34	-8.87	52.47	74	-21.53	PK
H	11590.091	49.21	-8.87	40.34	54	-13.66	AV
H	17385.159	55.85	-2.35	53.50	68.2	-14.70	PK
H	17385.159	44.98	-2.35	42.63	54	-11.37	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G							
V	4679.036	74.06	-20.24	53.82	74	-20.18	PK
V	4679.036	59.59	-20.24	39.34	54	-14.66	AV
V	11490.105	63.58	-8.79	54.79	68.2	-13.41	PK
V	11490.105	49.52	-8.79	40.73	54	-13.27	AV
V	17235.012	59.05	-3.18	55.87	68.2	-12.33	PK
V	17235.012	44.64	-3.18	41.46	54	-12.54	AV
H	4679.122	74.71	-20.24	54.47	74	-19.53	PK
H	4679.122	59.79	-20.24	39.54	54	-14.46	AV
H	11490.089	62.69	-8.79	53.90	68.2	-14.30	PK
H	11490.089	49.37	-8.79	40.58	54	-13.42	AV
H	17235.046	59.94	-3.18	56.76	68.2	-11.44	PK
H	17235.046	44.24	-3.18	41.06	54	-12.94	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.162	72.34	-20.42	51.93	74	-22.07	PK
V	4592.162	59.52	-20.42	39.11	54	-14.89	AV
V	11570.079	63.29	-8.86	54.43	68.2	-13.77	PK
V	11570.079	49.82	-8.86	40.96	54	-13.04	AV
V	17355.019	55.05	-2.52	52.53	68.2	-15.67	PK
V	17355.019	44.34	-2.52	41.82	54	-12.18	AV
H	4592.135	74.59	-20.42	54.17	74	-19.83	PK
H	4592.135	59.60	-20.42	39.18	54	-14.82	AV
H	11570.150	62.09	-8.86	53.23	68.2	-14.97	PK
H	11570.150	49.57	-8.86	40.71	54	-13.29	AV
H	17355.128	59.48	-2.52	56.96	68.2	-11.24	PK
H	17355.128	44.16	-2.52	41.64	54	-12.36	AV
High Channel (5825 MHz)-Above 1G							
V	6039.091	71.31	-18.93	52.38	68.2	-15.82	PK
V	6039.091	59.45	-18.93	40.51	54	-13.49	AV
V	11650.032	63.34	-8.92	54.42	74	-19.58	PK
V	11650.032	49.64	-8.92	40.72	54	-13.28	AV
V	17475.031	56.95	-1.86	55.09	68.2	-13.11	PK
V	17475.031	44.85	-1.86	42.99	54	-11.01	AV
H	6039.075	73.14	-18.93	54.21	68.2	-13.99	PK
H	6039.075	59.84	-18.93	40.90	54	-13.10	AV
H	11650.053	62.74	-8.92	53.82	74	-20.18	PK
H	11650.053	49.09	-8.92	40.17	54	-13.83	AV
H	17475.081	57.05	-1.86	55.19	68.2	-13.01	PK
H	17475.081	44.64	-1.86	42.78	54	-11.22	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 (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5755 MHz)-Above 1G							
V	4679.059	71.19	-20.24	50.95	74	-23.05	PK
V	4679.059	59.23	-20.24	38.99	54	-15.01	AV
V	11510.001	64.12	-8.81	55.31	74	-18.69	PK
V	11510.001	49.62	-8.81	40.81	54	-13.19	AV
V	17265.145	55.78	-3.01	52.77	68.2	-15.43	PK
V	17265.145	44.62	-3.01	41.61	54	-12.39	AV
H	4679.179	72.34	-20.24	52.10	74	-21.90	PK
H	4679.179	59.14	-20.24	38.90	54	-15.10	AV
H	11510.123	62.08	-8.81	53.27	74	-20.73	PK
H	11510.123	49.52	-8.81	40.71	54	-13.29	AV
H	17265.133	59.02	-3.01	56.01	68.2	-12.19	PK
H	17265.133	44.65	-3.01	41.64	54	-12.36	AV
High Channel (5795 MHz)-Above 1G							
V	6039.012	73.98	-18.93	55.04	68.2	-13.16	PK
V	6039.012	59.96	-18.93	41.03	54	-12.97	AV
V	11590.185	63.52	-8.87	54.65	74	-19.35	PK
V	11590.185	49.87	-8.87	41.00	54	-13.00	AV
V	17385.161	59.87	-2.35	57.52	68.2	-10.68	PK
V	17385.161	44.51	-2.35	42.16	54	-11.84	AV
H	6039.013	72.83	-18.93	53.90	68.2	-14.30	PK
H	6039.013	59.36	-18.93	40.43	54	-13.57	AV
H	11590.153	64.16	-8.87	55.29	74	-18.71	PK
H	11590.153	49.44	-8.87	40.57	54	-13.43	AV
H	17385.155	59.91	-2.35	57.56	68.2	-10.64	PK
H	17385.155	44.73	-2.35	42.38	54	-11.62	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.

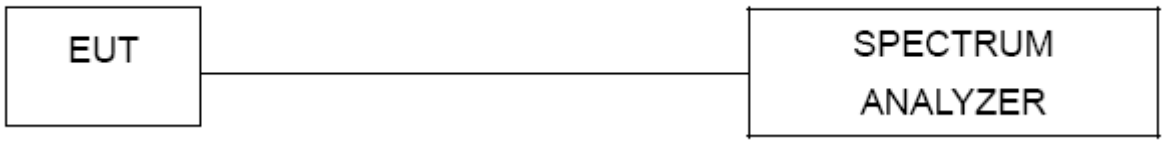
Test Mode:	TX(5.8G) - 802.11ac-HT80

Polar (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measurement (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
(5775 MHz)-Above 1G							
V	4679.197	74.37	-20.24	54.13	74	-19.87	PK
V	4679.197	59.73	-20.24	39.49	54	-14.51	AV
V	11550.143	63.49	-8.84	54.65	74	-19.35	PK
V	11550.143	49.63	-8.84	40.79	54	-13.21	AV
V	17325.117	59.25	-2.68	56.57	68.2	-11.63	PK
V	17325.117	44.13	-2.68	41.45	54	-12.55	AV
H	4679.171	73.48	-20.24	53.24	74	-20.76	PK
H	4679.171	59.14	-20.24	38.90	54	-15.10	AV
H	11550.083	61.82	-8.84	52.98	74	-21.02	PK
H	11550.083	49.76	-8.84	40.92	54	-13.08	AV
H	17325.063	58.50	-2.68	55.82	68.2	-12.38	PK
H	17325.063	44.75	-2.68	42.07	54	-11.93	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 Wifi Repeater 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 Wifi Repeater 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 Wifi Repeaters 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 ≥ 1/T, where T is defined in section II.B.I.a).
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 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 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 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 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.

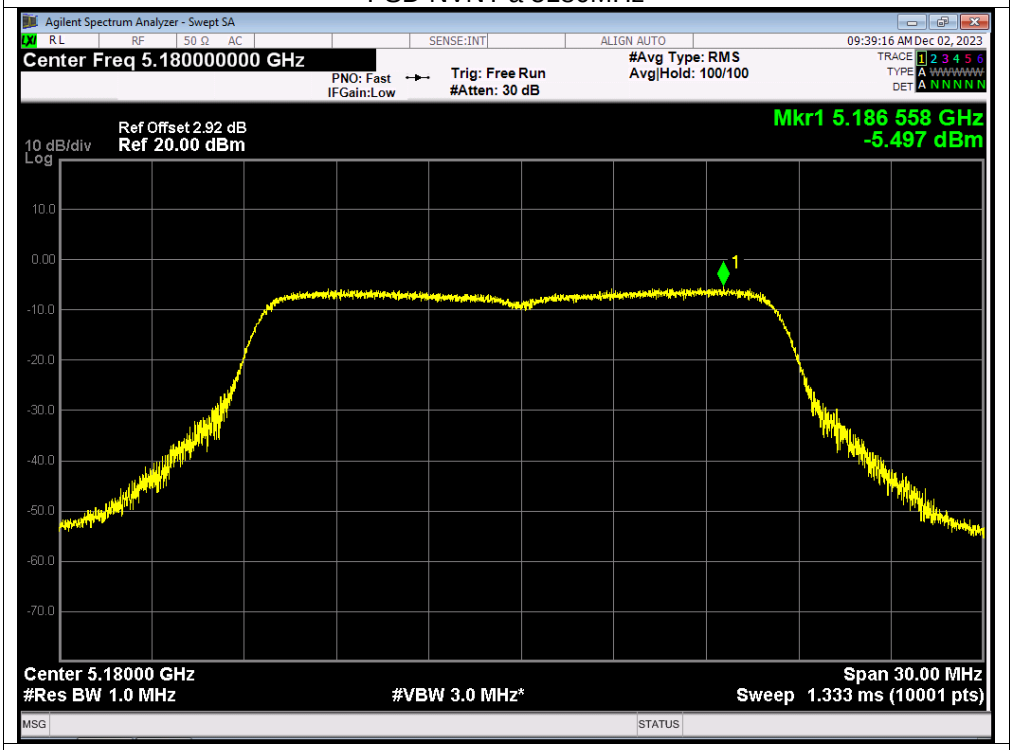
8.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

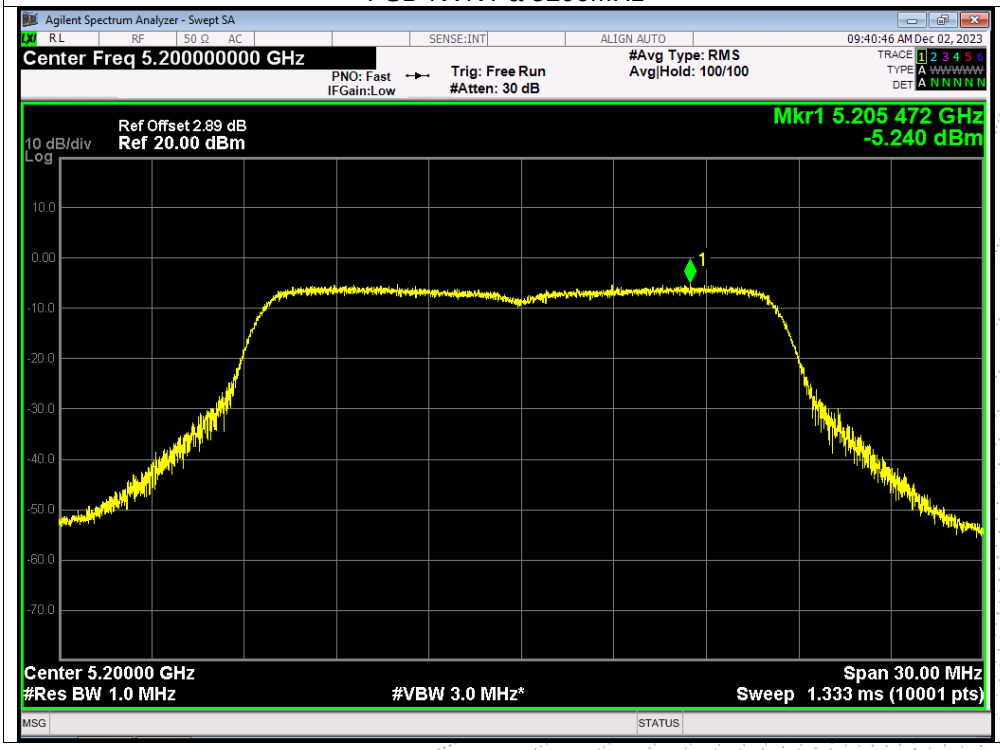
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	-5.50	11	Pass
NVNT	a	5200	-5.24	11	Pass
NVNT	a	5240	-5.42	11	Pass
NVNT	n20	5180	-6.66	11	Pass
NVNT	n20	5200	-6.45	11	Pass
NVNT	n20	5240	-7.25	11	Pass
NVNT	n40	5190	-11.50	11	Pass
NVNT	n40	5230	-11.23	11	Pass
NVNT	ac20	5180	-6.69	11	Pass
NVNT	ac20	5200	-6.63	11	Pass
NVNT	ac20	5240	-7.40	11	Pass
NVNT	ac40	5190	-10.86	11	Pass
NVNT	ac40	5230	-11.35	11	Pass
NVNT	ac80	5210	-14.01	11	Pass

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	-6.79	30	Pass
NVNT	a	5785	-8.10	30	Pass
NVNT	a	5825	-8.91	30	Pass
NVNT	n20	5745	-8.18	30	Pass
NVNT	n20	5785	-9.16	30	Pass
NVNT	n20	5825	-10.19	30	Pass
NVNT	n40	5755	-12.05	30	Pass
NVNT	n40	5795	-13.09	30	Pass
NVNT	ac20	5745	-8.17	30	Pass
NVNT	ac20	5785	-9.22	30	Pass
NVNT	ac20	5825	-10.04	30	Pass
NVNT	ac40	5755	-12.11	30	Pass
NVNT	ac40	5795	-12.83	30	Pass
NVNT	ac80	5775	-14.99	30	Pass

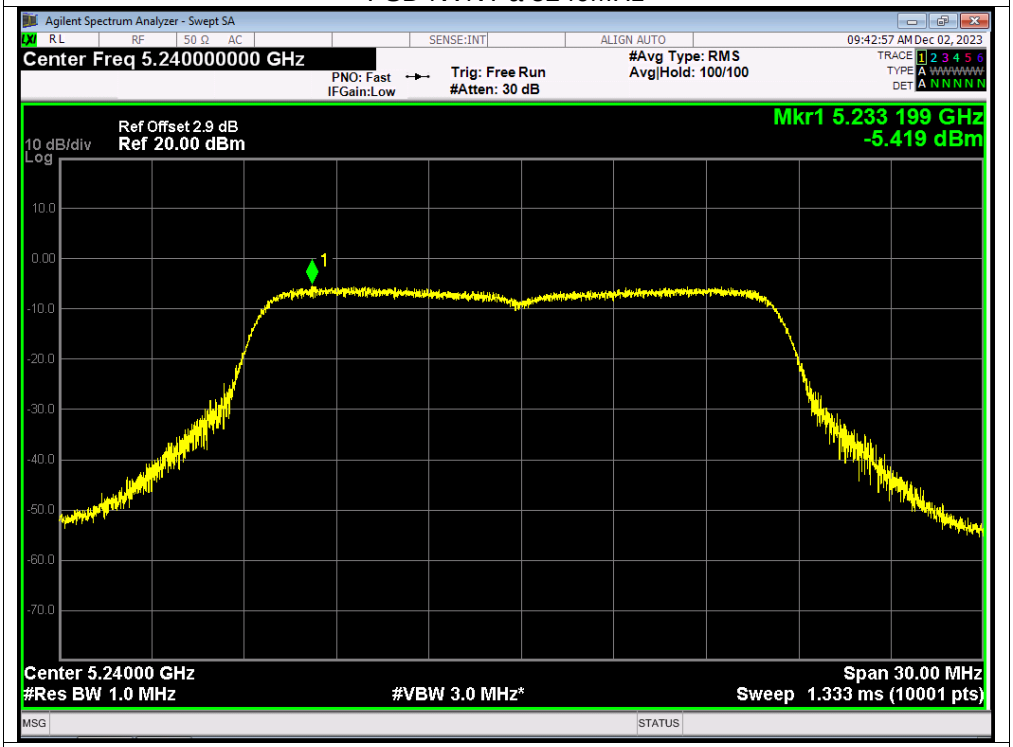
Test Graphs
PSD NVNT a 5180MHz



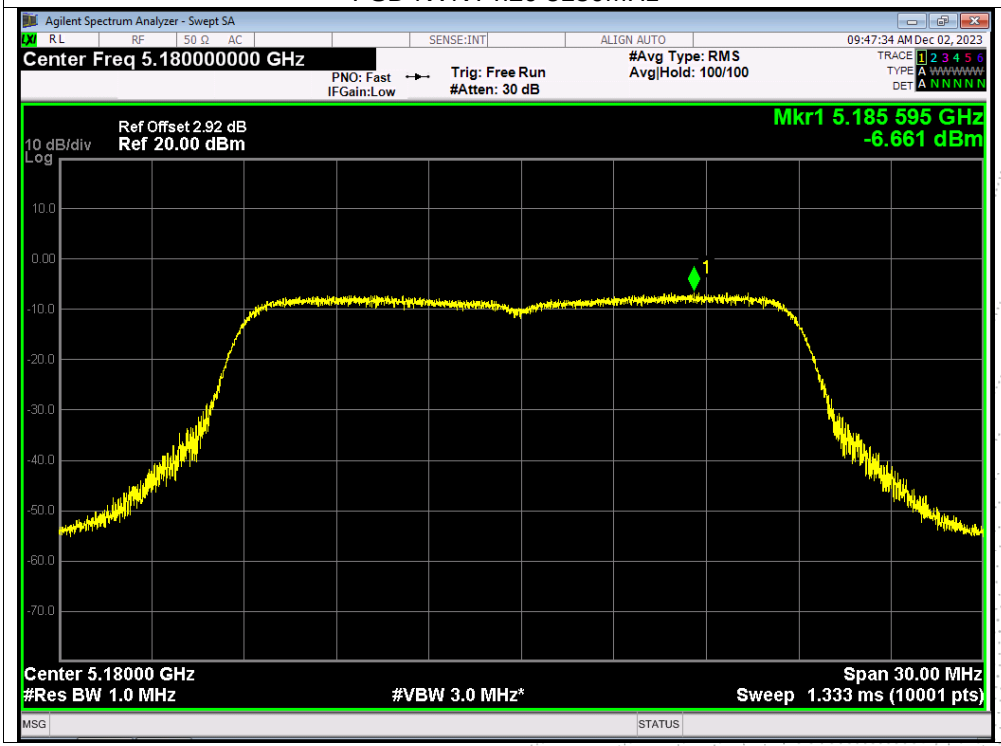
PSD NVNT a 5200MHz



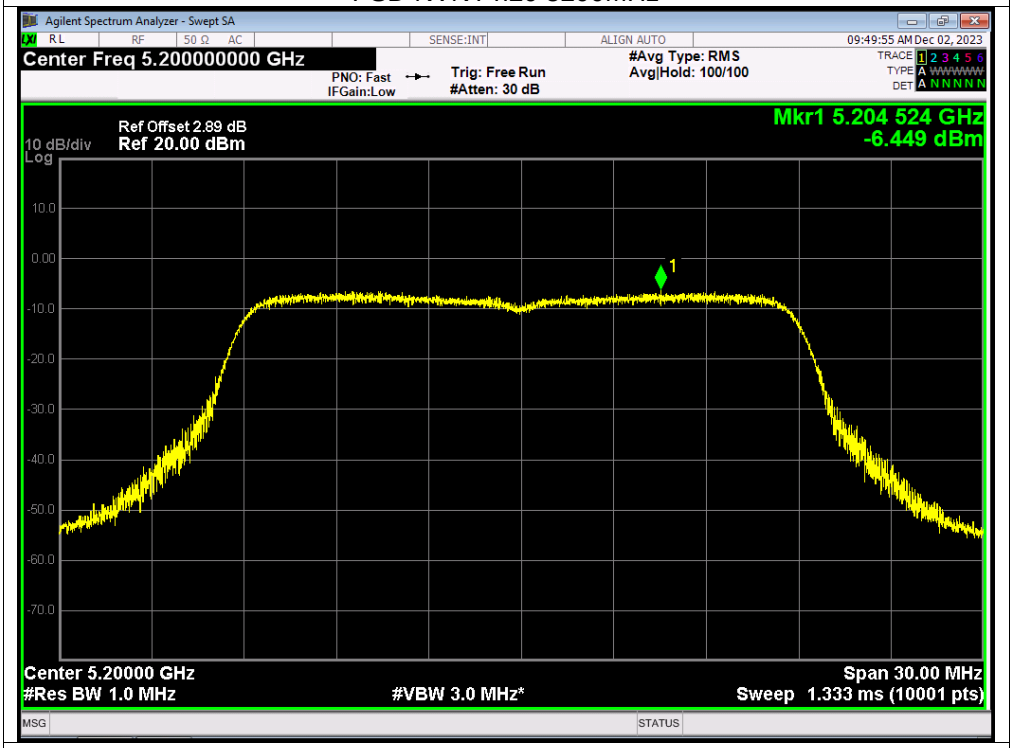
PSD NVNT a 5240MHz



PSD NVNT n20 5180MHz



PSD NVNT n20 5200MHz



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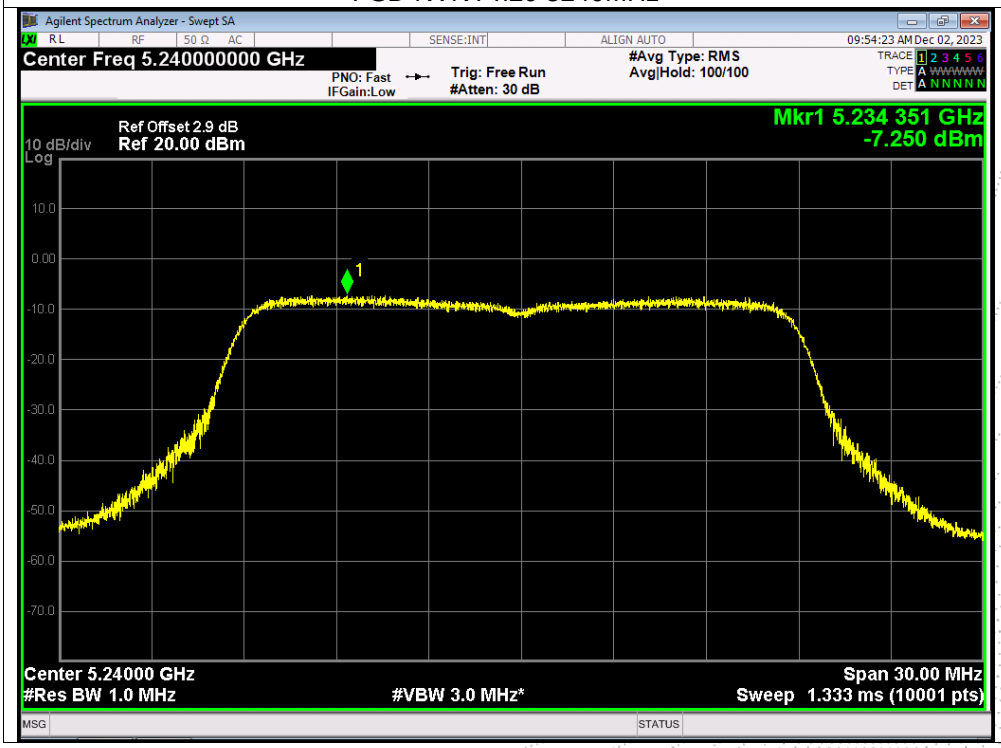
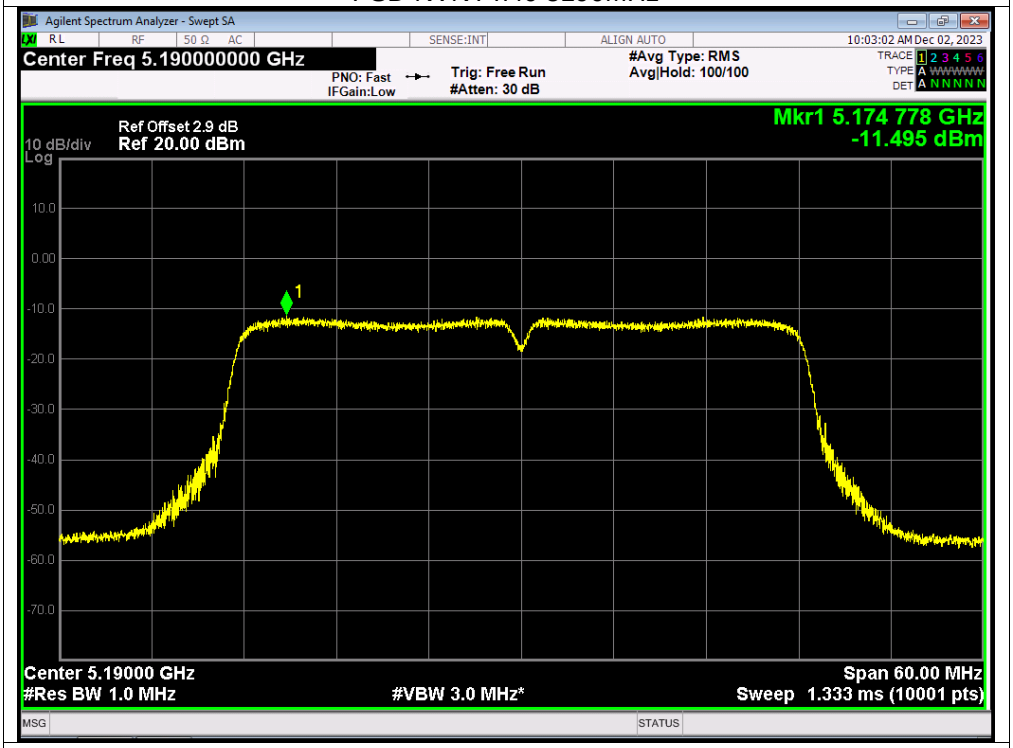
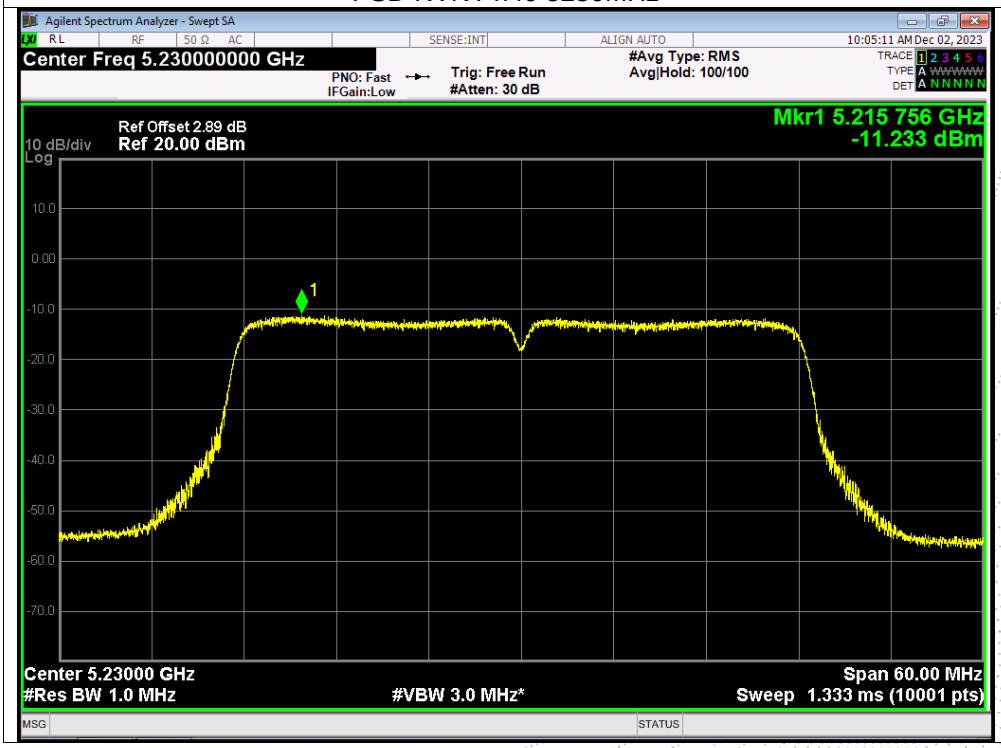


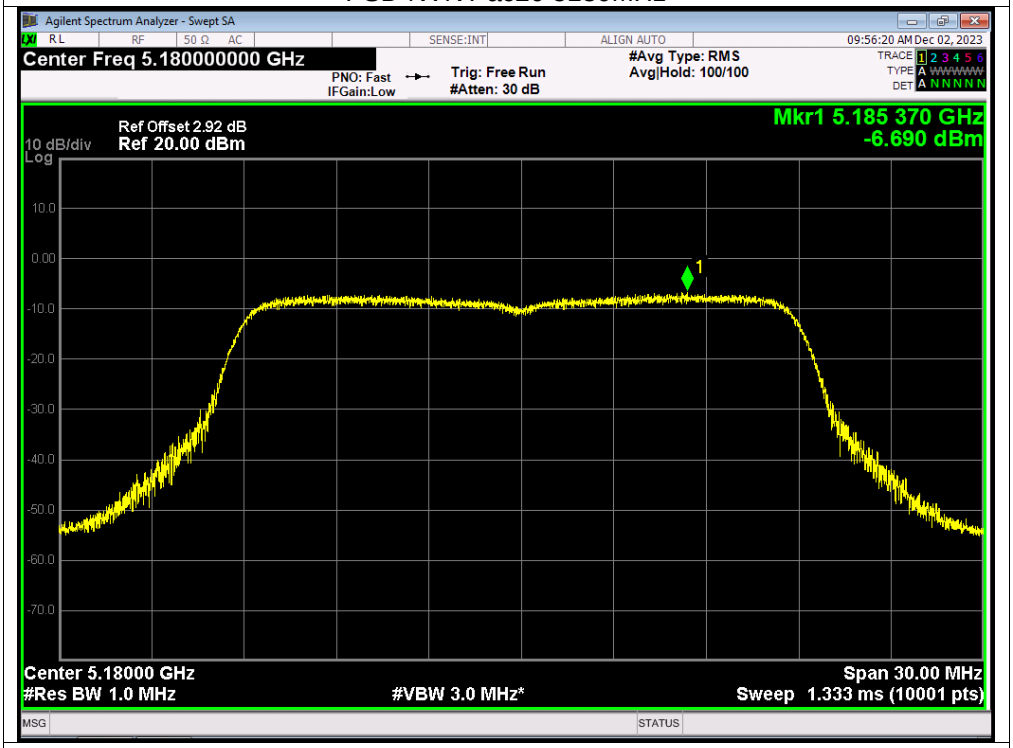
PSD NVNT n40 5190MHz



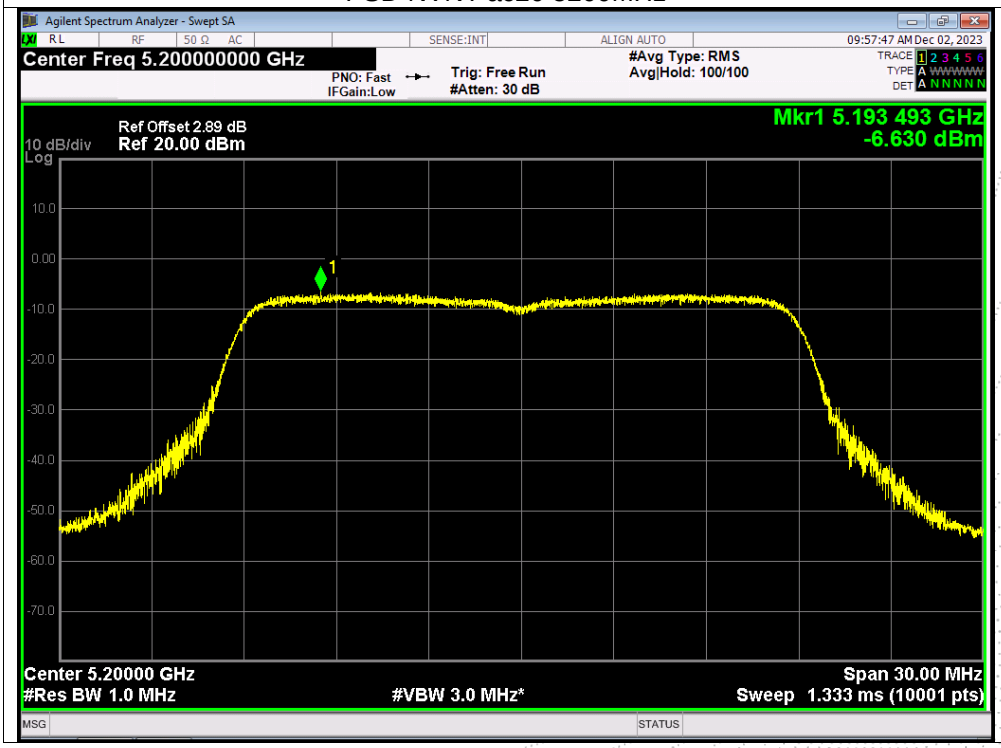
PSD NVNT n40 5230MHz



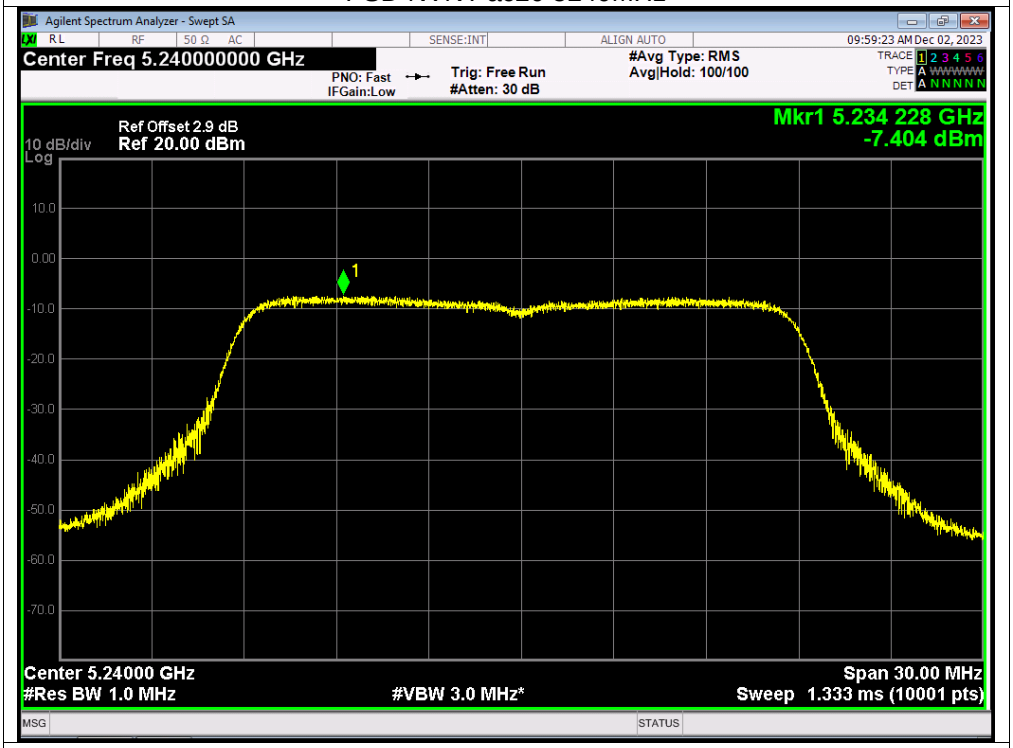
PSD NVNT ac20 5180MHz



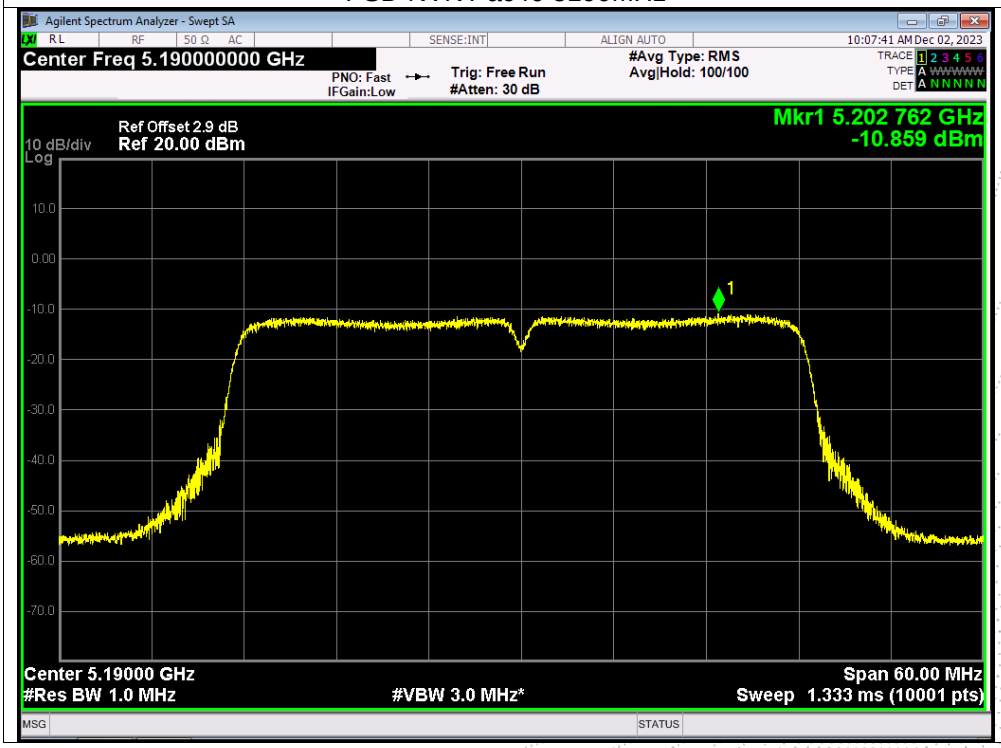
PSD NVNT ac20 5200MHz



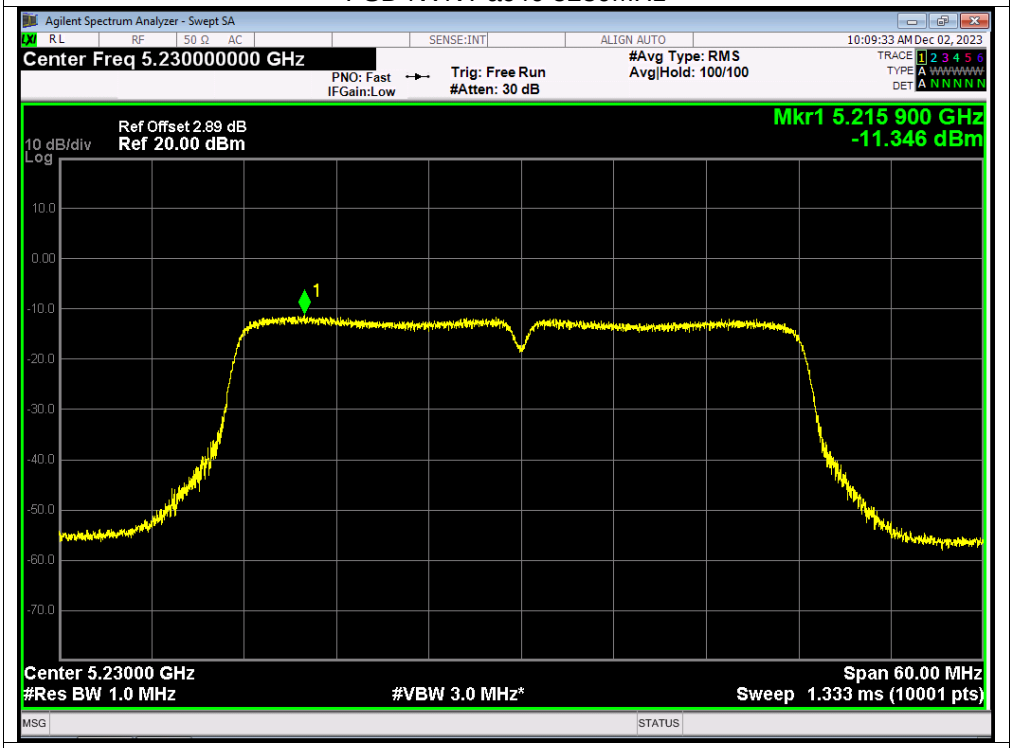
PSD NVNT ac20 5240MHz



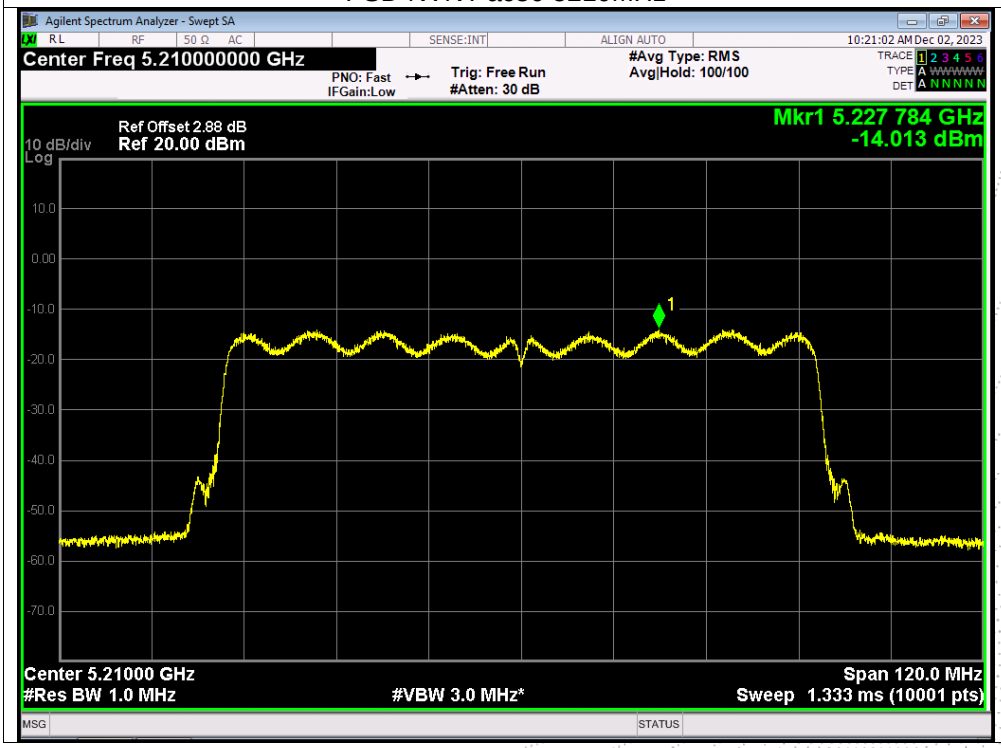
PSD NVNT ac40 5190MHz



PSD NVNT ac40 5230MHz

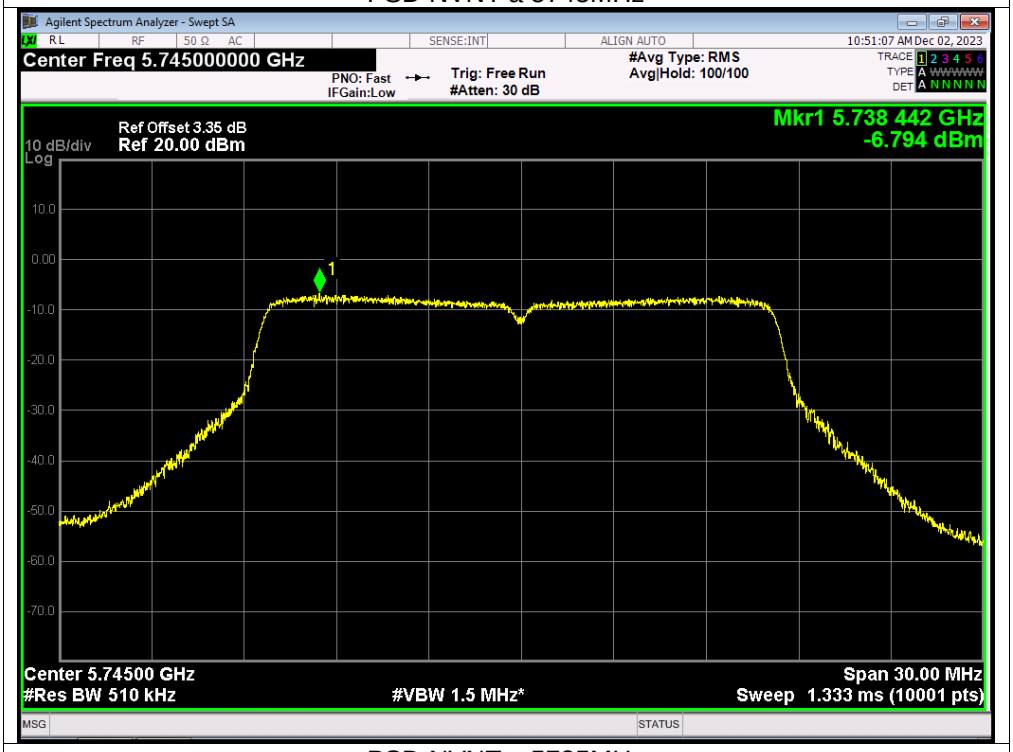


PSD NVNT ac80 5210MHz

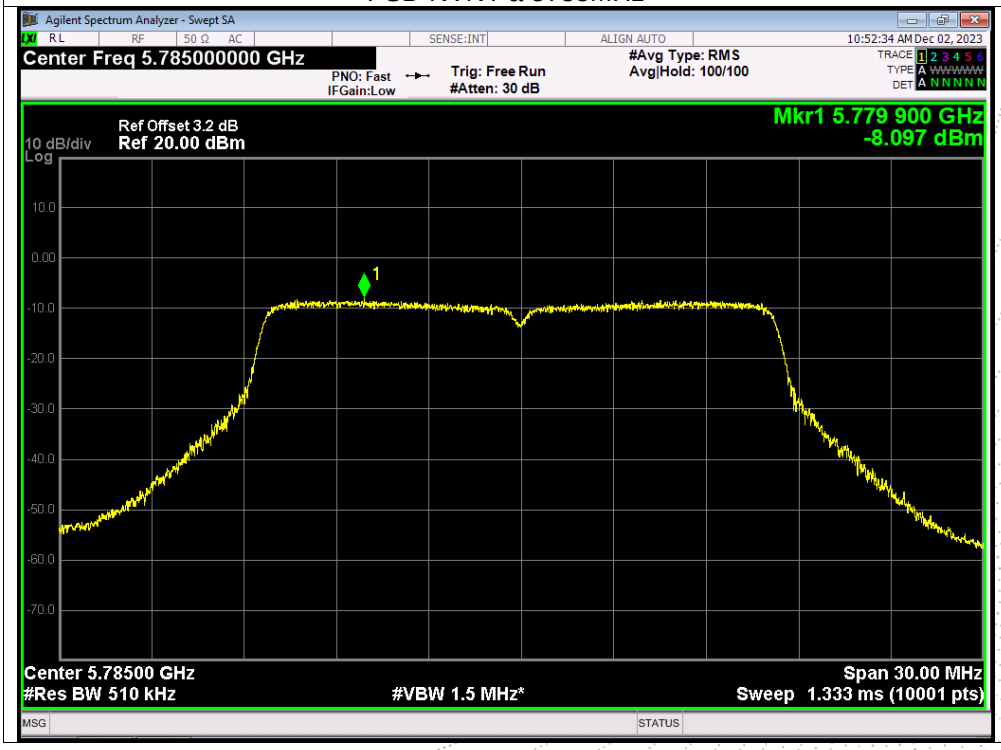


Test Graphs

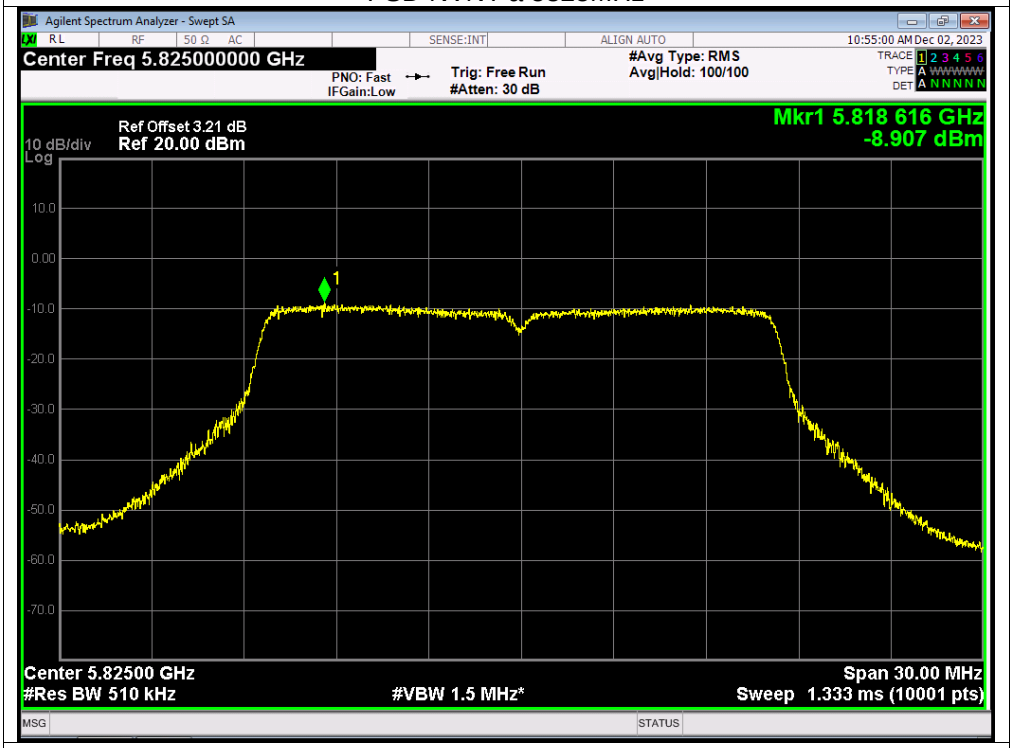
PSD NVNT a 5745MHz



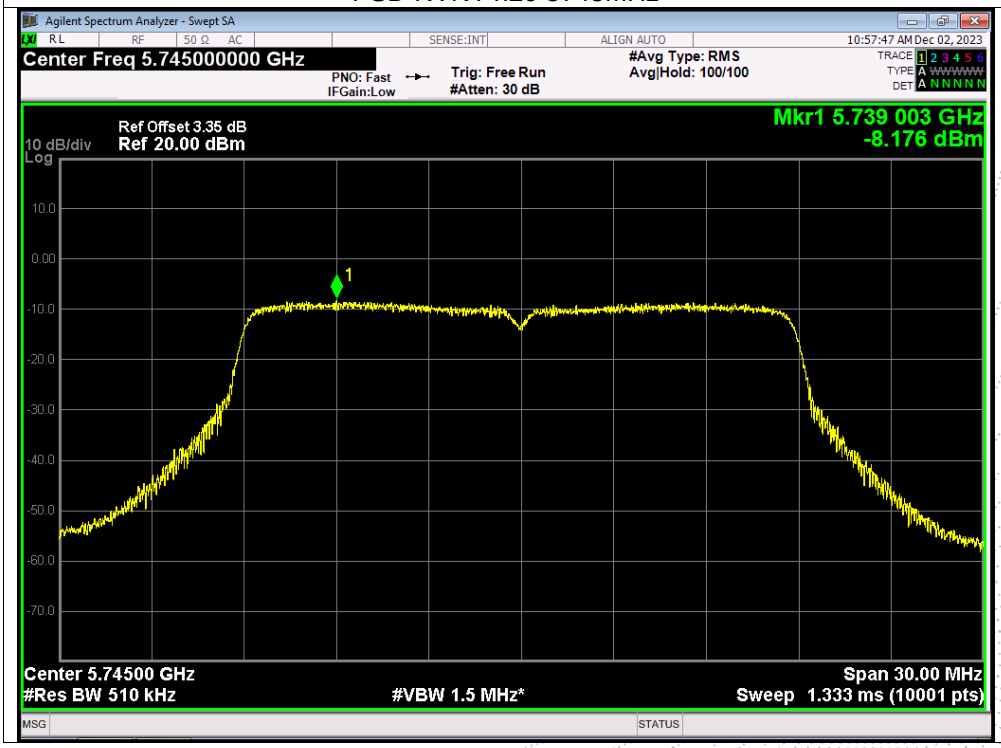
PSD NVNT a 5785MHz



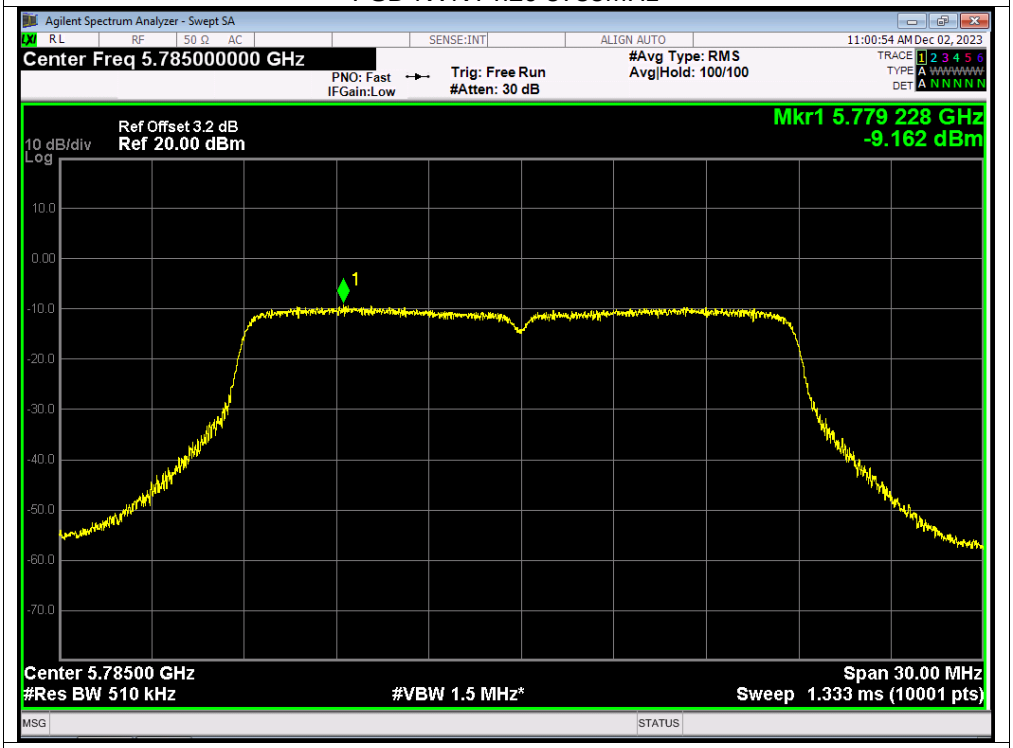
PSD NVNT a 5825MHz



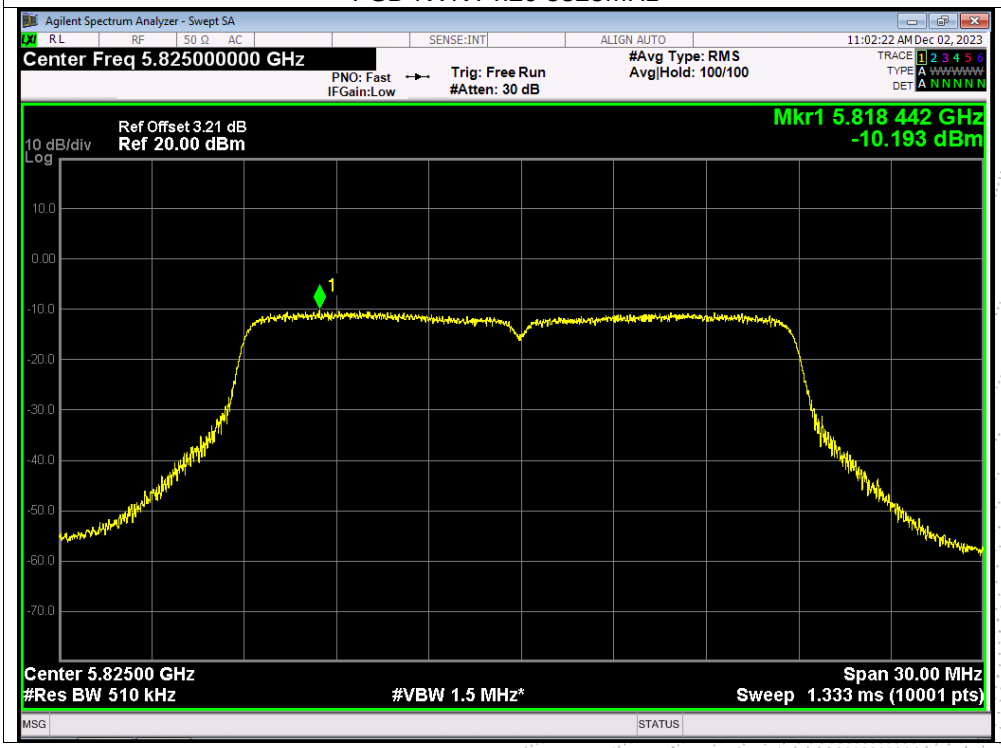
PSD NVNT n20 5745MHz



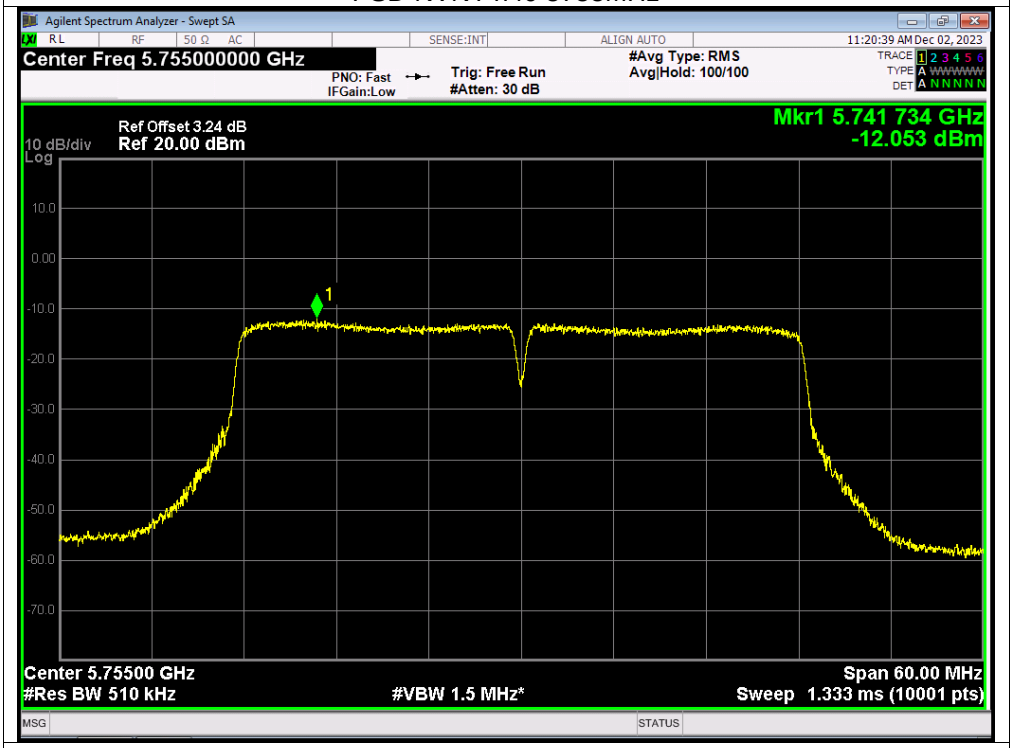
PSD NVNT n20 5785MHz



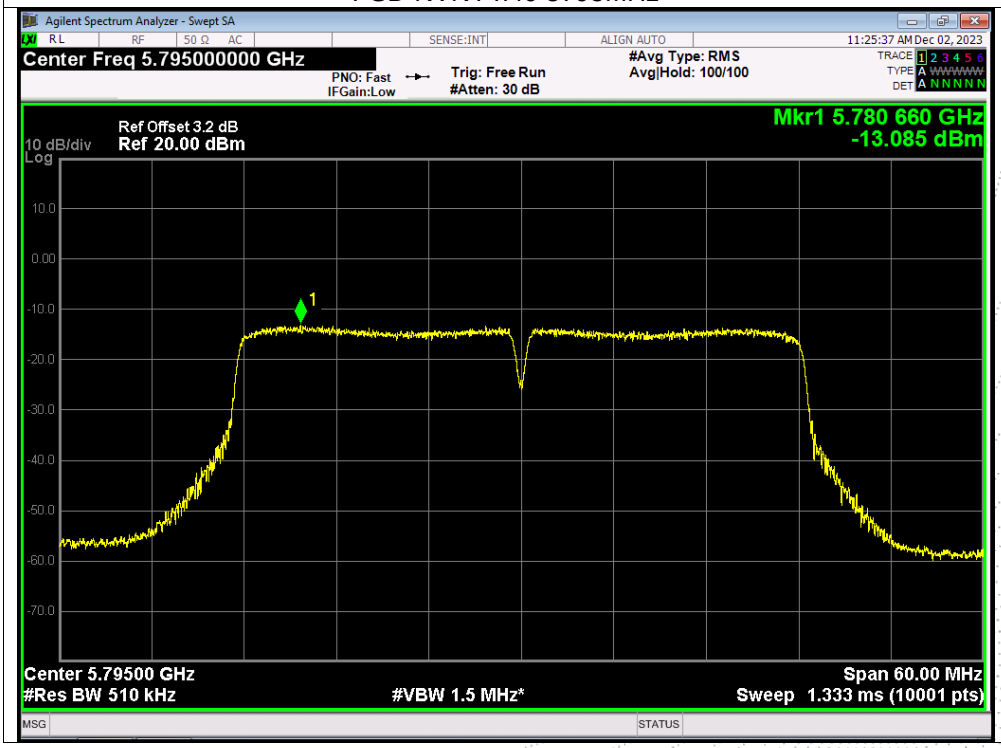
PSD NVNT n20 5825MHz



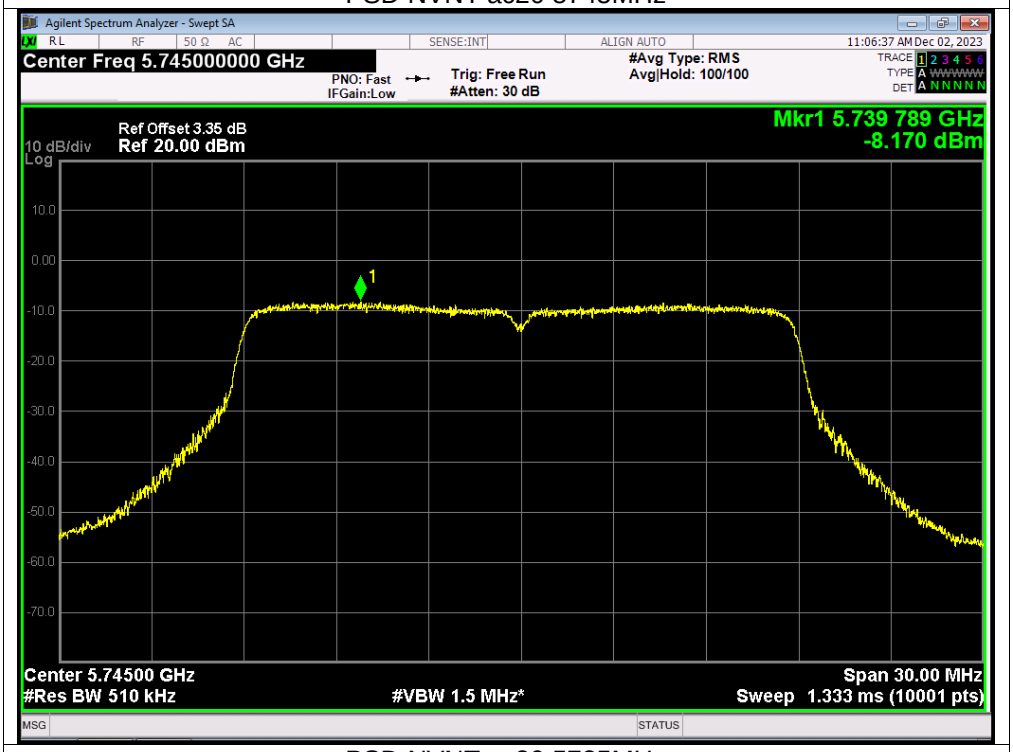
PSD NVNT n40 5755MHz



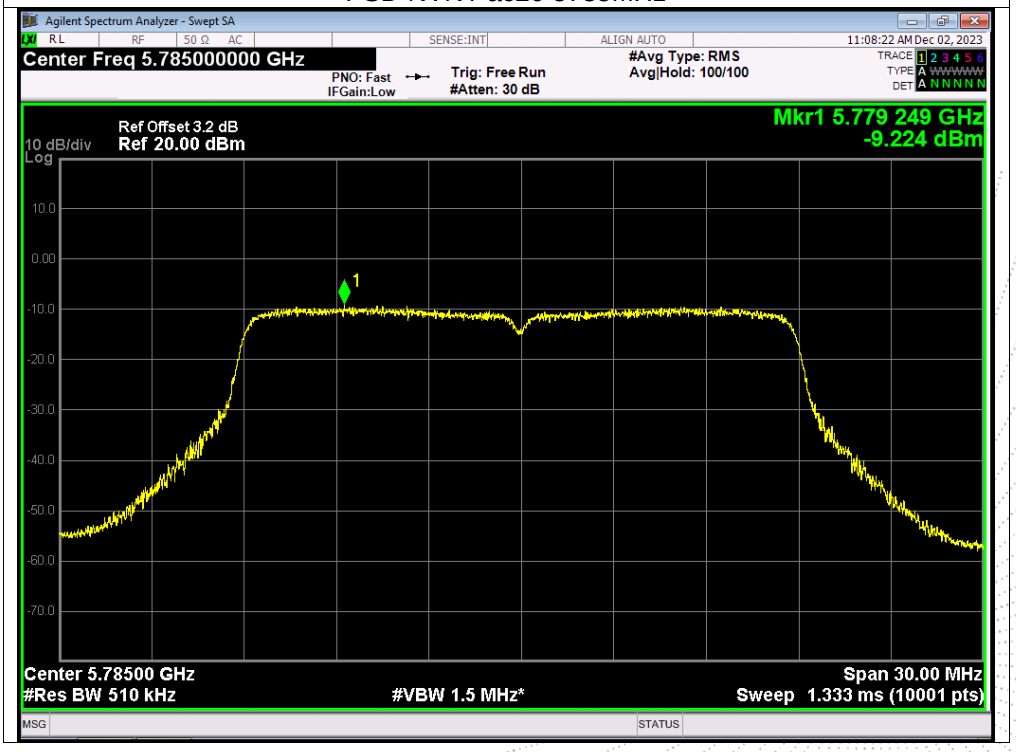
PSD NVNT n40 5795MHz



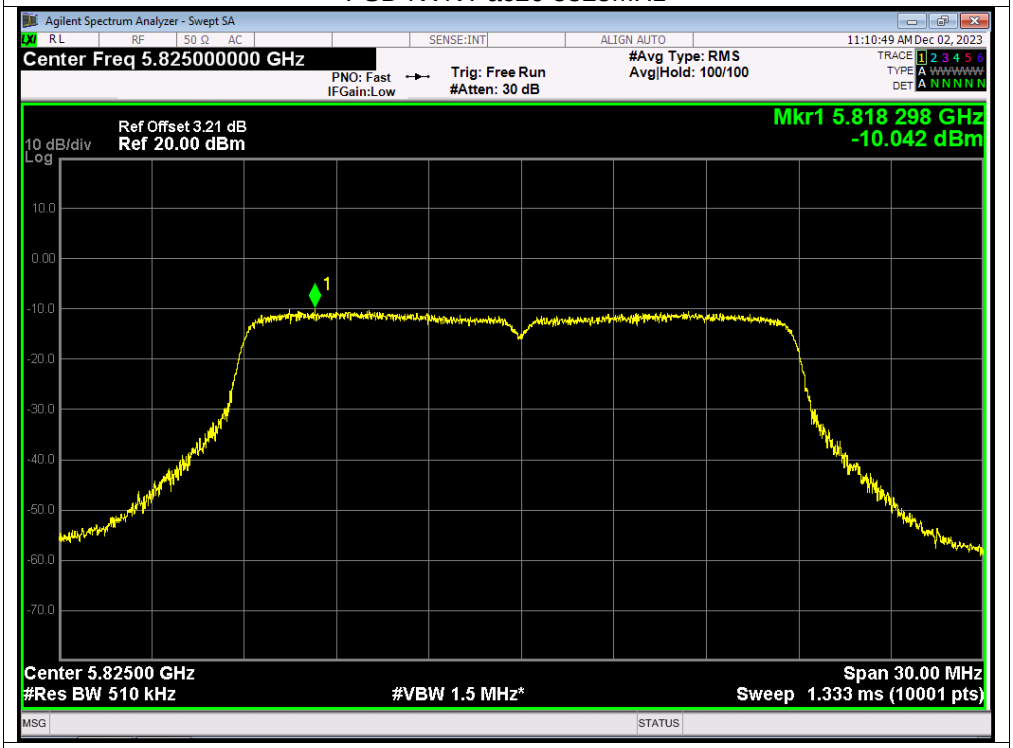
PSD NVNT ac20 5745MHz



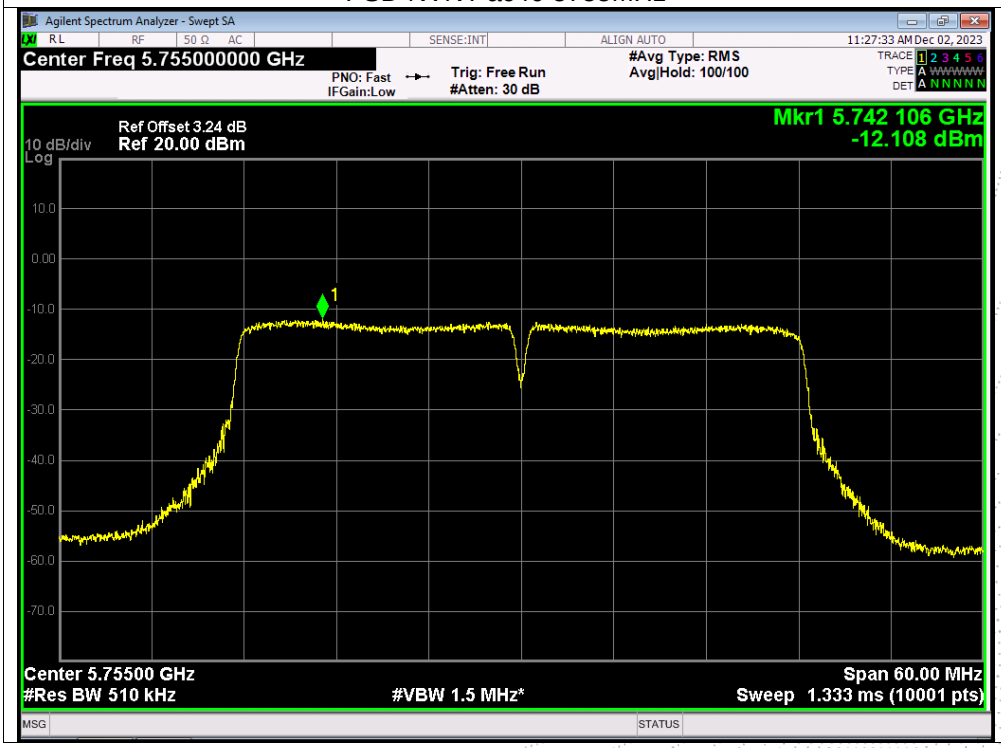
PSD NVNT ac20 5785MHz



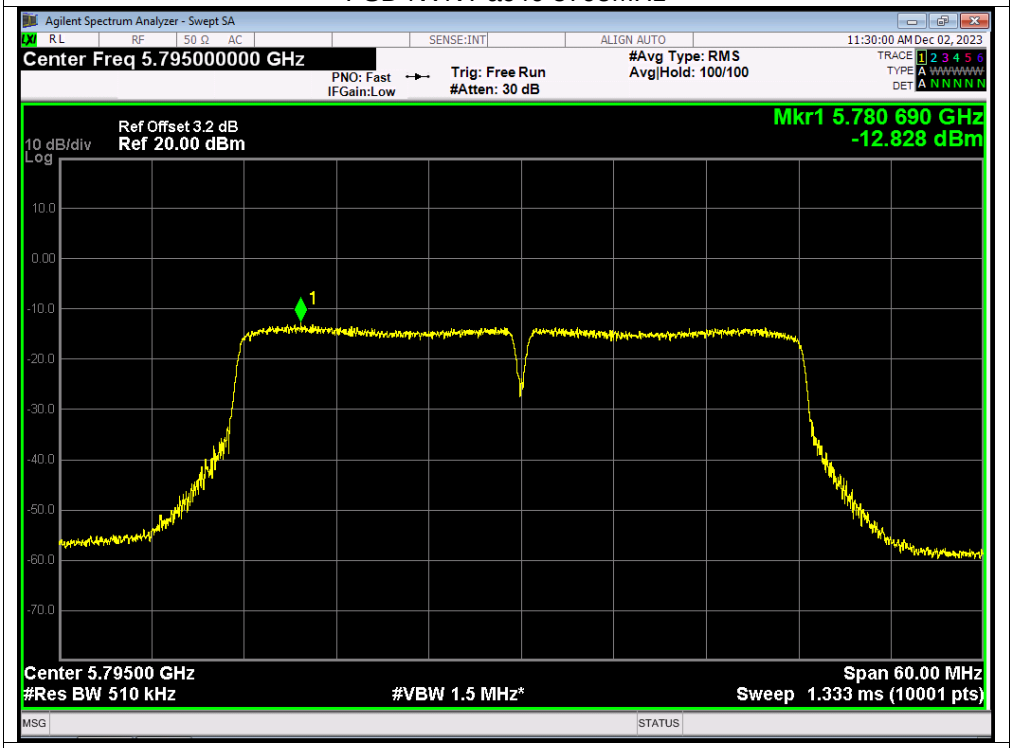
PSD NVNT ac20 5825MHz



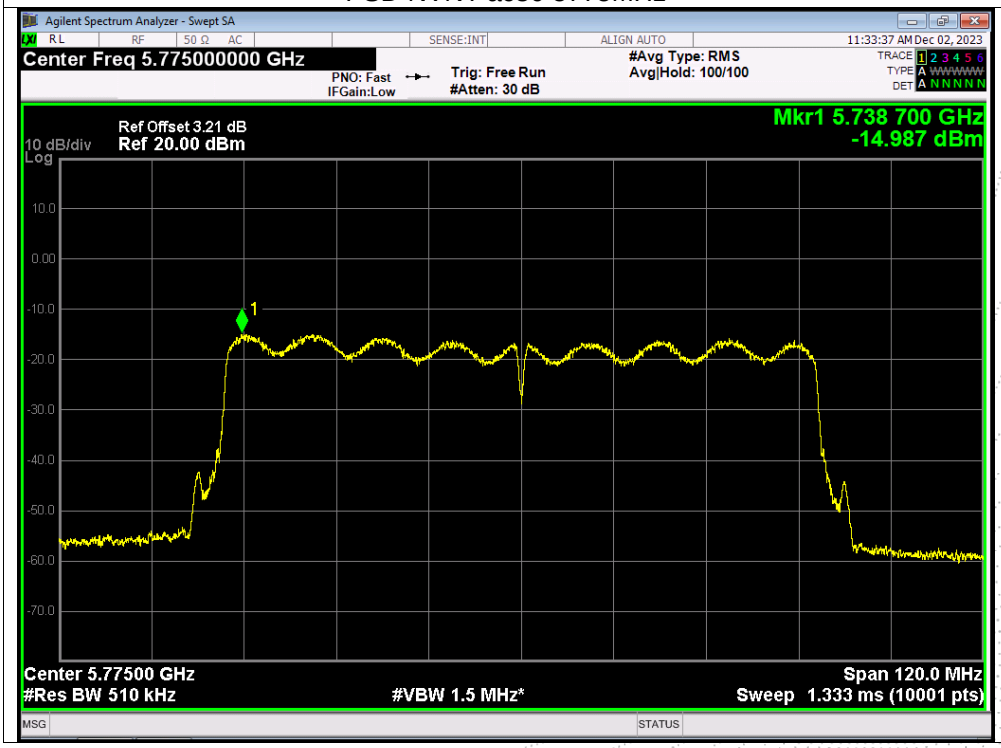
PSD NVNT ac40 5755MHz



PSD NVNT ac40 5795MHz

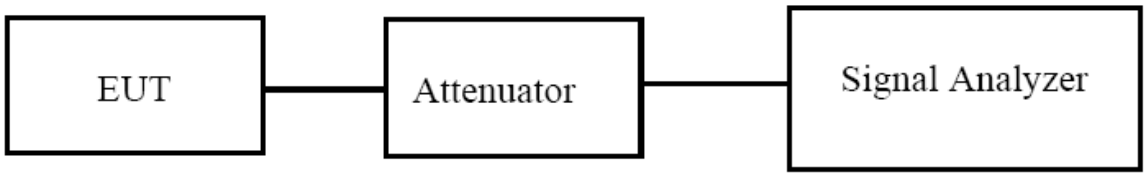


PSD NVNT ac80 5775MHz



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.

9.3 Test procedure

a) Set RBW = approximately 1% of the emission bandwidth.

b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) 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:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · RBW
5. 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.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. 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.

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 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)
NVNT	a	5180	20.881
NVNT	a	5200	20.944
NVNT	a	5240	20.712
NVNT	n20	5180	21.567
NVNT	n20	5200	21.571
NVNT	n20	5240	21.252
NVNT	n40	5190	43.356
NVNT	n40	5230	43.897
NVNT	ac20	5180	21.616
NVNT	ac20	5200	21.520
NVNT	ac20	5240	21.568
NVNT	ac40	5190	43.621
NVNT	ac40	5230	43.451
NVNT	ac80	5210	82.179

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5180	16.539
NVNT	a	5200	16.528
NVNT	a	5240	16.560
NVNT	n20	5180	17.672
NVNT	n20	5200	17.671
NVNT	n20	5240	17.710
NVNT	n40	5190	36.204
NVNT	n40	5230	36.239
NVNT	ac20	5180	17.719
NVNT	ac20	5200	17.711
NVNT	ac20	5240	17.692
NVNT	ac40	5190	36.204
NVNT	ac40	5230	36.183
NVNT	ac80	5210	75.580

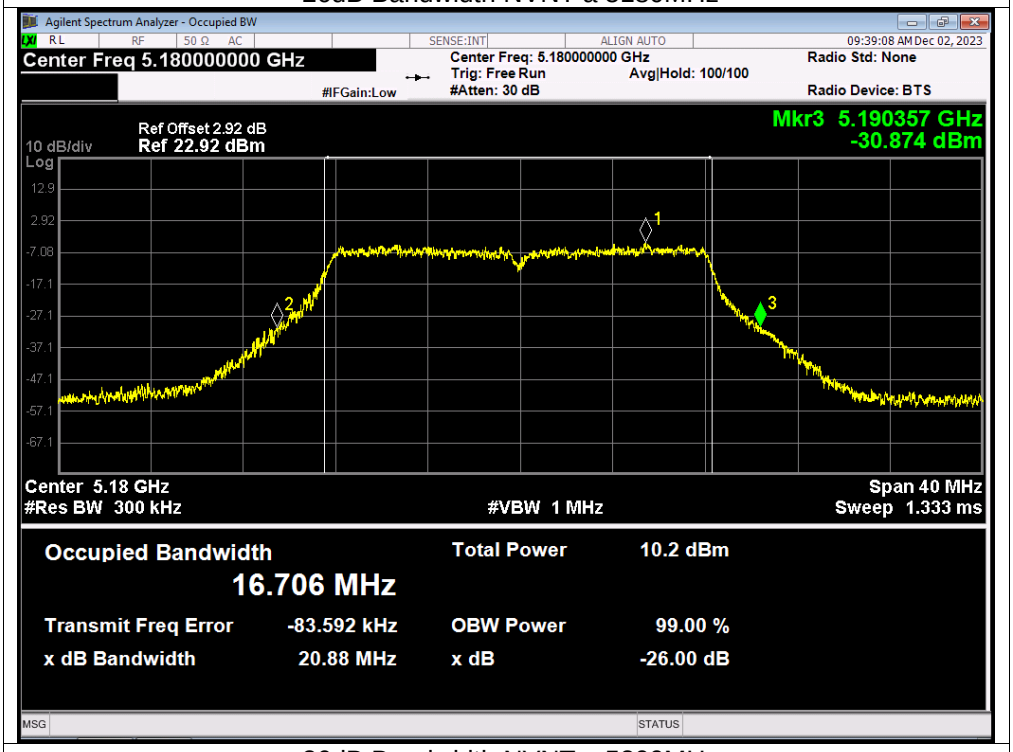
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	(5745-5825MHz)		

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	16.538	0.5	Pass
NVNT	a	5785	16.545	0.5	Pass
NVNT	a	5825	16.529	0.5	Pass
NVNT	n20	5745	17.668	0.5	Pass
NVNT	n20	5785	17.631	0.5	Pass
NVNT	n20	5825	17.689	0.5	Pass
NVNT	n40	5755	36.449	0.5	Pass
NVNT	n40	5795	36.421	0.5	Pass
NVNT	ac20	5745	17.664	0.5	Pass
NVNT	ac20	5785	17.686	0.5	Pass
NVNT	ac20	5825	17.691	0.5	Pass
NVNT	ac40	5755	36.473	0.5	Pass
NVNT	ac40	5795	36.458	0.5	Pass
NVNT	ac80	5775	76.105	0.5	Pass

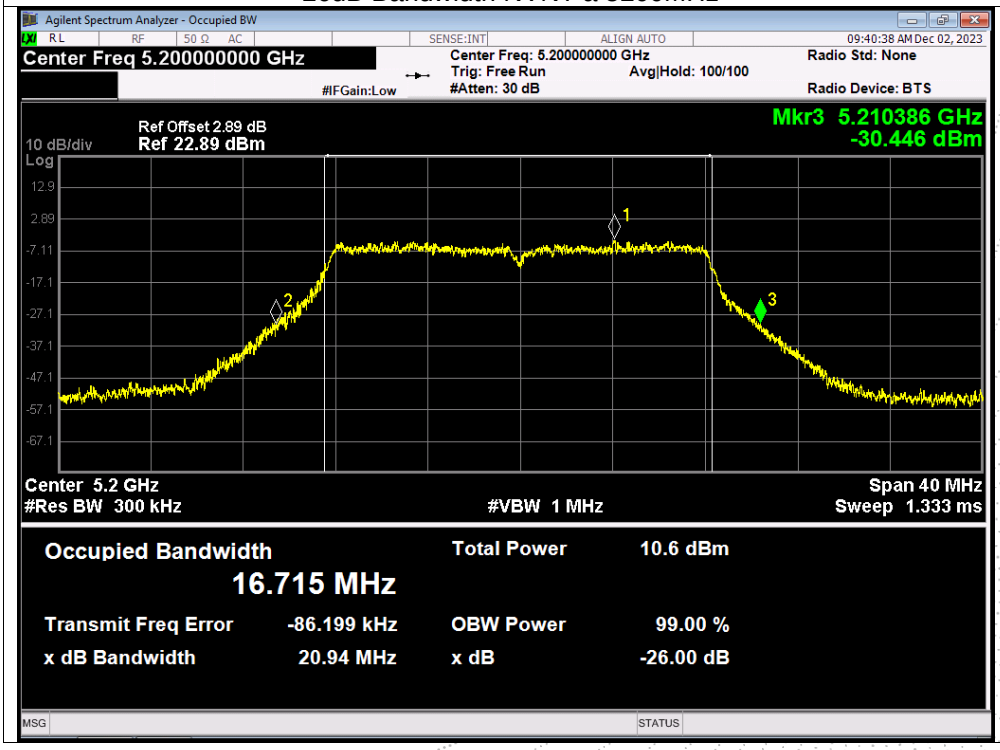
Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5745	16.552
NVNT	a	5785	16.570
NVNT	a	5825	16.571
NVNT	n20	5745	17.707
NVNT	n20	5785	17.699
NVNT	n20	5825	17.678
NVNT	n40	5755	36.285
NVNT	n40	5795	36.263
NVNT	ac20	5745	17.733
NVNT	ac20	5785	17.715
NVNT	ac20	5825	17.724
NVNT	ac40	5755	36.234
NVNT	ac40	5795	36.225
NVNT	ac80	5775	75.609

Test Graphs

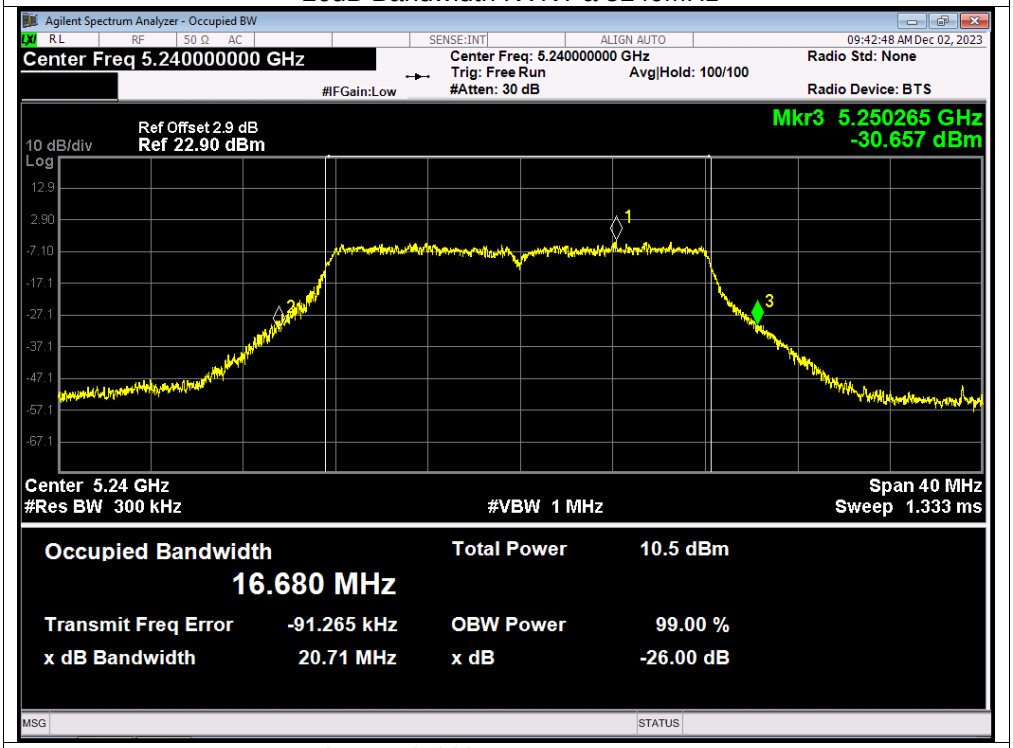
-26dB Bandwidth NVNT a 5180MHz



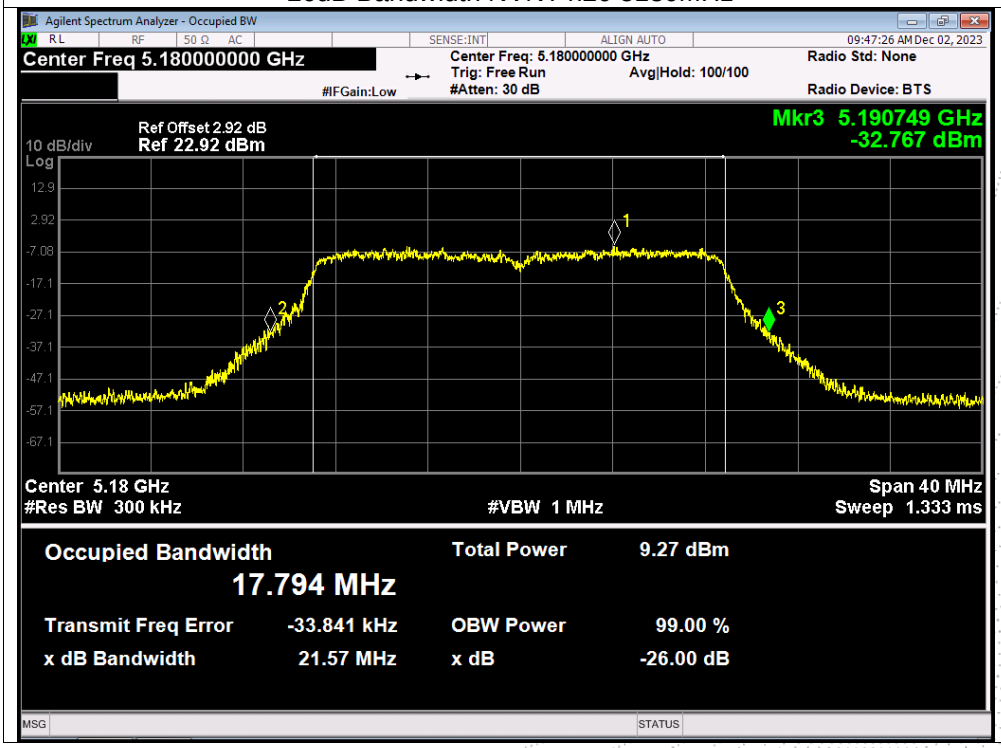
-26dB Bandwidth NVNT a 5200MHz



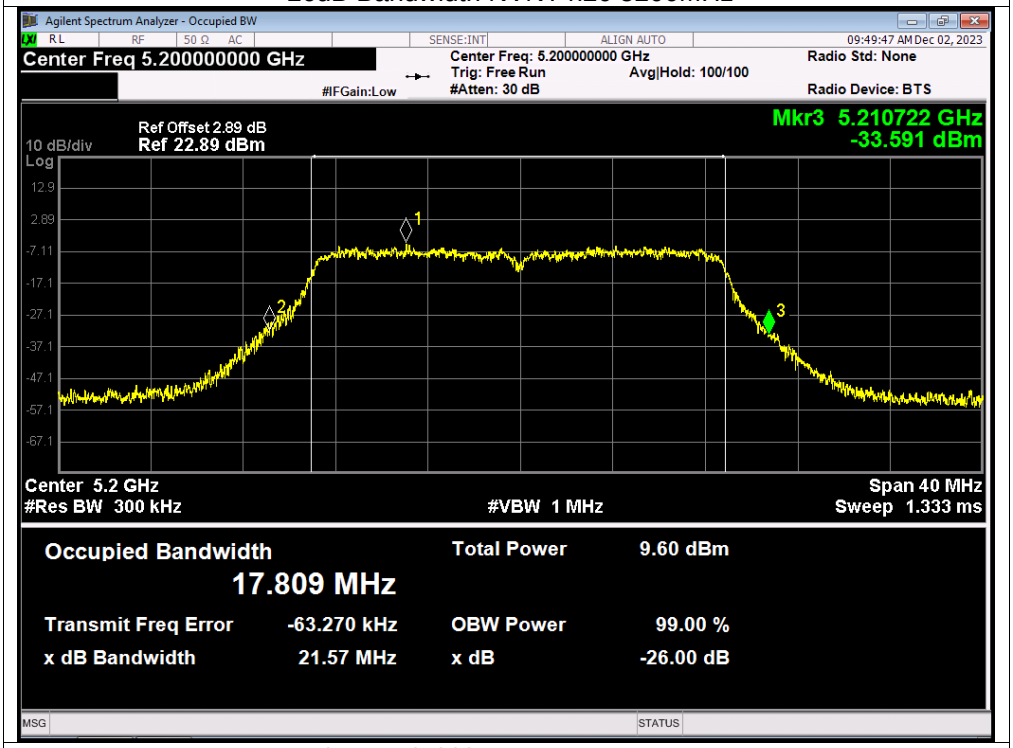
-26dB Bandwidth NVNT a 5240MHz



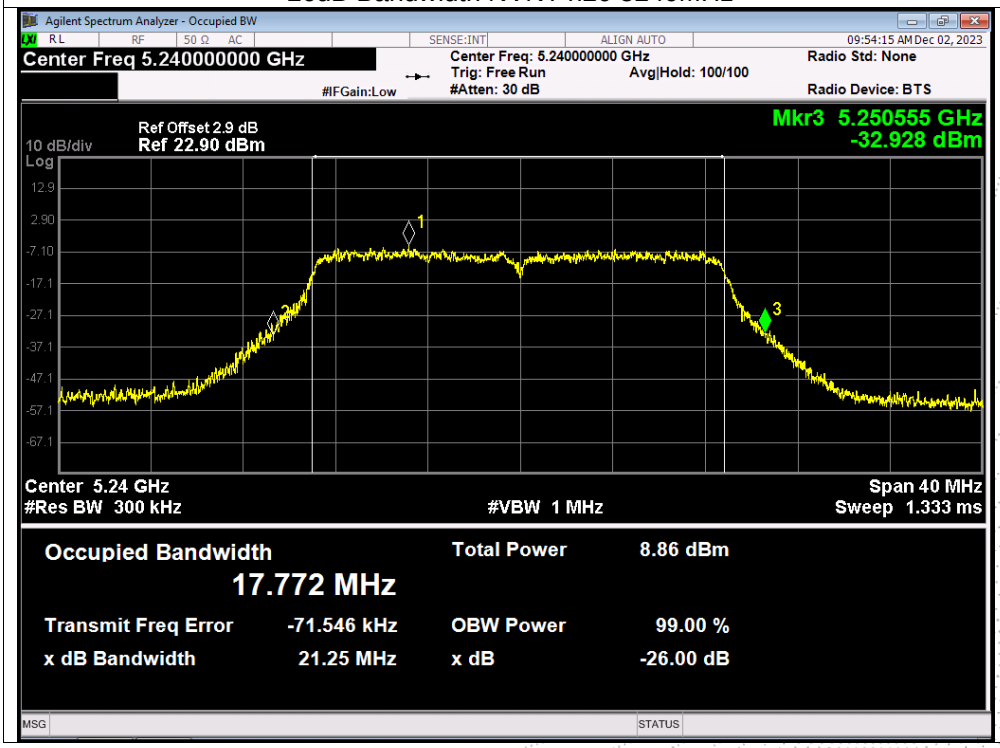
-26dB Bandwidth NVNT n20 5180MHz



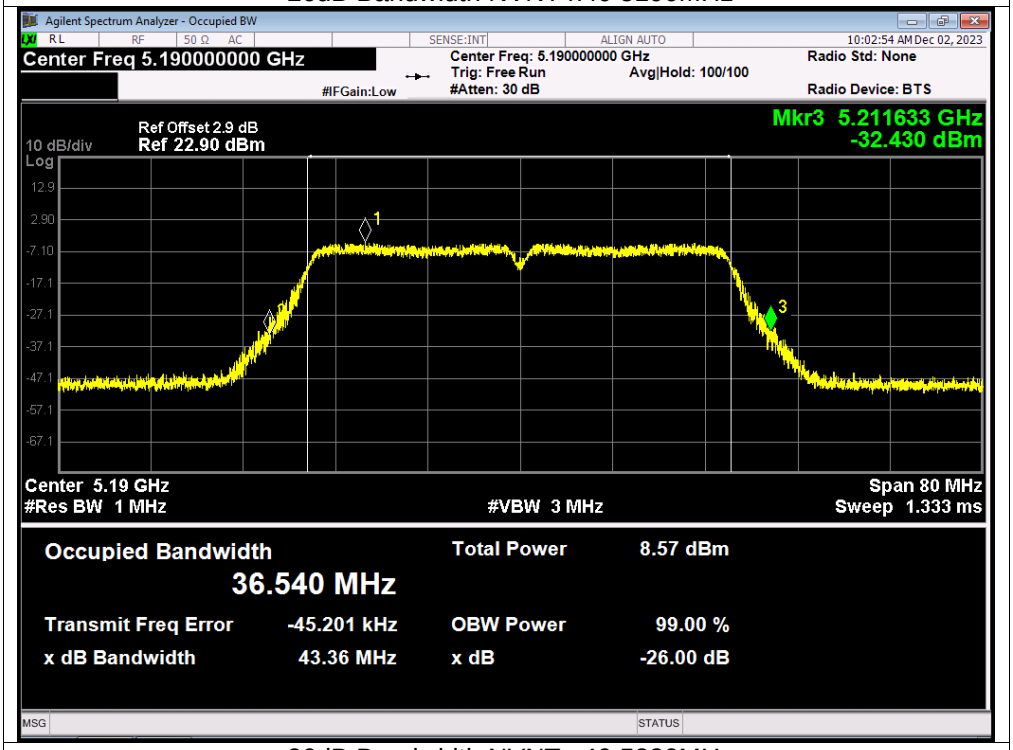
-26dB Bandwidth NVNT n20 5200MHz



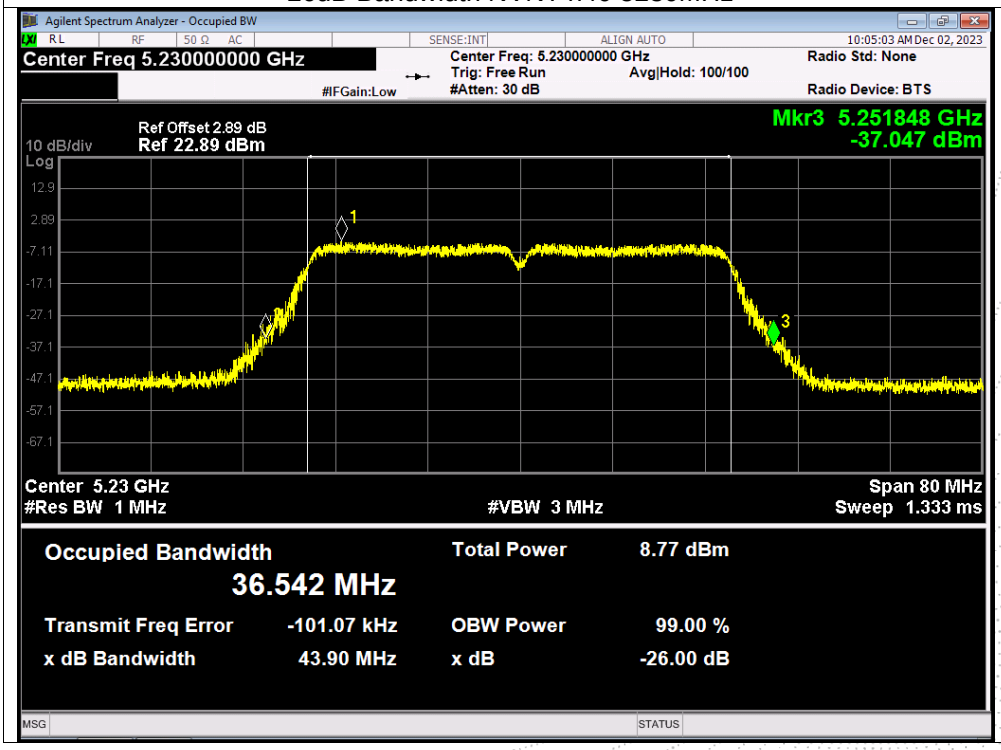
-26dB Bandwidth NVNT n20 5240MHz



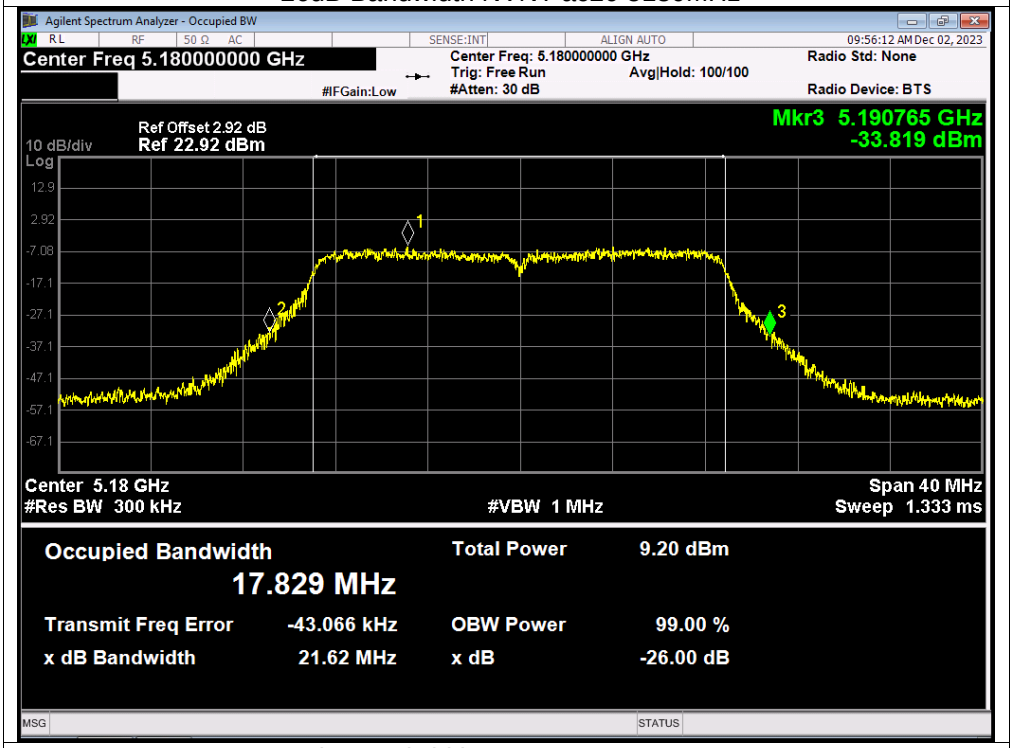
-26dB Bandwidth NVNT n40 5190MHz



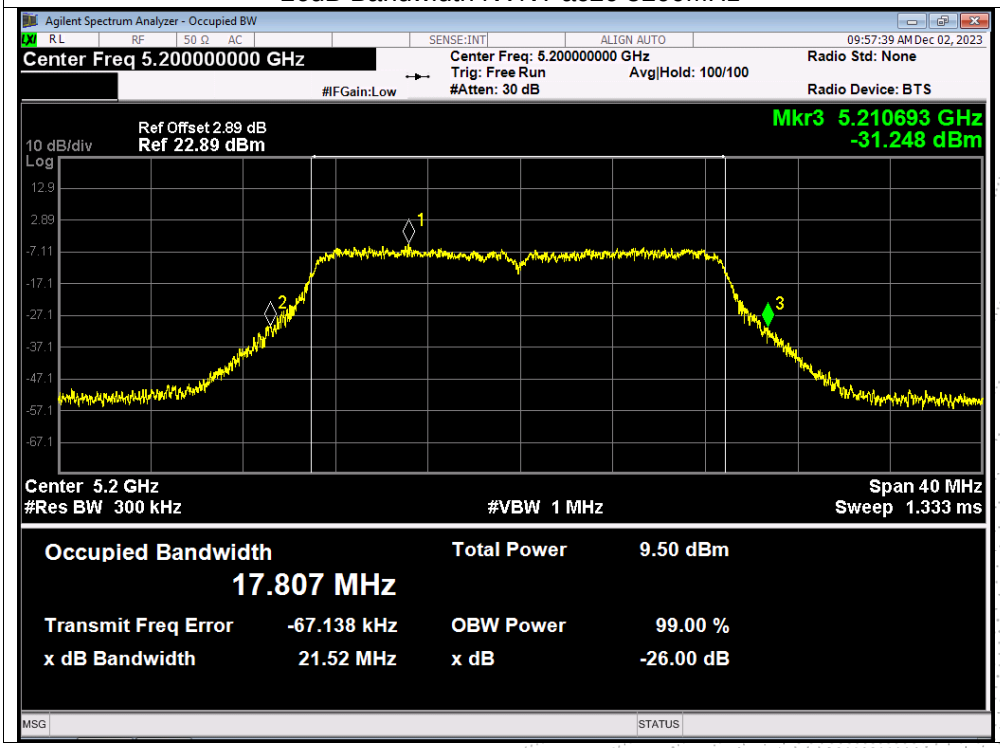
-26dB Bandwidth NVNT n40 5230MHz



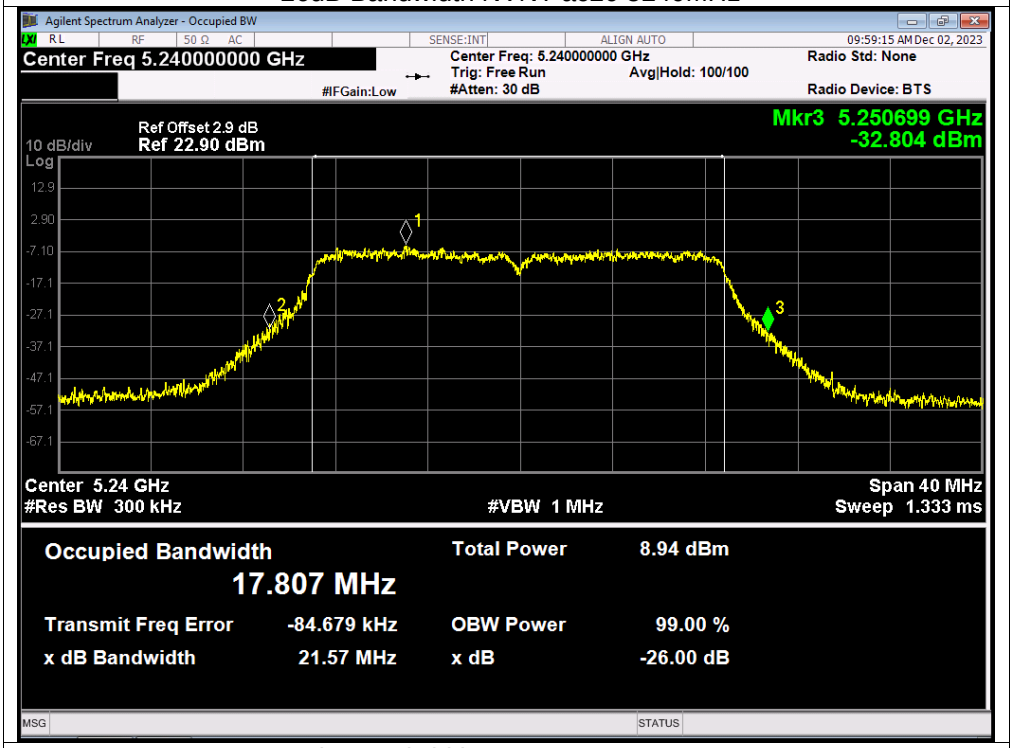
-26dB Bandwidth NVNT ac20 5180MHz



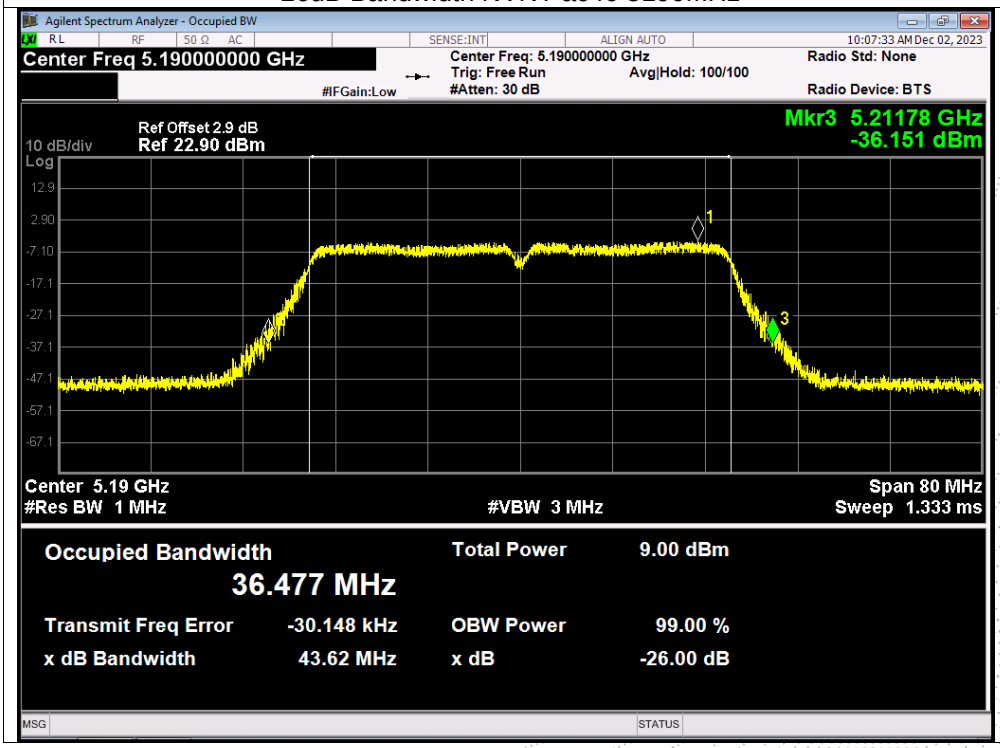
-26dB Bandwidth NVNT ac20 5200MHz



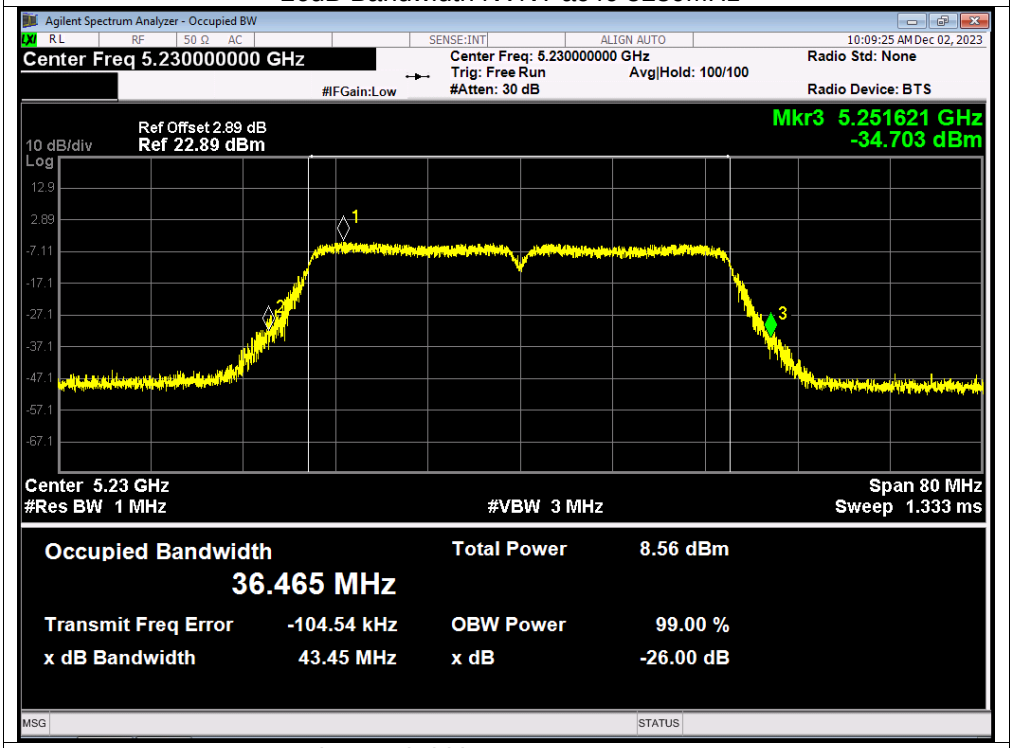
-26dB Bandwidth NVNT ac20 5240MHz



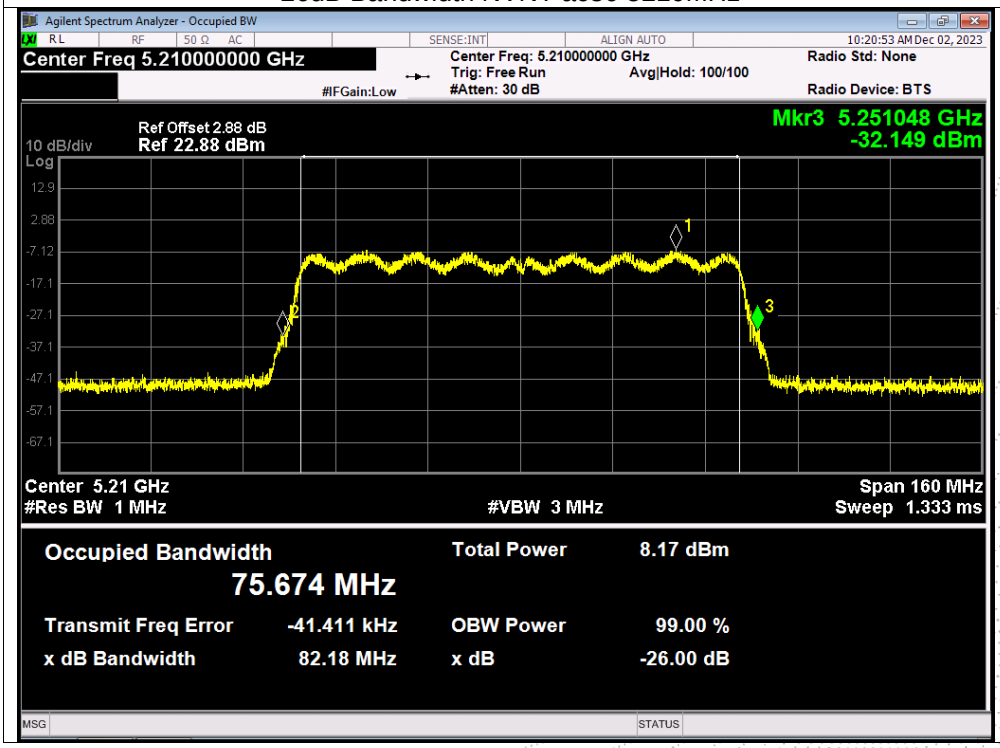
-26dB Bandwidth NVNT ac40 5190MHz



-26dB Bandwidth NVNT ac40 5230MHz

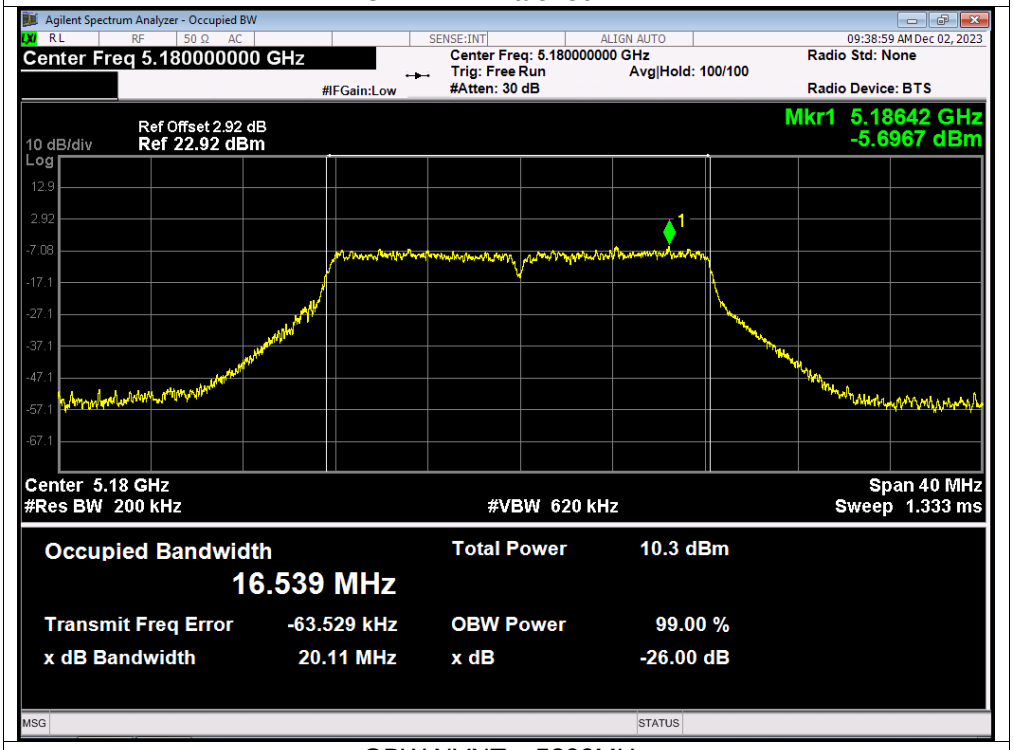


-26dB Bandwidth NVNT ac80 5210MHz

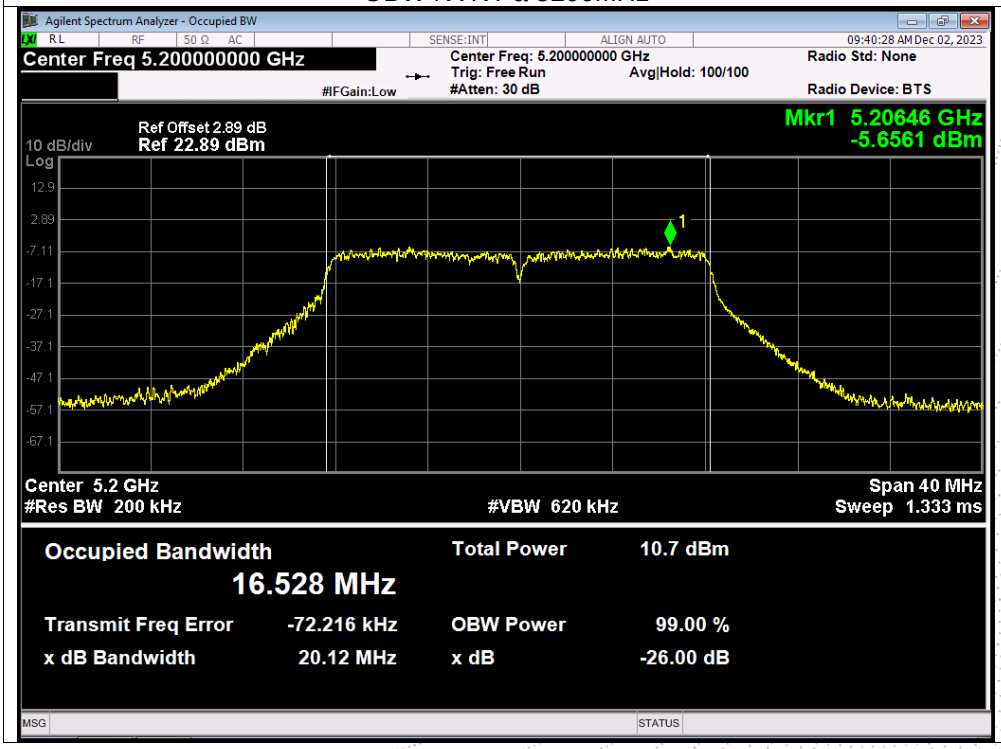


Test Graphs

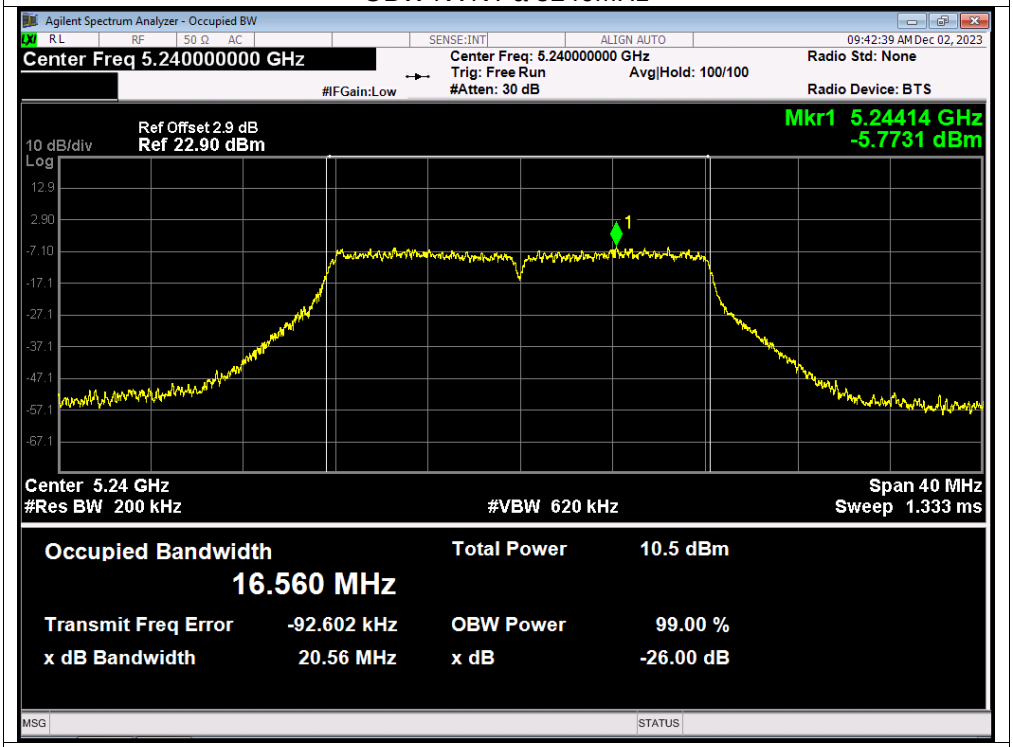
OBW NVNT a 5180MHz



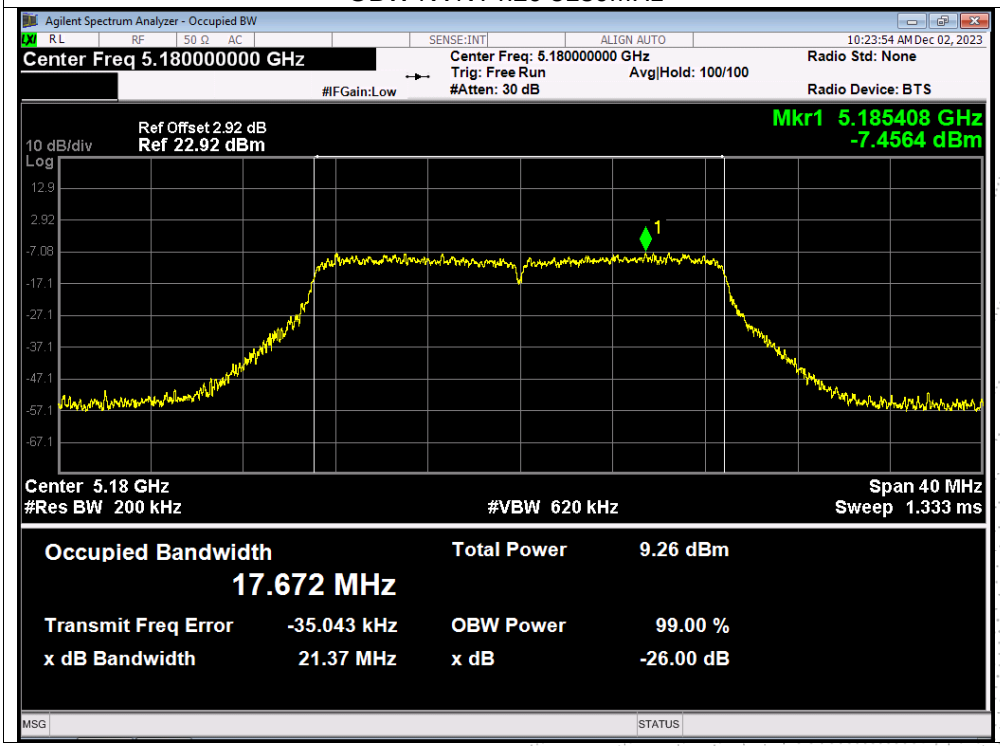
OBW NVNT a 5200MHz



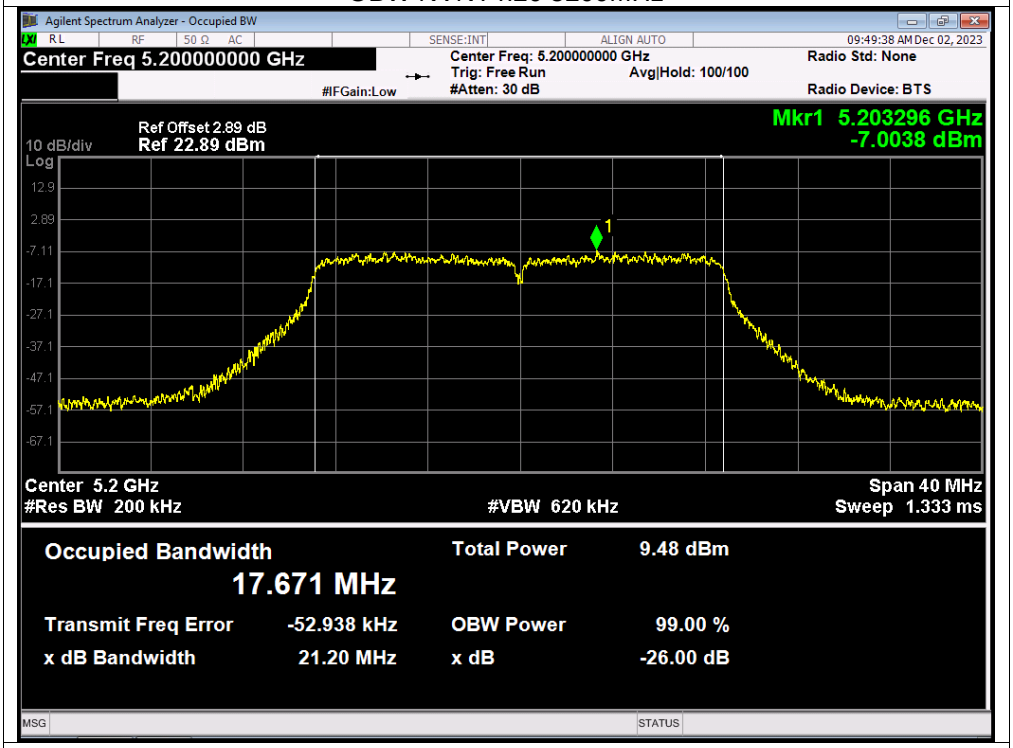
OBW NVNT a 5240MHz



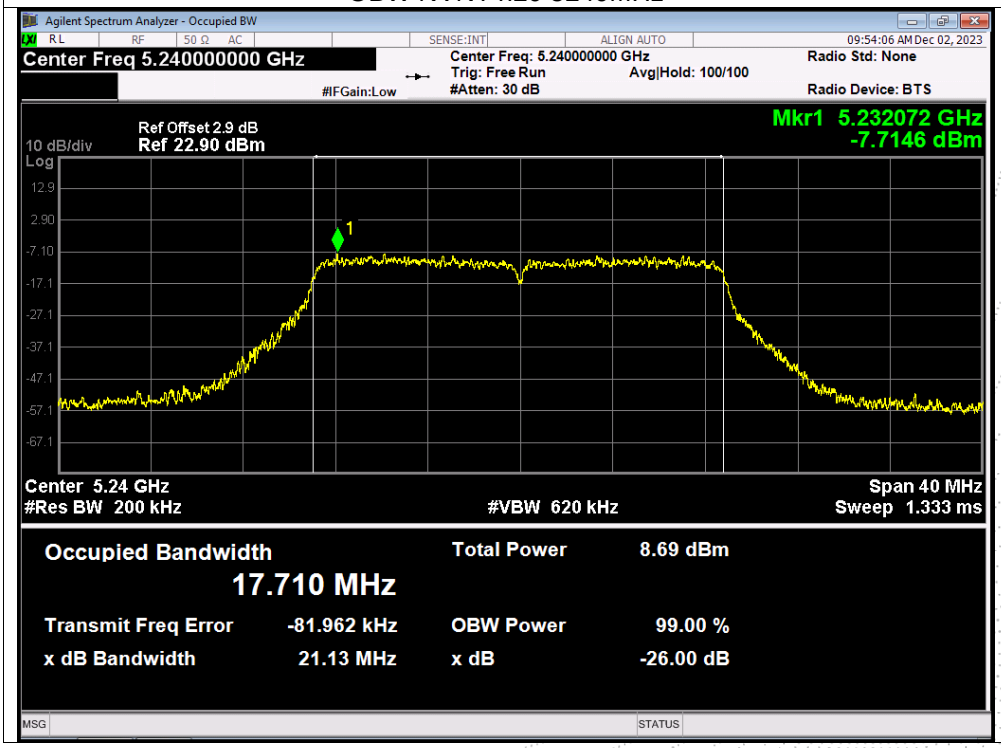
OBW NVNT n20 5180MHz



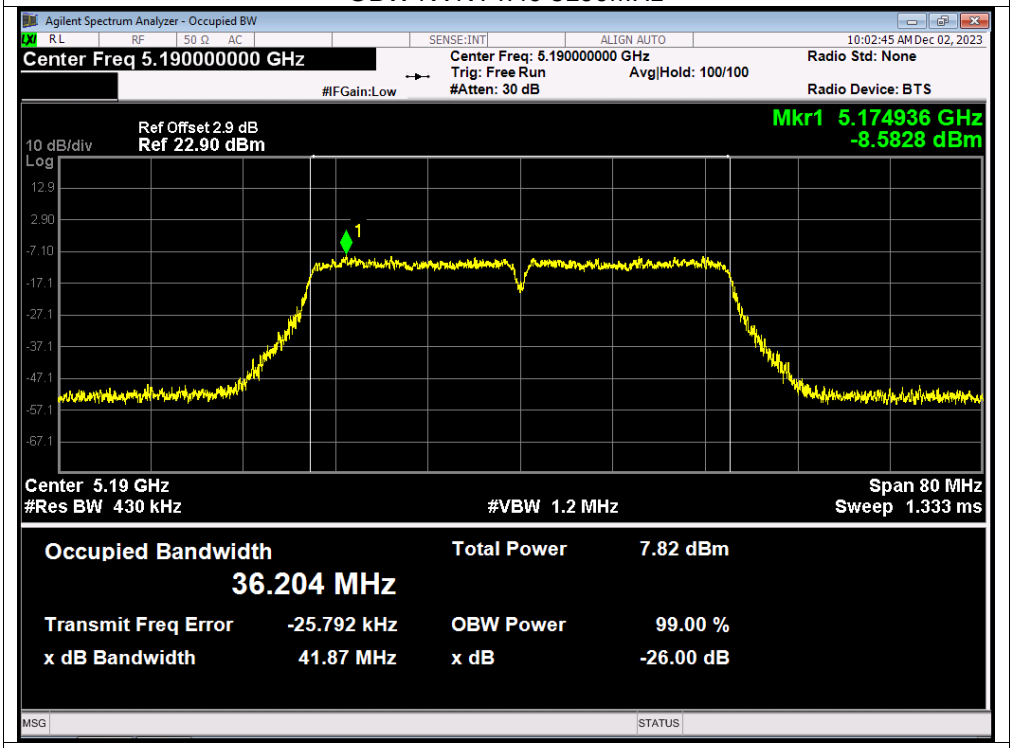
OBW NVNT n20 5200MHz



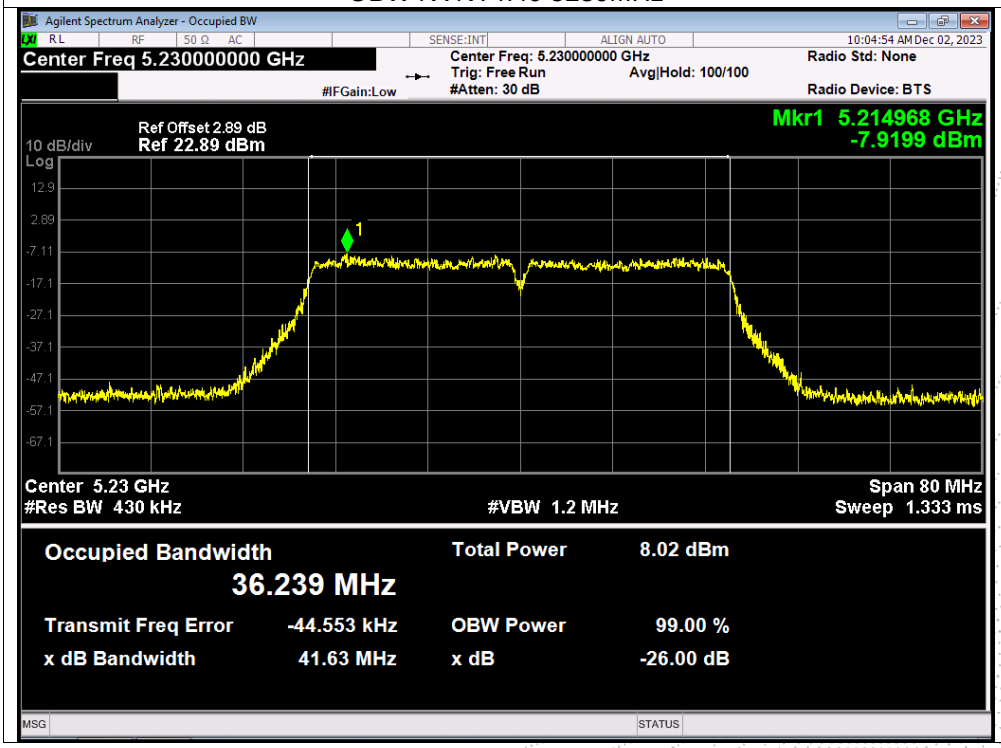
OBW NVNT n20 5240MHz



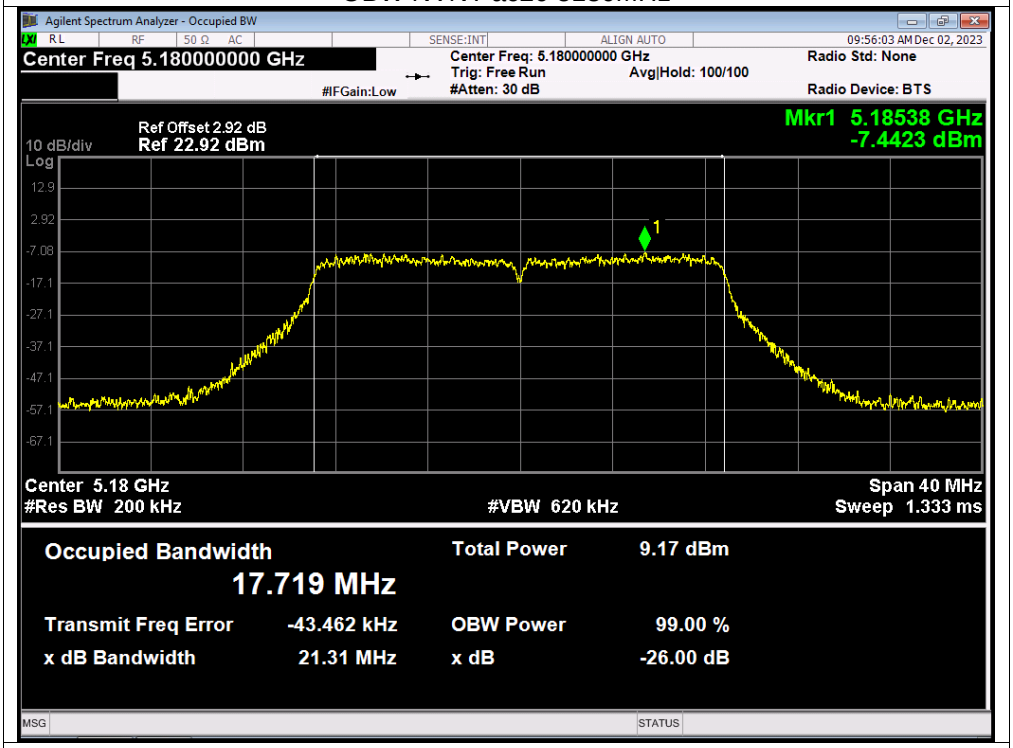
OBW NVNT n40 5190MHz



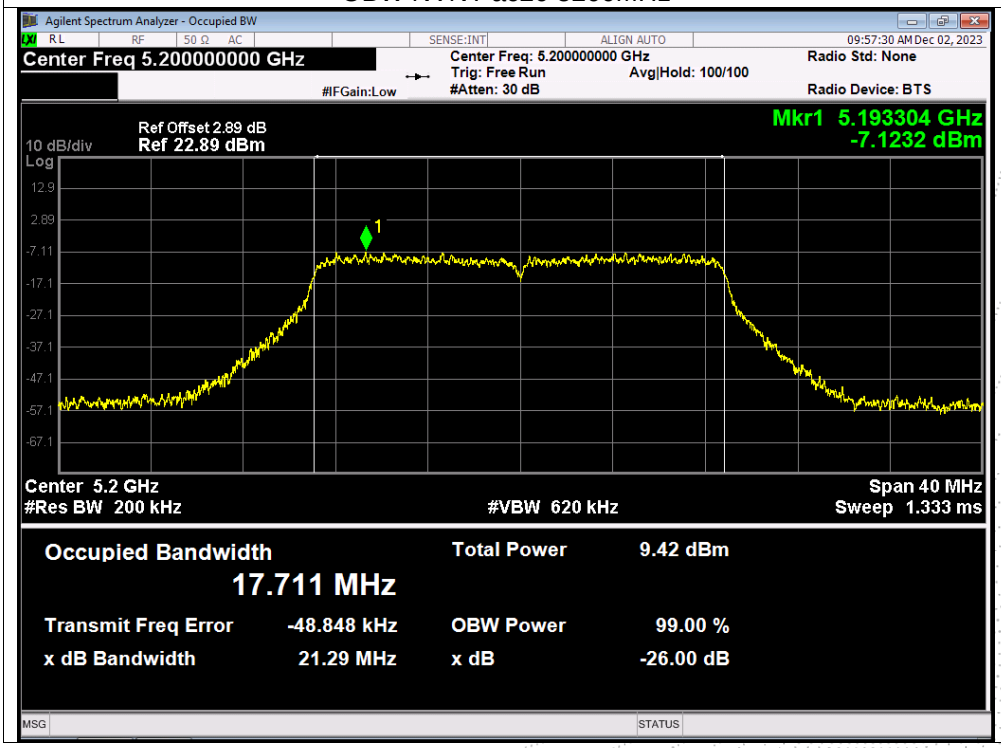
OBW NVNT n40 5230MHz



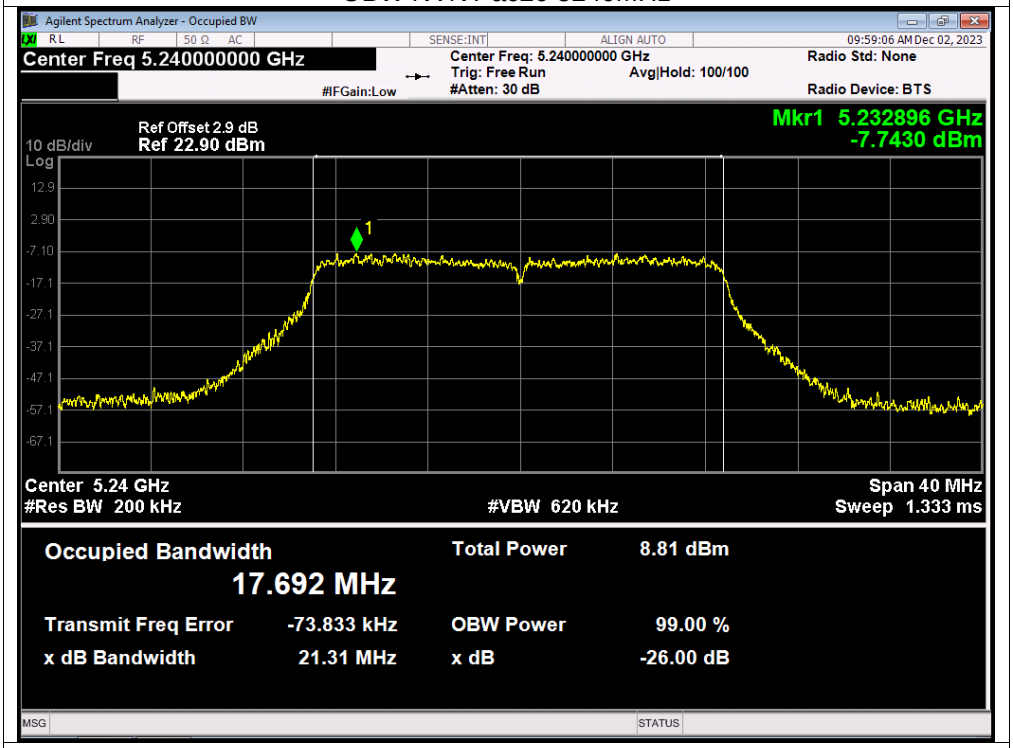
OBW NVNT ac20 5180MHz



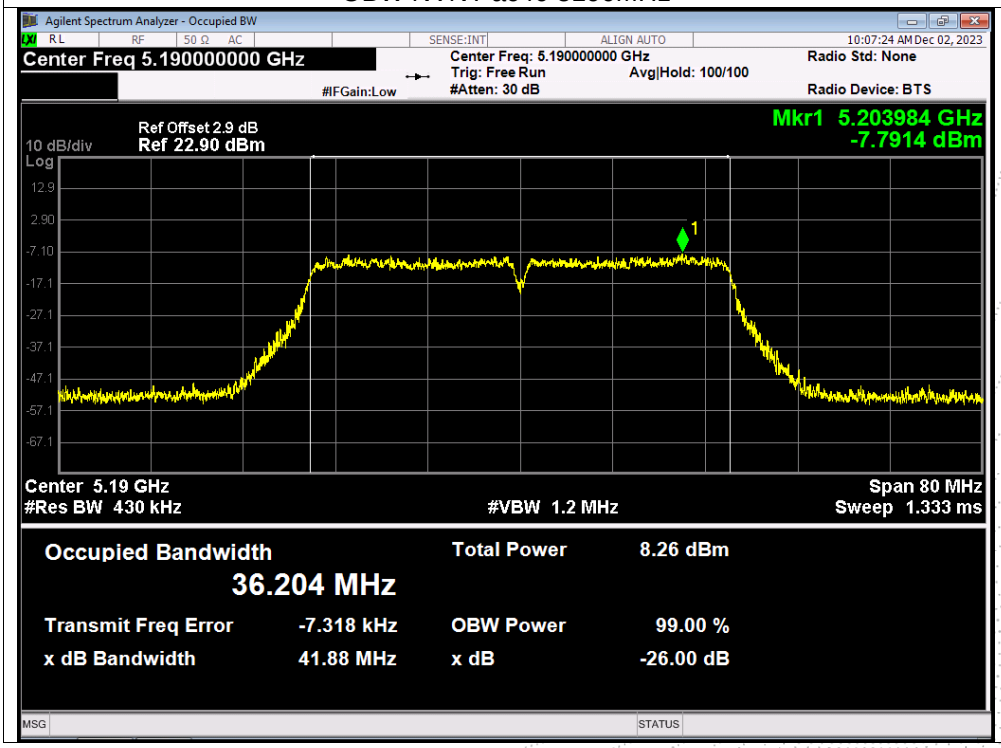
OBW NVNT ac20 5200MHz



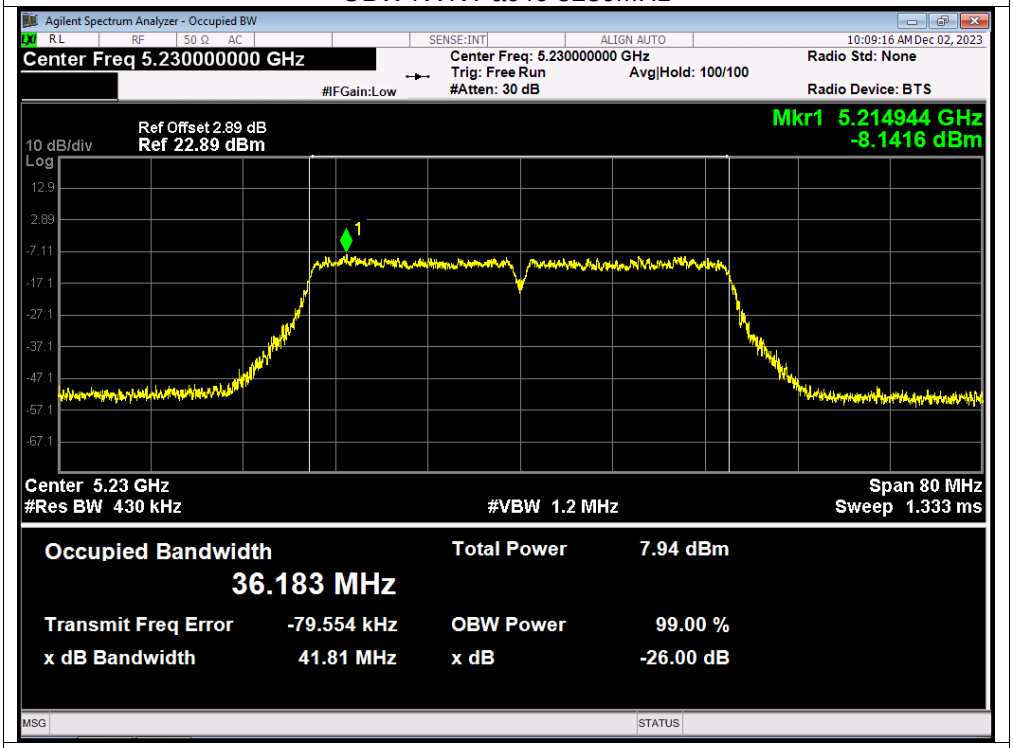
OBW NVNT ac20 5240MHz



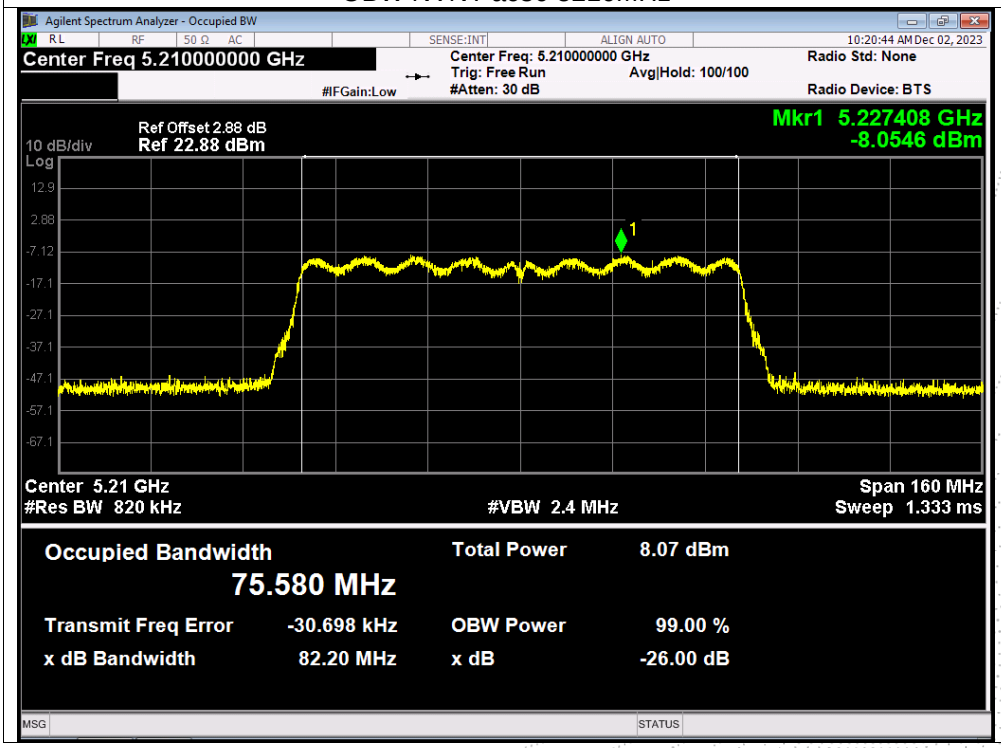
OBW NVNT ac40 5190MHz



OBW NVNT ac40 5230MHz

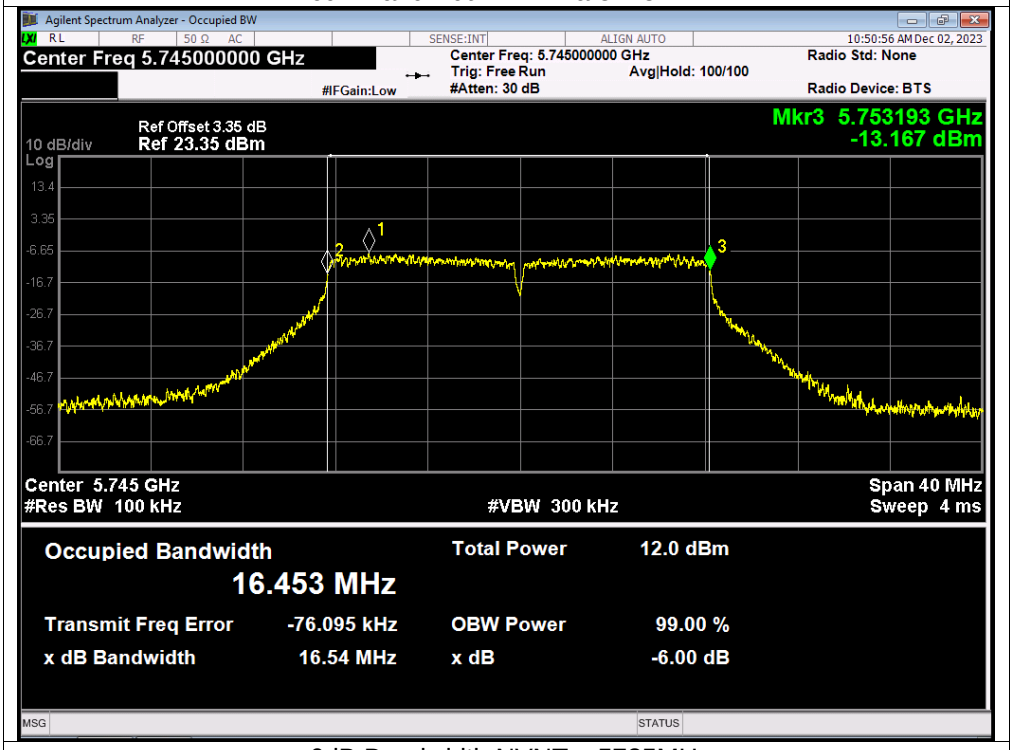


OBW NVNT ac80 5210MHz

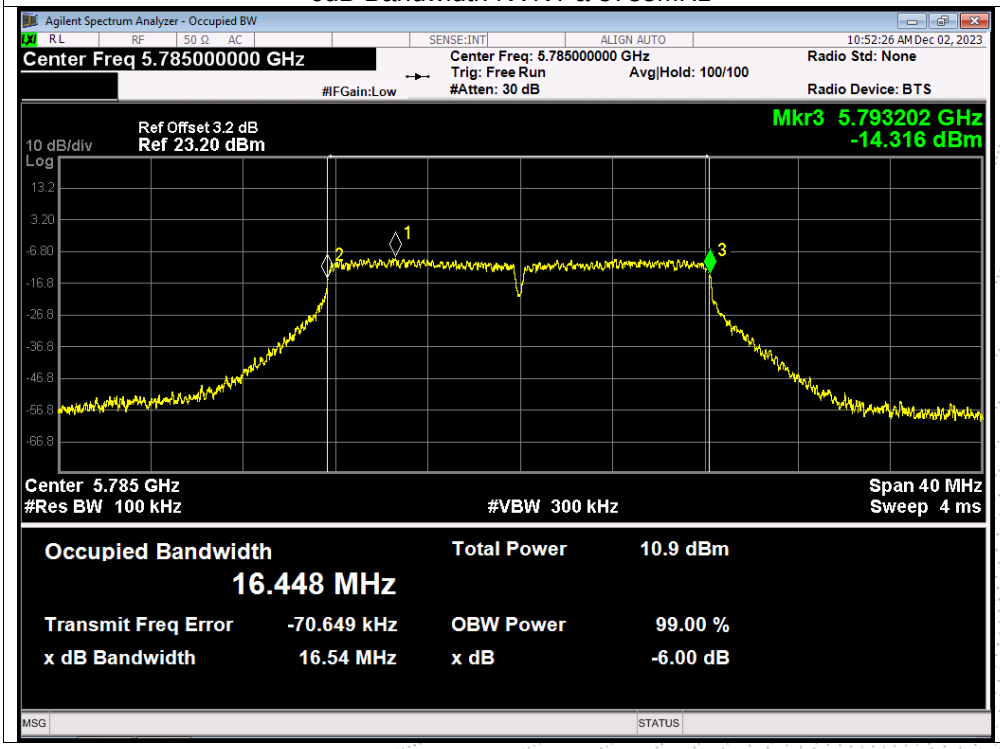


Test Graphs

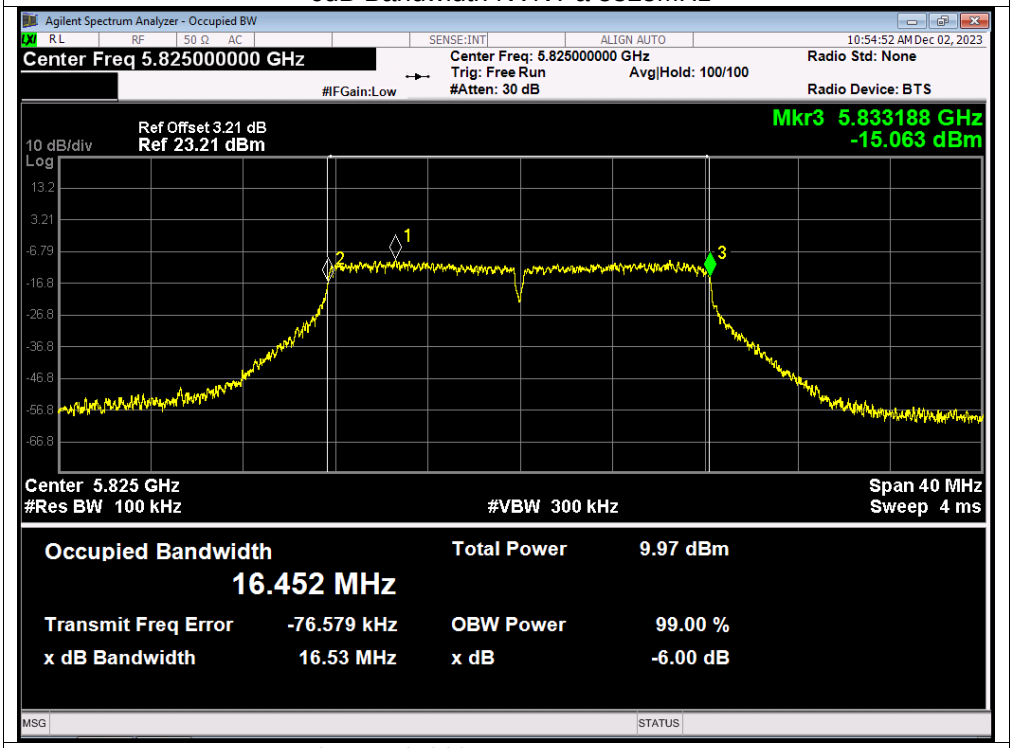
-6dB Bandwidth NVNT a 5745MHz



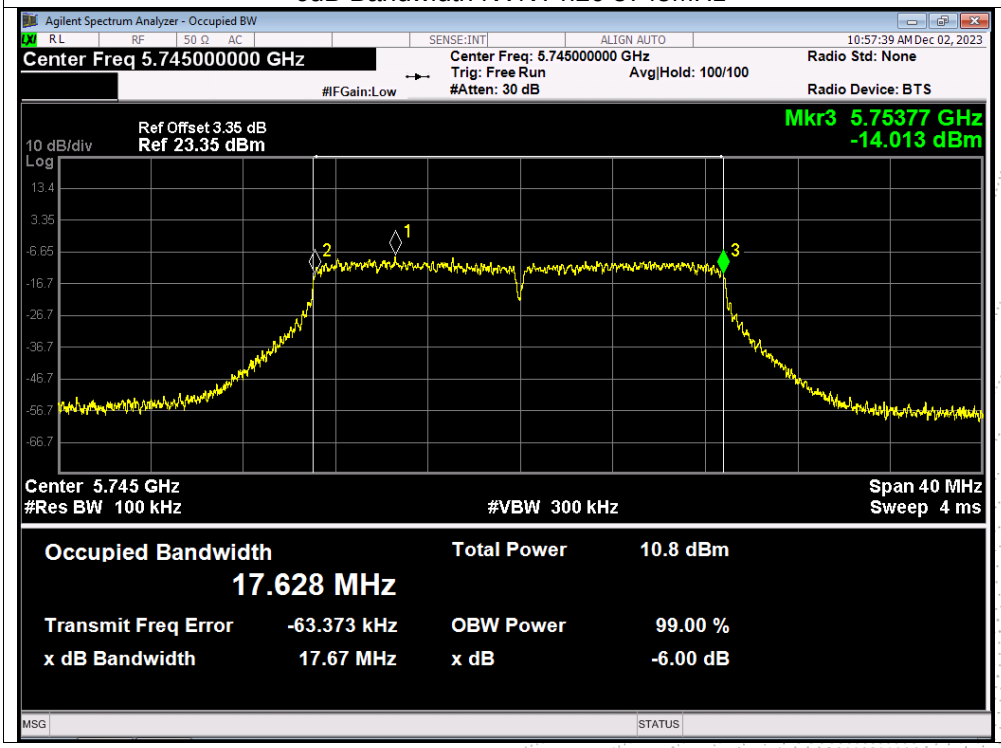
-6dB Bandwidth NVNT a 5785MHz



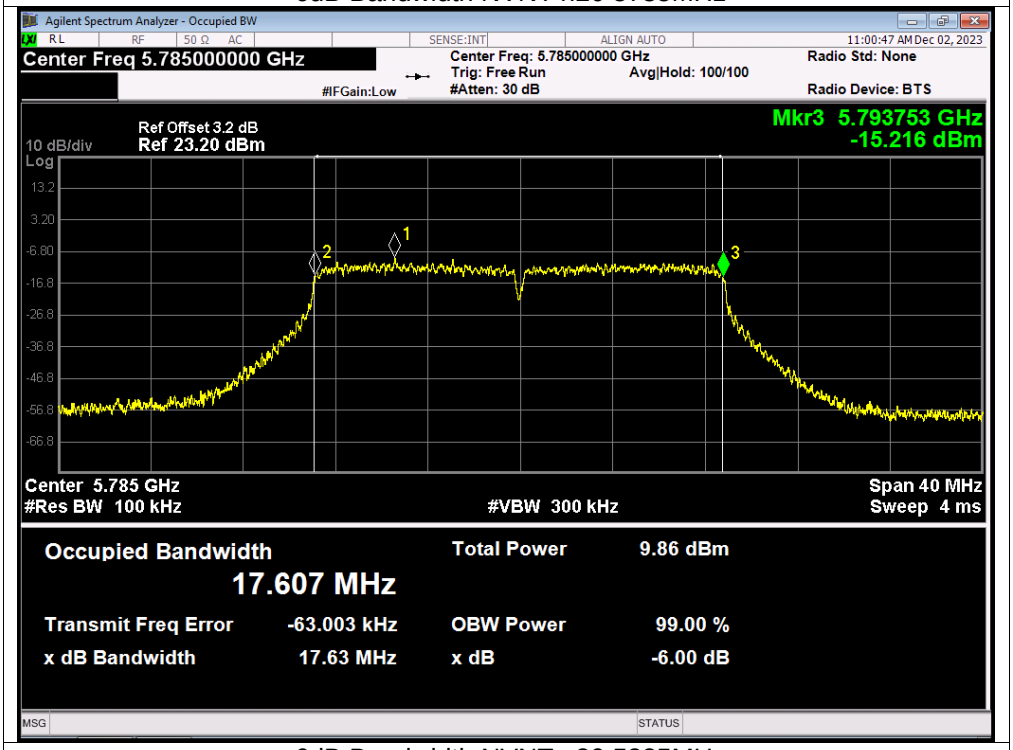
-6dB Bandwidth NVNT a 5825MHz



-6dB Bandwidth NVNT n20 5745MHz



-6dB Bandwidth NVNT n20 5785MHz



-6dB Bandwidth NVNT n20 5825MHz